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1.1 libjpeg 6b

1.1.1 Notifications :

This software is based in part on the work of the Independent JPEG Group.

1.1.2 Available under license :

The Independent JPEG Group's JPEG software

=====
README for release 6b of 27-Mar-1998
=====

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This software is the work of Tom Lane, Philip Gladstone, Jim Boucher, Lee Crocker, Julian Minguillon, Luis Ortiz, George Phillips, Davide Rossi, Guido Vollbeding, Ge' Weijers, and other members of the Independent JPEG Group.

IJG is not affiliated with the official ISO JPEG standards committee.

DOCUMENTATION

ROADMAP

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This file contains the following sections:

OVERVIEW General description of JPEG and the IJG software.
LEGAL ISSUES Copyright, lack of warranty, terms of distribution.
REFERENCES Where to learn more about JPEG.
ARCHIVE LOCATIONS Where to find newer versions of this software.
RELATED SOFTWARE Other stuff you should get.
FILE FORMAT WARS Software *not* to get.
TO DO Plans for future IJG releases.

Other documentation files in the distribution are:

User documentation:

install.doc How to configure and install the IJG software.
usage.doc Usage instructions for cjpeg, djpeg, jpegtran,
 rdjpgcom, and wrjpgcom.
*.1 Unix-style man pages for programs (same info as usage.doc).
wizard.doc Advanced usage instructions for JPEG wizards only.
change.log Version-to-version change highlights.
Programmer and internal

documentation:

libjpeg.doc How to use the JPEG library in your own programs.
example.c Sample code for calling the JPEG library.
structure.doc Overview of the JPEG library's internal structure.
filelist.doc Road map of IJG files.
coderrules.doc Coding style rules --- please read if you contribute code.

Please read at least the files install.doc and usage.doc. Useful information can also be found in the JPEG FAQ (Frequently Asked Questions) article. See ARCHIVE LOCATIONS below to find out where to obtain the FAQ article.

If you want to understand how the JPEG code works, we suggest reading one or more of the REFERENCES, then looking at the documentation files (in roughly the order listed) before diving into the code.

OVERVIEW

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This package contains C software to implement JPEG image compression and decompression. JPEG (pronounced "jay-peg") is a standardized compression method for full-color and gray-scale images.

JPEG is intended for compressing "real-world" scenes; line drawings, cartoons and other non-realistic images are not its strong suit. JPEG is lossy, meaning that the output image is not exactly identical to the input image. Hence you must not use JPEG if you have to have identical output bits. However, on typical photographic images, very good compression levels can be obtained with no visible change, and remarkably high compression levels are possible if you can tolerate a low-quality image. For more details, see the references, or just experiment with various compression settings.

This software implements JPEG baseline, extended-sequential, and progressive compression processes. Provision is made for supporting all variants of these processes, although some uncommon parameter settings aren't implemented yet. For legal reasons, we are not distributing code for the arithmetic-coding variants of JPEG; see LEGAL ISSUES. We have made no provision for supporting the hierarchical or lossless processes defined in the standard.

We provide a set of library routines for reading and writing JPEG image files, plus two sample applications "cjpeg" and "djpeg", which use the library to perform conversion between JPEG and some other popular image file formats. The library is intended to be reused in other applications.

In order to support file conversion and viewing software, we have included considerable functionality beyond the bare JPEG coding/decoding capability; for example, the color quantization modules are not strictly part of JPEG

decoding, but they are essential for output to colormapped file formats or colormapped displays. These extra functions can be compiled out of the library if not required for a particular application. We have also included "jpegtran", a utility for lossless transcoding between different JPEG processes, and "rdjpgcom" and "wrjpgcom", two simple applications for inserting and extracting textual comments in JFIF files.

The emphasis in designing this software has been on achieving portability and flexibility, while also making it fast enough to be useful. In particular, the software is not intended to be read as a tutorial on JPEG. (See the REFERENCES section for introductory material.) Rather, it is intended to be reliable, portable, industrial-strength code. We do not claim to have achieved that goal in every aspect of the software, but we strive for it.

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The Unix configuration script "configure" was produced with GNU Autoconf. It is copyright by the Free Software Foundation but is freely distributable. The same holds for its supporting scripts (config.guess, config.sub, ltconfig, ltmain.sh). Another support script, install-sh, is copyright by M.I.T. but is also freely distributable.

It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software. (Since arithmetic coding provides only a marginal gain over the unpatented Huffman mode, it is unlikely that very many implementations will support it.) So far as we are aware, there are no patent restrictions on the remaining

code.

The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

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REFERENCES

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We

highly recommend reading one or more of these references before trying to understand the innards of the JPEG software.

The best short technical introduction to the JPEG compression algorithm is Wallace, Gregory K. "The JPEG Still Picture Compression Standard", Communications of the ACM, April 1991 (vol. 34 no. 4), pp. 30-44. (Adjacent articles in that issue discuss MPEG motion picture compression, applications of JPEG, and related topics.) If you don't have the CACM issue handy, a PostScript file containing a revised version of Wallace's article is available at <ftp://ftp.uu.net/graphics/jpeg/wallace.ps.gz>. The file (actually a preprint for an article that appeared in IEEE Trans. Consumer Electronics) omits the sample images that appeared in CACM, but it includes corrections and some added material. Note: the Wallace article is copyright ACM and IEEE, and it may not be used for commercial purposes.

A somewhat less technical, more

leisurely introduction to JPEG can be found in

"The Data Compression Book" by Mark Nelson and Jean-loup Gailly, published by M&T Books (New York), 2nd ed. 1996, ISBN 1-55851-434-1. This book provides good explanations and example C code for a multitude of compression methods including JPEG. It is an excellent source if you are comfortable reading C code but don't know much about data compression in general. The book's JPEG sample code is far from industrial-strength, but when you are ready to look at a full implementation, you've got one here...

The best full description of JPEG is the textbook "JPEG Still Image Data Compression Standard" by William B. Pennebaker and Joan L. Mitchell, published by Van Nostrand Reinhold, 1993, ISBN 0-442-01272-1. Price US\$59.95, 638 pp. The book includes the complete text of the ISO JPEG standards (DIS 10918-1

and draft DIS 10918-2). This is by far the most complete exposition of JPEG in existence, and we highly recommend it.

The

JPEG standard itself is not available electronically; you must order a paper copy through ISO or ITU. (Unless you feel a need to own a certified official copy, we recommend buying the Pennebaker and Mitchell book instead; it's much cheaper and includes a great deal of useful explanatory material.)

In the USA, copies of the standard may be ordered from ANSI Sales at (212) 642-4900, or from Global Engineering Documents at (800) 854-7179. (ANSI doesn't take credit card orders, but Global does.) It's not cheap: as of 1992, ANSI was charging \$95 for Part 1 and \$47 for Part 2, plus 7% shipping/handling. The standard is divided into two parts, Part 1 being the actual specification, while Part 2 covers compliance testing methods. Part 1 is titled "Digital Compression and Coding of Continuous-tone Still Images, Part 1: Requirements and guidelines" and has document numbers ISO/IEC IS 10918-1, ITU-T T.81. Part 2 is titled "Digital Compression and Coding of Continuous-tone Still

Images, Part 2: Compliance testing" and has document numbers ISO/IEC IS 10918-2, ITU-T T.83.

Some extensions to the original JPEG standard are defined in JPEG Part 3, a newer ISO standard numbered ISO/IEC IS 10918-3 and ITU-T T.84. IJG currently does not support any Part 3 extensions.

The JPEG standard does not specify all details of an interchangeable file format. For the omitted details we follow the "JFIF" conventions, revision 1.02. A copy of the JFIF spec is available from:

Literature Department

C-Cube Microsystems, Inc.

1778 McCarthy Blvd.

Milpitas, CA 95035

phone (408) 944-6300, fax (408) 944-6314

A PostScript version of this document is available by FTP at

<ftp://ftp.uu.net/graphics/jpeg/jfif.ps.gz>. There is also a plain text

version at <ftp://ftp.uu.net/graphics/jpeg/jfif.txt.gz>, but it is missing

the figures.

The TIFF 6.0 file format specification can be obtained by FTP from

<ftp://ftp.sgi.com/graphics/tiff/TIFF6.ps.gz>. The JPEG incorporation

scheme

found in the TIFF 6.0 spec of 3-June-92 has a number of serious problems.

IJG does not recommend use of the TIFF 6.0 design (TIFF Compression tag 6).

Instead, we recommend the JPEG design proposed by TIFF Technical Note #2

(Compression tag 7). Copies of this Note can be obtained from <ftp.sgi.com> or

from <ftp://ftp.uu.net/graphics/jpeg/>. It is expected that the next revision

of the TIFF spec will replace the 6.0 JPEG design with the Note's design.

Although IJG's own code does not support TIFF/JPEG, the free libtiff library

uses our library to implement TIFF/JPEG per the Note. libtiff is available from <ftp://ftp.sgi.com/graphics/tiff/>.

ARCHIVE LOCATIONS

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The "official" archive site for this software is <ftp.uu.net> (Internet address 192.48.96.9). The most recent released version can always be found there in directory `graphics/jpeg`. This particular version will be archived as <ftp://ftp.uu.net/graphics/jpeg/jpegsrc.v6b.tar.gz>. If you don't have direct Internet access, UUNET's archives are also available via UUCP; contact help@uunet.uu.net for information on retrieving files that way.

Numerous Internet sites maintain copies of the UUNET files. However, only <ftp.uu.net> is guaranteed to have the latest official version.

You can also obtain this software in DOS-compatible "zip" archive format from the SimTel archives (<ftp://ftp.simtel.net/pub/simtelnet/msdos/graphics/>), or on CompuServe in the Graphics Support forum (GO CIS:GRAPHSUP), library 12 "JPEG Tools". Again, these versions may sometimes lag behind the <ftp.uu.net> release.

The JPEG FAQ (Frequently Asked Questions) article is a useful source of general information about JPEG. It is updated constantly and therefore is not included in this distribution. The FAQ is posted every two weeks to Usenet newsgroups `comp.graphics.misc`, `news.answers`, and other groups. It is available on the World Wide Web at <http://www.faqs.org/faqs/jpeg-faq/> and other `news.answers` archive sites, including the official `news.answers` archive at [rtfm.mit.edu: ftp://rtfm.mit.edu/pub/usenet/news.answers/jpeg-faq/](ftp://rtfm.mit.edu/pub/usenet/news.answers/jpeg-faq/). If you don't have Web or FTP access, send e-mail to mail-server@rtfm.mit.edu with body
send `usenet/news.answers/jpeg-faq/part1`
send `usenet/news.answers/jpeg-faq/part2`

RELATED SOFTWARE

=====

Numerous viewing and image manipulation programs now support JPEG. (Quite a few of them use this library to do so.) The JPEG FAQ described above lists some of the more popular free and shareware viewers, and tells where to obtain them on Internet.

If you are on a Unix machine, we highly recommend Jef Poskanzer's free PBPLUS software, which provides many useful operations on PPM-format image

files. In particular, it can convert PPM images to and from a wide range of other formats, thus making cjpeg/djpeg considerably more useful. The latest version is distributed by the NetPBM group, and is available from numerous sites,

notably <ftp://wuarchive.wustl.edu/graphics/graphics/packages/NetPBM/>.

Unfortunately PBPLUS/NETPBM is not nearly as portable as the IJG software is; you are likely to have difficulty making it work on any non-Unix machine.

A different free JPEG implementation, written by the PVRG group at Stanford, is available from <ftp://havefun.stanford.edu/pub/jpeg/>. This program is designed for research and experimentation rather than production use; it is slower, harder to use, and less portable than the IJG code, but it is easier to read and modify. Also, the PVRG code supports lossless JPEG, which we do not. (On the other hand, it doesn't do progressive JPEG.)

FILE FORMAT WARS

=====

Some JPEG programs produce files that are not compatible with our library. The root of the problem is that the ISO JPEG committee failed to specify a concrete file format. Some vendors "filled in the blanks" on their own, creating proprietary formats that no one else could read.

(For example, none of the early commercial JPEG implementations for the Macintosh were able to exchange compressed files.)

The file format we have adopted is called JFIF (see REFERENCES). This format has been agreed to by a number of major commercial JPEG vendors, and it has become the de facto standard. JFIF is a minimal or "low end" representation. We recommend the use of TIFF/JPEG (TIFF revision 6.0 as modified by TIFF Technical Note #2) for "high end" applications that need to record a lot of additional data about an image. TIFF/JPEG is fairly new and not yet widely supported, unfortunately.

The upcoming JPEG Part 3 standard defines a file format called SPIFF. SPIFF is interoperable with JFIF, in the sense that most JFIF decoders should be able to read the most common variant of SPIFF. SPIFF has some technical advantages over JFIF, but its major claim to fame is simply that it is an official standard rather than an informal one. At this point it is unclear whether

SPIFF will supersede JFIF or whether JFIF will remain the de-facto standard. IJG intends to support SPIFF once the standard is frozen, but we have not decided whether it should become our default output format or not. (In any case, our decoder will remain capable of reading JFIF indefinitely.)

Various proprietary file formats incorporating JPEG compression also exist. We have little or no sympathy for the existence of these formats. Indeed,

one of the original reasons for developing this free software was to help force convergence on common, open format standards for JPEG files. Don't use a proprietary file format!

TO DO

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The major thrust for v7 will probably be improvement of visual quality. The current method for scaling the quantization tables is known not to be very good at low Q values. We also intend to investigate block boundary smoothing, "poor man's variable quantization", and other means of improving quality-vs-file-size performance without sacrificing compatibility.

In future versions, we are considering supporting some of the upcoming JPEG Part 3 extensions --- principally, variable quantization and the SPIFF file format.

As always, speeding things up is of great interest.

Please send bug reports, offers of help, etc. to jpeg-info@uunet.uu.net.

1.2 javax-inject 1

1.2.1 Available under license :

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Version 2.0, January 2004

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1.7 hk2-api 2.4.0-b34

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1.8 jeromq 0.3.5

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1.9 tiger-types 1.4

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```
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* /opt/cola/permits/146726199_1695306667.849129/0/tiger-types-1-4-sources-jar/org/jvnet/tiger_types/Types.java
```

* /opt/cola/permits/146726199_1695306667.849129/0/tiger-types-1-4-sources-
jar/org/jvnet/tiger_types/TypeVisitor.java
* /opt/cola/permits/146726199_1695306667.849129/0/tiger-types-1-4-sources-
jar/org/jvnet/tiger_types/ParameterizedTypeImpl.java
* /opt/cola/permits/146726199_1695306667.849129/0/tiger-types-1-4-sources-
jar/org/jvnet/tiger_types/WildcardTypeImpl.java
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* /opt/cola/permits/146726199_1695306667.849129/0/tiger-types-1-4-sources-jar/org/jvnet/tiger_types/GenericArrayTypeImpl.java

1.10 aopalliance-repackaged 2.4.0-b34

1.11 annotations 13.0

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* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-jar/org/intellij/lang/annotations/Pattern.java

* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-jar/org/intellij/lang/annotations/Language.java

*

/opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-jar/org/intellij/lang/annotations/PrintFormat.java

* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-jar/org/intellij/lang/annotations/RegExp.java

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jar/org/jetbrains/annotations/Contract.java
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jar/org/intellij/lang/annotations/Flow.java
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jar/org/jetbrains/annotations/Nls.java
* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-
jar/org/jetbrains/annotations/Nullable.java
* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-
jar/org/jetbrains/annotations/NonNls.java
*
```

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/opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-  
jar/org/jetbrains/annotations/PropertyKey.java
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* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-  
jar/org/intellij/lang/annotations/JdkConstants.java
```

```
* /opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-  
jar/org/jetbrains/annotations/NotNull.java
```

```
*
```

```
/opt/cola/permits/173667507_1695324641.7896898/0/annotations-13-0-sources-  
jar/org/intellij/lang/annotations/MagicConstant.java
```

1.12 failureaccess 1.0.1

1.13 byte-buddy 1.9.10

1.14 javax-ws-rs-api 2.1.1

1.15 bzip2 1.0.8

1.16 objenesis 2.6

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1.27 swagger 1.6.2

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1.28 jctools-core 3.1.0

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```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/maven-v4_0_0.xsd">
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</build>

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  </repository>
</distributionManagement>

<url>https://github.com/JCTools</url>
<inceptionYear>2013</inceptionYear>

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    <name>Apache

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  <tag>HEAD</tag>
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  <developer>
    <url>https://github.com/nitsanw</url>
  </developer>
  <developer>
    <url>https://github.com/mjpt777</url>
  </developer>
  <developer>
    <url>https://github.com/RichardWarburton</url>
  </developer>
  <developer>
    <url>https://github.com/kay</url>
  </developer>
  <developer>
    <url>https://github.com/franz1981</url>
  </developer>
</developers>

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  <java.test.version>1.8</java.test.version>

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  <maven.compiler.testSource>${java.test.version}</maven.compiler.testSource>
  <maven.compiler.testTarget>${java.test.version}</maven.compiler.testTarget>

  <hamcrest.version>1.3</hamcrest.version>
  <junit.version>4.12</junit.version>
  <guava-testlib.version>21.0</guava-testlib.version>
</properties>
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</project>

Found

in path(s):

* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/META-INF/maven/org.jctools/jctools-core/pom.xml

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*/

Found in path(s):

* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/spec/Ordering.java

* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/atomic/SpSCUnboundedAtomicArrayQueue.java

* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/atomic/SpMCAtomicArrayQueue.java

*

/* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/MessagePassingQueueUtil.java

* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/atomic/MpMCAtomicArrayQueue.java

* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/util/UnsafeJvmInfo.java

* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/atomic/LinkedListQueueAtomicNode.java

* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/SpSCLinkedListQueue.java

* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/MpSCUnboundedXaddArrayQueue.java

* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/spec/Preference.java

* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/atomic/MpSCAtomicArrayQueue.java

*

/opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/MessagePassingQueue.java
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 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/queues/spec/ConcurrentQueueSpec.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/queues/atomic/SpSCChunkedAtomicArrayQueue.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/maps/ConcurrentAutoTable.java
 *
 /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/queues/MpscUnboundedXaddChunk.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/queues/atomic/MpscUnboundedAtomicArrayQueue.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/queues/LinkedQueueNode.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/queues/SpSCUnboundedArrayQueue.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/util/PortableJvmInfo.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/queues/ConcurrentCircularArrayQueue.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/maps/NonBlockingSetInt.java
 *
 /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/queues/atomic/BaseLinkedAtomicQueue.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/queues/atomic/SequencedAtomicReferenceArrayQueue.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/queues/MpscLinkedQueue.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/util/UnsafeRefArrayAccess.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/queues/MpscCompoundQueue.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/queues/SpSCChunkedArrayQueue.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/queues/SpSCArrayQueue.java
 * /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-
 jar/org/jctools/queues/atomic/AtomicReferenceArrayQueue.java

*
/opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/QueueFactory.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/MpscArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/util/UnsafeAccess.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/MpscUnboundedArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/atomic/SpSCGrowAtomicArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/IndexedQueueSizeUtil.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/atomic/MpscLinkedAtomicQueue.java
*
/opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/SpSCGrowArrayQueue.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/util/RangeUtil.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/package-info.java
* /opt/ws_local/PERMITS_SQL/1093815924_1601014602.33/0/jctools-core-3-1-0-sources-jar/org/jctools/queues/BaseSpSCLinkedArrayQueue.java

1.29 xerces-j 2.12.2

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1.38 commons-logging 1.2

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jar/org/apache/commons/logging/impl/Jdk13LumberjackLogger.java
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jar/org/apache/commons/logging/impl/SimpleLog.java
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jar/org/apache/commons/logging/impl/ServletContextCleaner.java
```

1.39 commons-codec 1.14

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1.40 classmate 1.5.1

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Java ClassMate library was originally written by Tatu Saloranta (tatu.saloranta@iki.fi)

Other developers who have contributed code are:

* Brian Langel

1.41 httpcomponents-mime 4.5.12

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1.42 jakarta-validation-api 2.0.2

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*/
```

Found in path(s):

```
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/Validator.java  
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/CascadableDescriptor.java
```

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ConstraintTarget.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/FutureOrPresent.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Null.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ConstraintValidatorContext.java

*

/opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/ExecutableDescriptor.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/groups/Default.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/MessageInterpolator.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/package-info.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/valueextraction/Unwrapping.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/valueextraction/ValueExtractor.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraintvalidation/ValidationTarget.java

*

/opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/MethodDescriptor.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/package-info.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/UnexpectedTypeException.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/BeanDescriptor.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Digits.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/bootstrap/ProviderSpecificBootstrap.java

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* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/NegativeOrZero.java

*

/opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ConstraintViolation.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ConstraintDefinitionException.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/ValidateUnwrappedValue.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-

jar/javax/validation/constraintvalidation/SupportedValidationTarget.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/groups/package-info.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/spi/ValidationProvider.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/ElementKind.java
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/opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/metadata/GroupConversionDescriptor.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/valueextraction/ExtractedValue.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/bootstrap/GenericBootstrap.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/metadata/MethodType.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/valueextraction/ValueExtractorDeclarationException.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/metadata/ConstructorDescriptor.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/constraintvalidation/package-info.java
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/opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/constraints/AssertTrue.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/Path.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/executable/package-info.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/valueextraction/package-info.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/constraints/PositiveOrZero.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/valueextraction/ValueExtractorDefinitionException.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/BootstrapConfiguration.java
*
/opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/metadata/ElementDescriptor.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/metadata/ContainerElementTypeDescriptor.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/GroupDefinitionException.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/constraints/Min.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/groups/ConvertGroup.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/Scope.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Max.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ReportAsSingleViolation.java

*

/opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/ReturnValueDescriptor.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ParameterNameProvider.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Pattern.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/NoProviderFoundException.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/Validation.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ValidatorContext.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/NotBlank.java

*

/opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/spi/package-info.java

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* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/Valid.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/metadata/CrossParameterDescriptor.java

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* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/executable/ValidateOnExecution.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/Size.java

*

/opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/constraints/PastOrPresent.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/ConstraintViolationException.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/bootstrap/package-info.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/javax/validation/TraversableResolver.java

* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-

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jar/javax/validation/executable/ExecutableValidator.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/ValidationProviderResolver.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/ValidatorFactory.java
*
/opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/metadata/ContainerDescriptor.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/metadata/ConstraintDescriptor.java
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jar/javax/validation/constraints/NotNull.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/constraints/package-info.java
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jar/javax/validation/ValidationException.java
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jar/javax/validation/OverridesAttribute.java
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jar/javax/validation/constraints/Email.java
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jar/javax/validation/ConstraintDeclarationException.java
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jar/javax/validation/metadata/PropertyDescriptor.java
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* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/constraints/Positive.java

```



```
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/constraints/NotEmpty.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/spi/ConfigurationState.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/Payload.java
*
/opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/constraints/DecimalMin.java
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-
jar/javax/validation/constraints/Past.java
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```

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~

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<![CDATA[

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```
* /opt/cola/permits/1135880235_1613624044.2/0/jakarta-validation-api-2-0-2-sources-3-jar/META-
INF/maven/jakarta.validation/jakarta.validation-api/pom.xml
```

1.43 asm 7.1

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```
* /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/ClassWriter.java
* /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/Handler.java
```

* /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/Frame.java
 *
 /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/Edge.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/Type.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/MethodWriter.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/FieldVisitor.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/Context.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/AnnotationVisitor.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/SymbolTable.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/Symbol.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/ClassVisitor.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/MethodVisitor.java
 *
 /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/Handle.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/Constants.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/Label.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/ModuleVisitor.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/Attribute.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-
 jar/org/objectweb/asm/signature/SignatureVisitor.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/TypePath.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-
 jar/org/objectweb/asm/MethodTooLargeException.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-
 jar/org/objectweb/asm/signature/SignatureWriter.java
 *
 /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/ClassReader.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/ConstantDynamic.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/AnnotationWriter.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-
 jar/org/objectweb/asm/signature/SignatureReader.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/FieldWriter.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/ModuleWriter.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/CurrentFrame.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-
 jar/org/objectweb/asm/ClassTooLargeException.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/TypeReference.java
 * /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/ByteVector.java
 *
 /opt/cola/permits/1135892428_1613626883.3/0/asm-7-1-sources-6-jar/org/objectweb/asm/Opcodes.java
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- * /opt/cola/permits/1135892428_1613626883.3/asm-7-1-sources-6-jar/org/objectweb/asm/signature/package.html

1.44 jakarta-ws-rs-api 2.1.6

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1.46 commons-codec 1.15

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1.47 fluent-hc 4.5.13

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1.49 jakarta-inject 2.6.1

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Upstream-Name: liblz4

Upstream-Contact: Yann Collet <Cyan4973@github.com>

Source: <https://github.com/lz4/lz4>

Files: *

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```
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-  
jar/com/lmax/disruptor/EventReleaseAware.java  
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-  
jar/com/lmax/disruptor/EventReleaser.java
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```
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/WorkHandler.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/EventTranslatorThreeArg.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/BatchEventProcessor.java
*
/opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/dsl/EventHandlerGroup.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/LiteBlockingWaitStrategy.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/EventTranslatorVararg.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-jar/com/lmax/disruptor/WorkerPool.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/EventTranslatorOneArg.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/WaitStrategy.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/EventHandler.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/dsl/ExceptionHandlerSetting.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/WorkProcessor.java
*
/opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/util/DaemonThreadFactory.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-jar/com/lmax/disruptor/util/Util.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/LifecycleAware.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
```

```

jar/com/lmax/disruptor/AlertException.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/AbstractSequencer.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/BlockingWaitStrategy.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/YieldingWaitStrategy.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/EventTranslatorTwoArg.java
*
/opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/NoOpEventProcessor.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/SequenceBarrier.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/SingleProducerSequencer.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/PhasedBackoffWaitStrategy.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-jar/com/lmax/disruptor/RingBuffer.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/EventProcessor.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/BusySpinWaitStrategy.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/FatalExceptionHandler.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/dsl/ConsumerRepository.java
*
/opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/SequenceGroup.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/MultiProducerSequencer.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/SequenceReportingEventHandler.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/EventTranslator.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/AggregateEventHandler.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/dsl/EventProcessorInfo.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/IgnoreExceptionHandler.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/dsl/Disruptor.java
*
/opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/ProcessingSequenceBarrier.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-

```


jar/com/lmax/disruptor/SleepingWaitStrategy.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/EventFactory.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/ExceptionHandler.java
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* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-
jar/com/lmax/disruptor/InsufficientCapacityException.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-jar/com/lmax/disruptor/Sequencer.java
* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-

jar/com/lmax/disruptor/DataProvider.java

*

/opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-

jar/com/lmax/disruptor/SequenceGroups.java

* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-jar/com/lmax/disruptor/Sequence.java

* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-jar/com/lmax/disruptor/Cursored.java

* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-

jar/com/lmax/disruptor/FixedSequenceGroup.java

* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-

jar/com/lmax/disruptor/dsl/ProducerType.java

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* /opt/cola/permits/1185279897_1627734845.86/0/disruptor-3-4-4-sources-

jar/com/lmax/disruptor/ExceptionHandlers.java

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```

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* See the license.txt file in the root directory or <http://www.apache.org/licenses/LICENSE-2.0>.
*/
/**
* <p>
* A method-level constraint, that evaluates a script expression against the
* annotated method or constructor. This constraint can be used to implement
* validation routines that depend on several parameters of the annotated
* executable.
* </p>
* <p>
* Script expressions can be written in any scripting or expression language,
* for which a <a href="http://jcp.org/en/jsr/detail?id=223">JSR 223</a>
* ("Scripting for the Java<sup>TM</sup> Platform") compatible engine can be
* found on the classpath. To refer to a parameter within the scripting
* expression, use its name as obtained by the active
* {@link javax.validation.ParameterNameProvider}. The default provider will
* return the
  actual parameter names, if the -parameters compiler option
* has been enabled, and {@code arg0}, {@code arg1} etc. otherwise.
* </p>
* <p>
* The following listing shows an example using the JavaScript engine which
* comes with the JDK:
* </p>
* <pre>
* {@code @ParameterScriptAssert(script = "start.before(end)", lang = "javascript")}
* public void createEvent(Date start, Date end) { ... }
* }
* </pre>
* <p>
* Can be specified on any method or constructor.
* </p>
*
* @author Gunnar Morling
*/

```

Found in path(s):

```

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/constraints/ParameterScriptAssert.java

```

No license file was found, but licenses were detected in source scan.

```

/*
* Hibernate Validator, declare and validate application constraints
*
* License: Apache License, Version 2.0
* See the license.txt file in the root directory or <http://www.apache.org/licenses/LICENSE-2.0>.
*/

```

```
/**
 * Retrieves constraint related meta data for the parameters of the given
 * executable.
 *
 * @param javaBeanExecutable The executable of interest.
 *
 * @return A list with parameter meta data for the given executable.
 */
```

Found in path(s):

```
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/provider/AnnotationMetaDataProvider.java
No license file was found, but licenses were detected in source scan.
```

```
/*
 * Hibernate Validator, declare and validate application constraints
 *
 * License: Apache License, Version 2.0
 * See the license.txt file in the root directory or <http://www.apache.org/licenses/LICENSE-2.0>.
 */
```

Found in path(s):

```
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/raw/BeanConfiguration.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/decimal/DecimalMaxValidatorForFloat.ja
va
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/descriptor/PropertyDescriptorImpl.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/xml/mapping/AbstractConstrainedElementStaxBuilder.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/future/FutureValidatorForHijrahDate.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/money/PositiveOrZeroValidatorForMonetaryAmount.jav
a
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/defs/pl/NIPDef.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/aggregated/BeanMetaDataBuilder.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/constraintvalidation/HibernateConstraintValidatorContext.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/size/SizeValidatorForArray.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/PredefinedScopeValidatorFactoryImpl.java
```

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/defs/NegativeDef.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/util/Version.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/cfg/context/ExecutableConstraintMappingContextImpl.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/validationcontext/BeanValidationContext.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/spi/messageinterpolation/LocaleResolver.java

*

/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/valueextraction/ListPropertyValueExtractor.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/constraints/br/TituloEleitoral.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/hv/br/CNPJValidator.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/decimal/DecimalMinValidatorForCharSequence.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/notempty/NotEmptyValidatorForCharSequence.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/metadata/aggregated/ContainerCascadingMetaData.java

*

/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/spi/nodenameprovider/Property.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/valueextraction/SetPropertyValueExtractor.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/metadata/core/ConstraintOrigin.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/scripting/DefaultScriptEvaluatorFactory.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/metadata/location/GetterConstraintLocation.java

*

/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/MaxValidatorForByte.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/MinValidatorForNumber.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/metadata/aggregated/GroupConversionHelper.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/NotNullValidator.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/messageinterpolation/parser/ELState.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/time/package-info.java

*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/defs/pl/REGONDef.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/messageinterpolation/AbstractMessageInterpolator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/decimal/AbstractDecimalMinValidator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/constraints/pl/REGON.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/defs/FutureOrPresentDef.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/defs/AssertTrueDef.java
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/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/PositiveValidatorForBigInteger.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/time/future/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/metadata/aggregated/NonContainerCascadingMetaData.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/size/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/util/ExecutableParameterNameProvider.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/money/NegativeOrZeroValidatorForMonetaryAmount.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/util/DomainNameUtil.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/messageinterpolation/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/context/TypeTarget.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/constraints/Mod11Check.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/cfg/context/ParameterConstraintMappingContextImpl.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/xml/AbstractStaxBuilder.java
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/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/defs/NullDef.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/metadata/raw/ConfigurationSource.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/util/Contracts.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/context/ReturnValueTarget.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/PositiveOrZeroValidatorForDouble.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/metadata/BeanMetaDataClassNormalizer.java

*

/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/HibernateValidatorFactory.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/metadata/PredefinedScopeBeanMetaDataManager.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/valueextraction/OptionalIntValueExtractor.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/cfg/context/GetterConstraintMappingContextImpl.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/MaxValidatorForCharSequence.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/constraints/time/DurationMin.java

*

/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/money/MinValidatorForMonetaryAmount.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/constraints/ru/INN.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/util/privilegedactions/package-info.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/PositiveOrZeroValidatorForCharSequence.java

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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/metadata/facets/package-info.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/ValidatorImpl.java

*

/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/NegativeOrZeroValidatorForCharSequence.java

java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/time/futureorpresent/FutureOrPresentValidatorForHijrahDate.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/cfg/context/package-info.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/AssertTrueValidator.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/valueextraction/ArrayElement.java

*

/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/HibernateValidatorConfiguration.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/hv/time/DurationMaxValidator.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/time/future/FutureValidatorForYear.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/defs/ParameterScriptAssertDef.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/EmailValidator.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/time/future/FutureValidatorForReadableInstant.java
 *
 /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/engine/ConstraintViolationImpl.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/engine/PredefinedScopeValidatorContextImpl.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/defs/package-info.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/HibernateValidatorPermission.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/util/annotation/AnnotationDescriptor.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/time/past/PastValidatorForThaiBuddhistDate.java
 *
 /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/money/PositiveValidatorForMonetaryAmount.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/time/futureorpresent/FutureOrPresentValidatorForYear.java
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 jar/org/hibernate/validator/HibernateValidatorContext.java
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 jar/org/hibernate/validator/internal/engine/resolver/CachingTraversableResolverForSingleValidation.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/engine/constraintdefinition/ConstraintDefinitionContribution.java
 *
 /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/hv/ScriptAssertContext.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/xml/mapping/MappingXmlParser.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/messageinterpolation/ExpressionLanguageFeatureLevel.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/defs/EANDef.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/hv/AbstractScriptAssertValidator.java

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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/util/privilegedactions/GetDeclaredMethodHandle.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/defs/AssertFalseDef.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/NegativeValidatorForDouble.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/util/logging/formatter/TypeFormatter.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/util/privilegedactions/SetContextClassLoader.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/xml/config/ValidationConfigStaxBuilder.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/spi/scripting/ScriptEvaluatorFactory.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/spi/nodenameprovider/PropertyNodeNameProvider.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/notempty/NotEmptyValidatorForArraysOfByte.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/cfg/context/CascadableConstraintMappingContextImplBase.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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stant.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/messageinterpolation/el/NoOpElResolver.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/context/Constrainable.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/futureorpresent/FutureOrPresentValidatorForInstant.
java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/AbstractMinValidator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/spi/scripting/ScriptEvaluator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/messageinterpolation/el/BeanPropertiesElContext.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/futureorpresent/FutureOrPresentValidatorForLocalD
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*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/xml/mapping/ConstraintDefinitionStaxBuilder.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/ConstraintMapping.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-

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jar/org/hibernate/validator/internal/xml/package-info.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/size/SizeValidatorForArraysOfChar.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/notempty/NotEmptyValidatorForCollection.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/ConstraintDef.java
 *
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 jar/org/hibernate/validator/internal/engine/messageinterpolation/el/BeanMethodsELContext.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/time/past/PastValidatorForYear.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/engine/validationcontext/ValidationContextBuilder.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/notempty/NotEmptyValidatorForArraysOfFloat.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/metadata/aggregated/AbstractConstraintMetaData.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/defs/RangeDef.java
 *
 /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/defs/DigitsDef.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/size/SizeValidatorForMap.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/defs/br/CPFDef.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/constraints/Normalized.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/xml/mapping/DefaultPackageStaxBuilder.java
 *
 /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/cfg/context/ReturnValueConstraintMappingContextImpl.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/GenericConstraintDef.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/util/privilegedactions/GetDeclaredField.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/xml/mapping/ValidStaxBuilder.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/engine/valueextraction/ObjectArrayValueExtractor.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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 jar/org/hibernate/validator/cfg/defs/PatternDef.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/metadata/descriptor/CrossParameterDescriptorImpl.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/notempty/NotEmptyValidatorForMap.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/properties/Field.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/constraints/Length.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/util/ModUtil.java
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 jar/org/hibernate/validator/internal/constraintvalidators/bv/time/pastorpresent/PastOrPresentValidatorForDate.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/context/ConstraintMappingTarget.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/util/annotation/package-info.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/context/TypeConstraintMappingContext.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/engine/messageinterpolation/parser/Token.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/metadata/location/package-info.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/MaxValidatorForNumber.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/engine/groups/ValidationOrderGenerator.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/decimal/DecimalMinValidatorForLong.java
 *
 /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/defs/NotBlankDef.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/metadata/aggregated/rule/MethodConfigurationRule.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/constraints/pl/package-info.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/metadata/descriptor/ReturnValueDescriptorImpl.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/groups/Group.java

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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/spi/group/DefaultGroupSequenceProvider.java

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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/cfg/context/ConfiguredConstraint.java

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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/util/privilegedactions/GetMethods.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/messageinterpolation/package-info.java

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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/cfg/context/FieldConstraintMappingContextImpl.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/properties/Callable.java

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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/properties/javabean/JavaBeanMethod.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/resourceloading/DelegatingResourceBundleLocator.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/time/future/FutureValidatorForMonthDay.java

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jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/decimal/DecimalMinValidatorForByte.java
*
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/ValidatorFactoryConfigurationHelper.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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jar/org/hibernate/validator/internal/xml/mapping/ClassLoadingHelper.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/cfg/context/MethodConstraintMappingContextImpl.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/raw/ConstrainedElement.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/pastorpresent/AbstractPastOrPresentInstantBasedValidator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/properties/Signature.java
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jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/PositiveOrZeroValidatorForByte.java
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jar/org/hibernate/validator/internal/engine/valueextraction/ValueExtractorDescriptor.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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jar/org/hibernate/validator/internal/util/privilegedactions/GetDeclaredConstructors.java
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jar/org/hibernate/validator/internal/constraintvalidators/hv/pl/PolishNumberValidator.java
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/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/context/MethodTarget.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/engine/constraintvalidation/PredefinedScopeConstraintValidatorManagerImpl.java
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 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/metadata/core/MetaConstraint.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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 Time.java
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 jar/org/hibernate/validator/internal/metadata/descriptor/ConstraintDescriptorImpl.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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 jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/decimal/DecimalMaxValidatorForNumber
 .java
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 jar/org/hibernate/validator/spi/properties/GetterPropertySelectionStrategy.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/time/pastorpresent/PastOrPresentValidatorForLocalDate.java
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 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/util/TypeResolutionHelper.java
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 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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 jar/org/hibernate/validator/internal/constraintvalidators/bv/time/futureorpresent/FutureOrPresentValidatorForYearMonth
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 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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 *
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/AnnotationDef.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/size/SizeValidatorForCharSequence.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/pastorpresent/PastOrPresentValidatorForMonthDay.
java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/DefaultClockProvider.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-

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jar/org/hibernate/validator/internal/util/privilegedactions/GetResources.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/constraintvalidation/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/xml/mapping/ConstraintMappingsStaxBuilder.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/constraintvalidation/ConstraintValidatorManager.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/constraints/LuhnCheck.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/futureorpresent/FutureOrPresentValidatorForThaiBu
ddhistDate.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/future/FutureValidatorForOffsetDateTime.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/defs/NegativeOrZeroDef.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/aggregated/ExecutableMetaData.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/messageinterpolation/el/VariablesELContext.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/constraintvalidation/HibernateCrossParameterConstraintValidatorContext.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/money/DecimalMinValidatorForMonetaryAmount.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/PredefinedScopeHibernateValidatorConfiguration.java
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jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/MaxValidatorForLong.java
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jar/org/hibernate/validator/internal/constraintvalidators/bv/time/past/PastValidatorForMonthDay.java
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jar/org/hibernate/validator/internal/cfg/context/ConstructorConstraintMappingContextImpl.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/hv/ru/INNValidator.java
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/hv/Mod11CheckValidator.java

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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/util/TypeVariableBindings.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/PositiveOrZeroValidatorForBigInteger.java
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/provider/MetaDataProvider.java
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jar/org/hibernate/validator/internal/engine/messageinterpolation/ParameterTermResolver.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/messageinterpolation/el/RootResolver.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/context/ConstructorTarget.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/path/PropertyNode.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/util/ExecutableHelper.java
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jar/org/hibernate/validator/internal/constraintvalidators/bv/time/past/PastValidatorForMinguoDate.java
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/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/decimal/DecimalMaxValidatorForShort.java
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jar/org/hibernate/validator/internal/engine/constraintvalidation/CrossParameterConstraintValidatorContextImpl.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/aggregated/rule/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/properties/Constrainable.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-

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jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/NegativeValidatorForLong.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/messageinterpolation/parser/EscapedState.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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jar/org/hibernate/validator/internal/engine/valueextraction/ValueExtractorManager.java
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*
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jar/org/hibernate/validator/internal/metadata/aggregated/BeanMetaData.java
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jar/org/hibernate/validator/internal/util/CollectionHelper.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/aggregated/GetterCascadable.java
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jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/PositiveValidatorForFloat.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/xml/mapping/ConstrainedFieldStaxBuilder.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/past/PastValidatorForZonedDateTime.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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*
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/provider/package-info.java

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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/metadata/core/AnnotationProcessingOptionsImpl.java

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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/PositiveValidatorForByte.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/metadata/raw/AbstractConstrainedElement.java

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/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/time/past/PastValidatorForReadableInstant.java
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/Incubating.java
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/money/CurrencyValidatorForMonetaryAmount.java
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*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/AssertFalseValidator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/defs/LengthDef.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/metadata/descriptor/ElementDescriptorImpl.java
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-

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jar/org/hibernate/validator/internal/util/privilegedactions/GetAnnotationAttribute.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/cfg/context/TypeConstraintMappingContextImpl.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/NegativeValidatorForShort.java
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 jar/org/hibernate/validator/internal/engine/validationcontext/ParameterExecutableValidationContext.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/defs/NotEmptyDef.java
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 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/NegativeOrZeroValidatorForFloat.java
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/descriptor/package-info.java
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 jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/PositiveValidatorForInteger.java
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 /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/constraints/br/package-info.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/DigitsValidatorForNumber.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/util/privilegedactions/GetClassLoader.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/time/futureorpresent/FutureOrPresentValidatorForDate.ja
 va
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-

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jar/org/hibernate/validator/internal/constraintvalidators/bv/money/DigitsValidatorForMonetaryAmount.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/constraints/Mod10Check.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/MinValidatorForDouble.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/MinValidatorForBigInteger.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/NegativeOrZeroValidatorForByte.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/util/logging/formatter/ClassObjectFormatter.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/past/AbstractPastEpochBasedValidator.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/spi/scripting/ScriptEvaluatorNotFoundException.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/xml/CloseIgnoringInputStream.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/notempty/NotEmptyValidatorForArray.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/money/DecimalMaxValidatorForMonetaryAmount.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/util/logging/formatter/ArrayOfClassesObjectFormatter.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/spi/scripting/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/valueextraction/MapPropertyValueExtractor.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/facets/Cascadable.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/resolver/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/NegativeOrZeroValidatorForInteger.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/xml/mapping/ConstrainedConstructorStaxBuilder.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/MinValidatorForByte.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/decimal/DecimalMaxValidatorForInteger.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/package-info.java

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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/defs/pl/package-info.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/defs/CurrencyDef.java

*

/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/valueextraction/ValueExtractorResolver.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/util/ReflectionHelper.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/validationcontext/ReturnValueExecutableValidationContext.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/time/pastorpresent/PastOrPresentValidatorForLocalDate
Time.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/group/package-info.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/valueextraction/ByteArrayValueExtractor.java

*

/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/path/package-info.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/messageinterpolation/InterpolationTerm.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/xml/config/ResourceLoaderHelper.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/time/futureorpresent/FutureOrPresentValidatorForMonth
Day.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/metadata/aggregated/ReturnValueMetaData.java

*

/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/ConstraintCreationContext.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/util/stereotypes/Immutable.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/time/pastorpresent/package-info.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/constraints/Currency.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/groups/Sequence.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/time/futureorpresent/FutureOrPresentValidatorForOffset
Time.java

*

/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/time/AbstractJavaTimeValidator.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-

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jar/org/hibernate/validator/constraints/NotEmpty.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/decimal/DecimalMinValidatorForDouble.
java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/decimal/DecimalNumberComparatorHelp
er.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/properties/javabean/JavaBeanField.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/PositiveOrZeroValidatorForInteger.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/context/CrossParameterConstraintMappingContext.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/aggregated/rule/OverridingMethodMustNotAlterParameterConstraints.j
ava
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/xml/mapping/ContainerElementTypeConfigurationBuilder.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/NegativeValidatorForInteger.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/hv/LengthValidator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/properties/javabean/JavaBeanConstructor.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/properties/DefaultGetterPropertySelectionStrategy.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/core/ConstraintHelper.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/NumberSignHelper.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/aggregated/ValidatableParametersMetaData.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/messageinterpolation/el/BeanPropertiesELResolver.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/engine/HibernateValidatorEnhancedBean.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/futureorpresent/FutureOrPresentValidatorForLocalD
ateTime.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/hv/URLValidator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/messageinterpolation/ParameterMessageInterpolator.java

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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/DecimalMinValidatorForInteger.j
ava
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/constraints/br/CNPJ.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/PositiveOrZeroValidatorForFloat.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/PositiveValidatorForDouble.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/defs/UniqueElementsDef.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/valueextraction/ValueExtractorHelper.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/aggregated/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/defs/br/TituloEleitoralDef.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/validationcontext/PropertyValidationContext.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/NotBlankValidator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/MaxValidatorForBigDecimal.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/scripting/package-info.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/NegativeOrZeroValidatorForDouble.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/xml/config/ValidationBootstrapParameters.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/cfg/context/DefaultConstraintMapping.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/context/CrossParameterTarget.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/money/NegativeValidatorForMonetaryAmount.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/future/FutureValidatorForReadablePartial.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/constraintvalidation/ConstraintViolationCreationContext.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/defs/DecimalMaxDef.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/messageinterpolation/el/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-

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jar/org/hibernate/validator/HibernateValidator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/NullValidator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/messageinterpolation/LocalizedMessage.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/cfg/context/GroupConversionTargetContextImpl.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/hv/UniqueElementsValidator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/valuecontext/ValueContexts.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/MinValidatorForFloat.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/properties/Getter.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/defs/URLDef.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/constraintvalidation/SimpleConstraintTree.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/defs/CodePointLengthDef.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/size/SizeValidatorForArraysOfBoolean.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/BeanMetaDataManager.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/util/privilegedactions/GetMethodFromGetterNameCandidates.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/context/PropertyTarget.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/util/logging/formatter/CollectionOfClassesObjectFormatter.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/xml/config/BootstrapConfigurationImpl.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/pastorpresent/PastOrPresentValidatorForInstant.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/hv/ParameterScriptAssertValidator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/core/BuiltinConstraint.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/xml/mapping/ConstrainedParameterStaxBuilder.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/MaxValidatorForFloat.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-

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jar/org/hibernate/validator/internal/util/logging/formatter/ExecutableFormatter.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/hv/ModCheckValidator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/xml/mapping/BeanStaxBuilder.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/path/package-info.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/groups/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/util/privilegedactions/GetResource.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/AbstractEpochBasedTimeValidator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/past/PastValidatorForInstant.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/context/ConstraintDefinitionTarget.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/future/FutureValidatorForJapaneseDate.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/cfg/context/GroupConversionTargetContext.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/path/PathImpl.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/pastorpresent/PastOrPresentValidatorForYear.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/ValidatorFactoryImpl.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/notempty/package-info.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/NegativeOrZeroValidatorForBigInteger.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/valueextraction/CharArrayValueExtractor.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/group/GroupSequenceProvider.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/MinValidatorForCharSequence.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/descriptor/ContainerElementTypeDescriptorImpl.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/messageinterpolation/parser/MessageState.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/time/future/FutureValidatorForOffsetTime.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-

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jar/org/hibernate/validator/internal/engine/DefaultPropertyNameProvider.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/resourceloading/package-info.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/parameternameprovider/package-info.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/time/pastorpresent/PastOrPresentValidatorForMinguoDate.java
 *
 /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/defs/br/package-info.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/MinValidatorForLong.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/time/past/AbstractPastInstantBasedValidator.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/decimal/DecimalMinValidatorForBigDecimal.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/xml/mapping/ConstrainedMethodStaxBuilder.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/decimal/DecimalMaxValidatorForLong.java
 *
 /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/metadata/facets/Validatable.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/engine/valueextraction/IntArrayValueExtractor.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/cfg/defs/SizeDef.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/time/futureorpresent/AbstractFutureOrPresentInstantBasedValidator.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/util/logging/formatter/DurationFormatter.java
 *
 /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/engine/PredefinedScopeConfigurationImpl.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/package-info.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/xml/mapping/ContainerElementTypeStaxBuilder.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/util/privilegedactions/ConstructorInstance.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/constraintvalidators/bv/time/future/FutureValidatorForCalendar.java
 * /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
 jar/org/hibernate/validator/internal/engine/constraintvalidation/ConstraintTree.java

*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/context/ConstructorConstraintMappingContext.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/util/annotation/AnnotationFactory.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/time/futureorpresent/FutureOrPresentValidatorForCalendar.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/size/SizeValidatorForArraysOfDouble.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/messageinterpolation/TermResolver.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/constraints/CodePointLength.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/valueextraction/LongArrayValueExtractor.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/xml/mapping/AbstractMultiValuedElementStaxBuilder.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/util/annotation/AnnotationProxy.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/hv/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/messageinterpolation/parser/TokenCollector.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/time/AbstractInstantBasedTimeValidator.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/metadata/provider/XmlMetaDataProvider.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/constraintvalidation/HibernateConstraintViolationBuilder.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/validationcontext/AbstractValidationContext.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/metadata/raw/ConstrainedParameter.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/xml/mapping/ContainerElementTypePath.java
*
/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/xml/XmlParserHelper.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/util/stereotypes/Lazy.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/time/past/PastValidatorForOffsetTime.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/decimal/DecimalMinValidatorForFloat.java
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/constraints/pl/PESEL.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/util/privilegedactions/GetDeclaredFields.java

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/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/context/MethodConstraintMappingContext.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/spi/cfg/ConstraintMappingContributor.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/constraints/Range.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/valueextraction/MapPropertyKeyExtractor.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/resolver/TraversableResolvers.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/valueextraction/ReadOnlySetPropertyValueExtractor.java

*

/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/util/classhierarchy/ClassHierarchyHelper.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/constraints/NotBlank.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/engine/constraintvalidation/ComposingConstraintTree.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/defs/NormalizedDef.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/notempty/NotEmptyValidatorForArraysOfBoolean.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/hv/ScriptAssertValidator.java

*

/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/context/AnnotationIgnoreOptions.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/hv/pl/NIPValidator.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/time/past/PastValidatorForLocalDateTime.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/cfg/defs/DecimalMinDef.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/PositiveValidatorForLong.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/constraints/ru/package-info.java

*

/opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-jar/org/hibernate/validator/internal/constraintvalidators/bv/number/bound/decimal/DecimalMaxValidatorForBigDecimal.java

* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-

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jar/org/hibernate/validator/internal/constraintvalidators/hv/EANValidator.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/raw/ConstrainedExecutable.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/util/classhierarchy/package-info.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/util/privilegedactions/GetAnnotationAttributes.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/engine/constraintvalidation/ConstraintValidatorManagerImpl.java
*
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/IgnoreForbiddenApisErrors.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/constraintvalidators/bv/number/sign/NegativeValidatorForBigInteger.java
* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
jar/org/hibernate/validator/internal/metadata/aggregated/PotentiallyContainerCascadingMetaData.java
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* /opt/cola/permits/1223666055_1635937368.92/0/hibernate-validator-6-2-0-final-sources-2-
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1.67 alpine-keys 2.4-r1

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1.69 httpcore-nio 4.4.15

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1.72 apache-log4j 2.17.1

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1.76 hikaricp 4.0.3

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* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/metrics/dropwizard/CodahaleHealthChecker.java

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* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/metrics/MetricsTrackerFactory.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/HikariJNDIFactory.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/pool/HikariPool.java
*

/opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/metrics/dropwizard/CodaHaleMetricsTracker.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/metrics/MetricsTracker.java

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* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/metrics/prometheus/PrometheusHistogramMetricsTrackerFactory.java
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* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/util/SuspendResumeLock.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-

jar/com/zaxxer/hikari/pool/ProxyResultSet.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-
jar/com/zaxxer/hikari/util/JavassistProxyFactory.java
*
/opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/HikariConfig.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-
jar/com/zaxxer/hikari/metrics/prometheus/HikariCPCollector.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/util/FastList.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-
jar/com/zaxxer/hikari/util/ConcurrentBag.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-
jar/com/zaxxer/hikari/util/DriverDataSource.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-
jar/com/zaxxer/hikari/pool/ProxyFactory.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-
jar/com/zaxxer/hikari/pool/ProxyConnection.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-
jar/com/zaxxer/hikari/pool/ProxyLeakTaskFactory.java
*
/opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-
jar/com/zaxxer/hikari/pool/ProxyLeakTask.java
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jar/com/zaxxer/hikari/metrics/prometheus/PrometheusMetricsTrackerFactory.java
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* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/metrics/prometheus/PrometheusMetricsTracker.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/hibernate/HikariConfigurationUtil.java
*
/opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/HikariDataSource.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/util/UtilityElf.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/HikariConfigMXBean.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/metrics/dropwizard/CodahaleMetricsTrackerFactory.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/pool/ProxyPreparedStatement.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/HikariPoolMXBean.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/metrics/prometheus/PrometheusHistogramMetricsTracker.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/util/PropertyElf.java
*
/opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/hibernate/HikariConnectionProvider.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-jar/com/zaxxer/hikari/pool/ProxyStatement.java

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jar/com/zaxxer/hikari/metrics/PoolStats.java
* /opt/cola/permits/1257217757_1642790274.61/0/hikaricp-4-0-3-sources-
jar/com/zaxxer/hikari/util/ClockSource.java

1.77 dom 1.0

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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASNotationDeclaration.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASObject.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/CharacterDataEditAS.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/DOMImplementationAS.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASModel.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/DocumentAS.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASAttributeDeclaration.java

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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASNamedObjectMap.java

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/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASDataType.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASContentModel.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/DOMASWriter.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/DocumentEditAS.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASObjectList.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/DOMASBuilder.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/DOMASException.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/NodeEditAS.java

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*/
/**
 * Checks if this content model has had its min/maxOccurs values reduced for
 * purposes of speeding up UPA. If
so, this content model should not be used
 * for any purpose other than checking unique particle attribution
 *
 * @return a boolean that says whether this content has been compacted for UPA
 */
```

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```
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*/
/**
 * DOM Level 3 LS CR - Experimental.
 * Create a new LSParser. The newly constructed parser may
 *
 */
```

then be configured by means of its `DOMConfiguration`

- * object, and used to parse documents by means of its `parse`

- * method.

- * `@param mode` The `mode` argument is either

- * `MODE_SYNCHRONOUS` or `MODE_ASYNCHRONOUS`, if

- * `mode` is `MODE_SYNCHRONOUS` then the

- * `LSParser` that is created will operate in synchronous

- * mode, if it's `MODE_ASYNCHRONOUS` then the

- * `LSParser` that is created will operate in asynchronous

- * mode.

- * `@param schemaType` An absolute URI representing the type of the schema

- * language used during the load of a `Document` using the

- * newly created `LSParser`. Note that no lexical checking

- * is done on the absolute URI. In order to create a

- * `LSParser` for any kind of schema types (i.e. the

- * `LSParser` will be free to use any schema

found), use the value

- * `null`.

- * `<p>Note:` For W3C XML Schema [<http://www.w3.org/TR/2001/REC-xmlschema-1-20010502>] XML Schema Part 1

- * , applications must use the value

- * `"http://www.w3.org/2001/XMLSchema"`. For XML DTD [<http://www.w3.org/TR/2000/REC-xml-20001006>] XML 1.0

- * applications must use the value

- * `"http://www.w3.org/TR/REC-xml"`. Other Schema languages

- * are outside the scope of the W3C and therefore should recommend an

- * absolute URI in order to use this method.

- * `@return` The newly created `LSParser` object. This

- * `LSParser` is either synchronous or asynchronous

- * depending on the value of the `mode` argument.

- * `<p>Note:` By default, the newly created `LSParser`

- * does not contain a `DOMErrorHandler`, i.e. the value of

- * the "<http://www.w3.org/TR/2003/WD-DOM-Level-3-Core-20030609/core.html#parameter-error-handler>

- * `error-handler`" configuration parameter is `null`. However, implementations

- * may provide a default error handler at creation time. In that case,

- * the initial value of the `"error-handler"` configuration

- * parameter on the new created `LSParser` contains a

- * reference to the default error handler.

- * `@exception DOMException`

- * `NOT_SUPPORTED_ERR`: Raised if the requested mode or schema type is

- * not supported.

*/

Found in path(s):

- * `/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/CoreDOMImplementationImpl.java`

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```
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/traversers/XSDocumentInfo.java
*
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/traversers/XSDElementTraverser.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/parser/XMLErrorHandler.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLFrameElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/util/XMLEntityDescriptionImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/util/ShadowedSymbolTable.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/util/ObjectListImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLImgElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLOptgroupElement.java
*
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/parser/XMLInputSource.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLImgElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/DeferredCDATASectionImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/traversers/XSDAbstractIDConstraintTraverser.java
```


* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLTimerElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSParticle.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLWmlElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/AnySimpleDV.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/StringList.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLTimerElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/regex/CaseInsensitiveMap.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/SchemaDOMImplementation.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/DefaultXMLDocumentHandler.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLAnchorElement.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/HTMLSerializer.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLHtmlElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/DefaultNamespaceContext.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xinclude/MultipleScopeNamespaceSupport.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/SchemaParsingConfig.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/XML11NSDtdValidator.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xpointer/XPointerMessageFormatter.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSException.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLMetaElementImpl.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLQuoteElementImpl.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/EncodingMap.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-

jar/org/apache/xerces/xinclude/XIncludeTextReader.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/DOMInputImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/ObjectFactory.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xpointer/XPointerHandler.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/util/XMLCatalogResolver.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/TeeXMLDocumentFilterImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLTableSectionElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dtd/models/CMStateSet.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/Base64BinaryDV.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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jar/org/apache/xerces/dom/ElementDefinitionImpl.java
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/jaxp/validation/XSGrammarPoolContainer.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/xs/models/CMBuilder.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/util/DOMUtil.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/jaxp/SAXParserFactoryImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xpointer/ElementSchemePointer.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/impl/msg/XMLMessageFormatter.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/validation/SoftReferenceGrammarPool.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/AttrNSImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/datatype/DurationImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLTdElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/identity/FieldActivator.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/ParentNode.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/html/dom/HTMLTableCellElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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jar/org/apache/xerces/dom/ObjectFactory.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/io/UTF16Reader.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 *
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 jar/org/apache/wml/WMLHeadElement.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 jar/org/apache/xerces/xni/XMLAttributes.java
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-

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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/BooleanDV.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/parser/XMLEntityResolver.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/DOMMessageFormatter.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/SchemaGrammar.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xni/grammars/XMLGrammarDescription.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/ValidatedInfo.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/ChildNode.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/util/XSNamedMapImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/Constants.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/events/MouseEventImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dtd/XMLDTDValidatorFilter.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/XMLDocumentScannerImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/validation/Util.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/DefaultValidationErrorHandler.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/SchemaValidatorConfiguration.java
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/stax/events/ElementImpl.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/parsers/SoftReferenceSymbolTableConfiguration.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/xpointer/ShortHandPointer.java
 *
 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/parsers/BasicParserConfiguration.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-

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jar/org/apache/html/dom/HTMLPreElementImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xml/serialize/HTMLdtd.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLDOMImplementation.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/XSImplementation.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/dom/WMLUElementImpl.java
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/util/XSNamedMap4Types.java

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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/wml/WMLBElement.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xml/serialize/IndentPrinter.java

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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xml/serialize/ObjectFactory.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/dom/PSVIDOMImplementationImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/dtd/StringDatatypeValidator.java
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/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/XMLDocumentFragmentScannerImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/ValidationContext.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xpath/regex/Match.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/XSMessageFormatter.java
*
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jar/org/apache/xml/serialize/TextSerializer.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/stax/events/NamespaceImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/xs/XSAttributeDeclaration.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/jaxp/JAXPConstants.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/wml/WMLAElement.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-

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jar/org/apache/xerces/util/EntityResolverWrapper.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
 jar/org/apache/xerces/parsers/SecuritySupport.java
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
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* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DOMImplementationListImpl.java

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/**

- * used to check the 3 constraints against each complex type
- * (should be each model group):
- * Unique Particle

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Found in path(s):

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSConstraints.java

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jar/org/apache/xerces/impl/xs/models/XSDFACM.java

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jar/org/apache/xerces/impl/dv/xs/AbstractDateTimeDV.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/YearDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/traversers/XSDKeyrefTraverser.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/DateDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/DateTimeDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/traversers/XSDUniqueOrKeyTraverser.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/MonthDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/DurationDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/MonthDayDV.java

*

/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/TimeDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/traversers/XSAttributeChecker.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/YearMonthDV.java

* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-


```
jar/org/apache/xerces/impl/xs/XSModelGroupImpl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/XSSimpleTypeDecl.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/traversers/XSDHandler.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/dv/xs/DayDV.java
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/XMLSchemaValidator.java
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jar/org/apache/xerces/impl/msg/XMLSchemaMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xpath/regex/message.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/DOMMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/XPointerMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/DatatypeMessages.properties
*
/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xpath/regex/message_fr.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/SAXMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/XIncludeMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/XMLMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/XMLSerializerMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xpath/regex/message_ja.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/JAXPValidationMessages.properties
```

1.78 dagger 2.4

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* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/MapFactory.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/Component.java
*
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/InstanceFactory.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/SingleCheck.java
```

* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/Factory.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/MapProviderFactory.java
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* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/IntKey.java

* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/StringKey.java

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* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/ClassKey.java

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* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/Binds.java

* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/Preconditions.java

*
/opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/DoubleCheck.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/ElementsIntoSet.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/IntoMap.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/package-info.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/IntoSet.java
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1.79 paranamer 2.5.1

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jar/com/thoughtworks/paranamer/AdaptiveParanamer.java

* /opt/cola/permits/1257772269_1643010353.74/0/paranamer-2-5-1-sources-
jar/com/thoughtworks/paranamer/ParameterNamesNotFoundException.java

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jar/com/thoughtworks/paranamer/CachingParanamer.java

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jar/com/thoughtworks/paranamer/DefaultParanamer.java

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* /opt/cola/permits/1257772269_1643010353.74/0/paranamer-2-5-1-sources-jar/com/thoughtworks/paranamer/JavadocParanamer.java

1.80 jctools-core 3.3.0

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* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-jar/META-INF/maven/org.jctools/jctools-core/pom.xml

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Found in path(s):

* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-jar/org/jctools/queues/atomic/AtomicQueueFactory.java

* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-jar/org/jctools/queues/ConcurrentCircularArrayQueue.java

* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-jar/org/jctools/queues/atomic/SequencedAtomicReferenceArrayQueue.java

*

/opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-jar/org/jctools/queues/spec/Preference.java

* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-jar/org/jctools/queues/package-

```

info.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/spec/Ordering.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/IndexedQueueSizeUtil.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/atomic/SpSCChunkedAtomicArrayQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/MpmcUnboundedXaddChunk.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/atomic/SpSCAtomicArrayQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-jar/org/jctools/util/RangeUtil.java
*
/opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/util/PaddedAtomicLong.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/atomic/BaseLinkedAtomicQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/QueueFactory.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/LinkedQueueNode.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/atomic/MpscAtomicArrayQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/MpscUnboundedXaddArrayQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/MessagePassingQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/MpscBlockingConsumerArrayQueue.java
*
/opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/atomic/MpmcAtomicArrayQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/MpscLinkedQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/MpscChunkedArrayQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/SpSCArrayQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/util/UnsafeRefArrayAccess.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/maps/AbstractEntry.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/maps/NonBlockingSetInt.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/ConcurrentSequencedCircularArrayQueue.java
*

```

/opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/atomic/SpSCUnboundedAtomicArrayQueue.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/atomic/MpscUnboundedAtomicArrayQueue.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/SpmcArrayQueue.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/BaseSpSCLinkedArrayQueue.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/BaseLinkedQueue.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/maps/NonBlockingHashSet.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/util/UnsafeJvmInfo.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/atomic/BaseMpscLinkedAtomicArrayQueue.java
 *
 /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/MessagePassingQueueUtil.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/MpscCompoundQueue.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/maps/NonBlockingIdentityHashMap.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/atomic/AtomicReferenceArrayQueue.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/MpscUnboundedXaddChunk.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/maps/ConcurrentAutoTable.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/atomic/LinkedQueueAtomicNode.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/atomic/SpSCLinkedAtomicQueue.java
 *
 /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/atomic/MpscLinkedAtomicQueue.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/SpSCLinkedQueue.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/MpscGrowableArrayQueue.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/spec/ConcurrentQueueSpec.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-jar/org/jctools/util/UnsafeAccess.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/MpscUnboundedArrayQueue.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
 jar/org/jctools/queues/MpmcArrayQueue.java
 * /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-

```

jar/org/jctools/queues/SupportsIterator.java
*
/opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/MpscArrayQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/MpmcUnboundedXaddArrayQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/SpSCChunkedArrayQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/util/UnsafeLongArrayAccess.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/atomic/BaseSpSCLinkedAtomicArrayQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
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* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-jar/org/jctools/util/InternalAPI.java
*
/opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/maps/NonBlockingHashMap.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
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* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
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* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/atomic/SpSCGrowableAtomicArrayQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/util/PortableJvmInfo.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/BaseMpscLinkedArrayQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/queues/atomic/SpMCAtomicArrayQueue.java
* /opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-
jar/org/jctools/maps/NonBlockingHashMapLong.java
*
/opt/cola/permits/1257772382_1643010290.62/0/jctools-core-3-3-0-sources-jar/org/jctools/util/Pow2.java

```

1.81 jakarta-el 3.0.4

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1.82 annotations 4.1.1.4

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```
* /opt/cola/permits/1258811491_1643111603.33/0/annotations-4-1-1-4-sources-
jar/android/annotation/SuppressLint.java
* /opt/cola/permits/1258811491_1643111603.33/0/annotations-4-1-1-4-sources-
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1.83 tracing-opentelemetry 0.3.3

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* /opt/cola/permits/1258876670_1643115824.76/0/tracing-opentelemetry-0-3-3-sources-
jar/com/couchbase/client/tracing/opentelemetry/OpenTelemetryRequestTracer.java
```

1.84 animal-sniffer-annotation 1.19

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* /opt/cola/permits/1258876677_1643115784.16/0/animal-sniffer-annotations-1-19-sources-jar/META-INF/maven/org.codehaus.mojo/animal-sniffer-annotations/pom.xml

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*/opt/cola/permits/1258876677_1643115784.16/0/animal-sniffer-annotations-1-19-sources-jar/org/codehaus/mojo/animal_sniffer/IgnoreJRERequirement.java

1.85 javax-activation 1.2.0

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```

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signature of Ty Coon, 1 April 1989
Ty Coon, President of Vice
```

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1.86 swagger-annotations 1.6.2

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 */
```

Found in path(s):

```
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/Authorization.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ExternalDocs.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/Info.java
*
/opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ExampleProperty.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiModelProperty.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiModel.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ResponseHeader.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/Tag.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/SwaggerDefinition.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiResponse.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ExtensionProperty.java
```



```
*
/opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/Extension.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiResponse.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/License.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/Api.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiImplicitParam.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/AuthorizationScope.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiImplicitParams.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiParam.java
*
/opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/ApiOperation.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/Example.java
* /opt/cola/permits/1260643097_1643189570.95/0/swagger-annotations-1-6-2-sources-
jar/io/swagger/annotations/Contact.java
```

1.87 jakarta-inject-api 2.0.1

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1.88 error_prone_annotations 2.3.3

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 */
```

Found in path(s):

```
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-
jar/com/google/errorprone/annotations/CompatibleWith.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-
jar/com/google/errorprone/annotations/FormatMethod.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-
jar/com/google/errorprone/annotations/MustBeClosed.java
*
/opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-
jar/com/google/errorprone/annotations/RestrictedApi.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-
jar/com/google/errorprone/annotations/FormatString.java
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* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/OverridingMethodsMustInvokeSuper.java

* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/DoNotCall.java

* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/concurrent/GuardedBy.java

*

/opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/CheckReturnValue.java

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* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/NoAllocation.java

* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/concurrent/LockMethod.java

* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/concurrent/UnlockMethod.java

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- * /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/SuppressPackageLocation.java
- * /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/Immutable.java
- *
- /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/RequiredModifiers.java
- * /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/Var.java
- * /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/ForOverride.java
- * /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/concurrent/LazyInit.java
- * /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/CanIgnoreReturnValue.java
- * /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/IncompatibleModifiers.java

1.89 picocontainer 2.15

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- * /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/ProviderAdapter.java
- * /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/ComponentLifecycle.java
- * /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-

```

jar/org/picocontainer/security/CustomPermissionsURLClassLoader.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/ComponentMonitorStrategy.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Stored.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/FactoryInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/references/SimpleReference.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Guarded.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/Provider.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/CompositeInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/Injector.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/InjectInto.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/references/ThreadLocalMapObjectReference.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/CompositeInjection.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/Injector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/MultiInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/ObjectReference.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Decorated.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/Reinjection.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/references/ThreadLocalReference.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/Reinjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/MultiInjection.java
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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/classname/ClassName.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/classname/ClassLoadingPicoContainer.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/parameters/DefaultConstructorParameter.java

*

/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/classname/DefaultClassLoadingPicoContainer.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/parameters/NullParameter.java

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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/lifecycle/StartableLifecycleStrategy.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/visitors/MethodCallingVisitor.java

*

/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/lifecycle/AbstractMonitoringLifecycleStrategy.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/visitors/TraversalCheckingVisitor.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/converters/Converter.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/lifecycle/ReflectionLifecycleStrategy.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/PicoVisitor.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/ComponentAdapter.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-

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jar/org/picocontainer/lifecycle/JavaEE5LifecycleStrategy.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/Converters.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/LifecycleStrategy.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/visitors/VerifyingVisitor.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/lifecycle/DefaultLifecycleState.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/lifecycle/CompositeLifecycleStrategy.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/lifecycle/ReflectionLifecycleException.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/visitors/AbstractPicoVisitor.java

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jar/org/picocontainer/injectors/AnnotatedFieldInjection.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/NamedFieldInjector.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Automated.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Locked.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/NameBinding.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/AdaptingBehavior.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/PropertyApplicator.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/AnnotatedFieldInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/monitors/LifecycleComponentMonitor.java

```

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/PicoContainer.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/Automating.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/ComponentFactory.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/adapters/AbstractAdapter.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/Injectors.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/Characteristics.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/PropertyApplying.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/annotations/Inject.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/containers/TransientPicoContainer.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/DefaultPicoContainer.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/lifecycle/NullLifecycleStrategy.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/parameters/BasicComponentParameter.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/Synchronizing.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/NamedMethodInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/PicoVerificationException.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/PicoException.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/annotations/Cache.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/containers/CommandLinePicoContainer.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/TypedFieldInjection.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/adapters/InstanceAdapter.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/TypedFieldInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/NamedFieldInjection.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-

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jar/org/picocontainer/parameters/CollectionComponentParameter.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Locking.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/annotations/Nullable.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Behaviors.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/AbstractInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/BehaviorFactory.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/PicoBuilder.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/InjectionFactory.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/AnnotatedMethodInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/ImplementationHiding.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/HiddenImplementation.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/parameters/ComponentParameter.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/containers/ImmutablePicoContainer.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Synchronized.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/injectors/SetterInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/PicoClassNotFoundException.java

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```

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/monitors/NullComponentMonitor.java

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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/Decorating.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/FieldDecorating.java

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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/monitors/ComponentMonitorHelper.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-

jar/org/picocontainer/monitors/WriterComponentMonitor.java

*

/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-

jar/org/picocontainer/monitors/ConsoleComponentMonitor.java

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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-

jar/org/picocontainer/containers/AbstractDelegatingMutablePicoContainer.java

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jar/org/picocontainer/injectors/PrimitiveMemberChecker.java

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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/containers/CompositePicoContainer.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/MutablePicoContainer.java

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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/containers/PropertiesPicoContainer.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/MethodInjector.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/Intercepting.java

*

/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/PicoLifecycleException.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/ForgetfulConstructorInjection.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/Intercepted.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/containers/SystemPropertiesPicoContainer.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/containers/CommandLineArgumentsPicoContainer.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/ParameterNameBinding.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/parameters/AbstractParameter.java

*

/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/SingleMemberInjector.java

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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/monitors/ComposingMonitor.java

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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-

jar/org/picocontainer/containers/EmptyPicoContainer.java

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jar/org/picocontainer/Disposable.java

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* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/ThreadCached.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/Guarding.java

*

/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/SetterInjection.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/MethodInjection.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/AnnotatedMethodInjection.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/AdaptingInjection.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/injectors/ConstructorInjection.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-jar/org/picocontainer/behaviors/ThreadCaching.java

* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-

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jar/org/picocontainer/injectors/ConstructorInjector.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Storing.java
*
/opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Caching.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/PicoCompositionException.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/OptInCaching.java
* /opt/cola/permits/1266565840_1644246713.67/0/picocontainer-2-15-sources-
jar/org/picocontainer/behaviors/Cached.java
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1.91 joda-time 2.10.14

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/opt/cola/permits/1312150600_1650468744.15/0/asm-9-3-sources-jar/org/objectweb/asm/Type.java
* /opt/cola/permits/1312150600_1650468744.15/0/asm-9-3-sources-
jar/org/objectweb/asm/signature/SignatureReader.java
* /opt/cola/permits/1312150600_1650468744.15/0/asm-9-3-sources-
jar/org/objectweb/asm/RecordComponentWriter.java
* /opt/cola/permits/1312150600_1650468744.15/0/asm-9-3-sources-jar/org/objectweb/asm/ModuleWriter.java
* /opt/cola/permits/1312150600_1650468744.15/0/asm-9-3-sources-jar/org/objectweb/asm/Symbol.java
* /opt/cola/permits/1312150600_1650468744.15/0/asm-9-3-sources-jar/org/objectweb/asm/Handler.java
* /opt/cola/permits/1312150600_1650468744.15/0/asm-9-3-sources-
jar/org/objectweb/asm/signature/SignatureWriter.java
* /opt/cola/permits/1312150600_1650468744.15/0/asm-9-3-sources-jar/org/objectweb/asm/Frame.java
* /opt/cola/permits/1312150600_1650468744.15/0/asm-9-3-sources-jar/org/objectweb/asm/ModuleVisitor.java
* /opt/cola/permits/1312150600_1650468744.15/0/asm-9-3-sources-jar/org/objectweb/asm/ByteVector.java
*
/opt/cola/permits/1312150600_1650468744.15/0/asm-9-3-sources-jar/org/objectweb/asm/FieldVisitor.java
* /opt/cola/permits/1312150600_1650468744.15/0/asm-9-3-sources-jar/org/objectweb/asm/AnnotationVisitor.java

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1.94 jackson-jr-objects 2.13.2

1.94.1 Available under license :

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1.95 azure-core-tracing-opentelemetry 1.0.0-beta.12

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* /opt/cola/permits/1327261614_1652475280.6910825/0/azure-core-tracing-opentelemetry-1-0-0-beta-12-sources-jar/com/azure/core/tracing/opentelemetry/implementation/AmqpPropagationFormatUtil.java

* /opt/cola/permits/1327261614_1652475280.6910825/0/azure-core-tracing-opentelemetry-1-0-0-beta-12-sources-jar/com/azure/core/tracing/opentelemetry/implementation/HttpTraceUtil.java

* /opt/cola/permits/1327261614_1652475280.6910825/0/azure-core-tracing-opentelemetry-1-0-0-beta-12-sources-jar/com/azure/core/tracing/opentelemetry/OpenTelemetryHttpPolicy.java

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*

/opt/cola/permits/1327261614_1652475280.6910825/0/azure-core-tracing-opentelemetry-1-0-0-beta-12-sources-jar/com/azure/core/tracing/opentelemetry/implementation/AmqpTraceUtil.java

1.96 gson 2.9.0

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* /opt/cola/permits/1331093984_1653033295.598981/0/gson-2-9-0-sources-1-jar/com/google/gson/internal/bind/TypeAdapterRuntimeTypeWrapper.java

* /opt/cola/permits/1331093984_1653033295.598981/0/gson-2-9-0-sources-1-jar/com/google/gson/internal/bind/TypeAdapters.java

*

/opt/cola/permits/1331093984_1653033295.598981/0/gson-2-9-0-sources-1-jar/com/google/gson/internal/bind/ArrayTypeAdapter.java

* /opt/cola/permits/1331093984_1653033295.598981/0/gson-2-9-0-sources-1-jar/com/google/gson/internal/bind/ReflectiveTypeAdapterFactory.java

* /opt/cola/permits/1331093984_1653033295.598981/0/gson-2-9-0-sources-1-jar/com/google/gson/internal/JsonReaderInternalAccess.java

* /opt/cola/permits/1331093984_1653033295.598981/0/gson-2-9-0-sources-1-jar/com/google/gson/TypeAdapterFactory.java

* /opt/cola/permits/1331093984_1653033295.598981/0/gson-2-9-0-sources-1-jar/com/google/gson/TypeAdapter.java

* /opt/cola/permits/1331093984_1653033295.598981/0/gson-2-9-0-sources-1-jar/com/google/gson/internal/bind/JsonTreeReader.java

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/opt/cola/permits/1331093984_1653033295.598981/0/gson-2-9-0-sources-1-jar/com/google/gson/internal/bind/MapTypeAdapterFactory.java

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jar/com/google/gson/JsonStreamParser.java

* /opt/cola/permits/1331093984_1653033295.598981/0/gson-2-9-0-sources-1-
jar/com/google/gson/FieldAttributes.java

* /opt/cola/permits/1331093984_1653033295.598981/0/gson-2-9-0-sources-1-jar/com/google/gson/JsonParser.java
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jar/com/google/gson/internal/JavaVersion.java
* /opt/cola/permits/1331093984_1653033295.598981/0/gson-2-9-0-sources-1-
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* /opt/cola/permits/1331093984_1653033295.598981/0/gson-2-9-0-sources-1-jar/com/google/gson/stream/JsonScope.java

*

/opt/cola/permits/1331093984_1653033295.598981/0/gson-2-9-0-sources-1-jar/com/google/gson/stream/MalformedJsonException.java

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2006-Jan-27

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#

builds/unix/pkg.m4

#

docs/FTL.TXT

docs/GPLv2.TXT

#

include/freetype/internal/fthash.h

#

src/base/fthash.c

src/base/md5.c

src/base/md5.h

#

src/bdf/bdf.c

```
src/bdf/bdf.h
src/bdf/bdfdrivr.c
src/bdf/bdfdrivr.h
src/bdf/bdferror.h
src/bdf/bdflib.c
src/bdf/module.mk
src/bdf/README
src/bdf/rules.mk
#
src/pcf/module.mk
src/pcf/pcf.c
src/pcf/pcf.h
src/pcf/pcfdrivr.c
src/pcf/pcfdrivr.h
src/pcf/pcferror.h
src/pcf/pcfread.c
src/pcf/pcfread.h
src/pcf/pcfutil.c
src/pcf/pcfutil.h
src/pcf/README
src/pcf/rules.mk
#
src/gzip/adler32.c
src/gzip/infblock.c
src/gzip/infblock.h
src/gzip/infcodes.c
src/gzip/infcodes.h
src/gzip/inffixed.h
src/gzip/inflate.c
src/gzip/inftrees.c
src/gzip/inftrees.h
src/gzip/infutil.c
src/gzip/infutil.h
src/gzip/zconf.h
src/gzip/zlib.h
src/gzip/zutil.c
src/gzip/zutil.h
#
src/tools/apinames.c
src/tools/ftrandom/ftrandom.c
#
subprojects/dlg
#
#
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* /opt/cola/permits/1362173022_1657688436.1357603/0/jcommander-1-82-sources-
```

jar/com/beust/jcommander/validators/PositiveInteger.java

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jar/com/beust/jcommander/validators/NoValueValidator.java

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* /opt/cola/permits/1362173022_1657688436.1357603/0/jcommander-1-82-sources-

jar/com/beust/jcommander/UnixStyleUsageFormatter.java

*

/opt/cola/permits/1362173022_1657688436.1357603/0/jcommander-1-82-sources-

jar/com/beust/jcommander/IUsageFormatter.java

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*
/opt/cola/permits/1362173022_1657688436.1357603/0/jcommander-1-82-sources-jar/com/beust/jcommander/converters/DoubleConverter.java
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* /opt/cola/permits/1362173022_1657688436.1357603/0/jcommander-1-82-sources-jar/com/beust/jcommander/internal/Maps.java
* /opt/cola/permits/1362173022_1657688436.1357603/0/jcommander-1-82-sources-jar/com/beust/jcommander/Parameter.java
* /opt/cola/permits/1362173022_1657688436.1357603/0/jcommander-1-82-sources-jar/com/beust/jcommander/IStringConverterFactory.java
* /opt/cola/permits/1362173022_1657688436.1357603/0/jcommander-1-82-sources-jar/com/beust/jcommander/Parameters.java
* /opt/cola/permits/1362173022_1657688436.1357603/0/jcommander-1-82-sources-jar/com/beust/jcommander/defaultprovider/PropertyFileDefaultProvider.java
* /opt/cola/permits/1362173022_1657688436.1357603/0/jcommander-1-82-sources-jar/com/beust/jcommander/converters/BooleanConverter.java
*

```

/opt/cola/permits/1362173022_1657688436.1357603/0/jcommander-1-82-sources-
jar/com/beust/jcommander/ParameterException.java
* /opt/cola/permits/1362173022_1657688436.1357603/0/jcommander-1-82-sources-
jar/com/beust/jcommander/converters/NoConverter.java
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jar/com/beust/jcommander/ResourceBundle.java
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jar/com/beust/jcommander/converters/FileConverter.java
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jar/com/beust/jcommander/MissingCommandException.java
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jar/com/beust/jcommander/converters/URICConverter.java
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jar/com/beust/jcommander/converters/CharArrayConverter.java
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jar/com/beust/jcommander/internal/DefaultConverterFactory.java
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```

1.103 agent-api 4.5.13.27526

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```

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```

Found in path(s):

```

* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-
jar/com/appdynamics/agent/api/AppdynamicsAgent.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-

```



```
jar/com/appdynamics/agent/api/impl/NoOpExitCall.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-
jar/com/appdynamics/agent/api/ExitCall.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-
jar/com/appdynamics/agent/api/EumDelegate.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-
jar/com/appdynamics/agent/api/EventPublisher.java
*
/opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-
jar/com/appdynamics/agent/api/MetricPublisher.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-
jar/com/appdynamics/agent/api/impl/NoOpTransaction.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-
jar/com/appdynamics/agent/api/Transaction.java
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Found in path(s):

```
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-
jar/com/appdynamics/agent/api/bootstrap/IApiBootstrapFacade.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-
jar/com/appdynamics/agent/api/ExitTypes.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-
jar/com/appdynamics/agent/api/bootstrap/NoOpTransactionDelegate.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-
jar/com/appdynamics/agent/api/bootstrap/IApiTransactionDelegate.java
* /opt/cola/permits/1366801991_1658170427.268079/0/agent-api-4-5-13-27526-sources-
jar/com/appdynamics/agent/api/EntryTypes.java
```

1.104 rxjava-server 0.9.0

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1.105 core-server 0.9.0

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1.106 jakarta-annotation-api 2.1.1

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* <https://github.com/eclipse-ee4j/common-annotations-api>

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```

Found in path(s):

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* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/ClassFileWriter.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/ExceptionTable.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/rmi/RemoteRef.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/rmi/Proxy.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/Javac.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/CtMember.java

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\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/compiler/ast/CondExpr.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/CtNewConstructor.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/expr/ConstructorCall.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/bytecode/analysis/Executor.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/compiler/SyntaxError.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/compiler/SymbolTable.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/tools/reflect/ClassMetaobject.java  
 \*  
 /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/tools/rmi/Sample.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/tools/Dump.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/CtNewWrappedMethod.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/util/proxy/MethodHandler.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/util/proxy/ProxyObject.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/compiler/JvstTypeChecker.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/bytecode/analysis/ControlFlow.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/NotFoundException.java  
 \*  
 /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/scopedpool/ScopedClassPoolRepository.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/bytecode/SyntheticAttribute.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/compiler/AccessorMaker.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/tools/reflect/Sample.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/tools/reflect/Metaobject.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/util/proxy/MethodFilter.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/runtime/Cflow.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-  
 jar/javassist/compiler/CompileError.java  
 \*



/opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/CtClass.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/tools/reflect/CannotCreateException.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/Bytecode.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/compiler/ast/ASTList.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/CtArray.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/stackmap/TypeTag.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/util/proxy/DefineClassHelper.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/analysis/MultiType.java  
 \*  
 /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/MethodInfo.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/ClassFile.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/AnnotationDefaultAttribute.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/expr/Instanceof.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/compiler/ast/MethodDecl.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/compiler/ast/AssignExpr.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/Mnemonic.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/analysis/Util.java  
 \*  
 /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/compiler/NoFieldException.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/expr/Cast.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/DuplicateMemberException.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/tools/reflect/Metalevel.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/annotation/AnnotationImpl.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/URLClassPath.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/Descriptor.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/util/HotSwapper.java  
 \* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-

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jar/javassist/tools/rmi/RemoteException.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/annotation/AnnotationsWriter.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/MemberResolver.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/LocalVariableTypeAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/Expr.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/SourceFileAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/convert/TransformNew.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/ArrayInit.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/reflect/CannotInvokeException.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/SecurityActions.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/ProxyObjectInputStream.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/InstructionPrinter.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/web/Webserver.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/StringL.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/TokenId.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/compiler/ast/Variable.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/util/proxy/RuntimeSupport.java
*
/opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/AttributeInfo.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/SignatureAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/tools/reflect/Reflection.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/AnnotationsAttribute.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-
jar/javassist/bytecode/analysis/SubroutineScanner.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/CtField.java
* /opt/cola/permits/1434218610_1664996210.5127783/0/javassist-3-29-2-ga-sources-

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jar/javassist/expr/NewExpr.java

\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-

jar/javassist/bytecode/CodeAnalyzer.java

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Found in path(s):

\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-

jar/javassist/bytecode/annotation/FloatMemberValue.java

\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-

jar/javassist/bytecode/annotation/MemberValueVisitor.java

\*

/opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-

jar/javassist/bytecode/annotation/MemberValue.java

\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-

jar/javassist/bytecode/annotation/LongMemberValue.java

\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-

jar/javassist/bytecode/annotation/CharMemberValue.java

\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-

jar/javassist/bytecode/annotation/ByteMemberValue.java

\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-

jar/javassist/bytecode/annotation/ClassMemberValue.java

\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-

jar/javassist/bytecode/annotation/Annotation.java

\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-

jar/javassist/bytecode/annotation/ArrayMemberValue.java

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/opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-

jar/javassist/bytecode/annotation/DoubleMemberValue.java

\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-

jar/javassist/bytecode/annotation/ShortMemberValue.java

\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-

jar/javassist/bytecode/annotation/IntegerMemberValue.java

\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/annotation/StringMemberValue.java  
\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/annotation/EnumMemberValue.java  
\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/annotation/BooleanMemberValue.java  
\* /opt/cola/permits/1434218610\_1664996210.5127783/0/javassist-3-29-2-ga-sources-jar/javassist/bytecode/annotation/AnnotationMemberValue.java

# 1.108 Iz4 1.2.12

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```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute
it
under certain conditions; type `show c' for details.
```

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```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

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## 1.109 kotlin 1.7.10

### 1.109.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
{ "version":3,"file":"kotlin.js","sources":["wrapper.js","js/arrayUtils.js","js/callableReferenceUtils.js","js/conversions.js","js/core.js","js/long.js","js/markerFunctions.js","js/misc.js","js/polyfills.js","js/rtti.js","runtime/arrayUtils.kt","runtime/Enum.kt","primitiveCompanionObjects.kt","common/src/generated/_Arrays.kt","common/src/generated/_Ranges.kt","unsigned/src/kotlin/UByte.kt","unsigned/src/kotlin/UInt.kt","unsigned/src/kotlin/UShort.kt","builtin-sources/Ranges.kt","src/kotlin/collections/Collections.kt","src/kotlin/collections/Maps.kt","src/kotlin/collections/Sets.kt","src/kotlin/text/StringNumberConversions.kt","src/kotlin/time/Duration.kt","unsigned/src/kotlin/UnsignedUtils.kt","src/kotlin/collections/Iterables.kt","src/kotlin/collections/Sequences.kt","src/kotlin/util/Preconditions.kt","js/src/generated/_ArraysJs.kt","src/kotlin/comparisons/Comparisons.kt","src/kotlin/util/Standard.kt","js/src/generated/_ComparisonsJs.kt","unsigned/src/kotlin/ULong.kt","common/src/generated/_Collections.kt","js/src/kotlin/collections.kt","src/kotlin/collections/Iterators.kt","common/src/generated/_Comparisons.kt","common/src/generated/_Maps.kt","common/src/generated/_OneToManyTitlecaseMappings.kt","js/src/kotlin/text/char.kt","js/src/kotlin/text/string.kt","src/kotlin/text/Char.kt","src/kotlin/CharCode.kt","common/src/generated/_Sequences.kt","common/src/generated/_Sets.kt","common/src/generated/_Strings.kt","src/kotlin/text/Strings.kt","unsigned/src/kotlin/UByteArray.kt","unsigned/src/kotlin/UIntArray.kt","unsigned/src/kotlin/ULongArray.kt","unsigned/src/kotlin/UShortArray.kt","common/src/generated/_UArrays.kt","common/src/generated/_UCollections.kt","common/src/generated/_UComparisons.kt","common/src/generated/_URanges.kt","common/src/generated/_USequences.kt","common/src/kotlin/ExceptionsH.kt","common/src/kotlin/JsAnnotationsH.kt","common/src/kotlin/ioH.kt","builtin-sources/Collections.kt","builtin-sources/Iterators.kt","builtin-sources/ProgressionIterators.kt","builtin-sources/Progressions.kt","builtin-sources/Range.kt","builtin-sources/Unit.kt","builtin-sources/annotation/Annotations.kt","builtin-sources/internal/InternalAnnotations.kt","builtin-sources/internal/progressionUtil.kt","src/kotlin/builtins.kt","src/kotlin/jsTypeOf.kt","src/kotlin/kotlin.kt","src/kotlin/CharCode_js-v1.kt","src/kotlin/coroutines/CoroutineImpl.kt","src/kotlin/util/Result.kt","src/kotlin/coroutines/Continuation.kt","src/kotlin/coroutines/intrinsics/IntrinsicsJs.kt","src/kotlin/currentBeMisc.kt","src/kotlin/exceptions.kt","src/kotlin/jsOperators.kt","src/kotlin/math_js-v1.kt","src/kotlin/numbers_js-v1.kt","src/kotlin/reflection_js-v1.kt","src/kotlin/text/numberConversions_js-v1.kt","js/src/kotlin/js.arrays/fill.kt","js/src/kotlin/js.arrays/sort.kt","js/src/generated/_CharCategories.kt","js/src/generated/_CollectionsJs.kt","js/src/generated/_DigitChars.kt","js/src/generated/_LetterChars.kt","js/src/generated/_OtherLowercaseChars.kt","js/src/generated/_OtherUppercaseChars.kt","js/src/generated/_StringsJs.kt","js/src/generated/_TitlecaseMappings.kt","js/src/generated/_UArraysJs.kt","js/src/generated/_WhitespaceChars.kt","js/src/kotlin/Comparator.kt","js/src/kotlin/annotations.kt","js/src/kotlin/annotationsJVM.kt","js/src/kotlin/collections/AbstractMutableCollection.kt","js/src/kotlin/collections/AbstractMutableList.kt","js/src/kotlin/collections/AbstractMutableMap.kt"
```

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"src/kotlin/text/StringBuilder.kt", "js/src/kotlin/text/stringsCode.kt", "js/src/kotlin/text/utf8Encoding.kt", "js/src/kotlin/throwableExtensions.kt", "js/src/kotlin/time/DurationJs.kt", "js/src/kotlin/time/DurationUnit.kt", "js/src/kotlin/time/MonoTimeSource.kt", "js/src/kotlinx/dom/Builders.kt", "js/src/kotlinx/dom/Classes.kt", "src/kotlin/text/regex/RegexExtensions.kt", "js/src/kotlinx/dom/Dom.kt", "js/src/kotlinx/dom/Mutations.kt", "js/src/org.w3c/deprecated.kt", "js/src/org.w3c/org.khronos.webgl.kt", "js/src/org.w3c/org.w3c.dom.clipboard.kt", "js/src/org.w3c/org.w3c.dom.css.kt", "js/src/org.w3c/org.w3c.dom.encryptedmedia.kt", "js/src/org.w3c/org.w3c.dom.events.kt", "js/src/org.w3c/org.w3c.dom.kt", "js/src/org.w3c/org.w3c.fetch.kt", "js/src/org.w3c/org.w3c.dom.mediacapture.kt", "js/src/org.w3c/org.w3c.dom.media.source.kt", "js/src/org.w3c/org.w3c.dom.pointerevents.kt", "js/src/org.w3c/org.w3c.dom.svg.kt", "js/src/org.w3c/org.w3c.files.kt", "js/src/org.w3c/org.w3c.notifications.kt", "js/src/org.w3c/org.w3c.workers.kt", "js/src/org.w3c/org.w3c.xhr.kt", "src/kotlin/annotations/Experimental.kt", "src/kotlin/annotations/ExperimentalStdlibApi.kt", "src/kotlin/annotations/Inference.kt", "src/kotlin/annotations/Multiplatform.kt", "src/kotlin/annotations/OptIn.kt", "src/kotlin/collections/AbstractCollection.kt", "src/kotlin/collections/AbstractIterator.kt", "src/kotlin/collections/AbstractList.kt", "src/kotlin/collections/AbstractMap.kt", "src/kotlin/collections/AbstractSet.kt", "src/kotlin/collections/ArrayDeque.kt", "src/kotlin/collections/Arrays.kt", "src/kotlin/collections/BrittleContainsOptimization.kt", "src/kotlin/collections/IndexedValue.kt", "src/kotlin/collections/MapAccessors.kt", "src/kotlin/collections/MapWithDefault.kt", "src/kotlin/collections/MutableCollections.kt", "src/kotlin/collections/ReversedViews.kt", "src/kotlin/collections/SequenceBuilder.kt", "src/kotlin/collections/SlidingWindow.kt", "src/kotlin/collections/UArraySorting.kt", "src/kotlin/comparisons/compareTo.kt", "src/kotlin/contracts/ContractBuilder.kt", "src/kotlin/coroutines/ContinuationInterceptor.kt", "src/kotlin/coroutines/CoroutineContext.kt", "src/kotlin/coroutines/CoroutineContextImpl.kt", "src/kotlin/coroutines/intrinsics/Intrinsics.kt", "src/kotlin/experimental/bitwiseOperations.kt", "src/kotlin/experimental/inferenceMarker.kt", "src/kotlin/internal/Annotations.kt", "src/kotlin/properties/Delegates.kt", "src/kotlin/properties/Interfaces.kt", "src/kotlin/properties/ObservableProperty.kt", "src/kotlin/properties/PropertyReferenceDelegates.kt", "src/kotlin/random/Random.kt", "src/kotlin/random/URandom.kt", "src/kotlin/random/XorWowRandom.kt", "src/kotlin/ranges/Ranges.kt", "src/kotlin/reflect/KClasses.kt", "src/kotlin/reflect/KTypeProjection.kt", "src/kotlin/reflect/KVariance.kt", "src/kotlin/reflect/typeOf.kt", "src/kotlin/text/Appendable.kt", "src/kotlin/text/Indent.kt", "src/kotlin/text/Typography.kt", "src/kotlin/text/regex/MatchResult.kt", "src/kotlin/time/DurationUnit.kt", "src/kotlin/time/ExperimentalTime.kt", "src/kotlin/time/TimeSource.kt", "src/kotlin/time/TimeSources.kt", "src/kotlin/time/longSaturatedMath.kt", "src/kotlin/time/measureTime.kt", "src/kotlin/util/DeepRecursive.kt", "src/kotlin/util/FloorDivMod.kt", "src/kotlin/util/HashCode.kt", "src/kotlin/util/KotlinVersion.kt", "src/kotlin/util/Lateinit.kt", "src/kotlin/util/Lazy.kt", "src/kotlin/util/Numbers.kt", "src/kotlin/util/Suspend.kt", "src/kotlin/util/Tuples.kt", "unsigned/src/kotlin/UIntRange.kt", "unsigned/src/kotlin/ULongRange.kt", "unsigned/src/kotlin/UMath.kt", "unsigned/src/kotlin/UNumbers.kt", "unsigned/src/kotlin/UProgressionUtil.kt", "unsigned/src/kotlin/UStrings.kt", "unsigned/src/kotlin/annotations/Unsigned.kt", "common/src/kotlin/MathH.kt", "js/src/kotlin/js/js.math.kt", "sources

```

Content":["(function
 (root, factory) {\n if (typeof define === 'function' && define.amd) {\n define('kotlin', ['exports'], factory);\n }\n else if (typeof exports === 'object') {\n factory(module.exports);\n }\n else {\n root.kotlin = {};\n factory(root.kotlin);\n }\n}(this, function (Kotlin) {\n var _ = Kotlin;\n\n insertContent();\n});\n", /*\n *
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is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\nKotlin.isArray = function (a) {\n return (Array.isArray(a) || a instanceof Int8Array) && a.$type$
=== \"BooleanArray\"\n};\n\nKotlin.isByteArray = function (a) {\n return a instanceof Int8Array && a.$type$
!=\"BooleanArray\"\n};\n\nKotlin.isShortArray = function (a) {\n
 return a instanceof Int16Array\n};\n\nKotlin.isCharArray = function (a) {\n return a instanceof Uint16Array &&
a.$type$ === \"CharArray\"\n};\n\nKotlin.isIntArray = function (a) {\n return a instanceof
Int32Array\n};\n\nKotlin.isFloatArray = function (a) {\n return a instanceof
Float32Array\n};\n\nKotlin.isDoubleArray = function (a) {\n return a instanceof
Float64Array\n};\n\nKotlin.isLongArray = function (a) {\n return Array.isArray(a) && a.$type$ ===
\"LongArray\"\n};\n\nKotlin.isArray = function (a) {\n return Array.isArray(a) &&
!a.$type$;\n};\n\nKotlin.isArrayish = function (a) {\n return Array.isArray(a) ||
ArrayBuffer.isView(a)\n};\n\nKotlin.arrayToString = function (a) {\n if (a === null) return \"null\"\n var
toString = Kotlin.isCharArray(a) ? String.fromCharCode : Kotlin.toString;\n return "[" +
Array.prototype.map.call(a, function(e) { return toString(e); }).join(", ") + "]";\n};\n\nKotlin.arrayDeepToString
= function (arr) {\n return
Kotlin.kotlin.collections.contentDeepToStringImpl(arr);\n};\n\nKotlin.arrayEquals = function (a, b) {\n if (a ===
b) {\n return true;\n }\n if (a === null || b === null || !Kotlin.isArrayish(b) || a.length !== b.length) {\n
return false;\n }\n for (var i = 0, n = a.length; i < n; i++) {\n if (!Kotlin.equals(a[i], b[i])) {\n return
false;\n }\n }\n return true;\n};\n\nKotlin.arrayDeepEquals = function (a, b) {\n return
Kotlin.kotlin.collections.contentDeepEqualsImpl(a, b);\n};\n\nKotlin.arrayHashCode = function (arr) {\n if (arr
=== null) return 0\n var result = 1;\n for (var i = 0, n = arr.length; i < n; i++) {\n result = ((31 * result | 0) +
Kotlin.hashCode(arr[i])) | 0;\n }\n return result;\n};\n\nKotlin.arrayDeepHashCode = function (arr) {\n return
Kotlin.kotlin.collections.contentDeepHashCodeImpl(arr);\n};\n\nKotlin.primitiveArraySort = function (array) {\n
array.sort(Kotlin.doubleCompareTo)\n};\n", /*\n *
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*/\n\nKotlin.getCallableRef = function(name, f) {\n f.callableName = name;\n return
f;\n};\n\nKotlin.getPropertyCallableRef = function(name, paramCount, getter, setter) {\n getter.get = getter;\n
getter.set = setter;\n getter.callableName = name;\n return getPropertyRefClass(getter, setter,
propertyRefClassMetadataCache[paramCount]);\n};\n\nfunction getPropertyRefClass(obj, setter, cache) {\n
obj.$metadata$ = getPropertyRefMetadata(typeof setter === \"function\" ? cache.mutable : cache.immutable);\n
obj.constructor = obj;\n return obj;\n}\n\nvar propertyRefClassMetadataCache = [\n {\n mutable: { value:
null, implementedInterface: function () {\n return Kotlin.kotlin.reflect.KMutableProperty0 }\n },\n
immutable:
{ value: null, implementedInterface: function () {\n return
Kotlin.kotlin.reflect.KMutableProperty1 }\n },\n immutable: { value: null, implementedInterface: function
() {\n return Kotlin.kotlin.reflect.KProperty1 }\n }\n };\n\nfunction getPropertyRefMetadata(cache)
{\n if (cache.value === null) {\n cache.value = {\n interfaces: [cache.implementedInterface()],\n
baseClass: null,\n functions: {},\n properties: {},\n types: {},\n staticMembers: {}\n };\n
 }\n return cache.value;\n}\n", /*\n *
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Language contributors. \n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\nKotlin.toShort

```

```

= function (a) {\n return (a & 0xFFFF) << 16 >> 16;\n};\n\nKotlin.toByte = function (a) {\n return (a & 0xFF)
<< 24 >> 24;\n};\n\nKotlin.toChar = function (a) {\n return a & 0xFFFF;\n};\n\nKotlin.numberToLong = function
(a) {\n return a instanceof Kotlin.Long ? a : Kotlin.Long.fromNumber(a);\n};\n\nKotlin.numberToInt = function
(a) {\n return a instanceof Kotlin.Long ? a.toInt() : Kotlin.doubleToInt(a);\n};\n\nKotlin.numberToShort =
function (a) {\n return Kotlin.toShort(Kotlin.numberToInt(a));\n};\n\nKotlin.numberToByte = function (a) {\n
return Kotlin.toByte(Kotlin.numberToInt(a));\n};\n\nKotlin.numberToDouble = function (a) {\n return
+a;\n};\n\nKotlin.numberToChar = function (a) {\n return
Kotlin.toChar(Kotlin.numberToInt(a));\n};\n\nKotlin.doubleToInt = function(a) {\n if (a > 2147483647) return
2147483647;\n if (a < -2147483648) return -2147483648;\n return a | 0;\n};\n\nKotlin.toBoxedChar = function
(a) {\n if (a == null) return a;\n
if (a instanceof Kotlin.BoxedChar) return a;\n return new Kotlin.BoxedChar(a);\n};\n\nKotlin.unboxChar =
function(a) {\n if (a == null) return a;\n return Kotlin.toChar(a);\n};\n};\n\n/*\n * Copyright 2010-2018 JetBrains
s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.\n */\n\nKotlin.equals = function (obj1, obj2) {\n if (obj1
== null) {\n return obj2 == null;\n }\n if (obj2 == null) {\n return false;\n }\n if (obj1 !== obj1)
{\n return obj2 !== obj2;\n }\n if (typeof obj1 === "object" && typeof obj1.equals === "function") {\n
return obj1.equals(obj2);\n }\n if (typeof obj1 === "number" && typeof obj2 === "number") {\n
return obj1 === obj2 && (obj1 !== 0 || 1 / obj1 === 1 / obj2);\n }\n return obj1 ===
obj2;\n};\n\nKotlin.hashCode = function (obj) {\n if (obj == null)
{\n return 0;\n }\n var objType = typeof obj;\n if ("object" === objType) {\n return "function" ===
typeof obj.hashCode ? obj.hashCode() : getObjectHashCode(obj);\n }\n if ("function" === objType) {\n
return getObjectHashCode(obj);\n }\n if ("number" === objType) {\n return
Kotlin.numberHashCode(obj);\n }\n if ("boolean" === objType) {\n return Number(obj)\n }\n var str
= String(obj);\n return getStringHashCode(str);\n};\n\nKotlin.toString = function (o) {\n if (o == null) {\n
return "null";\n }\n else if (Kotlin.isArrayish(o)) {\n return "["+...+"]";\n }\n else {\n return
o.toString();\n }\n};\n\n/**\n * @const *\nvar POW_2_32 = 4294967296;\n// TODO: consider switching to Symbol
type once we are on ES6.\n**\n * @const *\nvar OBJECT_HASH_CODE_PROPERTY_NAME =
"KotlinHashCodeValue$";\n\nfunction getObjectHashCode(obj) {\n if
(! (OBJECT_HASH_CODE_PROPERTY_NAME in obj))
{\n var hash = (Math.random() * POW_2_32) | 0; // Make 32-bit signed integer.\n
Object.defineProperty(obj, OBJECT_HASH_CODE_PROPERTY_NAME, { value: hash, enumerable: false });\n
}\n return obj[OBJECT_HASH_CODE_PROPERTY_NAME];\n}\n\nfunction getStringHashCode(str) {\n var
hash = 0;\n for (var i = 0; i < str.length; i++) {\n var code = str.charCodeAt(i);\n hash = (hash * 31 +
code) | 0; // Keep it 32-bit.\n }\n return hash;\n}\n\nKotlin.identityHashCode = getObjectHashCode;\n};\n\n/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code
is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n// Copyright 2009
The Closure Library Authors. All Rights Reserved.\n// Licensed under the Apache License, Version 2.0 (the
"License");\n// you may not use this file except in compliance with the License.\n// You may obtain a copy of the
License
at\n//\n// http://www.apache.org/licenses/LICENSE-2.0\n// Unless required by applicable law or agreed to in
writing, software\n// distributed under the License is distributed on an "AS-IS" BASIS,\n// WITHOUT
WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.\n\n/**\n * Constructs a 64-bit two's-
complement integer, given its low and high 32-bit\n * values as *signed* integers. See the from* functions below
for more\n * convenient ways of constructing Longs.\n * The internal representation of a long is the two given
signed, 32-bit values.\n * We use 32-bit pieces because these are the size of integers on which\n * Javascript
performs bit-operations. For operations like addition and\n * multiplication, we split each number into 16-bit
pieces, which can easily be\n * multiplied within Javascript's floating-point representation without overflow\n * or
change in sign.\n * In the algorithms below, we frequently reduce the negative case to the\n * positive case

```

by negating the input(s) and then post-processing the result. Note that we must ALWAYS check specially whether those values are MIN\_VALUE (-2<sup>63</sup>) because -MIN\_VALUE == MIN\_VALUE (since 2<sup>63</sup> cannot be represented as a positive number, it overflows back into a negative). Not handling this case would often result in infinite recursion.

`@param {number} low` The low (signed) 32 bits of the long.  
`@param {number} high` The high (signed) 32 bits of the long.

```

@constructor @final
Kotlin.Long =
function(low, high) {
 /**
 * @type {number}
 * @private
 */
 this.low_ = low | 0; // force into 32 signed bits.

 /**
 * @type {number}
 * @private
 */
 this.high_ = high | 0; // force into 32 signed bits.
}

Kotlin.Long.$metadata$ = {
 kind: "class",
 simpleName: "Long",
 interfaces: []
};

NOTE: Common constant values ZERO, ONE, NEG_ONE, etc. are defined below the from* methods on which they depend.

```

```

* A cache of the Long representations of small integer values.
@type {!Object}
@private

Kotlin.Long.IntCache_ = {};

/**
 * Returns a Long representing the given (32-bit) integer value.
 * @param {number} value The 32-bit integer in question.
 * @return {!Kotlin.Long} The corresponding Long value.
 */
Kotlin.Long.fromInt = function(value) {
 if (-128 <= value && value < 128) {
 var cachedObj = Kotlin.Long.IntCache_[value];
 if (cachedObj) {
 return cachedObj;
 }
 var obj = new Kotlin.Long(value | 0, value < 0 ? -1 : 0);
 if (-128 <= value && value < 128) {
 Kotlin.Long.IntCache_[value] = obj;
 }
 return obj;
 }

 /**
 * Converts this number value to `Long`.
 * The fractional part, if any, is rounded down towards zero.
 * Returns zero if this `Double` value is `NaN`, `Long.MIN_VALUE` if it's less than `Long.MIN_VALUE`, `Long.MAX_VALUE` if it's bigger than `Long.MAX_VALUE`.
 * @param {number} value The number in question.
 * @return {!Kotlin.Long} The corresponding Long value.
 */
 Kotlin.Long.fromNumber = function(value) {
 if (isNaN(value)) {
 return Kotlin.Long.ZERO;
 } else if (value <= -Kotlin.Long.TWO_PWR_63_DBL_) {
 return Kotlin.Long.MIN_VALUE;
 } else if (value + 1 >= Kotlin.Long.TWO_PWR_63_DBL_) {
 return Kotlin.Long.MAX_VALUE;
 } else if (value < 0) {
 return Kotlin.Long.fromNumber(-value).negate();
 } else {
 return new Kotlin.Long(
 (value % Kotlin.Long.TWO_PWR_32_DBL_) | 0,
 (value / Kotlin.Long.TWO_PWR_32_DBL_) | 0);
 }
 }

 /**
 * Returns a Long representing the 64-bit integer that comes by concatenating the given high and low bits. Each is assumed to use 32 bits.
 * @param {number} lowBits The low 32-bits.
 * @param {number} highBits The high 32-bits.
 * @return {!Kotlin.Long} The corresponding Long value.
 */
 Kotlin.Long.fromBits = function(lowBits, highBits) {
 return new Kotlin.Long(lowBits, highBits);
 }

 /**
 * Returns a Long representation of the given string, written using the given radix.
 * @param {string} str The textual representation of the Long.
 * @param {number=} opt_radix The radix in which the text is written.
 * @return {!Kotlin.Long} The corresponding Long value.
 */
 Kotlin.Long.fromString = function(str, opt_radix) {
 if (str.length == 0) {
 throw Error('number format error: empty string');
 }
 var radix = opt_radix || 10;
 if (radix < 2 || 36 < radix) {
 throw Error('radix out of range: ' + radix);
 }
 if (str.charAt(0) == '-') {
 return Kotlin.Long.fromString(str.substring(1), radix).negate();
 } else if (str.indexOf('-') >= 0) {
 throw Error('number format error: interior "-" character: ' + str);
 }
 // Do several (8) digits each time through the loop, so as to minimize the calls to the very expensive emulated div.
 var radixToPower = Kotlin.Long.fromNumber(Math.pow(radix, 8));
 var result = Kotlin.Long.ZERO;
 for (var i = 0; i < str.length; i += 8) {
 var size = Math.min(8, str.length - i);
 var value = parseInt(str.substring(i, i + size), radix);
 if (size < 8) {
 var power = Kotlin.Long.fromNumber(Math.pow(radix, size));
 result = result.multiply(power).add(Kotlin.Long.fromNumber(value));
 } else {
 result = result.multiply(radixToPower).add(Kotlin.Long.fromNumber(value));
 }
 }
 return result;
 }

 // NOTE: the compiler should inline these constant values below and then remove these variables, so there should be no runtime penalty for these.
 /**
 * Number used repeated below in calculations. This must appear before the first call to any from* function below.
 * @type {number}
 * @private
 */
 Kotlin.Long.TWO_PWR_16_DBL_ = 1 << 16;

```



```

*\nKotlin.Long.TWO_PWR_24_DBL_ = 1 << 24;\n\n/**\n * @type {number}\n * @private\n*\nKotlin.Long.TWO_PWR_32_DBL_
=\n Kotlin.Long.TWO_PWR_16_DBL_ * Kotlin.Long.TWO_PWR_16_DBL_;\n\n/**\n * @type {number}\n
* @private\n *\nKotlin.Long.TWO_PWR_31_DBL_ =\n Kotlin.Long.TWO_PWR_32_DBL_ / 2;\n\n/**\n *
@type {number}\n * @private\n *\nKotlin.Long.TWO_PWR_48_DBL_ =\n Kotlin.Long.TWO_PWR_32_DBL_
* Kotlin.Long.TWO_PWR_16_DBL_;\n\n/**\n * @type {number}\n * @private\n
*\nKotlin.Long.TWO_PWR_64_DBL_ =\n Kotlin.Long.TWO_PWR_32_DBL_ *
Kotlin.Long.TWO_PWR_32_DBL_;\n\n/**\n * @type {number}\n * @private\n
*\nKotlin.Long.TWO_PWR_63_DBL_ =\n Kotlin.Long.TWO_PWR_64_DBL_ / 2;\n\n/** @type
{!Kotlin.Long} *\nKotlin.Long.ZERO = Kotlin.Long.fromInt(0);\n\n/** @type {!Kotlin.Long}
*\nKotlin.Long.ONE = Kotlin.Long.fromInt(1);\n\n/** @type {!Kotlin.Long} *\nKotlin.Long.NEG_ONE =
Kotlin.Long.fromInt(-1);\n\n/** @type {!Kotlin.Long} *\nKotlin.Long.MAX_VALUE =\n
Kotlin.Long.fromBits(0xFFFFFFFF | 0, 0x7FFFFFFF | 0);\n\n/** @type {!Kotlin.Long}
*\nKotlin.Long.MIN_VALUE = Kotlin.Long.fromBits(0,
0x80000000 | 0);\n\n/**\n * @type {!Kotlin.Long}\n * @private\n *\nKotlin.Long.TWO_PWR_24_ =
Kotlin.Long.fromInt(1 << 24);\n\n/** @return {number} The value, assuming it is a 32-bit integer.
*\nKotlin.Long.prototype.toInt = function() {\n return this.low_;\n};\n\n/** @return {number} The closest
floating-point representation to this value. *\nKotlin.Long.prototype.toNumber = function() {\n return this.high_ *
Kotlin.Long.TWO_PWR_32_DBL_ +\n this.getLowBitsUnsigned();\n};\n\n/** @return {number} The 32-bit
hashCode of this value. *\nKotlin.Long.prototype.hashCode = function() {\n return this.high_ ^
this.low_;\n};\n\n/**\n * @param {number=} opt_radix The radix in which the text should be written.\n * @return
{string} The textual representation of this value.\n * @override\n *\nKotlin.Long.prototype.toString =
function(opt_radix) {\n var radix = opt_radix || 10;\n if (radix < 2 || 36 < radix) {\n throw Error('radix out of
range: ' + radix);\n
}\n\n if (this.isZero()) {\n return '0';\n }\n\n if (this.isNegative()) {\n if
(this.equalsLong(Kotlin.Long.MIN_VALUE)) {\n // We need to change the Long value before it can be negated,
so we remove\n // the bottom-most digit in this base and then recurse to do the rest.\n var radixLong =
Kotlin.Long.fromNumber(radix);\n var div = this.div(radixLong);\n var rem =
div.multiply(radixLong).subtract(this);\n return div.toString(radix) + rem.toInt().toString(radix);\n } else {\n
return '-' + this.negate().toString(radix);\n }\n }\n\n // Do several (5) digits each time through the loop, so as to\n
// minimize the calls to the very expensive emulated div.\n var radixToPower =
Kotlin.Long.fromNumber(Math.pow(radix, 5));\n var rem = this;\n var result = '';\n while (true) {\n var
remDiv = rem.div(radixToPower);\n var intVal = rem.subtract(remDiv.multiply(radixToPower)).toInt();\n var
digits = intVal.toString(radix);\n\n rem = remDiv;\n if (rem.isZero()) {\n return digits + result;\n } else {\n while (digits.length < 5) {\n
digits = '0' + digits;\n } result = " + digits + result;\n }\n }\n};\n\n/** @return {number} The high 32-
bits as a signed value. *\nKotlin.Long.prototype.getHighBits = function() {\n return this.high_;\n};\n\n/**
@return {number} The low 32-bits as a signed value. *\nKotlin.Long.prototype.getLowBits = function() {\n return
this.low_;\n};\n\n/** @return {number} The low 32-bits as an unsigned value.
*\nKotlin.Long.prototype.getLowBitsUnsigned = function() {\n return (this.low_ >= 0) ?\n this.low_ :
Kotlin.Long.TWO_PWR_32_DBL_ + this.low_;\n};\n\n/**\n * @return {number} Returns the number of bits
needed to represent the absolute\n * value of this Long.\n *\nKotlin.Long.prototype.getNumBitsAbs = function()
{\n if (this.isNegative()) {\n if (this.equalsLong(Kotlin.Long.MIN_VALUE)) {\n return 64;\n } else {\n
return this.negate().getNumBitsAbs();\n }\n } else {\n var val = this.high_ != 0 ? this.high_ : this.low_;\n
for (var bit = 31; bit > 0; bit--) {\n if ((val & (1 << bit)) != 0) {\n break;\n }\n }\n return this.high_ !=
0 ? bit + 33 : bit + 1;\n }\n};\n\n/** @return {boolean} Whether this value is zero.
*\nKotlin.Long.prototype.isZero = function() {\n return this.high_ == 0 && this.low_ == 0;\n};\n\n/** @return
{boolean} Whether this value is negative. *\nKotlin.Long.prototype.isNegative = function() {\n return this.high_ <

```

```

0;\n};\n\n\n/** @return {boolean} Whether this value is odd. */\nKotlin.Long.prototype.isOdd = function() {\n
return (this.low_ & 1) == 1;\n};\n\n\n/**\n * @param {Kotlin.Long} other Long to compare against.\n * @return
{boolean} Whether this Long equals the other.\n */\nKotlin.Long.prototype.equalsLong = function(other) {\n return
(this.high_ == other.high_) && (this.low_ == other.low_);\n};\n\n\n/**\n * @param {Kotlin.Long}
other Long to compare against.\n * @return {boolean} Whether this Long does not equal the other.\n
*/\nKotlin.Long.prototype.notEqualsLong = function(other) {\n return (this.high_ != other.high_) || (this.low_ !=
other.low_);\n};\n\n\n/**\n * @param {Kotlin.Long} other Long to compare against.\n * @return {boolean}
Whether this Long is less than the other.\n */\nKotlin.Long.prototype.lessThan = function(other) {\n return
this.compare(other) < 0;\n};\n\n\n/**\n * @param {Kotlin.Long} other Long to compare against.\n * @return
{boolean} Whether this Long is less than or equal to the other.\n */\nKotlin.Long.prototype.lessThanOrEqual =
function(other) {\n return this.compare(other) <= 0;\n};\n\n\n/**\n * @param {Kotlin.Long} other Long to
compare against.\n * @return {boolean} Whether this Long is greater than the other.\n
*/\nKotlin.Long.prototype.greaterThan = function(other) {\n return this.compare(other) > 0;\n};\n\n\n\n/**\n
* @param {Kotlin.Long} other Long to compare against.\n
* @return {boolean} Whether this Long is greater than or equal to the other.\n
*/\nKotlin.Long.prototype.greaterThanOrEqual = function(other) {\n return this.compare(other) >=
0;\n};\n\n\n\n/**\n * @param {Kotlin.Long} other Long to compare
against.\n * @return {number} 0 if they are the same, 1 if the this is greater, and -1\n * if the given one is
greater.\n */\nKotlin.Long.prototype.compare = function(other) {\n if (this.equalsLong(other)) {\n return 0;\n
}\n\n var thisNeg = this.isNegative();\n var otherNeg = other.isNegative();\n if (thisNeg && !otherNeg) {\n
return -1;\n }\n if (!thisNeg && otherNeg) {\n return 1;\n }\n\n // at this point, the signs are the same, so
subtraction will not overflow\n if (this.subtract(other).isNegative()) {\n return -1;\n } else {\n return 1;\n
}\n};\n\n\n\n/** @return {!Kotlin.Long} The negation of this value. */\nKotlin.Long.prototype.negate = function()
{\n if (this.equalsLong(Kotlin.Long.MIN_VALUE))\n
{\n return Kotlin.Long.MIN_VALUE;\n } else {\n return this.not().add(Kotlin.Long.ONE);\n }
};\n\n\n\n/**\n * Returns the sum of this and the given Long.\n * @param {Kotlin.Long} other Long to add to
this one.\n * @return {!Kotlin.Long} The sum of this and the given Long.\n */\nKotlin.Long.prototype.add =
function(other) {\n //
Divide each number into 4 chunks of 16 bits, and then sum the chunks.\n\n var a48 = this.high_ >>> 16;\n var
a32 = this.high_ & 0xFFFF;\n var a16 = this.low_ >>> 16;\n var a00 = this.low_ & 0xFFFF;\n\n var b48 =
other.high_ >>> 16;\n var b32 = other.high_ & 0xFFFF;\n var b16 = other.low_ >>> 16;\n var b00 =
other.low_ & 0xFFFF;\n\n var c48 = 0, c32 = 0, c16 = 0, c00 = 0;\n c00 += a00 + b00;\n c16 += c00 >>> 16;\n
c00 &= 0xFFFF;\n c16 += a16 + b16;\n c32 += c16 >>> 16;\n c16 &= 0xFFFF;\n c32 += a32 + b32;\n c48 +=
c32 >>> 16;\n c32 &= 0xFFFF;\n c48 += a48 + b48;\n c48 &= 0xFFFF;\n return Kotlin.Long.fromBits((c16
<<< 16) | c00, (c48 <<< 16) | c32);\n};\n\n\n\n/**\n * Returns the difference of this and the given Long.\n
* @param {Kotlin.Long} other Long to subtract from this.\n * @return {!Kotlin.Long} The difference of this and
the given Long.\n */\nKotlin.Long.prototype.subtract = function(other) {\n return this.add(other.negate());\n};\n\n\n\n\n/**\n
* Returns the product of this and the given long.\n * @param {Kotlin.Long} other Long to multiply with this.\n
* @return {!Kotlin.Long} The product of this and the other.\n */\nKotlin.Long.prototype.multiply = function(other)
{\n if (this.isZero()) {\n return Kotlin.Long.ZERO;\n } else if (other.isZero()) {\n return Kotlin.Long.ZERO;\n
}\n\n if (this.equalsLong(Kotlin.Long.MIN_VALUE)) {\n return other.isOdd() ? Kotlin.Long.MIN_VALUE :
Kotlin.Long.ZERO;\n } else if (other.equalsLong(Kotlin.Long.MIN_VALUE)) {\n return this.isOdd() ?
Kotlin.Long.MIN_VALUE : Kotlin.Long.ZERO;\n }\n\n if (this.isNegative()) {\n if (other.isNegative())\n
{\n return this.negate().multiply(other.negate());\n } else {\n return this.negate().multiply(other).negate();\n
}\n } else if (other.isNegative()) {\n return this.multiply(other.negate()).negate();\n }\n\n // If both longs are
small, use float multiplication\n if (this.lessThan(Kotlin.Long.TWO_PWR_24_) &&\n
other.lessThan(Kotlin.Long.TWO_PWR_24_)) {\n return Kotlin.Long.fromNumber(this.toNumber() *
other.toNumber());\n }\n\n // Divide each long into 4 chunks of 16 bits, and then add up 4x4 products.\n // We
can skip products that would overflow.\n\n var a48 = this.high_ >>> 16;\n var a32 = this.high_ & 0xFFFF;\n
var a16 =

```



```

and the given one.\n * @param {Kotlin.Long} other The Long with which to XOR.\n * @return {!Kotlin.Long}
The bitwise-XOR of this and the other.\n *\nKotlin.Long.prototype.xor
= function(other) {\n return Kotlin.Long.fromBits(this.low_ ^ other.low_,\n this.high_ ^
other.high_);\n};\n\n/**\n * Returns this Long with bits shifted to the left by the given amount.\n * @param
{number} numBits The number of bits by which to shift.\n * @return {!Kotlin.Long} This shifted to the left by the
given amount.\n */\nKotlin.Long.prototype.shiftLeft = function(numBits) {\n numBits &= 63;\n if (numBits == 0) {\n
return this;\n } else {\n var low = this.low_;\n if (numBits < 32) {\n var high = this.high_;\n return
Kotlin.Long.fromBits(\n low << numBits,\n (high << numBits) | (low >>> (32 - numBits));\n } else
{\n return Kotlin.Long.fromBits(0, low << (numBits - 32));\n }\n }\n};\n\n/**\n * Returns this Long with
bits shifted to the right by the given amount.\n * @param {number} numBits The number of bits by which to shift.\n
* @return {!Kotlin.Long} This shifted to the right by the given
amount.\n */\nKotlin.Long.prototype.shiftRight = function(numBits) {\n numBits &= 63;\n if (numBits == 0) {\n
return this;\n } else {\n var high = this.high_;\n if (numBits < 32) {\n var low = this.low_;\n return
Kotlin.Long.fromBits(\n (low >>> numBits) | (high << (32 - numBits)),\n high >> numBits);\n } else
{\n return Kotlin.Long.fromBits(\n high >> (numBits - 32),\n high >= 0 ? 0 : -1);\n }\n }\n};\n\n/**\n * Returns this Long with bits shifted to the right by the given amount, with\n * zeros placed into the
new leading bits.\n * @param {number} numBits The number of bits by which to shift.\n * @return {!Kotlin.Long}
This shifted to the right by the given amount, with\n * zeros placed into the new leading bits.\n
*/\nKotlin.Long.prototype.shiftRightUnsigned = function(numBits) {\n numBits &= 63;\n if (numBits == 0) {\n
return this;\n } else {\n var high = this.high_;\n if (numBits < 32) {\n
 var low = this.low_;\n return Kotlin.Long.fromBits(\n (low >>> numBits) | (high << (32 - numBits)),\n
 high >>> numBits);\n } else if (numBits == 32) {\n return Kotlin.Long.fromBits(high, 0);\n } else {\n
return Kotlin.Long.fromBits(high >>> (numBits - 32), 0);\n }\n }\n};\n\n// Support for
Kotlin\nKotlin.Long.prototype.equals = function (other) {\n return other instanceof Kotlin.Long &&
this.equalsLong(other);\n};\n\nKotlin.Long.prototype.compareTo_11rb$ =
Kotlin.Long.prototype.compare;\n\nKotlin.Long.prototype.inc = function() {\n return
this.add(Kotlin.Long.ONE);\n};\n\nKotlin.Long.prototype.dec = function() {\n return
this.add(Kotlin.Long.NEG_ONE);\n};\n\nKotlin.Long.prototype.valueOf = function() {\n return
this.toNumber();\n};\n\nKotlin.Long.prototype.unaryPlus = function() {\n return
this;\n};\n\nKotlin.Long.prototype.unaryMinus = Kotlin.Long.prototype.negate;\n\nKotlin.Long.prototype.inv =
Kotlin.Long.prototype.not;\n\nKotlin.Long.prototype.rangeTo
= function (other) {\n return new Kotlin.kotlin.ranges.LongRange(this, other);\n};\n\n"/**\n * Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors. \n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n * @param {string} id\n *
@param {Object} declaration\n */\nKotlin.defineModule = function (id, declaration)
{\n};\n\nKotlin.defineInlineFunction = function(tag, fun) {\n return fun;\n};\n\nKotlin.wrapFunction =
function(fun) {\n var f = function() {\n f = fun();\n return f.apply(this, arguments);\n }; \n return
function() {\n return f.apply(this, arguments);\n };\n};\n\nKotlin.isTypeOf = function(type) {\n return
function (object) {\n return typeof object === type;\n };\n};\n\nKotlin.isInstanceOf = function (klass) {\n
return function (object) {\n return Kotlin.isType(object, klass);\n };\n};\n\nKotlin.orNull
= function (fn) {\n return function (object) {\n return object == null || fn(object);\n
}\n};\n\nKotlin.andPredicate = function (a, b) {\n return function (object) {\n return a(object) && b(object);\n
}\n};\n\nKotlin.kotlinModuleMetadata = function (abiVersion, moduleName, data) {\n};\n\nKotlin.suspendCall =
function(value) {\n return value;\n};\n\nKotlin.coroutineResult = function(qualifier) {\n
throwMarkerError();\n};\n\nKotlin.coroutineController = function(qualifier) {\n
throwMarkerError();\n};\n\nKotlin.coroutineReceiver = function(qualifier) {\n
throwMarkerError();\n};\n\nKotlin.setCoroutineResult = function(value, qualifier) {\n
throwMarkerError();\n};\n\nKotlin.getReifiedTypeParameterKType = function(typeParameter) {\n

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throwMarkerError();\n};\n\nfunction throwMarkerError() {\n throw new Error(\n \"This marker function\n should never be called. \" +\n \"Looks like compiler did not eliminate it properly.\n \" +\n \"Please, report an issue if you caught this exception.\");\n}\n\nKotlin.getFunctionById = function(id,\n default\n Value) {\n return function() {\n return default\n Value;\n }\n};\n\n/*\n * Copyright 2010-2018 JetBrains\n s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0\n license that can be found in the license/LICENSE.txt file.\n */\n\nKotlin.compareTo = function (a, b) {\n var\n typeA = typeof a;\n if (typeA === \"number\") {\n if (typeof b === \"number\") {\n return\n Kotlin.doubleCompareTo(a, b);\n }\n return Kotlin.primitiveCompareTo(a, b);\n }\n if (typeA ===\n \"string\" || typeA === \"boolean\") {\n return Kotlin.primitiveCompareTo(a, b);\n }\n return\n a.compareTo_11rb$(b);\n};\n\nKotlin.primitiveCompareTo = function (a, b) {\n return a < b ? -1 : a > b ? 1 :\n 0;\n};\n\nKotlin.doubleCompareTo = function (a, b) {\n if (a < b) return -1;\n if (a\n > b) return 1;\n\n if (a === b) {\n if (a !== 0) return 0;\n\n var ia = 1 / a;\n return ia === 1 / b ? 0 : (ia\n < 0 ? -1 : 1);\n }\n return a !== a ? (b !== b ? 0 : 1) : -1;\n};\n\nKotlin.charInc = function (value) {\n return\n Kotlin.toChar(value+1);\n};\n\nKotlin.charDec = function (value) {\n return Kotlin.toChar(value-\n 1);\n};\n\nKotlin.imul = Math.imul || imul;\n\nKotlin.imulEmulated = imul;\n\nfunction imul(a, b) {\n return ((a &\n 0xffff0000) * (b & 0xffff) + (a & 0xffff) * (b | 0)) | 0;\n}\n\n(function() {\n var buf = new ArrayBuffer(8);\n var\n bufFloat64 = new Float64Array(buf);\n var bufFloat32 = new Float32Array(buf);\n var bufInt32 = new\n Int32Array(buf);\n var lowIndex = 0;\n var highIndex = 1;\n\n bufFloat64[0] = -1; // bff00000_00000000\n if\n (bufInt32[lowIndex] !== 0) {\n lowIndex = 1;\n highIndex = 0;\n }\n\n Kotlin.doubleToBits =\n function(value) {\n return Kotlin.doubleToRawBits(isNaN(value)\n ? NaN : value);\n };\n\n Kotlin.doubleToRawBits = function(value) {\n bufFloat64[0] = value;\n return\n Kotlin.Long.fromBits(bufInt32[lowIndex], bufInt32[highIndex]);\n };\n\n Kotlin.doubleFromBits =\n function(value) {\n bufInt32[lowIndex] = value.low_;\n bufInt32[highIndex] = value.high_;\n return\n bufFloat64[0];\n };\n\n Kotlin.floatToBits = function(value) {\n return Kotlin.floatToRawBits(isNaN(value)\n ? NaN : value);\n };\n\n Kotlin.floatToRawBits = function(value) {\n bufFloat32[0] = value;\n return\n bufInt32[0];\n };\n\n Kotlin.floatFromBits = function(value) {\n bufInt32[0] = value;\n return\n bufFloat32[0];\n };\n\n // returns zero value for number with positive sign bit and non-zero value for number\n with\n negative sign bit.\n Kotlin.doubleSignBit = function(value) {\n bufFloat64[0] = value;\n return\n bufInt32[highIndex] & 0x80000000;\n };\n\n Kotlin.numberHashCode\n = function(obj) {\n if ((obj | 0) === obj) {\n return obj | 0;\n }\n else {\n bufFloat64[0] =\n obj;\n return (bufInt32[highIndex] * 31 | 0) + bufInt32[lowIndex] | 0;\n }\n }\n})();\n\nKotlin.ensureNotNull = function(x) {\n return x != null ? x : Kotlin.throwNPE();\n};\n\n/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is\n governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\nif (typeof\n String.prototype.startsWith === \"undefined\") {\n Object.defineProperty(String.prototype, \"startsWith\", {\n value: function (searchString, position) {\n position = position || 0;\n return\n this.lastIndexOf(searchString, position) === position;\n }\n });\n}\n\nif (typeof String.prototype.endsWith ===\n \"undefined\") {\n Object.defineProperty(String.prototype, \"endsWith\", {\n value: function (searchString, position) {\n var subjectString = this.toString();\n if (position ===\n undefined || position > subjectString.length) {\n position = subjectString.length;\n }\n\n position -= searchString.length;\n var lastIndex = subjectString.indexOf(searchString, position);\n return lastIndex !== -1 && lastIndex === position;\n }\n });\n}\n\n// ES6 Math polyfills\n\nif (typeof Math.sign\n === \"undefined\") {\n Math.sign = function(x) {\n x = +x; // convert to a number\n if (x === 0 ||\n isNaN(x)) {\n return Number(x);\n }\n return x > 0 ? 1 : -1;\n };\n}\n\nif (typeof Math.trunc ===\n \"undefined\") {\n Math.trunc = function(x) {\n if (isNaN(x)) {\n return NaN;\n }\n if (x > 0)\n {\n return Math.floor(x);\n }\n return Math.ceil(x);\n };\n}\n\n(function() {\n var epsilon =\n 2.220446049250313E-16;\n}

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var taylor_2_bound = Math.sqrt(epsilon);\n var taylor_n_bound = Math.sqrt(taylor_2_bound);\n var
upper_taylor_2_bound = 1/taylor_2_bound;\n var upper_taylor_n_bound = 1/taylor_n_bound;\n\n if (typeof
Math.sinh === \"undefined\") {\n Math.sinh = function(x) {\n if (Math.abs(x) < taylor_n_bound) {\n
var result = x;\n if (Math.abs(x) > taylor_2_bound) {\n result += (x * x * x) / 6;\n
}\n return result;\n } else {\n var y = Math.exp(x);\n var y1 = 1 / y;\n if
(!isFinite(y)) return Math.exp(x - Math.LN2);\n if (!isFinite(y1)) return -Math.exp(-x - Math.LN2);\n
return (y - y1) / 2;\n }\n };\n }\n if (typeof Math.cosh === \"undefined\") {\n Math.cosh =
function(x) {\n var y = Math.exp(x);\n var y1 = 1 / y;\n if (isFinite(y)
|| isFinite(y1)) return Math.exp(Math.abs(x) - Math.LN2);\n return (y + y1) / 2;\n };\n }\n\n if
(typeof Math.tanh === \"undefined\") {\n Math.tanh = function(x){\n if (Math.abs(x) < taylor_n_bound)
{\n var result = x;\n if (Math.abs(x) > taylor_2_bound) {\n result -= (x * x * x) / 3;\n
}\n return result;\n }\n else {\n var a = Math.exp(+x), b = Math.exp(-x);\n
return a === Infinity ? 1 : b === Infinity ? -1 : (a - b) / (a + b);\n }\n };\n }\n\n // Inverse
hyperbolic function implementations derived from boost special math functions,\n // Copyright Eric Ford &
Hubert Holin 2001.\n\n if (typeof Math.asinh === \"undefined\") {\n var asinh = function(x) {\n if (x
>= +taylor_n_bound)\n {\n if (x > upper_taylor_n_bound)\n {\n
// approximation by laurent series in 1/x
at 0+ order from -1 to 0\n return Math.log(x) + Math.LN2;\n }\n else\n
{\n // approximation by laurent series in 1/x at 0+ order from -1 to 1\n
return
Math.log(x * 2 + (1 / (x * 2)));\n }\n }\n else\n {\n return
Math.log(x + Math.sqrt(x * x + 1));\n }\n }\n else if (x <= -taylor_n_bound)\n {\n
return -asinh(-x);\n }\n else\n {\n // approximation by taylor series in x at 0 up to
order 2\n var result = x;\n if (Math.abs(x) >= taylor_2_bound)\n {\n var x3 =
x * x * x;\n
// approximation by taylor series in x at 0 up to order 4\n result -= x3 / 6;\n }\n
return result;\n }\n };\n Math.asinh = asinh;\n }\n\n if (typeof Math.acosh === \"undefined\") {\n
Math.acosh = function(x) {\n if (x < 1)\n {\n return NaN;\n }\n else if (x - 1
>= taylor_n_bound)\n {\n if (x > upper_taylor_2_bound)\n {\n //
approximation by laurent series in 1/x at 0+ order from -1 to 0\n return Math.log(x) + Math.LN2;\n
}\n else\n {\n return Math.log(x + Math.sqrt(x * x - 1));\n }\n }\n
else\n {\n var y = Math.sqrt(x - 1);\n // approximation by taylor series in y at 0 up to
order 2\n var result =
y;\n if (y >= taylor_2_bound)\n {\n var y3 = y * y * y;\n // approximation
by taylor series in y at 0 up to order 4\n result -= y3 / 12;\n }\n\n return Math.sqrt(2) *
result;\n }\n };\n }\n\n if (typeof Math.atanh === \"undefined\") {\n Math.atanh = function(x) {\n
if (Math.abs(x) < taylor_n_bound) {\n var result = x;\n if (Math.abs(x) > taylor_2_bound) {\n
result += (x * x * x) / 3;\n }\n return result;\n }\n return Math.log((1 + x)
/ (1 - x)) / 2;\n };\n }\n\n if (typeof Math.log1p === \"undefined\") {\n Math.log1p = function(x) {\n
if (Math.abs(x) < taylor_n_bound) {\n var x2 = x * x;\n var x3 = x2 * x;\n var x4 = x3 *
x;\n // approximation by
taylor series in x at 0 up to order 4\n return (-x4 / 4 + x3 / 3 - x2 / 2 + x);\n }\n return
Math.log(x + 1);\n };\n }\n\n if (typeof Math.expm1 === \"undefined\") {\n Math.expm1 = function(x)
{\n if (Math.abs(x) < taylor_n_bound) {\n var x2 = x * x;\n var x3 = x2 * x;\n var
x4 = x3 * x;\n // approximation by taylor series in x at 0 up to order 4\n return (x4 / 24 + x3 / 6 +
x2 / 2 + x);\n }\n return Math.exp(x) - 1;\n };\n }\n\n\n if (typeof Math.hypot ===
\"undefined\") {\n Math.hypot = function() {\n var y = 0;\n var length = arguments.length;\n\n for
(var i = 0; i < length; i++) {\n if (arguments[i] === Infinity || arguments[i] === -Infinity) {\n
return
Infinity;\n }\n y += arguments[i] * arguments[i];\n }\n return Math.sqrt(y);\n
}

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};\n}\nif (typeof Math.log10 === \"undefined\") {\n Math.log10 = function(x) {\n return Math.log(x) *
Math.LOG10E;\n };\n}\nif (typeof Math.log2 === \"undefined\") {\n Math.log2 = function(x) {\n return
Math.log(x) * Math.LOG2E;\n };\n}\nif (typeof Math.clz32 === \"undefined\") {\n Math.clz32 = (function(log,
LN2) {\n return function(x) {\n var asUInt = x >>> 0;\n if (asUInt === 0) {\n return
32;\n }\n return 31 - (log(asUInt) / LN2 | 0) | 0; // the \"| 0\" acts like math.floor\n };\n })(Math.log, Math.LN2);\n}\n}\n// For HtmlUnit and PhantomJs\nif (typeof ArrayBuffer.isView === \"undefined\")
{\n ArrayBuffer.isView = function(a) {\n return a != null && a.__proto__ != null && a.__proto__.__proto__
=== Int8Array.prototype.__proto__;\n };\n}\n}\nif (typeof Array.prototype.fill === \"undefined\") {\n // Polyfill
from https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array/fill#Polyfill\n
 Object.defineProperty(Array.prototype, 'fill', {\n value: function (value) {\n\n // Steps 1-2.\n if
(this == null) {\n throw new TypeError('this is null or not defined');\n }\n\n var O =
Object(this);\n\n // Steps 3-5.\n var len = O.length >>> 0;\n\n // Steps 6-7.\n var start =
arguments[1];\n var relativeStart = start >> 0;\n\n // Step 8.\n var k = relativeStart < 0 ?\n Math.max(len + relativeStart, 0) : \n Math.min(relativeStart, len);\n\n // Steps 9-10.\n var end = arguments[2];\n var relativeEnd = end === undefined ?\n len : end >> 0;\n\n // Step 11.\n var finalValue = relativeEnd < 0 ?\n Math.max(len + relativeEnd, 0) : \n Math.min(relativeEnd, len);\n\n // Step 12.\n while (k < finalValue) {\n O[k] =
value;\n k++;\n }\n\n // Step 13.\n return O;\n };\n });\n}\n}\n(function() {\n
function normalizeOffset(offset, length) {\n if (offset < 0) return Math.max(0, offset + length);\n return
Math.min(offset, length);\n}\nfunction typedArraySlice(begin, end) {\n if (typeof end === \"undefined\")
{\n end = this.length;\n }\n begin = normalizeOffset(begin || 0, this.length);\n end =
Math.max(begin, normalizeOffset(end, this.length));\n return new this.constructor(this.subarray(begin, end));\n
}\n\n var arrays = [Int8Array, Int16Array, Uint16Array, Int32Array, Float32Array, Float64Array];\n for (var i =
0; i < arrays.length; ++i) {\n var TypedArray = arrays[i];\n if (typeof TypedArray.prototype.fill ===
\"undefined\")\n {\n Object.defineProperty(TypedArray.prototype, 'fill', {\n value: Array.prototype.fill\n });\n }\n if (typeof TypedArray.prototype.slice === \"undefined\") {\n
 Object.defineProperty(TypedArray.prototype, 'slice', {\n value: typedArraySlice\n });\n }\n
}\n\n // Patch apply to work with TypedArrays if needed.\n try {\n (function() {}).apply(null, new
Int32Array(0))\n } catch (e) {\n var apply = Function.prototype.apply;\n Object.defineProperty(Function.prototype, 'apply', {\n value: function(self, array) {\n return
apply.call(this, self, [].slice.call(array));\n }\n });\n }\n\n // Patch map to work with TypedArrays if
needed.\n for (var i = 0; i < arrays.length; ++i) {\n var TypedArray = arrays[i];\n if (typeof
TypedArray.prototype.map === \"undefined\") {\n Object.defineProperty(TypedArray.prototype,
'map', {\n value: function(callback, self) {\n return [].slice.call(this).map(callback, self);\n
 }\n });\n }\n }\n\n // Patch sort to work with TypedArrays if needed.\n // TODO: consider to
remove following function and replace it with `Kotlin.doubleCompareTo` (see misc.js)\n var
totalOrderComparator = function (a, b) {\n if (a < b) return -1;\n if (a > b) return 1;\n\n if (a === b) {\n
 if (a !== 0) return 0;\n var ia = 1 / a;\n return ia === 1 / b ? 0 : (ia < 0 ? -1 : 1);\n }\n
 return a !== a ? (b !== b ? 0 : 1) : -1\n };\n\n for (var i = 0; i < arrays.length; ++i) {\n var TypedArray =
arrays[i];\n if (typeof TypedArray.prototype.sort === \"undefined\") {\n Object.defineProperty(TypedArray.prototype, 'sort', {\n
 value: function(compareFunction) {\n return Array.prototype.sort.call(this, compareFunction || totalOrderComparator);\n }\n });\n }\n }\n
}\n\n })(\");\n\n /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors. \n * Use
of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\n Kotlin.Kind = {\n CLASS: \"class\",\n INTERFACE: \"interface\",\n OBJECT:
\"object\"\n};\n\n Kotlin.callGetter = function (thisObject, klass, propertyName) {\n var propertyDescriptor =
Object.getOwnPropertyDescriptor(klass, propertyName);\n if (propertyDescriptor != null &&

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propertyDescriptor.get != null) {\n return propertyDescriptor.get.call(thisObject);\n }\n\n propertyDescriptor
= Object.getOwnPropertyDescriptor(thisObject, propertyName);\n if (propertyDescriptor != null && \"value\" in
propertyDescriptor) {\n return thisObject[propertyName];\n }\n\n return Kotlin.callGetter(thisObject,
 Object.getPrototypeOf(klass), propertyName);\n};\n\nKotlin.callSetter = function (thisObject, klass, propertyName,
value) {\n var propertyDescriptor = Object.getOwnPropertyDescriptor(klass, propertyName);\n if
(propertyDescriptor != null && propertyDescriptor.set != null) {\n propertyDescriptor.set.call(thisObject,
value);\n return;\n }\n\n propertyDescriptor = Object.getOwnPropertyDescriptor(thisObject,
propertyName);\n if (propertyDescriptor != null && \"value\" in propertyDescriptor) {\n
thisObject[propertyName] = value;\n return\n }\n\n Kotlin.callSetter(thisObject,
Object.getPrototypeOf(klass), propertyName, value);\n};\n\nfunction isInheritanceFromInterface(ctor, iface) {\n if
(ctor === iface) return true;\n\n var metadata = ctor.$metadata$;\n if (metadata != null) {\n var interfaces =
metadata.interfaces;\n for (var i = 0; i < interfaces.length; i++) {\n if
(isInheritanceFromInterface(interfaces[i],
iface)) {\n return true;\n }\n }\n }\n\n var superPrototype = ctor.prototype != null ?
Object.getPrototypeOf(ctor.prototype) : null;\n var superConstructor = superPrototype != null ?
superPrototype.constructor : null;\n return superConstructor != null &&
isInheritanceFromInterface(superConstructor, iface);\n}\n\n/**\n * @param {*} object\n * @param
{Function|Object} klass\n * @returns {Boolean}\n */\nKotlin.isType = function (object, klass) {\n if (klass ===
Object) {\n switch (typeof object) {\n case \"string\":\n case \"number\":\n case
\"boolean\":\n case \"function\":\n return true;\n default:\n return object instanceof
Object;\n }\n }\n\n if (object == null || klass == null || (typeof object !== 'object' && typeof object !==
'function')) {\n return false;\n }\n\n if (typeof klass === \"function\" && object instanceof
klass) {\n return true;\n }\n\n var proto = Object.getPrototypeOf(klass);\n var constructor = proto != null ?
proto.constructor : null;\n if (constructor != null && \"$metadata$\" in constructor) {\n var metadata =
constructor.$metadata$;\n if (metadata.kind === Kotlin.Kind.OBJECT) {\n return object === klass;\n }\n }\n\n var classMetadata = klass.$metadata$;\n // In WebKit (JavaScriptCore) for some interfaces from
DOM typeof returns \"object\", nevertheless they can be used in RHS of instanceof\n if (classMetadata == null)
{\n return object instanceof klass;\n }\n\n if (classMetadata.kind === Kotlin.Kind.INTERFACE &&
object.constructor != null) {\n return isInheritanceFromInterface(object.constructor, klass);\n }\n\n return
false;\n};\n\nKotlin.isNumber = function (a) {\n return typeof a == \"number\" || a instanceof
Kotlin.Long;\n};\n\nKotlin.isChar = function (value) {\n return
value instanceof Kotlin.BoxedChar;\n};\n\nKotlin.isComparable = function (value) {\n var type = typeof
value;\n return type === \"string\" ||\n type === \"boolean\" ||\n Kotlin.isNumber(value) ||\n Kotlin.isType(value, Kotlin.kotlin.Comparable);\n};\n\nKotlin.isCharSequence = function (value) {\n return
typeof value === \"string\" || Kotlin.isType(value, Kotlin.kotlin.CharSequence);\n};\n\n/*\n * Copyright 2010-2020
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n// a package is omitted to get
declarations directly under the module\n\n@PublishedApi\nnexternal internal fun <T> Array(size: Int):
Array<T>\n\n@JsName(\"newArray\")\nfun <T> newArray(size: Int, initialValue: T) = fillArrayVal(Array<T>(size),
initialValue)\n\n@JsName(\"newArrayF\")\ninline fun <T> arrayWithFun(size: Int, init: (Int) -> T) =
fillArrayFun(Array<T>(size),
init)\n\n@JsName(\"fillArray\")\ninline fun <T> fillArrayFun(array: Array<T>, init: (Int) -> T): Array<T> {\n for
(i in 0..array.size - 1) {\n array[i] = init(i)\n }\n return array\n}\n\n@JsName(\"booleanArray\")\nfun
booleanArray(size: Int, init: dynamic): Array<Boolean> {\n val result: dynamic = Array<Boolean>(size)\n result.`$type$` = \"BooleanArray\"\n return when (init) {\n null, true -> fillArrayVal(result, false)\n false -
> result\n else -> fillArrayFun<Boolean>(result, init)\n }\n}\n\n@JsName(\"booleanArrayF\")\ninline fun
booleanArrayWithFun(size: Int, init: (Int) -> Boolean): Array<Boolean> = fillArrayFun(booleanArray(size, false),
init)\n\n@JsName(\"charArray\")\n@Suppress(\"UNUSED_PARAMETER\")\nfun charArray(size: Int, init:

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dynamic): Array<Char> {\n val result = js("new Uint16Array(size)")\n result.`$type$` = "CharArray"\n
return when (init) {\n null, true, false -> result // For consistency\n
 else -> fillArrayFun<Char>(result, init)\n }\n}\n\n@JsName("charArrayF")\n\ninline fun
charArrayWithFun(size: Int, init: (Int) -> Char): Array<Char> {\n val array = charArray(size, null)\n for (i in
0..array.size - 1) {\n @Suppress("UNUSED_VARIABLE") // used in js block\n val value = init(i)\n
js("array[i] = value;")\n }\n return array\n}\n\n@JsName("untypedCharArrayF")\n\ninline fun
untypedCharArrayWithFun(size: Int, init: (Int) -> Char): Array<Char> {\n val array = Array<Char>(size)\n for
(i in 0..array.size - 1) {\n @Suppress("UNUSED_VARIABLE") // used in js block\n val value = init(i)\n
js("array[i] = value;")\n }\n return array\n}\n\n@JsName("longArray")\n\nfun longArray(size: Int, init:
dynamic): Array<Long> {\n val result: dynamic = Array<Long>(size)\n result.`$type$` = "LongArray"\n
return when (init) {\n null, true -> fillArrayVal(result, 0L)\n false -> result\n
 else -> fillArrayFun<Long>(result, init)\n }\n}\n\n@JsName("longArrayF")\n\ninline fun
longArrayWithFun(size: Int, init: (Int) -> Long): Array<Long> = fillArrayFun(longArray(size, false),
init)\n\nprivate fun <T> fillArrayVal(array: Array<T>, initialValue: T): Array<T> {\n for (i in 0..array.size - 1) {\n
array[i] = initialValue\n }\n return array\n}", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n */\n\npackage kotlin\n\npublic class Enum<T> : Enum<T>> :
Comparable<Enum<T>> {\n @JsName("name$") private var _name: String = ""\n @JsName("ordinal$")
private var _ordinal: Int = 0\n val name: String\n get() = _name\n val ordinal: Int\n get() =
_ordinal\n\n override fun compareTo(other: Enum<T>) = ordinal.compareTo(other.ordinal)\n\n override fun
equals(other: Any?) = this ===
 other\n\n override fun hashCode(): Int = js("Kotlin.identityHashCode")(this)\n\n override fun toString() =
name\n\n companion object {\n }, /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.js.internal\n\n@JsName("DoubleCompanionObject")\n\ninternal
object DoubleCompanionObject {\n @JsName("MIN_VALUE")\n const val MIN_VALUE: Double = 4.9E-
324\n\n @JsName("MAX_VALUE")\n const val MAX_VALUE: Double = 1.7976931348623157E308\n\n @JsName("POSITIVE_INFINITY")\n @Suppress("DIVISION_BY_ZERO")\n const val
POSITIVE_INFINITY: Double = 1.0 / 0.0\n\n @JsName("NEGATIVE_INFINITY")\n
 @Suppress("DIVISION_BY_ZERO")\n const val NEGATIVE_INFINITY: Double = -1.0 / 0.0\n\n @JsName("NaN")\n @Suppress("DIVISION_BY_ZERO")\n const val NaN: Double = -(0.0 / 0.0)\n\n
 @JsName("SIZE_BYTES")\n
 const val SIZE_BYTES = 8\n\n @JsName("SIZE_BITS")\n const val SIZE_BITS =
64\n}\n\n@JsName("FloatCompanionObject")\n\ninternal object FloatCompanionObject {\n
 @JsName("MIN_VALUE")\n const val MIN_VALUE: Float = 1.4E-45F\n\n @JsName("MAX_VALUE")\n
 const val MAX_VALUE: Float = 3.4028235E38F\n\n @JsName("POSITIVE_INFINITY")\n
 @Suppress("DIVISION_BY_ZERO")\n const val POSITIVE_INFINITY: Float = 1.0F / 0.0F\n\n @JsName("NEGATIVE_INFINITY")\n
 @Suppress("DIVISION_BY_ZERO")\n const val NEGATIVE_INFINITY: Float = -1.0F / 0.0F\n\n @JsName("NaN")\n
 @Suppress("DIVISION_BY_ZERO")\n const val NaN: Float = -(0.0F / 0.0F)\n\n @JsName("SIZE_BYTES")\n
 const val SIZE_BYTES = 4\n\n @JsName("SIZE_BITS")\n const val
SIZE_BITS = 32\n}\n\n@JsName("IntCompanionObject")\n\ninternal object IntCompanionObject {\n
 @JsName("MIN_VALUE")\n val MIN_VALUE: Int = -2147483647 - 1\n\n @JsName("MAX_VALUE")\n
 val MAX_VALUE: Int = 2147483647\n\n @JsName("SIZE_BYTES")\n const val SIZE_BYTES = 4\n\n @JsName("SIZE_BITS")\n
 const val SIZE_BITS = 32\n}\n\n@JsName("LongCompanionObject")\n\ninternal
object LongCompanionObject {\n @JsName("MIN_VALUE")\n val MIN_VALUE: Long =
js("Kotlin.Long.MIN_VALUE")\n\n @JsName("MAX_VALUE")\n val MAX_VALUE: Long =
js("Kotlin.Long.MAX_VALUE")\n\n @JsName("SIZE_BYTES")\n const val SIZE_BYTES = 8\n\n

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@JsName("SIZE_BITS")\n const val SIZE_BITS = 64\n}\n\n@JsName("ShortCompanionObject")\ninternal
object ShortCompanionObject {\n @JsName("MIN_VALUE")\n val MIN_VALUE: Short = -32768\n\n @JsName("MAX_VALUE")\n val MAX_VALUE: Short = 32767\n\n @JsName("SIZE_BYTES")\n const
val SIZE_BYTES = 2\n\n @JsName("SIZE_BITS")\n const val SIZE_BITS =
16\n}\n\n@JsName("ByteCompanionObject")\ninternal object ByteCompanionObject {\n
@JsName("MIN_VALUE")\n val MIN_VALUE: Byte = -128\n\n @JsName("MAX_VALUE")\n val MAX_VALUE: Byte = 127\n\n @JsName("SIZE_BYTES")\n const
val SIZE_BYTES = 1\n\n @JsName("SIZE_BITS")\n const val SIZE_BITS =
8\n}\n\n@JsName("CharCompanionObject")\ninternal object CharCompanionObject {\n
@JsName("MIN_VALUE")\n public const val MIN_VALUE: Char = "\u0000"\n\n @JsName("MAX_VALUE")\n public const val MAX_VALUE: Char = "\uFFFF"\n\n
@JsName("MIN_HIGH_SURROGATE")\n public const val MIN_HIGH_SURROGATE: Char = "\uD800"\n\n
@JsName("MAX_HIGH_SURROGATE")\n public const val MAX_HIGH_SURROGATE: Char =
"\uDBFF"\n\n @JsName("MIN_LOW_SURROGATE")\n public const val MIN_LOW_SURROGATE: Char =
"\uDC00"\n\n @JsName("MAX_LOW_SURROGATE")\n public const val MAX_LOW_SURROGATE: Char =
"\uDFFF"\n\n @JsName("MIN_SURROGATE")\n public const val MIN_SURROGATE: Char =
MIN_HIGH_SURROGATE\n\n @JsName("MAX_SURROGATE")\n public const val MAX_SURROGATE:
Char = MAX_LOW_SURROGATE\n\n\n @JsName("SIZE_BYTES")\n const val SIZE_BYTES = 2\n\n @JsName("SIZE_BITS")\n const val
SIZE_BITS = 16\n}\n\ninternal object StringCompanionObject {\n}\n\ninternal object BooleanCompanionObject
{\n}\n\n",/*\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("ArraysKt")\n\npackage
kotlin.collections\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n\nimport kotlin.random.*\nimport
kotlin.ranges.contains\nimport kotlin.ranges.reversed\n\n/**\n * Returns 1st *element* from the array.\n * \n * If the
size of this array is less than 1, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior
is unspecified.\n */\n@kotlin.internal.InlineOnly\npublic
inline operator fun <T> Array<out T>.component1(): T {\n return get(0)\n}\n\n/**\n * Returns 1st *element*
from the array.\n * \n * If the size of this array is less than 1, throws an [IndexOutOfBoundsException] except in
Kotlin/JS\n * where the behavior is unspecified.\n */\n@kotlin.internal.InlineOnly\npublic inline operator fun
ByteArray.component1(): Byte {\n return get(0)\n}\n\n/**\n * Returns 1st *element* from the array.\n * \n * If the
size of this array is less than 1, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior
is unspecified.\n */\n@kotlin.internal.InlineOnly\npublic inline operator fun ShortArray.component1(): Short {\n
return get(0)\n}\n\n/**\n * Returns 1st *element* from the array.\n * \n * If the size of this array is less than 1,
throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*/\n@kotlin.internal.InlineOnly\npublic inline operator fun IntArray.component1():
Int {\n return get(0)\n}\n\n/**\n * Returns 1st *element* from the array.\n * \n * If the size of this array is less
than 1, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*/\n@kotlin.internal.InlineOnly\npublic inline operator fun LongArray.component1(): Long {\n return
get(0)\n}\n\n/**\n * Returns 1st *element* from the array.\n * \n * If the size of this array is less than 1, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*/\n@kotlin.internal.InlineOnly\npublic inline operator fun FloatArray.component1(): Float {\n return
get(0)\n}\n\n/**\n * Returns 1st *element* from the array.\n * \n * If the size of this array is less than 1, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*/\n@kotlin.internal.InlineOnly\npublic inline operator fun DoubleArray.component1(): Double {\n return
get(0)\n}\n\n/**\n * Returns 1st *element*

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from the array.\n \* \n \* If the size of this array is less than 1, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun BooleanArray.component1(): Boolean {\n return get(0)\n }\n\n \*\*\n \* Returns 1st \*element\* from the array.\n \* \n \* If the size of this array is less than 1, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun CharArray.component1(): Char {\n return get(0)\n }\n\n \*\*\n \* Returns 2nd \*element\* from the array.\n \* \n \* If the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun <T> Array<out T>.component2(): T {\n return get(1)\n }\n\n \*\*\n \* Returns 2nd \*element\* from the array.\n \* \n \* If the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun ByteArray.component2(): Byte {\n return get(1)\n }\n\n \*\*\n \* Returns 2nd \*element\* from the array.\n \* \n \* If the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun ShortArray.component2(): Short {\n return get(1)\n }\n\n \*\*\n \* Returns 2nd \*element\* from the array.\n \* \n \* If the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun IntArray.component2(): Int {\n return get(1)\n }\n\n \*\*\n \* Returns 2nd \*element\* from the array.\n \* \n \* If the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun LongArray.component2(): Long {\n return get(1)\n }\n\n \*\*\n \* Returns 2nd \*element\* from the array.\n \* \n \* If the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun FloatArray.component2(): Float {\n return get(1)\n }\n\n \*\*\n \* Returns 2nd \*element\* from the array.\n \* \n \* If the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun DoubleArray.component2(): Double {\n return get(1)\n }\n\n \*\*\n \* Returns 2nd \*element\* from the array.\n \* \n \* If the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun BooleanArray.component2(): Boolean {\n return get(1)\n }\n\n \*\*\n \* Returns 2nd \*element\* from the array.\n \* \n \* If the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun CharArray.component2(): Char {\n return get(1)\n }\n\n \*\*\n \* Returns 3rd \*element\* from the array.\n \* \n \* If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun <T> Array<out T>.component3(): T {\n return get(2)\n }\n\n \*\*\n \* Returns 3rd \*element\* from the array.\n \* \n \* If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun ByteArray.component3(): Byte {\n return get(2)\n }\n\n \*\*\n \* Returns 3rd \*element\* from the array.\n \* \n \* If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun ShortArray.component3(): Short {\n return get(2)\n }\n\n \*\*\n \* Returns 3rd \*element\* from the array.\n \* \n \* If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun IntArray.component3(): Int {\n return get(2)\n }\n\n \*\*\n \* Returns 3rd \*element\* from the array.\n \* \n \* If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n \* \n @kotlin.internal.InlineOnly\n public inline operator fun LongArray.component3(): Long {\n return get(2)\n }\n\n \*\*\n \* Returns 3rd \*element\* from the array.

\* Returns 3rd *element* from the array.\n \* \n \* If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun FloatArray.component3(): Float {\n return get(2)\n}\n\n/**\n * Returns 3rd element from the array.\n * \n * If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n`

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun DoubleArray.component3(): Double {\n return get(2)\n}\n\n/**\n * Returns 3rd element from the array.\n * \n * If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n`

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun BooleanArray.component3(): Boolean {\n return get(2)\n}\n\n/**\n * Returns 3rd element from the array.\n * \n * If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n`

If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun CharArray.component3(): Char {\n return get(2)\n}\n\n/**\n * Returns 4th element from the array.\n * \n * If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n`

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun <T> Array<out T>.component4(): T {\n return get(3)\n}\n\n/**\n * Returns 4th element from the array.\n * \n * If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n`

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun ByteArray.component4(): Byte {\n return get(3)\n}\n\n/**\n * Returns 4th element from the array.\n * \n * If the size of this array is less than 4, throws an [IndexOutOfBoundsException]`

except in Kotlin/JS\n \* where the behavior is unspecified.\n

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun ShortArray.component4(): Short {\n return get(3)\n}\n\n/**\n * Returns 4th element from the array.\n * \n * If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n`

If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun IntArray.component4(): Int {\n return get(3)\n}\n\n/**\n * Returns 4th element from the array.\n * \n * If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n`

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun LongArray.component4(): Long {\n return get(3)\n}\n\n/**\n * Returns 4th element from the array.\n * \n * If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n`

unspecified.\n

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun FloatArray.component4(): Float {\n return get(3)\n}\n\n/**\n * Returns 4th element from the array.\n * \n * If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n`

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun DoubleArray.component4(): Double {\n return get(3)\n}\n\n/**\n * Returns 4th element from the array.\n * \n * If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n`

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun BooleanArray.component4(): Boolean {\n return get(3)\n}\n\n/**\n * Returns 4th element from the array.\n * \n * If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n`

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun CharArray.component4(): Char {\n return get(3)\n}\n\n/**\n * Returns 5th element from the array.\n * \n * If the size of this array is less than 5, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n`

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun <T> Array<out T>.component5(): T {\n return get(4)\n}\n\n/**\n * Returns 5th element from the array.\n * \n * If the size of this array is less than 5, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n`

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun ByteArray.component5(): Byte {\n return get(4)\n}\n\n/**\n * Returns 5th element from the array.\n * \n * If the size of this array is less than 5, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n`

`*\n@kotlin.internal.InlineOnly\npublic inline operator fun ShortArray.component5(): Short {\n`

return get(4)\n}\n\n/\*\*\n \* Returns 5th \*element\* from the array.\n \* \n \* If the size of this array is less than 5, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n

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*\n@kotlin.internal.InlineOnly\npublic inline operator fun IntArray.component5(): Int {\n return
get(4)\n}\n\n/**\n * Returns 5th *element* from the array.\n * \n * If the size of this array is less than 5, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun LongArray.component5(): Long {\n return
get(4)\n}\n\n/**\n * Returns 5th *element* from the array.\n * \n * If the size of this array is less than 5, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun FloatArray.component5(): Float {\n return
get(4)\n}\n\n/**\n * Returns 5th *element* from the array.\n
* \n * If the size of this array is less than 5, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where
the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun
DoubleArray.component5(): Double {\n return get(4)\n}\n\n/**\n * Returns 5th *element* from the array.\n * \n *
If the size of this array is less than 5, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the
behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun BooleanArray.component5():
Boolean {\n return get(4)\n}\n\n/**\n * Returns 5th *element* from the array.\n * \n * If the size of this array is
less than 5, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun CharArray.component5(): Char {\n return
get(4)\n}\n\n/**\n * Returns `true` if [element] is found in the array.\n * \n\npublic operator fun
<@kotlin.internal.OnlyInputTypes
T> Array<out T>.contains(element: T): Boolean {\n return indexOf(element) >= 0\n}\n\n/**\n * Returns `true` if
[element] is found in the array.\n * \n\npublic operator fun ByteArray.contains(element: Byte): Boolean {\n return
indexOf(element) >= 0\n}\n\n/**\n * Returns `true` if [element] is found in the array.\n * \n\npublic operator fun
ShortArray.contains(element: Short): Boolean {\n return indexOf(element) >= 0\n}\n\n/**\n * Returns `true` if
[element] is found in the array.\n * \n\npublic operator fun IntArray.contains(element: Int): Boolean {\n return
indexOf(element) >= 0\n}\n\n/**\n * Returns `true` if [element] is found in the array.\n * \n\npublic operator fun
LongArray.contains(element: Long): Boolean {\n return indexOf(element) >= 0\n}\n\n/**\n * Returns `true` if
[element] is found in the array.\n * \n\n@Deprecated("\n * The function has unclear behavior when searching for NaN or
zero values and will be removed soon. Use 'any { it == element }' instead
to continue using this behavior, or '.asList().contains(element: T)' to get the same search behavior as in a list.\n",
ReplaceWith("\n * any { it == element }"))\n@DeprecatedSinceKotlin(warningSince = "\n * 1.4", errorSince = "\n * 1.6",
hiddenSince = "\n * 1.7")\npublic operator fun FloatArray.contains(element: Float): Boolean {\n return any { it ==
element }\n}\n\n/**\n * Returns `true` if [element] is found in the array.\n * \n\n@Deprecated("\n * The function has
unclear behavior when searching for NaN or zero values and will be removed soon. Use 'any { it == element }'
instead to continue using this behavior, or '.asList().contains(element: T)' to get the same search behavior as in a
list.\n", ReplaceWith("\n * any { it == element }"))\n@DeprecatedSinceKotlin(warningSince = "\n * 1.4", errorSince =
"\n * 1.6", hiddenSince = "\n * 1.7")\npublic operator fun DoubleArray.contains(element: Double): Boolean {\n return
any { it == element }\n}\n\n/**\n * Returns `true` if [element] is found in the array.\n * \n\npublic
operator fun BooleanArray.contains(element: Boolean): Boolean {\n return indexOf(element) >= 0\n}\n\n/**\n *
Returns `true` if [element] is found in the array.\n * \n\npublic operator fun CharArray.contains(element: Char):
Boolean {\n return indexOf(element) >= 0\n}\n\n/**\n * Returns an element at the given [index] or throws an
[IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n * \n\npublic expect fun <T> Array<out T>.elementAt(index:
Int): T\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index]
is out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n * \n\npublic
expect fun ByteArray.elementAt(index: Int): Byte\n\n/**\n * Returns an element at the given [index] or throws an
[IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n

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*^/npublic expect fun ShortArray.elementAt(index: Int): Short\n/n/**\n * Returns an element at the given [index] or
throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n */npublic expect fun IntArray.elementAt(index: Int):
Int\n/n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is
out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n */npublic
expect fun LongArray.elementAt(index: Int): Long\n/n/**\n * Returns an element at the given [index] or throws an
[IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n */npublic expect fun FloatArray.elementAt(index: Int):
Float\n/n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index]
is out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n */npublic
expect fun DoubleArray.elementAt(index: Int): Double\n/n/**\n * Returns an element at the given [index] or throws
an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n */npublic expect fun BooleanArray.elementAt(index: Int):
Boolean\n/n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the
[index] is out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n
*/npublic expect fun CharArray.elementAt(index: Int): Char\n/n/**\n * Returns an element at the given [index] or
the result of calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n */n@kotlin.internal.InlineOnly\npublic inline fun
<T> Array<out
T>.elementAtOrElse(index: Int, defaultValue: (Int) -> T): T {\n return if (index >= 0 && index <= lastIndex)
get(index) else defaultValue(index)\n}\n/n/**\n * Returns an element at the given [index] or the result of calling the
[defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n */n@kotlin.internal.InlineOnly\npublic inline fun
ByteArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Byte): Byte {\n return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n/n/**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n */n@kotlin.internal.InlineOnly\npublic inline fun
ShortArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Short): Short {\n return if (index >= 0 && index <=
lastIndex)
get(index) else defaultValue(index)\n}\n/n/**\n * Returns an element at the given [index] or the result of calling the
[defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n */n@kotlin.internal.InlineOnly\npublic inline fun
IntArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Int): Int {\n return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n/n/**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n */n@kotlin.internal.InlineOnly\npublic inline fun
LongArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Long): Long {\n return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n/n/**\n * Returns an element at the given [index] or the result of
calling
the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n */n@kotlin.internal.InlineOnly\npublic inline fun
FloatArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Float): Float {\n return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n/n/**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n */n@kotlin.internal.InlineOnly\npublic inline fun
DoubleArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Double): Double {\n return if (index >= 0 &&
index <= lastIndex) get(index) else defaultValue(index)\n}\n/n/**\n * Returns an element at the given [index] or the
result of calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample

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samples.collections.Collections.Elements.elementAtOrElse\n
*\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Boolean): Boolean {\n return if (index >= 0 && index <= lastIndex) get(index) else\n defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result of calling the [defaultValue]\n function if the [index] is out of bounds of this array.\n * \n * @sample\n samples.collections.Collections.Elements.elementAtOrElse\n *\n@kotlin.internal.InlineOnly\npublic inline fun\n CharArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Char): Char {\n return if (index >= 0 && index <=\n lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or `null` if the\n [index] is out of bounds of this array.\n * \n * @sample\n samples.collections.Collections.Elements.elementAtOrNull\n *\n@kotlin.internal.InlineOnly\npublic inline fun\n <T> Array<out T>.elementAtOrNull(index: Int): T? {\n return this.getOrNull(index)\n}\n\n/**\n * Returns an element at the given [index] or `null` if the [index] is out of\n bounds of this array.\n * \n * @sample\n samples.collections.Collections.Elements.elementAtOrNull\n *\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.elementAtOrNull(index: Int): Byte? {\n return\n this.getOrNull(index)\n}\n\n/**\n * Returns an element at the given [index] or `null` if the [index] is out of bounds\n of this array.\n * \n * @sample\n samples.collections.Collections.Elements.elementAtOrNull\n *\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.elementAtOrNull(index: Int): Short? {\n return\n this.getOrNull(index)\n}\n\n/**\n * Returns an element at the given [index] or `null` if the [index] is out of bounds\n of this array.\n * \n * @sample\n samples.collections.Collections.Elements.elementAtOrNull\n *\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.elementAtOrNull(index: Int): Int? {\n return\n this.getOrNull(index)\n}\n\n/**\n * Returns an element at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample\n samples.collections.Collections.Elements.elementAtOrNull\n *\n@kotlin.internal.InlineOnly\npublic inline fun\n LongArray.elementAtOrNull(index: Int): Long? {\n return this.getOrNull(index)\n}\n\n/**\n * Returns an element\n at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample\n samples.collections.Collections.Elements.elementAtOrNull\n *\n@kotlin.internal.InlineOnly\npublic inline fun\n FloatArray.elementAtOrNull(index: Int): Float? {\n return this.getOrNull(index)\n}\n\n/**\n * Returns an element\n at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample\n samples.collections.Collections.Elements.elementAtOrNull\n *\n@kotlin.internal.InlineOnly\npublic inline fun\n DoubleArray.elementAtOrNull(index: Int): Double? {\n return this.getOrNull(index)\n}\n\n/**\n * Returns an\n element at the given\n [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample\n samples.collections.Collections.Elements.elementAtOrNull\n *\n@kotlin.internal.InlineOnly\npublic inline fun\n BooleanArray.elementAtOrNull(index: Int): Boolean? {\n return this.getOrNull(index)\n}\n\n/**\n * Returns an\n element at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample\n samples.collections.Collections.Elements.elementAtOrNull\n *\n@kotlin.internal.InlineOnly\npublic inline fun\n CharArray.elementAtOrNull(index: Int): Char? {\n return this.getOrNull(index)\n}\n\n/**\n * Returns the first\n element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample\n samples.collections.Collections.Elements.find\n *\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out\n T>.find(predicate: (T) -> Boolean): T? {\n return firstOrNull(predicate)\n}\n\n/**\n * Returns the first element\n matching the given [predicate], or `null` if\n no such element was found.\n * \n * @sample\n samples.collections.Collections.Elements.find\n *\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.find(predicate: (Byte) -> Boolean): Byte? {\n return\n firstOrNull(predicate)\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null` if no such\n element was found.\n * \n * @sample\n samples.collections.Collections.Elements.find\n *\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.find(predicate: (Short) -> Boolean): Short? {\n return\n firstOrNull(predicate)\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null` if no\n such element was found.\n * \n * @sample\n samples.collections.Collections.Elements.find\n
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*^@kotlin.internal.InlineOnly\npublic inline fun IntArray.find(predicate: (Int) -> Boolean): Int? {\n return
firstOrNull(predicate)\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null` if no such
element was found.\n * \n * @sample samples.collections.Collections.Elements.find\n
*^@kotlin.internal.InlineOnly\npublic inline fun LongArray.find(predicate: (Long) -> Boolean): Long? {\n
return firstOrNull(predicate)\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null` if no
such element was found.\n * \n * @sample samples.collections.Collections.Elements.find\n
*^@kotlin.internal.InlineOnly\npublic inline fun FloatArray.find(predicate: (Float) -> Boolean): Float? {\n
return firstOrNull(predicate)\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null` if no
such element was found.\n * \n * @sample samples.collections.Collections.Elements.find\n
*^@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.find(predicate: (Double) -> Boolean): Double? {\n
return firstOrNull(predicate)\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null` if no
such element was found.\n * \n * @sample samples.collections.Collections.Elements.find\n
*^@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.find(predicate: (Boolean) -> Boolean): Boolean?
{\n return firstOrNull(predicate)\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null` if
no such element was found.\n * \n * @sample samples.collections.Collections.Elements.find\n
*^@kotlin.internal.InlineOnly\npublic inline fun CharArray.find(predicate: (Char) -> Boolean): Char? {\n return
firstOrNull(predicate)\n}\n\n/**\n * Returns the last element matching the given [predicate], or `null` if no such
element was found.\n * \n * @sample samples.collections.Collections.Elements.find\n
*^@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.findLast(predicate: (T) -> Boolean): T? {\n
return lastOrNull(predicate)\n}\n\n/**\n * Returns the last element matching the given [predicate], or `null` if no
such element was found.\n * \n * @sample samples.collections.Collections.Elements.find\n
*^@kotlin.internal.InlineOnly\npublic
inline fun ByteArray.findLast(predicate: (Byte) -> Boolean): Byte? {\n return lastOrNull(predicate)\n}\n\n/**\n *
Returns the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n
*^@kotlin.internal.InlineOnly\npublic inline fun
ShortArray.findLast(predicate: (Short) -> Boolean): Short? {\n return lastOrNull(predicate)\n}\n\n/**\n * Returns
the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n
*^@kotlin.internal.InlineOnly\npublic inline fun
IntArray.findLast(predicate: (Int) -> Boolean): Int? {\n return lastOrNull(predicate)\n}\n\n/**\n * Returns the last
element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n
*^@kotlin.internal.InlineOnly\npublic inline fun
LongArray.findLast(predicate:
(Long) -> Boolean): Long? {\n return lastOrNull(predicate)\n}\n\n/**\n * Returns the last element matching the
given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n
*^@kotlin.internal.InlineOnly\npublic inline fun
FloatArray.findLast(predicate: (Float) -> Boolean): Float? {\n return lastOrNull(predicate)\n}\n\n/**\n * Returns
the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n
*^@kotlin.internal.InlineOnly\npublic inline fun
DoubleArray.findLast(predicate: (Double) -> Boolean): Double? {\n return lastOrNull(predicate)\n}\n\n/**\n *
Returns the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n
*^@kotlin.internal.InlineOnly\npublic inline fun
BooleanArray.findLast(predicate: (Boolean) -> Boolean): Boolean?
{\n return lastOrNull(predicate)\n}\n\n/**\n * Returns the last element matching the given [predicate], or `null` if
no such element was found.\n * \n * @sample samples.collections.Collections.Elements.find\n
*^@kotlin.internal.InlineOnly\npublic inline fun CharArray.findLast(predicate: (Char) -> Boolean): Char? {\n
return lastOrNull(predicate)\n}\n\n/**\n * Returns the first element.\n * \n * @throws NoSuchElementException if
the array is empty.\n * \n * @public fun <T> Array<out T>.first(): T {\n if (isEmpty())\n throw
NoSuchElementException("Array is empty.")\n return this[0]\n}\n\n/**\n * Returns the first element.\n * \n *

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@throws NoSuchElementException if the array is empty.\n */\npublic fun ByteArray.first(): Byte {\n if\n (isEmpty())\n throw NoSuchElementException("Array is empty.")\n return this[0]\n}\n\n/**\n * Returns the\n first element.\n * \n * @throws NoSuchElementException if the array is empty.\n */\npublic fun ShortArray.first():\nShort\n {\n if (isEmpty())\n throw NoSuchElementException("Array is empty.")\n return this[0]\n}\n\n/**\n * Returns the first element.\n * \n * @throws NoSuchElementException if the array is empty.\n */\npublic fun\nIntArray.first(): Int {\n if (isEmpty())\n throw NoSuchElementException("Array is empty.")\n return\n this[0]\n}\n\n/**\n * Returns the first element.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n\npublic fun LongArray.first(): Long {\n if (isEmpty())\n throw NoSuchElementException("Array is\n empty.")\n return this[0]\n}\n\n/**\n * Returns the first element.\n * \n * @throws NoSuchElementException if\n the array is empty.\n */\npublic fun FloatArray.first(): Float {\n if (isEmpty())\n throw\n NoSuchElementException("Array is empty.")\n return this[0]\n}\n\n/**\n * Returns the first element.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n\npublic fun DoubleArray.first(): Double {\n if\n (isEmpty())\n throw NoSuchElementException("Array is empty.")\n return this[0]\n}\n\n/**\n * Returns the\n first element.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n\npublic fun\nBooleanArray.first(): Boolean {\n if (isEmpty())\n throw NoSuchElementException("Array is empty.")\n return this[0]\n}\n\n/**\n * Returns the first element.\n * \n * @throws NoSuchElementException if the array is\n empty.\n */\n\npublic fun CharArray.first(): Char {\n if (isEmpty())\n throw NoSuchElementException("Array\n is empty.")\n return this[0]\n}\n\n/**\n * Returns the first element matching the given [predicate].\n * \n * @throws\n [NoSuchElementException] if no such element is found.\n */\n\npublic inline fun <T> Array<out T>.first(predicate:\n (T) -> Boolean): T {\n for (element in this) if (predicate(element)) return element\n throw\n NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the first\n element\n matching the given [predicate].\n * \n * @throws [NoSuchElementException] if no such element is found.\n */\n\npublic\n inline fun ByteArray.first(predicate: (Byte) -> Boolean): Byte {\n for (element in this) if (predicate(element))\n return element\n throw NoSuchElementException("Array contains no element matching the\n predicate.")\n}\n\n/**\n * Returns the first element matching the given [predicate].\n * \n * @throws\n [NoSuchElementException] if no such element is found.\n */\n\npublic inline fun ShortArray.first(predicate: (Short) -\n > Boolean): Short {\n for (element in this) if (predicate(element)) return element\n throw\n NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the first\n element\n matching the given [predicate].\n * \n * @throws [NoSuchElementException] if no such element is found.\n */\n\npublic inline fun IntArray.first(predicate: (Int) -> Boolean): Int {\n for (element in this) if (predicate(element))\n return element\n throw NoSuchElementException("Array\n contains no element matching the predicate.")\n}\n\n/**\n * Returns the first element matching the given\n [predicate].\n * \n * @throws [NoSuchElementException] if no such element is found.\n */\n\npublic inline fun LongArray.first(predicate: (Long) -> Boolean): Long {\n for (element in this) if (predicate(element)) return\n element\n throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the first element\n matching the given [predicate].\n * \n * @throws [NoSuchElementException] if no such\n element\n is found.\n */\n\npublic inline fun FloatArray.first(predicate: (Float) -> Boolean): Float {\n for (element in\n this) if (predicate(element)) return element\n throw NoSuchElementException("Array contains no element\n matching the predicate.")\n}\n\n/**\n * Returns the first element matching the given [predicate].\n * \n * @throws\n [NoSuchElementException] if no such element is found.\n */\n\npublic inline fun DoubleArray.first(predicate:\n (Double) -> Boolean): Double {\n for (element in this) if (predicate(element)) return element\n throw\n NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the first\n element\n matching the given [predicate].\n * \n * @throws [NoSuchElementException] if no such element is found.\n */\n\npublic inline fun BooleanArray.first(predicate: (Boolean) -> Boolean): Boolean {\n for (element in this) if\n (predicate(element)) return element\n throw NoSuchElementException("Array contains no element matching the\n predicate.")\n}\n\n/**\n * Returns the first element matching the given [predicate].\n * \n * @throws

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[NoSuchElementException] if no such element is found.\n *^/npublic inline fun CharArray.first(predicate: (Char) ->
Boolean): Char {\n for (element in this) if (predicate(element)) return element\n throw
NoSuchElementException("Array contains no element matching the predicate.")\n}\n/n/**\n * Returns the first
non-null value produced
by [transform] function being applied to elements of this array in iteration order,\n * or throws
[NoSuchElementException] if no non-null value was produced.\n * \n * @sample
samples.collections.Collections.Transformations.firstNotNullOf\n
*^/n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Any> Array<out
T>.firstNotNullOf(transform: (T) -> R?): R {\n return firstNotNullOfOrNull(transform) ?: throw
NoSuchElementException("No element of the array was transformed to a non-null value.")\n}\n/n/**\n * Returns
the first non-null value produced by [transform] function being applied to elements of this array in iteration order,\n
* or `null` if no non-null value was produced.\n * \n * @sample
samples.collections.Collections.Transformations.firstNotNullOf\n
*^/n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Any> Array<out
T>.firstNotNullOfOrNull(transform: (T) -> R?): R? {\n for (element in this) {\n val result =
transform(element)\n if (result != null) {\n return result\n }\n }\n return null\n}\n/n/**\n * Returns the first element, or
`null` if the array is empty.\n *^/npublic fun <T> Array<out T>.firstOrNull(): T? {\n return if (isEmpty()) null else
this[0]\n}\n/n/**\n * Returns the first element, or `null` if the array is empty.\n *^/npublic fun
ByteArray.firstOrNull(): Byte? {\n return if (isEmpty()) null else this[0]\n}\n/n/**\n * Returns the first element, or
`null` if the array is empty.\n *^/npublic fun ShortArray.firstOrNull(): Short? {\n return if (isEmpty()) null else
this[0]\n}\n/n/**\n * Returns the first element, or `null` if the array is empty.\n *^/npublic fun IntArray.firstOrNull():
Int? {\n return if (isEmpty()) null else this[0]\n}\n/n/**\n * Returns the first element, or `null` if the array is
empty.\n *^/npublic fun LongArray.firstOrNull(): Long? {\n return if (isEmpty()) null else this[0]\n}\n/n/**\n *
Returns the first element,
or `null` if the array is empty.\n *^/npublic fun FloatArray.firstOrNull(): Float? {\n return if (isEmpty()) null else
this[0]\n}\n/n/**\n * Returns the first element, or `null` if the array is empty.\n *^/npublic fun
DoubleArray.firstOrNull(): Double? {\n return if (isEmpty()) null else this[0]\n}\n/n/**\n * Returns the first
element, or `null` if the array is empty.\n *^/npublic fun BooleanArray.firstOrNull(): Boolean? {\n return if
(isEmpty()) null else this[0]\n}\n/n/**\n * Returns the first element, or `null` if the array is empty.\n *^/npublic fun
CharArray.firstOrNull(): Char? {\n return if (isEmpty()) null else this[0]\n}\n/n/**\n * Returns the first element
matching the given [predicate], or `null` if element was not found.\n *^/npublic inline fun <T> Array<out
T>.firstOrNull(predicate: (T) -> Boolean): T? {\n for (element in this) if (predicate(element)) return element\n
return null\n}\n/n/**\n * Returns the first element matching the given [predicate], or
`null` if element was not found.\n *^/npublic inline fun ByteArray.firstOrNull(predicate: (Byte) -> Boolean): Byte?
{\n for (element in this) if (predicate(element)) return element\n return null\n}\n/n/**\n * Returns the first
element matching the given [predicate], or `null` if element was not found.\n *^/npublic inline fun
ShortArray.firstOrNull(predicate: (Short) -> Boolean): Short? {\n for (element in this) if (predicate(element))
return element\n return null\n}\n/n/**\n * Returns the first element matching the given [predicate], or `null` if
element was not found.\n *^/npublic inline fun IntArray.firstOrNull(predicate: (Int) -> Boolean): Int? {\n for
(element in this) if (predicate(element)) return element\n return null\n}\n/n/**\n * Returns the first element
matching the given [predicate], or `null` if element was not found.\n *^/npublic inline fun
LongArray.firstOrNull(predicate: (Long) -> Boolean): Long? {\n for (element in this) if (predicate(element))
return
element\n return null\n}\n/n/**\n * Returns the first element matching the given [predicate], or `null` if element
was not found.\n *^/npublic inline fun FloatArray.firstOrNull(predicate: (Float) -> Boolean): Float? {\n for
(element in this) if (predicate(element)) return element\n return null\n}\n/n/**\n * Returns the first element
matching the given [predicate], or `null` if element was not found.\n *^/npublic inline fun

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DoubleArray.firstOrNull(predicate: (Double) -> Boolean): Double? {\n for (element in this) if
(predicate(element)) return element\n return null\n}\n\n/**\n * Returns the first element matching the given
[predicate], or `null` if element was not found.\n */\npublic inline fun BooleanArray.firstOrNull(predicate:
(Boolean) -> Boolean): Boolean? {\n for (element in this) if (predicate(element)) return element\n return
null\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null` if element was not found.\n
*/\npublic inline
fun CharArray.firstOrNull(predicate: (Char) -> Boolean): Char? {\n for (element in this) if (predicate(element))
return element\n return null\n}\n\n/**\n * Returns an element at the given [index] or the result of calling the
[defaultValue] function if the [index] is out of bounds of this array.\n */\n@kotlin.internal.InlineOnly\npublic inline
fun <T> Array<out T>.getOrNull(index: Int, defaultValue: (Int) -> T): T? {\n return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n
*/\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.getOrNull(index: Int, defaultValue: (Int) -> Byte):
Byte? {\n return if (index >= 0 && index <= lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns
an element at the given [index] or the result of calling the [defaultValue] function if the [index] is
out of bounds of this array.\n */\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.getOrNull(index: Int,
defaultValue: (Int) -> Short): Short? {\n return if (index >= 0 && index <= lastIndex) get(index) else
defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result of calling the [defaultValue]
function if the [index] is out of bounds of this array.\n */\n@kotlin.internal.InlineOnly\npublic inline fun
IntArray.getOrNull(index: Int, defaultValue: (Int) -> Int): Int? {\n return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n */\n@kotlin.internal.InlineOnly\npublic inline fun
LongArray.getOrNull(index: Int, defaultValue: (Int) -> Long): Long? {\n return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the
given [index] or the result of calling the [defaultValue] function if the [index] is out of bounds of this array.\n
*/\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.getOrNull(index: Int, defaultValue: (Int) -> Float):
Float? {\n return if (index >= 0 && index <= lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns
an element at the given [index] or the result of calling the [defaultValue] function if the [index] is out of bounds of
this array.\n */\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.getOrNull(index: Int, defaultValue:
(Int) -> Double): Double? {\n return if (index >= 0 && index <= lastIndex) get(index) else
defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result of calling the [defaultValue]
function if the [index] is out of bounds of this array.\n */\n@kotlin.internal.InlineOnly\npublic inline fun
BooleanArray.getOrNull(index: Int, defaultValue: (Int) -> Boolean): Boolean? {\n return if (index
>= 0 && index <= lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given
[index] or the result of calling the [defaultValue] function if the [index] is out of bounds of this array.\n
*/\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.getOrNull(index: Int, defaultValue: (Int) -> Char):
Char? {\n return if (index >= 0 && index <= lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns
an element at the given [index] or `null` if the [index] is out of bounds of this array.\n */\n * @sample
samples.collections.Collections.Elements.getOrNull\n */\npublic fun <T> Array<out T>.getOrNull(index: Int): T?
{\n return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n/**\n * Returns an element at the
given [index] or `null` if the [index] is out of bounds of this array.\n */\n * @sample
samples.collections.Collections.Elements.getOrNull\n */\npublic fun ByteArray.getOrNull(index: Int): Byte? {\n
return if (index >=
0 && index <= lastIndex) get(index) else null\n}\n\n/**\n * Returns an element at the given [index] or `null` if the
[index] is out of bounds of this array.\n */\n * @sample samples.collections.Collections.Elements.getOrNull\n
*/\npublic fun ShortArray.getOrNull(index: Int): Short? {\n return if (index >= 0 && index <=
lastIndex)
get(index) else null\n}\n\n/**\n * Returns an element at the given [index] or `null` if the [index] is out of bounds of
this array.\n */\n * @sample samples.collections.Collections.Elements.getOrNull\n */\npublic fun

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IntArray.getOrNull(index: Int): Int? {\n return if (index >= 0 && index <= lastIndex) get(index) else
null\n}\n\n/**\n * Returns an element at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n
* @sample samples.collections.Collections.Elements.getOrNull\n */\npublic fun LongArray.getOrNull(index: Int):
Long? {\n return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n/**\n * Returns an element
at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.getOrNull\n */\npublic fun FloatArray.getOrNull(index: Int): Float? {\n
return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n/**\n * Returns an element at the given
[index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.getOrNull\n */\npublic fun DoubleArray.getOrNull(index: Int): Double?
{\n return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n/**\n * Returns an element at the
given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.getOrNull\n */\npublic fun BooleanArray.getOrNull(index: Int): Boolean?
{\n return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n/**\n * Returns an element at the
given [index] or `null` if the [index] is out of bounds
of this array.\n * \n * @sample samples.collections.Collections.Elements.getOrNull\n */\npublic fun
CharArray.getOrNull(index: Int): Char? {\n return if (index >= 0 && index <= lastIndex) get(index) else
null\n}\n\n/**\n * Returns first index of [element], or -1 if the array does not contain element.\n */\npublic fun
<@kotlin.internal.OnlyInputTypes T> Array<out T>.indexOf(element: T): Int {\n if (element == null) {\n for
(index in indices) {\n if (this[index] == null) {\n return index\n }\n }\n } else {\n
for (index in indices) {\n if (element == this[index]) {\n return index\n }\n }\n}\n
return -1\n}\n\n/**\n * Returns first index of [element], or -1 if the array does not contain element.\n */\npublic fun
ByteArray.indexOf(element: Byte): Int {\n for (index in indices) {\n if (element == this[index]) {\n
return index\n }\n }\n return
-1\n}\n\n/**\n * Returns first index of [element], or -1 if the array does not contain element.\n */\npublic fun
ShortArray.indexOf(element: Short): Int {\n for (index in indices) {\n if (element == this[index]) {\n
return index\n }\n }\n return -1\n}\n\n/**\n * Returns first index of [element], or -1 if the array does not
contain element.\n */\npublic fun IntArray.indexOf(element: Int): Int {\n for (index in indices) {\n if (element
== this[index]) {\n return index\n }\n }\n return -1\n}\n\n/**\n * Returns first index of [element], or -
1 if the array does not contain element.\n */\npublic fun LongArray.indexOf(element: Long): Int {\n for (index in
indices) {\n if (element == this[index]) {\n return index\n }\n }\n return -1\n}\n\n/**\n * Returns
first index of [element], or -1 if the array does not contain element.\n */\n\n@Deprecated("The function has unclear
behavior when searching
for NaN or zero values and will be removed soon. Use 'indexOfFirst { it == element }' instead to continue using this
behavior, or '.asList().indexOf(element: T)' to get the same search behavior as in a list.\n",
ReplaceWith("indexOfFirst { it == element }"))\n\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.6", hiddenSince = "1.7")\n\npublic fun FloatArray.indexOf(element: Float): Int {\n for (index in indices) {\n
if (element == this[index]) {\n return index\n }\n}\n return -1\n}\n\n/**\n * Returns first index of
[element], or -1 if the array does not contain element.\n */\n\n@Deprecated("The function has unclear behavior when
searching for NaN or zero values and will be removed soon. Use 'indexOfFirst { it == element }' instead to continue
using this behavior, or '.asList().indexOf(element: T)' to get the same search behavior as in a list.\n",
ReplaceWith("indexOfFirst { it == element }"))\n\n@DeprecatedSinceKotlin(warningSince = "1.4",
errorSince = "1.6", hiddenSince = "1.7")\n\npublic fun DoubleArray.indexOf(element: Double): Int {\n for
(index in indices) {\n if (element == this[index]) {\n return index\n }\n }\n return -1\n}\n\n/**\n *
Returns first index of [element], or -1 if the array does not contain element.\n */\n\npublic fun
BooleanArray.indexOf(element: Boolean): Int {\n for (index in indices) {\n if (element == this[index]) {\n
return index\n }\n }\n return -1\n}\n\n/**\n * Returns first index of [element], or -1 if the array does not
contain element.\n */\n\npublic fun CharArray.indexOf(element: Char): Int {\n for (index in indices) {\n if
(element == this[index]) {\n return index\n }\n }\n return -1\n}\n\n/**\n * Returns index of the first

```



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 }
 return -1
}

/**
 * Returns index of the last element matching the given [predicate], or -1 if the array
 * does not contain such element.
 */
public inline fun DoubleArray.indexOfLast(predicate: (Double) -> Boolean):
 Int {
 for (index in indices.reversed()) {
 if (predicate(this[index])) {
 return index
 }
 }
 return -1
}

/**
 * Returns index of the last element matching the given [predicate], or -1 if the array does not
 * contain such element.
 */
public inline fun BooleanArray.indexOfLast(predicate: (Boolean) -> Boolean): Int {
 for (index in indices.reversed()) {
 if (predicate(this[index])) {
 return index
 }
 }
 return -1
}

/**
 * Returns index of the last element matching the given [predicate], or -1 if the array does not contain
 * such element.
 */
public inline fun CharArray.indexOfLast(predicate: (Char) -> Boolean): Int {
 for (index in
 indices.reversed()) {
 if
 (predicate(this[index])) {
 return index
 }
 }
 return -1
}

/**
 * Returns the last element.
 */
@throws NoSuchElementException if the array is empty.
@sample
samples.collections.Collections.Elements.last

/**
 * Returns the last element.
 */
public fun <T> Array<out T>.last(): T {
 if (isEmpty())
 throw NoSuchElementException("Array is empty.")
 return this[lastIndex]
}

/**
 * Returns the last element.
 */
@throws NoSuchElementException if the array is empty.
@sample
samples.collections.Collections.Elements.last

/**
 * Returns the last element.
 */
public fun ByteArray.last(): Byte {
 if (isEmpty())
 throw NoSuchElementException("Array is empty.")
 return this[lastIndex]
}

/**
 * Returns the last element.
 */
@throws NoSuchElementException if the array is empty.
@sample
samples.collections.Collections.Elements.last

/**
 * Returns the last element.
 */
public fun ShortArray.last(): Short {
 if (isEmpty())
 throw NoSuchElementException("Array is empty.")
 return this[lastIndex]
}

/**
 * Returns the last element.
 */
@throws NoSuchElementException if the array is empty.
@sample
samples.collections.Collections.Elements.last

/**
 * Returns the last element.
 */
public fun IntArray.last(): Int {
 if (isEmpty())
 throw NoSuchElementException("Array is empty.")
 return
 this[lastIndex]
}

/**
 * Returns the last element.
 */
@throws NoSuchElementException if the array is
 * empty.
@sample
samples.collections.Collections.Elements.last

/**
 * Returns the last element.
 */
public fun LongArray.last(): Long {
 if (isEmpty())
 throw NoSuchElementException("Array is empty.")
 return this[lastIndex]
}

/**
 * Returns the last element.
 */
@throws NoSuchElementException if the array is empty.
@sample
samples.collections.Collections.Elements.last

/**
 * Returns
 * the last element.
 */
@throws NoSuchElementException if the array is empty.
@sample
samples.collections.Collections.Elements.last

/**
 * Returns the last
 * element.
 */
@throws NoSuchElementException if the array is empty.
@sample
samples.collections.Collections.Elements.last

/**
 * Returns the last
 * element.
 */
@throws NoSuchElementException if the array is empty.
@sample
samples.collections.Collections.Elements.last

/**
 * Returns the last
 * element matching the given [predicate].
 */
@throws NoSuchElementException if no such element is found.
@sample
samples.collections.Collections.Elements.last

/**
 * Returns the last element matching the given [predicate].
 */
@throws
 * NoSuchElementException if no such element is found.
@sample
samples.collections.Collections.Elements.last

/**
 * Returns the last element matching the
 */

```

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given [predicate].\n * \n * @throws NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n *^\npublic inline fun ShortArray.last(predicate: (Short) -> Boolean):
Short {\n for (index in this.indices.reversed()) {\n val element = this[index]\n if (predicate(element))
return element\n }\n throw NoSuchElementException("Array contains no element matching the
predicate.")\n}\n\n/**\n * Returns the last element matching the given [predicate].\n * \n * @throws
NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n *^\npublic inline fun IntArray.last(predicate: (Int) -> Boolean): Int
{\n for (index in this.indices.reversed()) {\n val element = this[index]\n if (predicate(element)) return
element\n }\n throw NoSuchElementException("Array contains no element matching the
predicate.")\n}\n\n/**\n * Returns the last element matching
the given [predicate].\n * \n * @throws NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n *^\npublic inline fun LongArray.last(predicate: (Long) -> Boolean):
Long {\n for (index in this.indices.reversed()) {\n val element = this[index]\n if (predicate(element))
return element\n }\n throw NoSuchElementException("Array contains no element matching the
predicate.")\n}\n\n/**\n * Returns the last element matching the given [predicate].\n * \n * @throws
NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n *^\npublic inline fun FloatArray.last(predicate: (Float) -> Boolean):
Float {\n for (index in this.indices.reversed()) {\n val element = this[index]\n if (predicate(element))
return element\n }\n throw NoSuchElementException("Array contains no element matching the
predicate.")\n}\n\n/**\n * Returns the last
element matching the given [predicate].\n * \n * @throws NoSuchElementException if no such element is found.\n
* \n * @sample samples.collections.Collections.Elements.last\n *^\npublic inline fun DoubleArray.last(predicate:
(Double) -> Boolean): Double {\n for (index in this.indices.reversed()) {\n val element = this[index]\n if
(predicate(element)) return element\n }\n throw NoSuchElementException("Array contains no element
matching the predicate.")\n}\n\n/**\n * Returns the last element matching the given [predicate].\n * \n * @throws
NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n *^\npublic inline fun BooleanArray.last(predicate: (Boolean) ->
Boolean): Boolean {\n for (index in this.indices.reversed()) {\n val element = this[index]\n if
(predicate(element)) return element\n }\n throw NoSuchElementException("Array contains no element
matching the predicate.")\n}\n\n/**\n
* Returns the last element matching the given [predicate].\n * \n * @throws NoSuchElementException if no such
element is found.\n * \n * @sample samples.collections.Collections.Elements.last\n *^\npublic inline fun
CharArray.last(predicate: (Char) -> Boolean): Char {\n for (index in this.indices.reversed()) {\n val element =
this[index]\n if (predicate(element)) return element\n }\n throw NoSuchElementException("Array contains
no element matching the predicate.")\n}\n\n/**\n * Returns last index of [element], or -1 if the array does not
contain element.\n *^\npublic fun <@kotlin.internal.OnlyInputTypes T> Array<out T>.lastIndexOf(element: T): Int
{\n if (element == null) {\n for (index in indices.reversed()) {\n if (this[index] == null) {\n
return index\n }\n }\n } else {\n for (index in indices.reversed()) {\n if (element ==
this[index]) {\n return index\n }\n }\n }\n return -1\n}\n\n/**\n * Returns last index of [element], or -1 if the array does not contain
element.\n *^\npublic fun ByteArray.lastIndexOf(element: Byte): Int {\n for (index in indices.reversed()) {\n if
(element == this[index]) {\n return index\n }\n }\n return -1\n}\n\n/**\n * Returns last index of
[element], or -1 if the array does not contain element.\n *^\npublic fun ShortArray.lastIndexOf(element: Short): Int
{\n for (index in indices.reversed()) {\n if (element == this[index]) {\n return index\n }\n }\n
return -1\n}\n\n/**\n * Returns last index of [element], or -1 if the array does not contain element.\n *^\npublic fun
IntArray.lastIndexOf(element: Int): Int {\n for (index in indices.reversed()) {\n if (element == this[index]) {\n
return index\n }\n }\n return -1\n}\n\n/**\n * Returns last index of [element], or -1 if the array does not
contain element.\n

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*^/npublic fun LongArray.lastIndexOf(element: Long): Int {^/n for (index in indices.reversed()) {^/n if (element
== this[index]) {^/n return index^/n }^/n }^/n return -1^/n}^/n/n/**^/n * Returns last index of [element], or -
1 if the array does not contain element.^/n *^/n@Deprecated("The function has unclear behavior when searching for
NaN or zero values and will be removed soon. Use 'indexOfLast { it == element }' instead to continue using this
behavior, or '.asList().lastIndexOf(element: T)' to get the same search behavior as in a list.^/n",
ReplaceWith("indexOfLast { it == element }"))^/n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.6", hiddenSince = "1.7")^/npublic fun FloatArray.lastIndexOf(element: Float): Int {^/n for (index in
indices.reversed()) {^/n if (element == this[index]) {^/n return index^/n }^/n }^/n return -1^/n}^/n/n/**^/n
* Returns last index of [element], or -1 if the array does not contain
element.^/n *^/n@Deprecated("The function has unclear behavior when searching for NaN or zero values and will
be removed soon. Use 'indexOfLast { it == element }' instead to continue using this behavior, or
'.asList().lastIndexOf(element: T)' to get the same search behavior as in a list.^/n", ReplaceWith("indexOfLast { it ==
element }"))^/n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.6", hiddenSince =
"1.7")^/npublic fun DoubleArray.lastIndexOf(element: Double): Int {^/n for (index in indices.reversed()) {^/n if
(element == this[index]) {^/n return index^/n }^/n }^/n return -1^/n}^/n/n/**^/n * Returns last index of
[element], or -1 if the array does not contain element.^/n *^/npublic fun BooleanArray.lastIndexOf(element:
Boolean): Int {^/n for (index in indices.reversed()) {^/n if (element == this[index]) {^/n return index^/n
 }^/n }^/n return -1^/n}^/n/n/**^/n * Returns last index of [element], or -1 if the array does
not contain element.^/n *^/npublic fun CharArray.lastIndexOf(element: Char): Int {^/n for (index in
indices.reversed()) {^/n if (element == this[index]) {^/n return index^/n }^/n }^/n return -1^/n}^/n/n/**^/n
* Returns the last element, or `null` if the array is empty.^/n * ^/n * @sample
samples.collections.Collections.Elements.last^/n *^/npublic fun <T> Array<out T>.lastOrNull(): T? {^/n return if
(isEmpty()) null else this[size - 1]^/n}^/n/n/**^/n * Returns the last element, or `null` if the array is empty.^/n * ^/n *
@sample samples.collections.Collections.Elements.last^/n *^/npublic fun ByteArray.lastOrNull(): Byte? {^/n return
if (isEmpty()) null else this[size - 1]^/n}^/n/n/**^/n * Returns the last element, or `null` if the array is empty.^/n * ^/n *
@sample samples.collections.Collections.Elements.last^/n *^/npublic fun ShortArray.lastOrNull(): Short? {^/n
return if (isEmpty()) null else this[size - 1]^/n}^/n/n/**^/n * Returns the last element, or `null` if the array
is empty.^/n * ^/n * @sample samples.collections.Collections.Elements.last^/n *^/npublic fun IntArray.lastOrNull():
Int? {^/n return if (isEmpty()) null else this[size - 1]^/n}^/n/n/**^/n * Returns the last element, or `null` if the array is
empty.^/n * ^/n * @sample samples.collections.Collections.Elements.last^/n *^/npublic fun LongArray.lastOrNull():
Long? {^/n return if (isEmpty()) null else this[size - 1]^/n}^/n/n/**^/n * Returns the last element, or `null` if the array
is empty.^/n * ^/n * @sample samples.collections.Collections.Elements.last^/n *^/npublic fun FloatArray.lastOrNull():
Float? {^/n return if (isEmpty()) null else this[size - 1]^/n}^/n/n/**^/n * Returns the last element, or `null` if the array
is empty.^/n * ^/n * @sample samples.collections.Collections.Elements.last^/n *^/npublic fun
DoubleArray.lastOrNull(): Double? {^/n return if (isEmpty()) null else this[size - 1]^/n}^/n/n/**^/n * Returns the last
element, or `null` if the array is empty.^/n * ^/n * @sample samples.collections.Collections.Elements.last^/n
*^/npublic fun BooleanArray.lastOrNull(): Boolean? {^/n return if (isEmpty()) null else this[size - 1]^/n}^/n/n/**^/n *
Returns the last element, or `null` if the array is empty.^/n * ^/n * @sample
samples.collections.Collections.Elements.last^/n *^/npublic fun CharArray.lastOrNull(): Char? {^/n return if
(isEmpty()) null else this[size - 1]^/n}^/n/n/**^/n * Returns the last element matching the given [predicate], or `null` if
no such element was found.^/n * ^/n * @sample samples.collections.Collections.Elements.last^/n *^/npublic inline fun
<T> Array<out T>.lastOrNull(predicate: (T) -> Boolean): T? {^/n for (index in this.indices.reversed()) {^/n val
element = this[index]^/n if (predicate(element)) return element^/n }^/n return null^/n}^/n/n/**^/n * Returns the last
element matching the given [predicate], or `null` if no such element was found.^/n * ^/n * @sample
samples.collections.Collections.Elements.last^/n *^/npublic inline fun ByteArray.lastOrNull(predicate:
(Byte) -> Boolean): Byte? {^/n for (index in this.indices.reversed()) {^/n val element = this[index]^/n if
(predicate(element)) return element^/n }^/n return null^/n}^/n/n/**^/n * Returns the last element matching the given
[predicate], or `null` if no such element was found.^/n * ^/n * @sample

```



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samples.collections.Collections.Elements.last\n *\npublic inline fun ShortArray.lastOrNull(predicate: (Short) ->
Boolean): Short? {\n for (index in this.indices.reversed()) {\n val element = this[index]\n if
(predicate(element)) return element\n }\n return null\n}\n\n/**\n * Returns the last element matching the given
[predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n *\npublic inline fun IntArray.lastOrNull(predicate: (Int) ->
Boolean): Int? {\n for (index in this.indices.reversed()) {\n val element = this[index]\n if
(predicate(element)) return element\n }\n return null\n}\n\n/**\n * Returns the last element matching the given [predicate], or `null` if no such element
was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n *\npublic inline fun LongArray.lastOrNull(predicate: (Long) -> Boolean): Long? {\n for (index in this.indices.reversed()) {\n val
element = this[index]\n if (predicate(element)) return element\n }\n return null\n}\n\n/**\n * Returns the last
element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n *\npublic inline fun FloatArray.lastOrNull(predicate: (Float) ->
Boolean): Float? {\n for (index in this.indices.reversed()) {\n val element = this[index]\n if
(predicate(element)) return element\n }\n return null\n}\n\n/**\n * Returns the last element matching the given
[predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n
*\npublic inline fun DoubleArray.lastOrNull(predicate: (Double) -> Boolean): Double? {\n for (index in
this.indices.reversed()) {\n val element = this[index]\n if (predicate(element)) return element\n }\n
return null\n}\n\n/**\n * Returns the last element matching the given [predicate], or `null` if no such element was
found.\n * \n * @sample
samples.collections.Collections.Elements.last\n *\npublic inline fun BooleanArray.lastOrNull(predicate: (Boolean) -> Boolean): Boolean? {\n for (index in this.indices.reversed()) {\n
val element = this[index]\n if (predicate(element)) return element\n }\n return null\n}\n\n/**\n * Returns
the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n *\npublic inline fun CharArray.lastOrNull(predicate: (Char) ->
Boolean): Char? {\n for (index in this.indices.reversed()) {\n val element
= this[index]\n if (predicate(element)) return element\n }\n return null\n}\n\n/**\n * Returns a random
element from this array.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.random(): T {\n
return random(Random)\n}\n\n/**\n * Returns a random element from this array.\n * \n * @throws
NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic
inline fun ByteArray.random(): Byte {\n return random(Random)\n}\n\n/**\n * Returns a random element from
this array.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.random(): Short {\n return
random(Random)\n}\n\n/**\n * Returns a random element from this array.\n * \n * @throws
NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic
inline fun IntArray.random(): Int {\n return random(Random)\n}\n\n/**\n * Returns a random element from this
array.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.random(): Long {\n return
random(Random)\n}\n\n/**\n * Returns a random element from this array.\n * \n * @throws
NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic
inline fun FloatArray.random(): Float {\n return random(Random)\n}\n\n/**\n * Returns a random element from
this array.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.random(): Double {\n
return random(Random)\n}\n\n/**\n * Returns a random element from this array.\n * \n * @throws
NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic
inline fun BooleanArray.random(): Boolean {\n return random(Random)\n}\n\n/**\n * Returns a random element
from this array.\n * \n * @throws NoSuchElementException if this array is empty.\n

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*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.randomOrNull(): Long? {\n return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n */\n*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.randomOrNull(): Float? {\n return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n */\n*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.randomOrNull(): Double? {\n return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n */\n*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.randomOrNull(): Boolean? {\n return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n */\n*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.randomOrNull(): Char? {\n return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n */\n*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T> Array<out T>.randomOrNull(random: Random): T? {\n if (isEmpty())\n return null\n return\n get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n */\n*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun\nByteArray.randomOrNull(random: Random): Byte? {\n if (isEmpty())\n return null\n return\n get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n */\n*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic\nfun ShortArray.randomOrNull(random: Random): Short? {\n if (isEmpty())\n return null\n return\n get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n */\n*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun\nIntArray.randomOrNull(random: Random): Int? {\n if (isEmpty())\n return null\n return\n get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n */\n*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun\nLongArray.randomOrNull(random: Random): Long? {\n if (isEmpty())\n return null\n return\n get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n */\n*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun\nFloatArray.randomOrNull(random: Random): Float? {\n if (isEmpty())\n return null\n return\n get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n */\n*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun\nDoubleArray.randomOrNull(random: Random): Double? {\n if (isEmpty())\n return null\n return\n get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n */\n*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun\nBooleanArray.randomOrNull(random: Random): Boolean? {\n if (isEmpty())\n return null\n return\n get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified

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```

source of randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun
CharArray.randomOrNull(random: Random): Char? {\n if (isEmpty())\n return null\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns the single element, or throws an exception if the array is empty or
has more than one element.\n *\npublic fun <T> Array<out T>.single(): T {\n return when (size) {\n 0 ->
throw NoSuchElementException("Array is empty.")\n 1 -> this[0]\n else -> throw
IllegalArgumentException("Array has more than one element.")\n }\n}\n\n/**\n * Returns the single element, or
throws an exception if the array is empty or has more than one element.\n *\npublic fun ByteArray.single(): Byte
{\n return when (size) {\n 0 -> throw NoSuchElementException("Array is empty.")\n 1 -> this[0]\n
else -> throw IllegalArgumentException("Array has more than one element.")\n }\n}\n\n/**\n * Returns the single element, or throws an exception if the array is empty or has more than one
element.\n *\npublic fun ShortArray.single(): Short {\n return when (size) {\n 0 -> throw
NoSuchElementException("Array is empty.")\n 1 -> this[0]\n else -> throw
IllegalArgumentException("Array has more than one element.")\n }\n}\n\n/**\n * Returns the single element, or
throws an exception if the array is empty or has more than one element.\n *\npublic fun IntArray.single(): Int {\n
return when (size) {\n 0 -> throw NoSuchElementException("Array is empty.")\n 1 -> this[0]\n else -
> throw IllegalArgumentException("Array has more than one element.")\n }\n}\n\n/**\n * Returns the single
element, or throws an exception if the array is empty or has more than one element.\n *\npublic fun
LongArray.single(): Long {\n return when (size) {\n 0 -> throw NoSuchElementException("Array is
empty.")\n 1 -> this[0]\n else -> throw IllegalArgumentException("Array has more than one element.")\n
}\n}\n\n/**\n * Returns the single element, or throws an exception if the array is empty or has more than one
element.\n *\npublic fun FloatArray.single(): Float {\n return when (size) {\n 0 -> throw
NoSuchElementException("Array is empty.")\n 1 -> this[0]\n else -> throw
IllegalArgumentException("Array has more than one element.")\n }\n}\n\n/**\n * Returns the single element, or
throws an exception if the array is empty or has more than one element.\n *\npublic fun DoubleArray.single():
Double {\n return when (size) {\n 0 -> throw NoSuchElementException("Array is empty.")\n 1 ->
this[0]\n else -> throw IllegalArgumentException("Array has more than one element.")\n }\n}\n\n/**\n *
Returns the single element, or throws an exception if the array is empty or has more than one element.\n *\npublic
fun BooleanArray.single():
Boolean {\n return when (size) {\n 0 -> throw NoSuchElementException("Array is empty.")\n 1 ->
this[0]\n else -> throw IllegalArgumentException("Array has more than one element.")\n }\n}\n\n/**\n *
Returns the single element, or throws an exception if the array is empty or has more than one element.\n *\npublic
fun CharArray.single(): Char {\n return when (size) {\n 0 -> throw NoSuchElementException("Array is
empty.")\n 1 -> this[0]\n else -> throw IllegalArgumentException("Array has more than one element.")\n
}\n}\n\n/**\n * Returns the single element matching the given [predicate], or throws exception if there is no or
more than one matching element.\n *\npublic inline fun <T> Array<out T>.single(predicate: (T) -> Boolean): T {\n
var single: T? = null\n var found = false\n for (element in this) {\n if (predicate(element)) {\n if
(found) throw IllegalArgumentException("Array contains more
than one matching element.")\n single = element\n found = true\n }\n }\n if (!found) throw
NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n@Suppress("UNCHECKED_CAST")\nreturn single as T\n}\n\n/**\n * Returns the single element matching the
given [predicate], or throws exception if there is no or more than one matching element.\n *\npublic inline fun
ByteArray.single(predicate: (Byte) -> Boolean): Byte {\n var single: Byte? = null\n var found = false\n for
(element in this) {\n if (predicate(element)) {\n if (found) throw IllegalArgumentException("Array
contains more than one matching element.")\n single = element\n found = true\n }\n }\n if
(!found) throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n@Suppress("UNCHECKED_CAST")\nreturn single as Byte\n}\n\n/**\n * Returns the single element matching

```

```

the given [predicate], or throws exception if there is no or more than one matching element.\n */\npublic inline fun
ShortArray.single(predicate: (Short) -> Boolean): Short {\n var single: Short? = null\n var found = false\n for
(element in this) {\n if (predicate(element)) {\n if (found) throw IllegalArgumentException("Array
contains more than one matching element.")\n single = element\n found = true\n }\n }\n if
(!found) throw NoSuchElementException("Array contains no element matching the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as Short\n}\n\n/**\n * Returns the single element matching
the given [predicate], or throws exception if there is no or more than one matching element.\n */\npublic inline fun
IntArray.single(predicate: (Int) -> Boolean): Int {\n var single: Int? = null\n var found = false\n for (element in
this) {\n if (predicate(element)) {\n if (found) throw
IllegalArgumentException("Array contains more than one matching element.")\n single = element\n
found = true\n }\n }\n if (!found) throw NoSuchElementException("Array contains no element matching
the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as Int\n}\n\n/**\n * Returns the single
element matching the given [predicate], or throws exception if there is no or more than one matching element.\n
*/\npublic inline fun LongArray.single(predicate: (Long) -> Boolean): Long {\n var single: Long? = null\n var
found = false\n for (element in this) {\n if (predicate(element)) {\n if (found) throw
IllegalArgumentException("Array contains more than one matching element.")\n single = element\n
found = true\n }\n }\n if (!found) throw NoSuchElementException("Array contains no element matching
the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as Long\n}\n\n/**\n * Returns the single
element matching the given [predicate], or throws exception if there is no or more than one matching element.\n
*/\npublic inline fun FloatArray.single(predicate: (Float) -> Boolean): Float {\n var single:
Float? = null\n var found = false\n for (element in this) {\n if (predicate(element)) {\n if (found)
throw IllegalArgumentException("Array contains more than one matching element.")\n single = element\n
found = true\n }\n }\n if (!found) throw NoSuchElementException("Array contains no element
matching the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as Float\n}\n\n/**\n * Returns the
single element matching the given [predicate], or throws exception if there is no or more than one matching element.\n
*/\npublic inline fun DoubleArray.single(predicate: (Double) -> Boolean): Double {\n var
single: Double? = null\n var found = false\n for (element in this) {\n if (predicate(element)) {\n if (found) throw
IllegalArgumentException("Array contains more than one matching element.")\n single = element\n
found = true\n }\n }\n if (!found) throw NoSuchElementException("Array contains no element matching
the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as Double\n}\n\n/**\n * Returns the single
element matching the given [predicate], or throws exception if there is no or more than one matching element.\n
*/\npublic inline fun BooleanArray.single(predicate: (Boolean) -> Boolean): Boolean {\n var single: Boolean? = null\n var
found = false\n for (element in this) {\n if (predicate(element)) {\n if (found) throw
IllegalArgumentException("Array contains more than one matching element.")\n single = element\n
found = true\n }\n }\n if (!found) throw NoSuchElementException("Array contains no element matching
the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as Boolean\n}\n\n/**\n * Returns the
single element matching the given [predicate], or throws exception if there is no or more than one matching
element.\n */\npublic inline fun CharArray.single(predicate: (Char) -> Boolean): Char {\n var single: Char? =
null\n var found = false\n for (element in this) {\n if (predicate(element)) {\n if (found) throw
IllegalArgumentException("Array contains more than one matching element.")\n single = element\n
found = true\n }\n }\n if (!found) throw NoSuchElementException("Array contains no element matching
the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as Char\n}\n\n/**\n * Returns single
element, or `null` if the array is empty or has more than one element.\n */\npublic fun <T> Array<out
T>.singleOrNull(): T? {\n return if (size == 1) this[0] else null\n}\n\n/**\n * Returns single element,
or `null` if the array is empty or has more than one element.\n */\npublic fun ByteArray.singleOrNull(): Byte? {\n
return if (size == 1) this[0] else null\n}\n\n/**\n * Returns single element, or `null` if the array is empty or has more

```

```

than one element.\n */\npublic fun ShortArray.singleOrNull(): Short? {\n return if (size == 1) this[0] else
null\n}\n\n/**\n * Returns single element, or `null` if the array is empty or has more than one element.\n */\npublic
fun IntArray.singleOrNull(): Int? {\n return if (size == 1) this[0] else null\n}\n\n/**\n * Returns single element, or
`null` if the array is empty or has more than one element.\n */\npublic fun LongArray.singleOrNull(): Long? {\n
return if (size == 1) this[0] else null\n}\n\n/**\n * Returns single element, or `null` if the array is empty or has more
than one element.\n */\npublic fun FloatArray.singleOrNull(): Float? {\n return if (size == 1) this[0] else
null\n}\n\n/**\n * Returns single element, or `null` if the array
is empty or has more than one element.\n */\npublic fun DoubleArray.singleOrNull(): Double? {\n return if (size
== 1) this[0] else null\n}\n\n/**\n * Returns single element, or `null` if the array is empty or has more than one
element.\n */\npublic fun BooleanArray.singleOrNull(): Boolean? {\n return if (size == 1) this[0] else
null\n}\n\n/**\n * Returns single element, or `null` if the array is empty or has more than one element.\n */\npublic
fun CharArray.singleOrNull(): Char? {\n return if (size == 1) this[0] else null\n}\n\n/**\n * Returns the single
element matching the given [predicate], or `null` if element was not found or more than one element was found.\n
*/\npublic inline fun <T> Array<out T>.singleOrNull(predicate: (T) -> Boolean): T? {\n var single: T? = null\n
var found = false\n for (element in this) {\n if (predicate(element)) {\n if (found) return null\n
single = element\n found = true\n }\n }\n if (!found) return null\n return single\n}\n\n/**\n * Returns the single element matching the given [predicate], or
`null` if element was not found or more than one element was found.\n */\npublic inline fun
ByteArray.singleOrNull(predicate: (Byte) -> Boolean): Byte? {\n var single: Byte? = null\n var found = false\n
for (element in this) {\n if (predicate(element)) {\n if (found) return null\n single = element\n
found = true\n }\n }\n if (!found) return null\n return single\n}\n\n/**\n * Returns the single element
matching the given [predicate], or `null` if element was not found or more than one element was found.\n */\npublic
inline fun ShortArray.singleOrNull(predicate: (Short) -> Boolean): Short? {\n var single: Short? = null\n var
found = false\n for (element in this) {\n if (predicate(element)) {\n if (found) return null\n single
= element\n found = true\n }\n }\n if (!found) return null\n return single\n}\n\n/**\n * Returns the single element matching the given
[predicate], or `null` if element was not found or more than one element was found.\n */\npublic inline fun
IntArray.singleOrNull(predicate: (Int) -> Boolean): Int? {\n var single: Int? = null\n var found = false\n for
(element in this) {\n if (predicate(element)) {\n if (found) return null\n single = element\n
found = true\n }\n }\n if (!found) return null\n return single\n}\n\n/**\n * Returns the single element
matching the given [predicate], or `null` if element was not found or more than one element was found.\n */\npublic
inline fun LongArray.singleOrNull(predicate: (Long) -> Boolean): Long? {\n var single: Long? = null\n var
found = false\n for (element in this) {\n if (predicate(element)) {\n if (found) return null\n single
= element\n found = true\n }\n }\n if (!found) return null\n return single\n}\n\n/**\n * Returns the single element matching the given
[predicate], or `null` if element was not found or more than one element was found.\n */\npublic inline fun
FloatArray.singleOrNull(predicate: (Float) -> Boolean): Float? {\n var single: Float? = null\n var found = false\n
for (element in this) {\n if (predicate(element)) {\n if (found) return null\n single = element\n
found = true\n }\n }\n if (!found) return null\n return single\n}\n\n/**\n * Returns the single element
matching the given [predicate], or `null` if element was not found or more than one element was found.\n */\npublic
inline fun DoubleArray.singleOrNull(predicate: (Double) -> Boolean): Double? {\n var single: Double? = null\n
var found = false\n for (element in this) {\n if (predicate(element)) {\n if (found) return null\n
single = element\n found = true\n }\n }\n if (!found) return null\n return single\n}\n\n/**\n * Returns the single element
matching the given [predicate], or `null` if element was not found or more than one element was found.\n */\npublic
inline fun BooleanArray.singleOrNull(predicate: (Boolean) -> Boolean): Boolean? {\n var single: Boolean? =
null\n var found = false\n for (element in this) {\n if (predicate(element)) {\n if (found) return null\n
single = element\n found = true\n }\n }\n if (!found) return null\n return single\n}\n\n/**\n *

```

Returns the single element matching the given [predicate], or `null` if element was not found or more than one element was found.

```


public inline fun CharArray.singleOrNull(predicate: (Char) -> Boolean): Char? {
 var single: Char? = null
 var found = false
 for (element in this) {
 if (predicate(element)) {
 if (found) return null
 single = element
 found = true
 }
 }
 if (!found) return null
 return single
}


```

Returns a list containing all elements except first [n] elements.

```


@throws IllegalArgumentException if [n] is negative.
@sample samples.collections.Collections.Transformations.drop
public fun <T> Array<out T>.drop(n: Int): List<T> {
 require(n >= 0) { "Requested element count $n is less than zero." }
 return takeLast((size - n).coerceAtLeast(0))
}


```

Returns a list containing all elements except first [n] elements.

```


@throws IllegalArgumentException if [n] is negative.
@sample samples.collections.Collections.Transformations.drop
public fun ByteArray.drop(n: Int): List<Byte> {
 require(n >= 0) { "Requested element count $n is less than zero." }
 return takeLast((size - n).coerceAtLeast(0))
}


```

Returns a list containing all elements except first [n] elements.

```


@throws IllegalArgumentException
if [n] is negative.
@sample samples.collections.Collections.Transformations.drop
public fun ShortArray.drop(n: Int): List<Short> {
 require(n >= 0) { "Requested element count $n is less than zero." }
 return takeLast((size - n).coerceAtLeast(0))
}


```

Returns a list containing all elements except first [n] elements.

```


@throws IllegalArgumentException if [n] is negative.
@sample samples.collections.Collections.Transformations.drop
public fun IntArray.drop(n: Int): List<Int> {
 require(n >= 0) { "Requested element count $n is less than zero." }
 return takeLast((size - n).coerceAtLeast(0))
}


```

Returns a list containing all elements except first [n] elements.

```


@throws IllegalArgumentException if [n] is negative.
@sample samples.collections.Collections.Transformations.drop
public fun LongArray.drop(n: Int): List<Long> {
 require(n >= 0) { "Requested element count $n is less than zero." }
 return takeLast((size - n).coerceAtLeast(0))
}


```

Returns a list containing all elements except first [n] elements.

```


@throws IllegalArgumentException if [n] is negative.
@sample samples.collections.Collections.Transformations.drop
public fun FloatArray.drop(n: Int): List<Float> {
 require(n >= 0) { "Requested element count $n is less than zero." }
 return takeLast((size - n).coerceAtLeast(0))
}


```

Returns a list containing all elements except first [n] elements.

```


@throws IllegalArgumentException if [n] is negative.
@sample samples.collections.Collections.Transformations.drop
public fun DoubleArray.drop(n: Int): List<Double> {
 require(n >= 0) { "Requested element count $n is less than zero." }
 return takeLast((size - n).coerceAtLeast(0))
}


```

Returns a list containing all elements except first [n] elements.

```


@sample samples.collections.Collections.Transformations.drop
public fun BooleanArray.drop(n: Int): List<Boolean> {
 require(n >= 0) { "Requested element count $n is less than zero." }
 return takeLast((size - n).coerceAtLeast(0))
}


```

Returns a list containing all elements except first [n] elements.

```


@throws IllegalArgumentException if [n] is negative.
@sample samples.collections.Collections.Transformations.drop
public fun CharArray.drop(n: Int): List<Char> {
 require(n >= 0) { "Requested element count $n is less than zero." }
 return takeLast((size - n).coerceAtLeast(0))
}


```

Returns a list containing all elements except last [n] elements.

```


@throws IllegalArgumentException if [n] is negative.
@sample samples.collections.Collections.Transformations.drop
public fun <T> Array<out T>.dropLast(n: Int): List<T> {
 require(n >= 0) { "Requested element count $n is less than zero." }
 return takeLast((size - n).coerceAtLeast(0))
}


```

Returns a list containing all elements except last [n] elements.

```


@throws IllegalArgumentException if [n] is negative.
@sample samples.collections.Collections.Transformations.drop
public fun ByteArray.dropLast(n: Int): List<Byte> {
 require(n >= 0) { "Requested element count $n is less than zero." }
 return takeLast((size -


```

```

n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun ShortArray.dropLast(n: Int): List<Short> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\npublic fun IntArray.dropLast(n: Int): List<Int> {\n require(n >= 0) { \"Requested element count $n is less than
zero.\" }\n return take((size - n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last
[n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun LongArray.dropLast(n: Int): List<Long> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun FloatArray.dropLast(n: Int): List<Float> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n]
is negative.\n * \n * @sample samples.collections.Collections.Transformations.drop\n *\npublic fun
DoubleArray.dropLast(n: Int): List<Double> {\n require(n >= 0) { \"Requested element count $n is less than
zero.\" }\n return take((size - n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last
[n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun BooleanArray.dropLast(n: Int):
List<Boolean> {\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic
fun CharArray.dropLast(n: Int): List<Char> {\n require(n >= 0) { \"Requested element count $n is less than
zero.\" }\n return take((size - n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last
elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun <T> Array<out
T>.dropLastWhile(predicate: (T) -> Boolean): List<T> {\n for (index in lastIndex downTo 0) {\n if
(!predicate(this[index])) {\n return take(index + 1)\n } }\n return emptyList()\n}\n\n/**\n * Returns
a list containing all elements except last elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun ByteArray.dropLastWhile(predicate:
(Byte) -> Boolean): List<Byte> {\n for (index in lastIndex downTo 0) {\n if (!predicate(this[index])) {\n
return take(index + 1)\n }\n }\n return emptyList()\n}\n\n/**\n * Returns a list containing all elements except last elements that satisfy
the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.drop\n *\npublic inline
fun ShortArray.dropLastWhile(predicate: (Short) -> Boolean): List<Short> {\n for (index in lastIndex downTo 0)
{\n if (!predicate(this[index])) {\n return take(index + 1)\n } }\n return emptyList()\n}\n\n/**\n * Returns a list containing all elements except last elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun IntArray.dropLastWhile(predicate:
(Int) -> Boolean): List<Int> {\n for (index in lastIndex downTo 0) {\n if (!predicate(this[index])) {\n
return take(index + 1)\n } }\n return emptyList()\n}\n\n/**\n * Returns a list containing all elements
except last elements that satisfy the given [predicate].\n
* \n * @sample samples.collections.Collections.Transformations.drop\n *\npublic inline fun
LongArray.dropLastWhile(predicate: (Long) -> Boolean): List<Long> {\n for (index in lastIndex downTo 0) {\n

```





```

(Double) -> Boolean): List<Double> {\n var yielding = false\n val list = ArrayList<Double>()\n for (item in this)\n if (yielding)\n list.add(item)\n else if (!predicate(item)) {\n list.add(item)\n yielding = true\n }\n return list\n}\n\n/**\n * Returns a list containing all elements except first elements that satisfy the given [predicate].\n *\n * @sample samples.collections.Collections.Transformations.drop\n */\npublic inline fun BooleanArray.dropWhile(predicate:
(Boolean) -> Boolean): List<Boolean> {\n var yielding = false\n val list = ArrayList<Boolean>()\n for (item in this)\n if (yielding)\n list.add(item)\n else if (!predicate(item)) {\n list.add(item)\n yielding = true\n }\n return list\n}\n\n/**\n * Returns a list containing all elements except first elements that satisfy the given [predicate].\n *\n * @sample samples.collections.Collections.Transformations.drop\n */\npublic inline fun CharArray.dropWhile(predicate: (Char) -> Boolean): List<Char> {\n var yielding = false\n val list = ArrayList<Char>()\n for (item in this)\n if (yielding)\n list.add(item)\n else if (!predicate(item)) {\n list.add(item)\n yielding = true\n }\n return list\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n *\n * @sample samples.collections.Collections.Filtering.filter\n */\npublic inline fun <T> Array<out T>.filter(predicate: (T) -> Boolean): List<T> {\n return filterTo(ArrayList<T>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n *\n * @sample samples.collections.Collections.Filtering.filter\n */\npublic inline fun ByteArray.filter(predicate: (Byte) -> Boolean): List<Byte> {\n return filterTo(ArrayList<Byte>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n *\n * @sample samples.collections.Collections.Filtering.filter\n */\npublic inline fun ShortArray.filter(predicate: (Short) -> Boolean): List<Short> {\n return filterTo(ArrayList<Short>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n *\n * @sample samples.collections.Collections.Filtering.filter\n */\npublic inline fun IntArray.filter(predicate: (Int) -> Boolean): List<Int> {\n return filterTo(ArrayList<Int>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n *\n * @sample samples.collections.Collections.Filtering.filter\n */\npublic inline fun LongArray.filter(predicate: (Long) -> Boolean): List<Long> {\n return filterTo(ArrayList<Long>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n *\n * @sample samples.collections.Collections.Filtering.filter\n */\npublic inline fun FloatArray.filter(predicate: (Float) -> Boolean): List<Float> {\n return filterTo(ArrayList<Float>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n *\n * @sample samples.collections.Collections.Filtering.filter\n */\npublic inline fun DoubleArray.filter(predicate: (Double) -> Boolean): List<Double> {\n return filterTo(ArrayList<Double>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n *\n * @sample samples.collections.Collections.Filtering.filter\n */\npublic inline fun BooleanArray.filter(predicate: (Boolean) -> Boolean): List<Boolean> {\n return filterTo(ArrayList<Boolean>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n *\n * @sample samples.collections.Collections.Filtering.filter\n */\npublic inline fun CharArray.filter(predicate: (Char) -> Boolean): List<Char> {\n return filterTo(ArrayList<Char>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n *\n * @param [predicate] function that takes the index of an element and the element itself\n * and returns the result of predicate evaluation on the element.\n *\n * @sample samples.collections.Collections.Filtering.filterIndexed\n */\npublic inline fun <T> Array<out T>.filterIndexed(predicate: (index: Int, T) -> Boolean): List<T> {\n return filterIndexedTo(ArrayList<T>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n *\n * @param [predicate] function that takes the index of an element and the element itself\n * and returns the result of predicate evaluation on the element.\n *\n * @sample samples.collections.Collections.Filtering.filterIndexed\n */\npublic inline fun ByteArray.filterIndexed(predicate: (index: Int, Byte) -> Boolean): List<Byte> {\n return filterIndexedTo(ArrayList<Byte>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n *\n * @param [predicate] function that takes the index of an element and the element itself\n * and

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returns the result of predicate evaluation on the element.\n \* \n \* @sample

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samples.collections.Collections.Filtering.filterIndexed\n *^\npublic inline fun ShortArray.filterIndexed(predicate:
(index: Int, Short) -> Boolean): List<Short> {\n return filterIndexedTo(ArrayList<Short>(), predicate)\n}\n\n/**\n
* Returns a list containing only elements matching the given [predicate].\n * @param [predicate] function
that takes the index of an element and the element itself\n * and returns the result of predicate evaluation on the
element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexed\n *^\npublic inline fun
IntArray.filterIndexed(predicate: (index: Int, Int) -> Boolean): List<Int> {\n return
filterIndexedTo(ArrayList<Int>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the
given [predicate].\n * @param [predicate] function that takes the index of an element and the element itself\n * and
returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexed\n *^\npublic inline fun LongArray.filterIndexed(predicate:
(index: Int, Long) -> Boolean): List<Long> {\n return filterIndexedTo(ArrayList<Long>(), predicate)\n}\n\n/**\n
* Returns a list containing only elements matching the given [predicate].\n * @param [predicate] function that takes
the index of an element and the element
itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexed\n *^\npublic inline fun FloatArray.filterIndexed(predicate:
(index: Int, Float) -> Boolean): List<Float> {\n return filterIndexedTo(ArrayList<Float>(), predicate)\n}\n\n/**\n
* Returns a list containing only elements matching the given [predicate].\n * @param [predicate] function that takes
the index of an element and the element itself\n * and returns the result of predicate evaluation on the element.\n * \n
* @sample samples.collections.Collections.Filtering.filterIndexed\n *^\npublic inline fun
DoubleArray.filterIndexed(predicate: (index: Int, Double) -> Boolean): List<Double> {\n return
filterIndexedTo(ArrayList<Double>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the
given [predicate].\n * @param [predicate] function that takes the index of an element and the element itself\n * and
returns the result
of predicate evaluation on the element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexed\n
*^\npublic inline fun BooleanArray.filterIndexed(predicate: (index: Int, Boolean) -> Boolean): List<Boolean> {\n
return filterIndexedTo(ArrayList<Boolean>(), predicate)\n}\n\n/**\n * Returns a list containing only elements
matching the given [predicate].\n * @param [predicate] function that takes the index of an element and the element
itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexed\n *^\npublic inline fun CharArray.filterIndexed(predicate:
(index: Int, Char) -> Boolean): List<Char> {\n return filterIndexedTo(ArrayList<Char>(), predicate)\n}\n\n/**\n
* Appends all elements matching the given [predicate] to the given [destination].\n * @param [predicate] function that
takes the index of an element and the element itself\n * and returns the result of predicate evaluation
on the element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexedTo\n *^\npublic inline fun
<T, C : MutableCollection<in T>> Array<out T>.filterIndexedTo(destination: C, predicate: (index: Int, T) ->
Boolean): C {\n forEachIndexed { index, element ->\n if (predicate(index, element))
destination.add(element)\n }\n return destination\n}\n\n/**\n * Appends all elements matching the given
[predicate] to the given [destination].\n * @param [predicate] function that takes the index of an element and the
element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n *^\npublic inline fun <C : MutableCollection<in Byte>>
ByteArray.filterIndexedTo(destination: C, predicate: (index: Int, Byte) -> Boolean): C {\n forEachIndexed {
index, element ->\n if (predicate(index, element)) destination.add(element)\n }\n return
destination\n}\n\n/**\n
* Appends all elements matching the given [predicate] to the given [destination].\n * @param [predicate] function
that takes the index of an element and the element itself\n * and returns the result of predicate evaluation on the
element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexedTo\n *^\npublic inline fun <C :
MutableCollection<in Short>> ShortArray.filterIndexedTo(destination: C, predicate: (index: Int, Short) ->
Boolean): C {\n forEachIndexed { index, element ->\n if (predicate(index, element))

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destination.add(element)\n } \n return destination\n}\n\n/**\n * Appends all elements matching the given
[predicate] to the given [destination].\n * @param [predicate] function that takes the index of an element and the
element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n * \npublic inline fun <C : MutableCollection<in Int>>
IntArray.filterIndexedTo(destination:
C, predicate: (index: Int, Int) -> Boolean): C {\n forEachIndexed { index, element ->\n if (predicate(index,
element)) destination.add(element)\n } \n return destination\n}\n\n/**\n * Appends all elements matching the given
[predicate] to the given [destination].\n * @param [predicate] function that takes the index of an element and
the element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n * \npublic inline fun <C : MutableCollection<in Long>>
LongArray.filterIndexedTo(destination: C, predicate: (index: Int, Long) -> Boolean): C {\n forEachIndexed {
index, element ->\n if (predicate(index, element)) destination.add(element)\n } \n return
destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n *
@param [predicate] function that takes the index of an element and the element itself\n * and
returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n * \npublic inline fun <C : MutableCollection<in Float>>
FloatArray.filterIndexedTo(destination: C, predicate: (index: Int, Float) -> Boolean): C {\n forEachIndexed {
index, element ->\n if (predicate(index, element)) destination.add(element)\n } \n return
destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n *
@param [predicate] function that takes the index of an element and the element itself\n * and returns the result of
predicate evaluation on the element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexedTo\n
* \npublic inline fun <C : MutableCollection<in Double>> DoubleArray.filterIndexedTo(destination: C, predicate:
(index: Int, Double) -> Boolean): C {\n forEachIndexed { index, element ->\n if (predicate(index, element))
destination.add(element)\n
}\n return destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given
[destination].\n * @param [predicate] function that takes the index of an element and the element itself\n * and
returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n * \npublic inline fun <C : MutableCollection<in
Boolean>> BooleanArray.filterIndexedTo(destination: C, predicate: (index: Int, Boolean) -> Boolean): C {\n
forEachIndexed { index, element ->\n if (predicate(index, element)) destination.add(element)\n } \n return
destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n *
@param [predicate] function that takes the index of an element and the element itself\n * and returns the result of
predicate evaluation on the element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexedTo\n
* \npublic inline fun
<C : MutableCollection<in Char>> CharArray.filterIndexedTo(destination: C, predicate: (index: Int, Char) ->
Boolean): C {\n forEachIndexed { index, element ->\n if (predicate(index, element))
destination.add(element)\n } \n return destination\n}\n\n/**\n * Returns a list containing all elements that are
instances of specified type parameter R.\n * \n * @sample
samples.collections.Collections.Filtering.filterIsInstance\n * \npublic inline fun <reified R>
Array<*>.filterIsInstance(): List<@kotlin.internal.NoInfer R> {\n return
filterIsInstanceTo(ArrayList<R>())\n}\n\n/**\n * Appends all elements that are instances of specified type
parameter R to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterIsInstanceTo\n * \npublic inline fun <reified R, C :
MutableCollection<in R>> Array<*>.filterIsInstanceTo(destination: C): C {\n for (element in this) if (element is
R) destination.add(element)\n return destination\n}\n\n/**\n * Returns
a list containing all elements not matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n * \npublic inline fun <T> Array<out T>.filterNot(predicate: (T) ->
Boolean): List<T> {\n return filterNotTo(ArrayList<T>(), predicate)\n}\n\n/**\n * Returns a list containing all

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elements not matching the given [predicate].\n * \n * @sample samples.collections.Collections.Filtering.filter\n
*/\npublic inline fun ByteArray.filterNot(predicate: (Byte) -> Boolean): List<Byte> {\n return
filterNotTo(ArrayList<Byte>(), predicate)\n}\n\n/**\n * Returns a list containing all elements not matching the
given [predicate].\n * \n * @sample samples.collections.Collections.Filtering.filter\n */\npublic inline fun
ShortArray.filterNot(predicate: (Short) -> Boolean): List<Short> {\n return filterNotTo(ArrayList<Short>(),
predicate)\n}\n\n/**\n * Returns a list containing all elements not matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n
*/\npublic inline fun IntArray.filterNot(predicate: (Int) -> Boolean): List<Int> {\n return
filterNotTo(ArrayList<Int>(), predicate)\n}\n\n/**\n * Returns a list containing all elements not matching the given
[predicate].\n * \n * @sample samples.collections.Collections.Filtering.filter\n */\npublic inline fun
LongArray.filterNot(predicate: (Long) -> Boolean): List<Long> {\n return filterNotTo(ArrayList<Long>(),
predicate)\n}\n\n/**\n * Returns a list containing all elements not matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n */\npublic inline fun FloatArray.filterNot(predicate: (Float) ->
Boolean): List<Float> {\n return filterNotTo(ArrayList<Float>(), predicate)\n}\n\n/**\n * Returns a list
containing all elements not matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n */\npublic inline fun DoubleArray.filterNot(predicate: (Double) ->
Boolean):
List<Double> {\n return filterNotTo(ArrayList<Double>(), predicate)\n}\n\n/**\n * Returns a list containing all
elements not matching the given [predicate].\n * \n * @sample samples.collections.Collections.Filtering.filter\n
*/\npublic inline fun BooleanArray.filterNot(predicate: (Boolean) -> Boolean): List<Boolean> {\n return
filterNotTo(ArrayList<Boolean>(), predicate)\n}\n\n/**\n * Returns a list containing all elements not matching the
given [predicate].\n * \n * @sample samples.collections.Collections.Filtering.filter\n */\npublic inline fun
CharArray.filterNot(predicate: (Char) -> Boolean): List<Char> {\n return filterNotTo(ArrayList<Char>(),
predicate)\n}\n\n/**\n * Returns a list containing all elements that are not `null`.\n * \n * @sample
samples.collections.Collections.Filtering.filterNotNull\n */\npublic fun <T : Any> Array<out T?>.filterNotNull():
List<T> {\n return filterNotNullTo(ArrayList<T?>())\n}\n\n/**\n * Appends all elements that are not `null` to the
given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterNotNullTo\n */\npublic fun <C
: MutableCollection<in T>, T : Any> Array<out T?>.filterNotNullTo(destination: C): C {\n for (element in this) if
(element != null) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements not matching
the given [predicate] to the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n
*/\npublic inline fun <T, C : MutableCollection<in T>> Array<out T>.filterNotTo(destination: C, predicate: (T) ->
Boolean): C {\n for (element in this) if (!predicate(element)) destination.add(element)\n return
destination\n}\n\n/**\n * Appends all elements not matching the given [predicate] to the given [destination].\n * \n *
@sample samples.collections.Collections.Filtering.filterTo\n */\npublic inline fun <C : MutableCollection<in
Byte>> ByteArray.filterNotTo(destination: C, predicate: (Byte) -> Boolean): C {\n for
(element in this) if (!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all
elements not matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n */\npublic inline fun <C : MutableCollection<in Short>>
ShortArray.filterNotTo(destination: C, predicate: (Short) -> Boolean): C {\n for (element in this) if
(!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements not
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n */\npublic inline fun <C : MutableCollection<in Int>>
IntArray.filterNotTo(destination: C, predicate: (Int) -> Boolean): C {\n for (element in this) if
(!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements not
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n */\npublic inline fun <C : MutableCollection<in Long>>
LongArray.filterNotTo(destination: C, predicate: (Long) -> Boolean): C {\n for (element in this) if
(!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements not

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matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n *^\npublic inline fun <C : MutableCollection<in Float>>
FloatArray.filterNotTo(destination: C, predicate: (Float) -> Boolean): C {\n for (element in this) if
(!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements not
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n *^\npublic inline fun <C : MutableCollection<in Double>>
DoubleArray.filterNotTo(destination: C, predicate: (Double) -> Boolean): C {\n for (element
in this) if (!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements
not matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n *^\npublic inline fun <C : MutableCollection<in Boolean>>
BooleanArray.filterNotTo(destination: C, predicate: (Boolean) -> Boolean): C {\n for (element in this) if
(!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements not
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n *^\npublic inline fun <C : MutableCollection<in Char>>
CharArray.filterNotTo(destination: C, predicate: (Char) -> Boolean): C {\n for (element in this) if
(!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements matching
the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n *^\npublic inline fun <T, C : MutableCollection<in T>>
Array<out T>.filterTo(destination: C, predicate: (T) -> Boolean): C {\n for (element in this) if
(predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements matching
the given [predicate] to the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n
*^\npublic inline fun <C : MutableCollection<in Byte>> ByteArray.filterTo(destination: C, predicate: (Byte) ->
Boolean): C {\n for (element in this) if (predicate(element)) destination.add(element)\n return
destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n * \n *
@sample samples.collections.Collections.Filtering.filterTo\n *^\npublic inline fun <C : MutableCollection<in
Short>> ShortArray.filterTo(destination: C, predicate: (Short) -> Boolean): C {\n for (element in this) if
(predicate(element))
destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements matching the given [predicate]
to the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n *^\npublic inline fun
<C : MutableCollection<in Int>> IntArray.filterTo(destination: C, predicate: (Int) -> Boolean): C {\n for (element
in this) if (predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n *^\npublic inline fun <C : MutableCollection<in Long>>
LongArray.filterTo(destination: C, predicate: (Long) -> Boolean): C {\n for (element in this) if
(predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements matching
the given [predicate] to the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n
*^\npublic inline fun <C : MutableCollection<in Float>> FloatArray.filterTo(destination: C, predicate: (Float) ->
Boolean): C {\n for (element in this) if (predicate(element)) destination.add(element)\n return
destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n * \n *
@sample samples.collections.Collections.Filtering.filterTo\n *^\npublic inline fun <C : MutableCollection<in
Double>> DoubleArray.filterTo(destination: C, predicate: (Double) -> Boolean): C {\n for (element in this) if
(predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements matching
the given [predicate] to the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n
*^\npublic inline fun <C : MutableCollection<in Boolean>> BooleanArray.filterTo(destination: C, predicate:
(Boolean) -> Boolean): C {\n for (element in this) if (predicate(element)) destination.add(element)\n
return destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n
\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n *^\npublic inline fun <C : MutableCollection<in
Char>> CharArray.filterTo(destination: C, predicate: (Char) -> Boolean): C {\n for (element in this) if

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(predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Returns a list containing elements
at indices in the specified [indices] range.\n */\npublic fun <T> Array<out T>.slice(indices: IntRange): List<T> {\n
if (indices.isEmpty()) return listOf()\n return copyOfRange(indices.start, indices.endInclusive +
1).asList()\n}\n\n/**\n * Returns a list containing elements at indices in the specified [indices] range.\n */\npublic
fun ByteArray.slice(indices: IntRange): List<Byte> {\n if (indices.isEmpty()) return listOf()\n return
copyOfRange(indices.start, indices.endInclusive + 1).asList()\n}\n\n/**\n * Returns a list
containing elements at indices in the specified [indices] range.\n */\npublic fun ShortArray.slice(indices: IntRange):
List<Short> {\n if (indices.isEmpty()) return listOf()\n return copyOfRange(indices.start, indices.endInclusive +
1).asList()\n}\n\n/**\n * Returns a list containing elements at indices in the specified [indices] range.\n */\npublic
fun IntArray.slice(indices: IntRange): List<Int> {\n if (indices.isEmpty()) return listOf()\n return
copyOfRange(indices.start, indices.endInclusive + 1).asList()\n}\n\n/**\n * Returns a list containing elements at
indices in the specified [indices] range.\n */\npublic fun LongArray.slice(indices: IntRange): List<Long> {\n if
(indices.isEmpty()) return listOf()\n return copyOfRange(indices.start, indices.endInclusive +
1).asList()\n}\n\n/**\n * Returns a list containing elements at indices in the specified [indices] range.\n */\npublic
fun FloatArray.slice(indices: IntRange): List<Float> {\n if (indices.isEmpty()) return
listOf()\n return copyOfRange(indices.start, indices.endInclusive + 1).asList()\n}\n\n/**\n * Returns a list
containing elements at indices in the specified [indices] range.\n */\npublic fun DoubleArray.slice(indices:
IntRange): List<Double> {\n if (indices.isEmpty()) return listOf()\n return copyOfRange(indices.start,
indices.endInclusive + 1).asList()\n}\n\n/**\n * Returns a list containing elements at indices in the specified
[indices] range.\n */\npublic fun BooleanArray.slice(indices: IntRange): List<Boolean> {\n if (indices.isEmpty())
return listOf()\n return copyOfRange(indices.start, indices.endInclusive + 1).asList()\n}\n\n/**\n * Returns a list
containing elements at indices in the specified [indices] range.\n */\npublic fun CharArray.slice(indices: IntRange):
List<Char> {\n if (indices.isEmpty()) return listOf()\n return copyOfRange(indices.start, indices.endInclusive +
1).asList()\n}\n\n/**\n * Returns a list containing elements at specified [indices].\n
*/\n\npublic fun <T> Array<out T>.slice(indices: Iterable<Int>): List<T> {\n val size =
indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n val list = ArrayList<T>(size)\n for
(index in indices) {\n list.add(get(index))\n }\n return list\n}\n\n/**\n * Returns a list containing elements at
specified [indices].\n */\n\npublic fun ByteArray.slice(indices: Iterable<Int>): List<Byte> {\n val size =
indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n val list = ArrayList<Byte>(size)\n for
(index in indices) {\n list.add(get(index))\n }\n return list\n}\n\n/**\n * Returns a list containing elements at
specified [indices].\n */\n\npublic fun ShortArray.slice(indices: Iterable<Int>): List<Short> {\n val size =
indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n val list = ArrayList<Short>(size)\n
for (index in indices) {\n list.add(get(index))\n }\n return list\n}\n\n/**\n * Returns a list containing elements at
specified [indices].\n */\n\npublic fun IntArray.slice(indices: Iterable<Int>):
List<Int> {\n val size = indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n val list =
ArrayList<Int>(size)\n for (index in indices) {\n list.add(get(index))\n }\n return list\n}\n\n/**\n * Returns
a list containing elements at specified [indices].\n */\n\npublic fun LongArray.slice(indices: Iterable<Int>):
List<Long> {\n val size = indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n val list =
ArrayList<Long>(size)\n for (index in indices) {\n list.add(get(index))\n }\n return list\n}\n\n/**\n *
Returns a list containing elements at specified [indices].\n */\n\npublic fun FloatArray.slice(indices: Iterable<Int>):
List<Float> {\n val size = indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n val list =
ArrayList<Float>(size)\n for
(index in indices) {\n list.add(get(index))\n }\n return list\n}\n\n/**\n * Returns a list containing elements at
specified [indices].\n */\n\npublic fun DoubleArray.slice(indices: Iterable<Int>): List<Double> {\n val size =
indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n val list = ArrayList<Double>(size)\n
for (index in indices) {\n list.add(get(index))\n }\n return list\n}\n\n/**\n * Returns a list containing
elements at specified [indices].\n */\n\npublic fun BooleanArray.slice(indices: Iterable<Int>): List<Boolean> {\n val
size = indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n val list =

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* Returns an array containing elements at indices in the specified [indices] range.\n */\npublic fun
DoubleArray.sliceArray(indices: IntRange): DoubleArray {\n if (indices.isEmpty()) return DoubleArray(0)\n
return copyOfRange(indices.start, indices.endInclusive + 1)\n}\n\n/**\n * Returns an array containing elements at
indices in the specified [indices] range.\n */\npublic fun BooleanArray.sliceArray(indices: IntRange): BooleanArray
{\n if (indices.isEmpty()) return BooleanArray(0)\n return copyOfRange(indices.start, indices.endInclusive +
1)\n}\n\n/**\n * Returns an array containing elements at indices in the specified [indices] range.\n */\npublic fun
CharArray.sliceArray(indices: IntRange): CharArray {\n if (indices.isEmpty()) return CharArray(0)\n return
copyOfRange(indices.start, indices.endInclusive + 1)\n}\n\n/**\n * Returns a list containing first [n] elements.\n */\n
* @throws IllegalArgumentException if [n] is negative.\n */\n * @sample
samples.collections.Collections.Transformations.take\n
*/\npublic fun <T> Array<out T>.take(n: Int): List<T> {\n require(n >= 0) { \"Requested element count $n is less
than zero.\" }\n if (n == 0) return emptyList()\n if (n >= size) return toList()\n if (n == 1) return
listOf(this[0])\n var count = 0\n val list = ArrayList<T>(n)\n for (item in this) {\n list.add(item)\n if
(++count == n)\n break\n }\n return list\n}\n\n/**\n * Returns a list containing first [n] elements.\n */\n
* @throws IllegalArgumentException if [n] is negative.\n */\n * @sample
samples.collections.Collections.Transformations.take\n
*/\npublic fun ByteArray.take(n: Int): List<Byte> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n if (n >=
size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list = ArrayList<Byte>(n)\n for
(item in this) {\n list.add(item)\n if (++count
== n)\n break\n }\n return list\n}\n\n/**\n * Returns a list containing first [n] elements.\n */\n
* @throws IllegalArgumentException if [n] is negative.\n */\n * @sample
samples.collections.Collections.Transformations.take\n
*/\npublic fun ShortArray.take(n: Int): List<Short> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n if (n >=
size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list = ArrayList<Short>(n)\n for
(item in this) {\n list.add(item)\n if (++count == n)\n
break\n }\n return list\n}\n\n/**\n * Returns
a list containing first [n] elements.\n */\n * @throws IllegalArgumentException if [n] is negative.\n */\n * @sample
samples.collections.Collections.Transformations.take\n
*/\npublic fun IntArray.take(n: Int): List<Int> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0)\n
return emptyList()\n if (n >= size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list
= ArrayList<Int>(n)\n for (item in this) {\n list.add(item)\n if (++count == n)\n
break\n }\n return list\n}\n\n/**\n * Returns a list containing first [n] elements.\n */\n
* @throws IllegalArgumentException if [n] is negative.\n */\n * @sample
samples.collections.Collections.Transformations.take\n
*/\npublic fun LongArray.take(n: Int): List<Long> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if
(n == 0) return emptyList()\n if (n >= size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n
val list = ArrayList<Long>(n)\n for (item in this) {\n list.add(item)\n if (++count == n)\n
break\n }\n return list\n}\n\n/**\n * Returns a list containing first [n] elements.\n */\n
* @throws IllegalArgumentException if [n] is negative.\n */\n
* @sample samples.collections.Collections.Transformations.take\n
*/\npublic fun FloatArray.take(n: Int): List<Float> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return
emptyList()\n if (n >= size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list =
ArrayList<Float>(n)\n for (item in this) {\n list.add(item)\n if (++count == n)\n
break\n }\n return list\n}\n\n/**\n * Returns a list containing first [n] elements.\n */\n
* @throws IllegalArgumentException if [n] is negative.\n */\n * @sample
samples.collections.Collections.Transformations.take\n
*/\npublic fun DoubleArray.take(n: Int): List<Double> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return
emptyList()\n if (n >= size) return toList()\n if (n == 1) return listOf(this[0])\n var
count = 0\n val list = ArrayList<Double>(n)\n for (item in this)\n
{\n list.add(item)\n if (++count == n)\n
break\n }\n return list\n}\n\n/**\n * Returns a list
containing first [n] elements.\n */\n * @throws IllegalArgumentException if [n] is negative.\n */\n * @sample

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samples.collections.Collections.Transformations.take\n *^\npublic fun BooleanArray.take(n: Int): List<Boolean> {\n
 require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n if (n >=
size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list = ArrayList<Boolean>(n)\n
for (item in this) {\n list.add(item)\n if (++count == n)\n break\n }\n return list\n}\n\n/**\n *
Returns a list containing first [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n *
@sample samples.collections.Collections.Transformations.take\n *^\npublic fun CharArray.take(n: Int): List<Char>
{\n require(n >= 0) { \"Requested element
count $n is less than zero.\" }\n if (n == 0) return emptyList()\n if (n >= size) return toList()\n if (n == 1)
return listOf(this[0])\n var count = 0\n val list = ArrayList<Char>(n)\n for (item in this) {\n
list.add(item)\n if (++count == n)\n break\n }\n return list\n}\n\n/**\n * Returns a list containing last
[n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic fun <T> Array<out T>.takeLast(n: Int): List<T>
{\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val
size = size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list =
ArrayList<T>(n)\n for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n * Returns
a list containing last [n] elements.\n * \n * @throws IllegalArgumentException
if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic fun
ByteArray.takeLast(n: Int): List<Byte> {\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n
if (n == 0) return emptyList()\n val size = size\n if (n >= size) return toList()\n if (n == 1) return
listOf(this[size - 1])\n val list = ArrayList<Byte>(n)\n for (index in size - n until size)\n
list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic fun ShortArray.takeLast(n: Int): List<Short> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val size =
size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list = ArrayList<Short>(n)\n
for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing
last [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic fun IntArray.takeLast(n: Int): List<Int> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val size =
size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list = ArrayList<Int>(n)\n
for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last
[n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic fun LongArray.takeLast(n: Int): List<Long> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n
if (n == 0) return emptyList()\n val size = size\n if (n >= size) return toList()\n if (n == 1) return
listOf(this[size - 1])\n val list = ArrayList<Long>(n)\n for (index in size - n until size)\n
list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic fun FloatArray.takeLast(n: Int): List<Float> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val size =
size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list = ArrayList<Float>(n)\n
for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last
[n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n
*^\npublic fun DoubleArray.takeLast(n: Int): List<Double> {\n require(n >= 0) { \"Requested element count $n is
less than zero.\" }\n if (n == 0) return emptyList()\n val size = size\n if (n >= size) return toList()\n if (n ==
1) return listOf(this[size - 1])\n val list = ArrayList<Double>(n)\n for (index in size - n until size)\n
list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last [n] elements.\n * \n * @throws

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IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic fun BooleanArray.takeLast(n: Int):
List<Boolean> {\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return
emptyList()\n val size = size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list
= ArrayList<Boolean>(n)\n for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last [n] elements.\n * \n * @throws IllegalArgumentException if
[n] is negative.\n * \n * @sample samples.collections.Collections.Transformations.take\n *^\npublic fun
CharArray.takeLast(n: Int): List<Char> {\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n
if (n == 0) return emptyList()\n val size = size\n if (n >= size) return toList()\n if (n == 1) return
listOf(this[size - 1])\n val list = ArrayList<Char>(n)\n for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last elements satisfying the given
[predicate].\n * \n * @sample samples.collections.Collections.Transformations.take\n *^\npublic inline fun <T>
Array<out T>.takeLastWhile(predicate: (T) -> Boolean): List<T> {\n for (index in lastIndex downTo 0) {\n if
(!predicate(this[index])) {\n return drop(index + 1)\n }\n }\n return toList()\n}\n\n/**\n * Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.take\n *^\npublic inline fun
ByteArray.takeLastWhile(predicate: (Byte) -> Boolean): List<Byte> {\n for (index in lastIndex downTo 0) {\n if
(!predicate(this[index])) {\n return drop(index + 1)\n }\n }\n return toList()\n}\n\n/**\n * Returns a
list containing last elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic inline fun ShortArray.takeLastWhile(predicate:
(Short) -> Boolean): List<Short> {\n for (index in lastIndex downTo 0) {\n if (!predicate(this[index])) {\n
 return drop(index + 1)\n }\n }\n return toList()\n}\n\n/**\n * Returns a list containing last elements
satisfying the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.take\n *^\npublic inline fun IntArray.takeLastWhile(predicate: (Int) -> Boolean): List<Int> {\n for (index in lastIndex
downTo 0) {\n if (!predicate(this[index])) {\n return drop(index + 1)\n }\n }\n return
toList()\n}\n\n/**\n * Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic inline fun LongArray.takeLastWhile(predicate:
(Long) -> Boolean): List<Long> {\n for (index in lastIndex downTo 0) {\n if (!predicate(this[index])) {\n
 return drop(index + 1)\n }\n }\n return toList()\n}\n\n/**\n * Returns a list containing last elements
satisfying the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.take\n *^\npublic
inline fun FloatArray.takeLastWhile(predicate: (Float) -> Boolean): List<Float> {\n for (index in lastIndex
downTo 0) {\n if (!predicate(this[index])) {\n return drop(index + 1)\n }\n }\n return
toList()\n}\n\n/**\n * Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic inline fun DoubleArray.takeLastWhile(predicate: (Double) -> Boolean): List<Double> {\n for (index in lastIndex
downTo 0) {\n if (!predicate(this[index])) {\n return drop(index + 1)\n }\n }\n return
toList()\n}\n\n/**\n * Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic inline fun BooleanArray.takeLastWhile(predicate: (Boolean) -> Boolean): List<Boolean> {\n for (index in lastIndex
downTo 0) {\n if (!predicate(this[index])) {\n return drop(index + 1)\n }\n }\n return
toList()\n}\n\n/**\n * Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic inline fun CharArray.takeLastWhile(predicate: (Char) -> Boolean): List<Char> {\n for (index in
lastIndex downTo 0) {\n if (!predicate(this[index])) {\n return drop(index + 1)\n }\n }\n return
toList()\n}\n\n/**\n * Returns a list containing first elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic inline fun <T> Array<out
T>.takeWhile(predicate: (T) -> Boolean): List<T> {\n val list = ArrayList<T>()\n for (item in this) {\n if
(!predicate(item))\n break\n list.add(item)\n }\n return list\n}\n\n/**\n * Returns a list containing first

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return
 var reverseIndex
 = lastIndex
 for (index in 0..midPoint) {
 val tmp = this[index]
 this[index] = this[reverseIndex]
 this[reverseIndex] = tmp
 reverseIndex--
 }
}

/** Reverses elements in the array in-place.
 *
 * public fun DoubleArray.reverse(): Unit {
 val midPoint = (size / 2) - 1
 if (midPoint < 0) return
 var reverseIndex = lastIndex
 for (index in 0..midPoint) {
 val tmp = this[index]
 this[index] =
 this[reverseIndex]
 this[reverseIndex] = tmp
 reverseIndex--
 }
}

/** Reverses elements in the
array in-place.
 *
 * public fun BooleanArray.reverse(): Unit {
 val midPoint = (size / 2) - 1
 if (midPoint < 0)
return
 var reverseIndex = lastIndex
 for (index in 0..midPoint) {
 val tmp = this[index]
 this[index]
= this[reverseIndex]
 this[reverseIndex] = tmp
 reverseIndex--
 }
}

/** Reverses elements in
the array in-place.
 *
 * public
fun CharArray.reverse(): Unit {
 val midPoint = (size / 2) - 1
 if (midPoint < 0) return
 var reverseIndex =
lastIndex
 for (index in 0..midPoint) {
 val tmp = this[index]
 this[index] = this[reverseIndex]
 this[reverseIndex] = tmp
 reverseIndex--
 }
}

/** Reverses elements of the array in the specified
range in-place.
 *
 * @param fromIndex the start of the range (inclusive) to reverse.
 * @param toIndex the end
of the range (exclusive) to reverse.
 * @throws IndexOutOfBoundsException if [fromIndex] is less than zero
or [toIndex] is greater than the size of this array.
 * @throws IllegalArgumentException if [fromIndex] is greater
than [toIndex].
 *
 * @SinceKotlin("1.4")
 * public fun <T> Array<T>.reverse(fromIndex: Int, toIndex: Int): Unit
{
 AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
 val midPoint = (fromIndex + toIndex) / 2
 if (fromIndex == midPoint) return
 var reverseIndex
= toIndex - 1
 for (index in fromIndex until midPoint) {
 val tmp = this[index]
 this[index] =
this[reverseIndex]
 this[reverseIndex] = tmp
 reverseIndex--
 }
}

/** Reverses elements of the
array in the specified range in-place.
 *
 * @param fromIndex the start of the range (inclusive) to reverse.
 * @param toIndex the end of the range (exclusive) to reverse.
 * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].
 *
 * @SinceKotlin("1.4")
 * public fun
ByteArray.reverse(fromIndex: Int, toIndex: Int): Unit {
 AbstractList.checkRangeIndexes(fromIndex, toIndex,
size)
 val midPoint = (fromIndex + toIndex) / 2
 if (fromIndex == midPoint) return
 var reverseIndex =
toIndex - 1
 for (index in fromIndex until midPoint) {
 val tmp = this[index]
 this[index]
= this[reverseIndex]
 this[reverseIndex] = tmp
 reverseIndex--
 }
}

/** Reverses elements of
the array in the specified range in-place.
 *
 * @param fromIndex the start of the range (inclusive) to reverse.
 * @param toIndex the end of the range (exclusive) to reverse.
 * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].
 *
 * @SinceKotlin("1.4")
 * public fun
ShortArray.reverse(fromIndex: Int, toIndex: Int): Unit {
 AbstractList.checkRangeIndexes(fromIndex, toIndex,
size)
 val midPoint = (fromIndex + toIndex) / 2
 if (fromIndex == midPoint) return
 var reverseIndex =
toIndex - 1
 for (index in fromIndex until midPoint) {
 val tmp = this[index]
 this[index] =
this[reverseIndex]
 this[reverseIndex] = tmp
 reverseIndex--
 }
}

/** Reverses
elements of the array in the specified range in-place.
 *
 * @param fromIndex the start of the range (inclusive) to
reverse.
 * @param toIndex the end of the range (exclusive) to reverse.
 * @throws
IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].
 *
 * @SinceKotlin("1.4")
 * public fun
IntArray.reverse(fromIndex: Int, toIndex: Int): Unit {
 AbstractList.checkRangeIndexes(fromIndex, toIndex,
size)
 val midPoint = (fromIndex + toIndex) / 2
 if (fromIndex == midPoint) return
 var reverseIndex =
toIndex - 1
 for (index in fromIndex until midPoint) {
 val tmp = this[index]
 this[index] =
this[reverseIndex]
 this[reverseIndex] = tmp
 reverseIndex--
 }
}

/** Reverses elements of the
array in the specified range in-place.
 *
 * @param fromIndex the start of the range (inclusive)
to reverse.
 * @param toIndex the end of the range (exclusive) to reverse.
 * @throws
IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 *

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@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\n@SinceKotlin("1.4")\npublic
fun LongArray.reverse(fromIndex: Int, toIndex: Int): Unit {\n AbstractList.checkRangeIndexes(fromIndex,
toIndex, size)\n val midPoint = (fromIndex + toIndex) / 2\n if (fromIndex == midPoint) return\n var
reverseIndex = toIndex - 1\n for (index in fromIndex until midPoint) {\n val tmp = this[index]\n
this[index] = this[reverseIndex]\n this[reverseIndex] = tmp\n reverseIndex--\n }\n}\n\n/**\n * Reverses
elements of the array in the specified range in-place.\n * \n * @param fromIndex the start of the range (inclusive) to
reverse.\n * @param toIndex the end of the range (exclusive) to reverse.\n * \n * @throws
IndexOutOfBoundsException
if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\n@SinceKotlin("1.4")\npublic fun
FloatArray.reverse(fromIndex: Int, toIndex: Int): Unit {\n AbstractList.checkRangeIndexes(fromIndex, toIndex,
size)\n val midPoint = (fromIndex + toIndex) / 2\n if (fromIndex == midPoint) return\n var reverseIndex =
toIndex - 1\n for (index in fromIndex until midPoint) {\n val tmp = this[index]\n this[index] =
this[reverseIndex]\n this[reverseIndex] = tmp\n reverseIndex--\n }\n}\n\n/**\n * Reverses elements of the
array in the specified range in-place.\n * \n * @param fromIndex the start of the range (inclusive) to reverse.\n *
@param toIndex the end of the range (exclusive) to reverse.\n * \n * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\n@SinceKotlin("1.4")\npublic fun DoubleArray.reverse(fromIndex:
Int, toIndex: Int): Unit {\n AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n val midPoint =
(fromIndex + toIndex) / 2\n if (fromIndex == midPoint) return\n var reverseIndex = toIndex - 1\n for (index in
fromIndex until midPoint) {\n val tmp = this[index]\n this[index] = this[reverseIndex]\n
this[reverseIndex] = tmp\n reverseIndex--\n }\n}\n\n/**\n * Reverses elements of the array in the specified
range in-place.\n * \n * @param fromIndex the start of the range (inclusive) to reverse.\n * @param toIndex the end
of the range (exclusive) to reverse.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero
or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater
than [toIndex].\n *\n@SinceKotlin("1.4")\npublic fun BooleanArray.reverse(fromIndex:
Int, toIndex: Int): Unit {\n AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n val midPoint =
(fromIndex + toIndex) / 2\n if (fromIndex == midPoint) return\n var reverseIndex = toIndex - 1\n for (index in
fromIndex until midPoint) {\n val tmp = this[index]\n this[index] = this[reverseIndex]\n
this[reverseIndex] = tmp\n reverseIndex--\n }\n}\n\n/**\n * Reverses elements of the array in the specified
range in-place.\n * \n * @param fromIndex the start of the range (inclusive) to reverse.\n * @param toIndex the end
of the range (exclusive) to reverse.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero
or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater
than [toIndex].\n *\n@SinceKotlin("1.4")\npublic fun CharArray.reverse(fromIndex: Int, toIndex: Int): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n
 val midPoint = (fromIndex + toIndex) / 2\n if (fromIndex == midPoint) return\n var reverseIndex = toIndex -
1\n for (index in fromIndex until midPoint) {\n val tmp = this[index]\n this[index] = this[reverseIndex]\n
this[reverseIndex] = tmp\n reverseIndex--\n }\n}\n\n/**\n * Returns a list with elements in reversed order.\n
*\n@public fun <T> Array<out T>.reversed(): List<T> {\n if (isEmpty()) return emptyList()\n val list =
toMutableList()\n list.reverse()\n return list\n}\n\n/**\n * Returns a list with elements in reversed order.\n
*\n@public fun ByteArray.reversed(): List<Byte> {\n if (isEmpty()) return emptyList()\n val list =
toMutableList()\n list.reverse()\n return list\n}\n\n/**\n * Returns a list with elements in reversed order.\n
*\n@public fun ShortArray.reversed(): List<Short> {\n if (isEmpty()) return emptyList()\n val list =
toMutableList()\n list.reverse()\n return list\n}\n\n/**\n * Returns a
list with elements in reversed order.\n *\n@public fun IntArray.reversed(): List<Int> {\n if (isEmpty()) return
emptyList()\n val list = toMutableList()\n list.reverse()\n return list\n}\n\n/**\n * Returns a list with elements
in reversed order.\n *\n@public fun LongArray.reversed(): List<Long> {\n if (isEmpty()) return emptyList()\n val

```

```

list = toMutableList()\n list.reverse()\n return list\n}\n\n/**\n * Returns a list with elements in reversed order.\n *\npublic fun FloatArray.reversed(): List<Float> {\n if (isEmpty()) return emptyList()\n val list =\n toMutableList()\n list.reverse()\n return list\n}\n\n/**\n * Returns a list with elements in reversed order.\n *\npublic fun DoubleArray.reversed(): List<Double> {\n if (isEmpty()) return emptyList()\n val list =\n toMutableList()\n list.reverse()\n return list\n}\n\n/**\n * Returns a list with elements in reversed order.\n *\npublic fun BooleanArray.reversed(): List<Boolean> {\n if (isEmpty())\n return emptyList()\n val list = toMutableList()\n list.reverse()\n return list\n}\n\n/**\n * Returns a list with\n elements in reversed order.\n *\npublic fun CharArray.reversed(): List<Char> {\n if (isEmpty()) return\n emptyList()\n val list = toMutableList()\n list.reverse()\n return list\n}\n\n/**\n * Returns an array with\n elements of this array in reversed order.\n *\npublic fun <T> Array<T>.reversedArray(): Array<T> {\n if\n (isEmpty()) return this\n val result = arrayOfNulls(this, size)\n val lastIndex = lastIndex\n for (i in\n 0..lastIndex)\n result[lastIndex - i] = this[i]\n return result\n}\n\n/**\n * Returns an array with elements of this\n array in reversed order.\n *\npublic fun ByteArray.reversedArray(): ByteArray {\n if (isEmpty()) return this\n val result = ByteArray(size)\n val lastIndex = lastIndex\n for (i in 0..lastIndex)\n result[lastIndex - i] =\n this[i]\n return result\n}\n\n/**\n * Returns an array\n with elements of this array in reversed order.\n *\npublic fun ShortArray.reversedArray(): ShortArray {\n if\n (isEmpty()) return this\n val result = ShortArray(size)\n val lastIndex = lastIndex\n for (i in 0..lastIndex)\n result[lastIndex - i] = this[i]\n return result\n}\n\n/**\n * Returns an array with elements of this array in reversed\n order.\n *\npublic fun IntArray.reversedArray(): IntArray {\n if (isEmpty()) return this\n val result =\n IntArray(size)\n val lastIndex = lastIndex\n for (i in 0..lastIndex)\n result[lastIndex - i] = this[i]\n return\n result\n}\n\n/**\n * Returns an array with elements of this array in reversed order.\n *\npublic fun\n LongArray.reversedArray(): LongArray {\n if (isEmpty()) return this\n val result = LongArray(size)\n val\n lastIndex = lastIndex\n for (i in 0..lastIndex)\n result[lastIndex - i] = this[i]\n return result\n}\n\n/**\n * Returns an array with elements of this array in reversed\n order.\n *\npublic fun FloatArray.reversedArray(): FloatArray {\n if (isEmpty()) return this\n val result =\n FloatArray(size)\n val lastIndex = lastIndex\n for (i in 0..lastIndex)\n result[lastIndex - i] = this[i]\n return\n result\n}\n\n/**\n * Returns an array with elements of this array in reversed order.\n *\npublic fun\n DoubleArray.reversedArray(): DoubleArray {\n if (isEmpty()) return this\n val result = DoubleArray(size)\n\n val lastIndex = lastIndex\n for (i in 0..lastIndex)\n result[lastIndex - i] = this[i]\n return result\n}\n\n/**\n * Returns an array with elements of this array in reversed order.\n *\npublic fun BooleanArray.reversedArray():\n BooleanArray {\n if (isEmpty()) return this\n val result = BooleanArray(size)\n val lastIndex = lastIndex\n\n for (i in 0..lastIndex)\n result[lastIndex - i] = this[i]\n return result\n}\n\n/**\n * Returns an array with\n elements of this array in reversed order.\n *\npublic fun\n CharArray.reversedArray(): CharArray {\n if (isEmpty()) return this\n val result = CharArray(size)\n val\n lastIndex = lastIndex\n for (i in 0..lastIndex)\n result[lastIndex - i] = this[i]\n return result\n}\n\n/**\n * Randomly shuffles elements in this array in-place.\n *\n@SinceKotlin("1.4")\npublic fun <T>\n Array<T>.shuffle(): Unit {\n shuffle(Random)\n}\n\n/**\n * Randomly shuffles elements in this array in-place.\n *\n@SinceKotlin("1.4")\npublic fun ByteArray.shuffle(): Unit {\n shuffle(Random)\n}\n\n/**\n * Randomly\n shuffles elements in this array in-place.\n *\n@SinceKotlin("1.4")\npublic fun ShortArray.shuffle(): Unit {\n\n shuffle(Random)\n}\n\n/**\n * Randomly shuffles elements in this array in-place.\n *\n@SinceKotlin("1.4")\npublic fun IntArray.shuffle(): Unit {\n shuffle(Random)\n}\n\n/**\n * Randomly\n shuffles elements in this array in-place.\n *\n@SinceKotlin("1.4")\npublic fun LongArray.shuffle(): Unit {\n\n shuffle(Random)\n}\n\n/**\n * Randomly shuffles elements in this array in-place.\n *\n@SinceKotlin("1.4")\npublic fun FloatArray.shuffle():\n Unit {\n shuffle(Random)\n}\n\n/**\n * Randomly shuffles elements in this array in-place.\n *\n@SinceKotlin("1.4")\npublic fun DoubleArray.shuffle(): Unit {\n shuffle(Random)\n}\n\n/**\n * Randomly\n shuffles elements in this array in-place.\n *\n@SinceKotlin("1.4")\npublic fun BooleanArray.shuffle(): Unit {\n\n shuffle(Random)\n}\n\n/**\n * Randomly shuffles elements in this array in-place.\n

```

\*\n@SinceKotlin("1.4")\npublic fun CharArray.shuffle(): Unit {\n shuffle(Random)\n}\n\n/\*\*\n \* Randomly shuffles elements in this array in-place using the specified [random] instance as the source of randomness.\n \* \n \* See: [https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\\_shuffle#The\\_modern\\_algorithm](https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm)\n

\*\n@SinceKotlin("1.4")\npublic fun <T> Array<T>.shuffle(random: Random): Unit {\n for (i in lastIndex downTo 1) {\n val j = random.nextInt(i + 1)\n val copy = this[i]\n this[i] = this[j]\n this[j] = copy\n }\n}\n\n/\*\*\n \* Randomly shuffles elements in this array in-place using the specified [random] instance as the source of randomness.\n \* \n \* See: [https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\\_shuffle#The\\_modern\\_algorithm](https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm)\n

\*\n@SinceKotlin("1.4")\npublic fun ByteArray.shuffle(random: Random): Unit {\n for (i in lastIndex downTo 1) {\n val j = random.nextInt(i + 1)\n val copy = this[i]\n this[i] = this[j]\n this[j] = copy\n }\n}\n\n/\*\*\n \* Randomly shuffles elements in this array in-place using the specified [random] instance as the source of randomness.\n \* \n \* See: [https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\\_shuffle#The\\_modern\\_algorithm](https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm)\n

\*\n@SinceKotlin("1.4")\npublic fun ShortArray.shuffle(random: Random): Unit {\n for (i in lastIndex downTo 1) {\n val j = random.nextInt(i + 1)\n val copy = this[i]\n this[i] = this[j]\n this[j] = copy\n }\n}\n\n/\*\*\n \* Randomly shuffles elements in this array in-place using the specified [random] instance as the source of randomness.\n \* \n \* See: [https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\\_shuffle#The\\_modern\\_algorithm](https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm)\n

\*\n@SinceKotlin("1.4")\npublic fun IntArray.shuffle(random: Random): Unit {\n for (i in lastIndex downTo 1) {\n val j = random.nextInt(i + 1)\n val copy = this[i]\n this[i] = this[j]\n this[j] = copy\n }\n}\n\n/\*\*\n \* Randomly shuffles elements in this array in-place using the specified [random] instance as the source of randomness.\n \* \n \* See: [https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\\_shuffle#The\\_modern\\_algorithm](https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm)\n

\*\n@SinceKotlin("1.4")\npublic fun LongArray.shuffle(random: Random): Unit {\n for (i in lastIndex downTo 1) {\n val j = random.nextInt(i + 1)\n val copy = this[i]\n this[i] = this[j]\n this[j] = copy\n }\n}\n\n/\*\*\n \* Randomly shuffles elements in this array in-place using the specified [random] instance as the source of randomness.\n \* \n \* See: [https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\\_shuffle#The\\_modern\\_algorithm](https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm)\n

\*\n@SinceKotlin("1.4")\npublic fun FloatArray.shuffle(random: Random): Unit {\n for (i in lastIndex downTo 1) {\n val j = random.nextInt(i + 1)\n val copy = this[i]\n this[i] = this[j]\n this[j] = copy\n }\n}\n\n/\*\*\n \* Randomly shuffles elements in this array in-place using the specified [random] instance as the source of randomness.\n \* \n \* See: [https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\\_shuffle#The\\_modern\\_algorithm](https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm)\n

\*\n@SinceKotlin("1.4")\npublic fun DoubleArray.shuffle(random: Random): Unit {\n for (i in lastIndex downTo 1) {\n val j = random.nextInt(i + 1)\n val copy = this[i]\n this[i] = this[j]\n this[j] = copy\n }\n}\n\n/\*\*\n \* Randomly shuffles elements in this array in-place using the specified [random] instance as the source of randomness.\n \* \n \* See: [https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\\_shuffle#The\\_modern\\_algorithm](https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm)\n

\*\n@SinceKotlin("1.4")\npublic fun BooleanArray.shuffle(random: Random): Unit {\n for (i in lastIndex downTo 1) {\n val j = random.nextInt(i + 1)\n val copy = this[i]\n this[i] = this[j]\n this[j] = copy\n }\n}\n\n/\*\*\n \* Randomly shuffles elements in this array in-place using the specified [random] instance as the source of randomness.\n \* \n \* See: [https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\\_shuffle#The\\_modern\\_algorithm](https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm)\n

\*\n@SinceKotlin("1.4")\npublic fun CharArray.shuffle(random: Random): Unit {\n for (i in lastIndex downTo 1) {\n val j = random.nextInt(i + 1)\n val copy = this[i]\n this[i] = this[j]\n this[j] = copy\n }\n}\n\n/\*\*\n \* Sorts elements in the array in-place according to natural sort order of the value returned by specified [selector] function.\n \* \n \* See: [https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\\_shuffle#The\\_modern\\_algorithm](https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm)\n



The sort is `_stable_`. It means that equal elements preserve their order relative to each other after sorting.

```

*^public inline fun <T, R : Comparable<R>> Array<out T>.sortBy(crossinline selector: (T) -> R?): Unit {
 if (size > 1) sortBy(compareBy(selector))
}

* Sorts elements in the array in-place descending according to natural sort order of the value returned by specified [selector] function.
* The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.
*^public inline fun <T, R : Comparable<R>> Array<out T>.sortByDescending(crossinline selector: (T) -> R?): Unit {
 if (size > 1) sortByDescending(compareByDescending(selector))
}

* Sorts elements in the array in-place descending according to their natural sort order.
* The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.
*^public fun <T : Comparable<T>> Array<out T>.sortDescending(): Unit {
 sortByDescending(reverseOrder())
}

* Sorts elements in the array in-place descending according to their natural sort order.
*^public fun ByteArray.sortDescending(): Unit {
 if (size > 1) {
 sort()
 reverse()
 }
}

* Sorts elements in the array in-place descending according to their natural sort order.
*^public fun ShortArray.sortDescending(): Unit {
 if (size > 1) {
 sort()
 reverse()
 }
}

* Sorts elements in the array in-place descending according to their natural sort order.
*^public fun IntArray.sortDescending(): Unit {
 if (size > 1) {
 sort()
 reverse()
 }
}

* Sorts elements in the array in-place descending according to their natural sort order.
*^public fun LongArray.sortDescending(): Unit {
 if (size > 1) {
 sort()
 reverse()
 }
}

* Sorts elements in the array in-place descending according to their natural sort order.
*^public fun FloatArray.sortDescending(): Unit {
 if (size > 1) {
 sort()
 reverse()
 }
}

* Sorts elements in the array in-place descending according to their natural sort order.
*^public fun DoubleArray.sortDescending(): Unit {
 if (size > 1) {
 sort()
 reverse()
 }
}

* Sorts elements in the array in-place descending according to their natural sort order.
*^public fun CharArray.sortDescending(): Unit {
 if (size > 1) {
 sort()
 reverse()
 }
}

* Returns a list of all elements sorted according to their natural sort order.
* The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.
*^public fun <T : Comparable<T>> Array<out T>.sorted(): List<T> {
 return sortedArray().asList()
}

* Returns a list of all elements sorted according to their natural sort order.
*^public fun ByteArray.sorted(): List<Byte> {
 return toTypedArray().apply { sort() }.asList()
}

* Returns a list of all elements sorted according to their natural sort order.
*^public fun ShortArray.sorted(): List<Short> {
 return toTypedArray().apply { sort() }.asList()
}

* Returns a list of all elements sorted according to their natural sort order.
*^public fun IntArray.sorted(): List<Int> {
 return toTypedArray().apply { sort() }.asList()
}

* Returns a list of all elements sorted according to their natural sort order.
*^public fun LongArray.sorted(): List<Long> {
 return toTypedArray().apply { sort() }.asList()
}

* Returns a list of all elements sorted according to their natural sort order.
*^public fun FloatArray.sorted(): List<Float> {
 return toTypedArray().apply { sort() }.asList()
}

* Returns a list of all elements sorted according to their natural sort order.
*^public fun DoubleArray.sorted(): List<Double> {
 return toTypedArray().apply { sort() }.asList()
}

* Returns a list of all elements sorted according to their natural sort order.
*^public fun CharArray.sorted(): List<Char> {
 return toTypedArray().apply { sort() }.asList()
}

Returns an array with all elements of this array sorted according to their natural sort order.
* The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.
*^public fun <T : Comparable<T>> Array<T>.sortedArray(): Array<T> {
 if (isEmpty()) return this
 return this.copyOf().apply { sort() }
}

* Returns an array with all elements of this array sorted according to their natural sort order.
*^public fun ByteArray.sortedArray(): ByteArray {
 if (isEmpty()) return this
 return this.copyOf().apply { sort() }
}

* Returns an array with all elements of this array sorted according to their natural sort order.
*^public fun ShortArray.sortedArray(): ShortArray {
 if (isEmpty()) return this
 return this.copyOf().apply { sort() }
}

* Returns an array with all elements of this array sorted according to their natural sort order.
*^public fun IntArray.sortedArray(): IntArray {
 if (isEmpty()) return this
 return this.copyOf().apply { sort() }
}

* Returns an array with all

```

```

elements of this array sorted according to their natural sort order.\n */\npublic fun LongArray.sortedArray():
LongArray {\n if (isEmpty()) return this\n return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array
with all elements of this array sorted according to their natural sort order.\n */\npublic fun FloatArray.sortedArray():
FloatArray {\n if (isEmpty()) return this\n return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array
with all elements of this array sorted according to their natural sort order.\n */\npublic fun
DoubleArray.sortedArray(): DoubleArray {\n if (isEmpty()) return this\n
return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array with all elements of this array sorted
according to their natural sort order.\n */\npublic fun CharArray.sortedArray(): CharArray {\n if (isEmpty())
return this\n return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array with all elements of this array
sorted descending according to their natural sort order.\n * \n * The sort is _stable_. It means that equal elements
preserve their order relative to each other after sorting.\n */\npublic fun <T : Comparable<T>>
Array<T>.sortedArrayDescending(): Array<T> {\n if (isEmpty()) return this\n return this.copyOf().apply {
sortWith(reverseOrder()) }\n}\n\n/**\n * Returns an array with all elements of this array sorted descending
according to their natural sort order.\n */\npublic fun ByteArray.sortedArrayDescending(): ByteArray {\n if
(isEmpty()) return this\n return this.copyOf().apply { sortDescending() }\n}\n\n/**\n * Returns an array with all
elements of this array sorted descending according to their natural sort order.\n */\npublic fun
ShortArray.sortedArrayDescending(): ShortArray {\n if (isEmpty()) return this\n return this.copyOf().apply {
sortDescending() }\n}\n\n/**\n * Returns an array with all elements of this array sorted descending according to
their natural sort order.\n */\npublic fun IntArray.sortedArrayDescending(): IntArray {\n if (isEmpty()) return
this\n return this.copyOf().apply { sortDescending() }\n}\n\n/**\n * Returns an array with all elements of this
array sorted descending according to their natural sort order.\n */\npublic fun LongArray.sortedArrayDescending():
LongArray {\n if (isEmpty()) return this\n return this.copyOf().apply { sortDescending() }\n}\n\n/**\n * Returns
an array with all elements of this array sorted descending according to their natural sort order.\n */\npublic fun
FloatArray.sortedArrayDescending(): FloatArray {\n if (isEmpty()) return this\n return this.copyOf().apply
{ sortDescending() }\n}\n\n/**\n * Returns an array with all elements of this array sorted descending according to
their natural sort order.\n */\npublic fun DoubleArray.sortedArrayDescending(): DoubleArray {\n if (isEmpty())
return this\n return this.copyOf().apply { sortDescending() }\n}\n\n/**\n * Returns an array with all elements of
this array sorted descending according to their natural sort order.\n */\npublic fun
CharArray.sortedArrayDescending(): CharArray {\n if (isEmpty()) return this\n return this.copyOf().apply {
sortDescending() }\n}\n\n/**\n * Returns an array with all elements of this array sorted according the specified
[comparator].\n * \n * The sort is _stable_. It means that equal elements preserve their order relative to each other
after sorting.\n */\npublic fun <T> Array<out T>.sortedArrayWith(comparator: Comparator<in T>): Array<out T>
{\n if (isEmpty()) return this\n return this.copyOf().apply { sortWith(comparator) }\n}\n\n/**\n * Returns a list of all elements sorted according to natural sort order of the value returned by specified [selector]
function.\n * \n * The sort is _stable_. It means that equal elements preserve their order relative to each other after
sorting.\n * \n * @sample samples.collections.Collections.Sorting.sortedBy\n */\npublic inline fun <T, R :
Comparable<R>> Array<out T>.sortedBy(crossinline selector: (T) -> R?): List<T> {\n return
sortedWith(compareBy(selector))\n}\n\n/**\n * Returns a list of all elements sorted according to natural sort order
of the value returned by specified [selector] function.\n * \n * @sample
samples.collections.Collections.Sorting.sortedBy\n */\npublic inline fun <R : Comparable<R>>
ByteArray.sortedBy(crossinline selector: (Byte) -> R?): List<Byte> {\n return
sortedWith(compareBy(selector))\n}\n\n/**\n * Returns a list of all elements sorted according to natural sort order
of the value returned by specified [selector] function.\n * \n * @sample
samples.collections.Collections.Sorting.sortedBy\n
*/\npublic inline fun <R : Comparable<R>> ShortArray.sortedBy(crossinline selector: (Short) -> R?): List<Short>
{\n return sortedWith(compareBy(selector))\n}\n\n/**\n * Returns a list of all elements sorted according to natural
sort order of the value returned by specified [selector] function.\n * \n * @sample
samples.collections.Collections.Sorting.sortedBy\n */\npublic inline fun <R : Comparable<R>>

```

IntArray.sortedBy(crossinline selector: (Int) -> R?): List<Int> {\n return  
sortedWith(compareBy(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted according to natural sort order  
of the value returned by specified [selector] function.\n \* \n \* @sample  
samples.collections.Collections.Sorting.sortedBy\n \*/\npublic inline fun <R : Comparable<R>>

LongArray.sortedBy(crossinline selector: (Long) -> R?): List<Long> {\n return  
sortedWith(compareBy(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted according to natural  
sort order of the value returned by specified [selector] function.\n \* \n \* @sample  
samples.collections.Collections.Sorting.sortedBy\n \*/\npublic inline fun <R : Comparable<R>>

FloatArray.sortedBy(crossinline selector: (Float) -> R?): List<Float> {\n return  
sortedWith(compareBy(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted according to natural sort order  
of the value returned by specified [selector] function.\n \* \n \* @sample  
samples.collections.Collections.Sorting.sortedBy\n \*/\npublic inline fun <R : Comparable<R>>

DoubleArray.sortedBy(crossinline selector: (Double) -> R?): List<Double> {\n return  
sortedWith(compareBy(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted according to natural sort order  
of the value returned by specified [selector] function.\n \* \n \* @sample  
samples.collections.Collections.Sorting.sortedBy\n \*/\npublic inline fun <R : Comparable<R>>

BooleanArray.sortedBy(crossinline selector: (Boolean) -> R?): List<Boolean> {\n return  
sortedWith(compareBy(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted according to natural sort order  
of the value returned by specified [selector] function.\n \* \n \* @sample  
samples.collections.Collections.Sorting.sortedBy\n \*/\npublic inline fun <R : Comparable<R>>

CharArray.sortedBy(crossinline selector: (Char) -> R?): List<Char> {\n return  
sortedWith(compareBy(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending according to natural  
sort order of the value returned by specified [selector] function.\n \* \n \* The sort is `_stable_`. It means that equal  
elements preserve their order relative to each other after sorting.\n \*/\npublic inline fun <T, R : Comparable<R>>

Array<out T>.sortedByDescending(crossinline selector: (T) -> R?): List<T> {\n return  
sortedWith(compareByDescending(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending  
according to natural sort order of the value returned by specified [selector] function.\n \*/\npublic  
inline fun <R : Comparable<R>> ByteArray.sortedByDescending(crossinline selector: (Byte) -> R?): List<Byte>  
{\n return sortedWith(compareByDescending(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted  
descending according to natural sort order of the value returned by specified [selector] function.\n \*/\npublic inline  
fun <R : Comparable<R>> ShortArray.sortedByDescending(crossinline selector: (Short) -> R?): List<Short> {\n  
return sortedWith(compareByDescending(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending  
according to natural sort order of the value returned by specified [selector] function.\n \*/\npublic inline fun <R :  
Comparable<R>> IntArray.sortedByDescending(crossinline selector: (Int) -> R?): List<Int> {\n return  
sortedWith(compareByDescending(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending  
according to natural sort order of the value returned by specified [selector] function.\n \*/\npublic inline  
fun <R : Comparable<R>> LongArray.sortedByDescending(crossinline selector: (Long) -> R?): List<Long> {\n  
return sortedWith(compareByDescending(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending  
according to natural sort order of the value returned by specified [selector] function.\n \*/\npublic inline fun <R :  
Comparable<R>> FloatArray.sortedByDescending(crossinline selector: (Float) -> R?): List<Float> {\n return  
sortedWith(compareByDescending(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending  
according to natural sort order of the value returned by specified [selector] function.\n \*/\npublic inline fun <R :  
Comparable<R>> DoubleArray.sortedByDescending(crossinline selector: (Double) -> R?): List<Double> {\n  
return sortedWith(compareByDescending(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending  
according to natural sort order of the value returned by specified [selector] function.\n \*/\npublic inline fun <R  
: Comparable<R>> BooleanArray.sortedByDescending(crossinline selector: (Boolean) -> R?): List<Boolean> {\n  
return sortedWith(compareByDescending(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending  
according to natural sort order of the value returned by specified [selector] function.\n \*/\npublic inline fun <R :

Comparable<R>> CharArray.sortedByDescending(crossinline selector: (Char) -> R?): List<Char> {\n return sortedWith(compareByDescending(selector))\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending according to their natural sort order.\n \* \n \* The sort is `_stable_`. It means that equal elements preserve their order relative to each other after sorting.\n \*/\npublic fun <T : Comparable<T>> Array<out T>.sortedDescending(): List<T> {\n return sortedWith(reverseOrder())\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending according to their natural sort order.\n \*/\npublic fun ByteArray.sortedDescending(): List<Byte> {\n return copyOf().apply { sort() }.reversed()\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending according to their natural sort order.\n \*/\npublic fun ShortArray.sortedDescending(): List<Short> {\n return copyOf().apply { sort() }.reversed()\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending according to their natural sort order.\n \*/\npublic fun IntArray.sortedDescending(): List<Int> {\n return copyOf().apply { sort() }.reversed()\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending according to their natural sort order.\n \*/\npublic fun LongArray.sortedDescending(): List<Long> {\n return copyOf().apply { sort() }.reversed()\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending according to their natural sort order.\n \*/\npublic fun FloatArray.sortedDescending(): List<Float> {\n return copyOf().apply { sort() }.reversed()\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending according to their natural sort order.\n \*/\npublic fun DoubleArray.sortedDescending(): List<Double> {\n return copyOf().apply { sort() }.reversed()\n}\n\n/\*\*\n \* Returns a list of all elements sorted descending according to their natural sort order.\n \*/\npublic fun CharArray.sortedDescending(): List<Char> {\n return copyOf().apply { sort() }.reversed()\n}\n\n/\*\*\n \* Returns a list of all elements sorted according to the specified [comparator].\n \* \n \* The sort is `_stable_`. It means that equal elements preserve their order relative to each other after sorting.\n \*/\npublic fun <T> Array<out T>.sortedWith(comparator: Comparator<in T>): List<T> {\n return sortedArrayWith(comparator).asList()\n}\n\n/\*\*\n \* Returns a list of all elements sorted according to the specified [comparator].\n \*/\npublic fun ByteArray.sortedWith(comparator: Comparator<in Byte>): List<Byte> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/\*\*\n \* Returns a list of all elements sorted according to the specified [comparator].\n \*/\npublic fun ShortArray.sortedWith(comparator: Comparator<in Short>): List<Short> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/\*\*\n \* Returns a list of all elements sorted according to the specified [comparator].\n \*/\npublic fun IntArray.sortedWith(comparator: Comparator<in Int>): List<Int> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/\*\*\n \* Returns a list of all elements sorted according to the specified [comparator].\n \*/\npublic fun LongArray.sortedWith(comparator: Comparator<in Long>): List<Long> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/\*\*\n \* Returns a list of all elements sorted according to the specified [comparator].\n \*/\npublic fun FloatArray.sortedWith(comparator: Comparator<in Float>): List<Float> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/\*\*\n \* Returns a list of all elements sorted according to the specified [comparator].\n \*/\npublic fun DoubleArray.sortedWith(comparator: Comparator<in Double>): List<Double> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/\*\*\n \* Returns a list of all elements sorted according to the specified [comparator].\n \*/\npublic fun BooleanArray.sortedWith(comparator: Comparator<in Boolean>): List<Boolean> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/\*\*\n \* Returns a list of all elements sorted according to the specified [comparator].\n \*/\npublic fun CharArray.sortedWith(comparator: Comparator<in Char>): List<Char> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/\*\*\n \* Returns a [List] that wraps the original array.\n \*/\npublic expect fun <T> Array<out T>.asList(): List<T>\n\n/\*\*\n \* Returns a [List] that wraps the original array.\n \*/\npublic expect fun ByteArray.asList(): List<Byte>\n\n/\*\*\n \* Returns a [List] that wraps the original array.\n \*/\npublic expect fun ShortArray.asList(): List<Short>\n\n/\*\*\n \* Returns a [List] that wraps the original array.\n \*/\npublic expect fun IntArray.asList(): List<Int>\n\n/\*\*\n \* Returns a [List] that wraps the original array.\n \*/\npublic expect fun LongArray.asList(): List<Long>\n\n/\*\*\n \* Returns a [List] that wraps the original array.\n \*/\npublic expect fun FloatArray.asList(): List<Float>\n\n/\*\*\n \* Returns a [List] that wraps the original array.\n \*/\npublic expect fun DoubleArray.asList(): List<Double>\n\n/\*\*\n \* Returns a

[List] that wraps the original array.  
`public expect fun BooleanArray.asList(): List<Boolean>`  
Returns a [List] that wraps the original array.  
`public expect fun CharArray.asList(): List<Char>`  
Returns `true` if the two specified arrays are *deeply* equal to one another, i.e. contain the same number of the same elements in the same order. If two corresponding elements are nested arrays, they are also compared deeply. If any of arrays contains itself on any nesting level the behavior is undefined. The elements of other types are compared for equality with the `[equals][Any.equals]` function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.  
`@SinceKotlin("1.1")@kotlin.internal.LowPriorityInOverloadResolution public expect infix fun <T> Array<out T>.contentDeepEquals(other: Array<out T>): Boolean`  
Returns `true` if the two specified arrays are *deeply* equal to one another, i.e. contain the same number of the same elements in the same order. The specified arrays are also considered deeply equal if both are `null`. If two corresponding elements are nested arrays, they are also compared deeply. If any of arrays contains itself on any nesting level the behavior is undefined. The elements of other types are compared for equality with the `[equals][Any.equals]` function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.  
`@SinceKotlin("1.4") public expect infix fun <T> Array<out T>?.contentDeepEquals(other: Array<out T>?): Boolean`  
Returns a hash code based on the contents of this array as if it is [List]. Nested arrays are treated as lists too. If any of arrays contains itself on any nesting level the behavior is undefined.  
`@SinceKotlin("1.1")@kotlin.internal.LowPriorityInOverloadResolution public expect fun <T> Array<out T>.contentDeepHashCode(): Int`  
Returns a hash code based on the contents of this array as if it is [List]. Nested arrays are treated as lists too. If any of arrays contains itself on any nesting level the behavior is undefined.  
`@SinceKotlin("1.4") public expect fun <T> Array<out T>?.contentDeepHashCode(): Int`  
Returns a string representation of the contents of this array as if it is a [List]. Nested arrays are treated as lists too. If any of arrays contains itself on any nesting level that reference is rendered as `"[...]"` to prevent recursion. @sample  
`samples.collections.Arrays.ContentOperations.contentDeepToString`  
`@SinceKotlin("1.1")@kotlin.internal.LowPriorityInOverloadResolution public expect fun <T> Array<out T>.contentDeepToString(): String`  
Returns a string representation of the contents of this array as if it is a [List]. Nested arrays are treated as lists too. If any of arrays contains itself on any nesting level that reference is rendered as `"[...]"` to prevent recursion. @sample  
`samples.collections.Arrays.ContentOperations.contentDeepToString`  
`@SinceKotlin("1.4") public expect fun <T> Array<out T>?.contentDeepToString(): String`  
Returns `true` if the two specified arrays are *structurally* equal to one another, i.e. contain the same number of the same elements in the same order. The elements are compared for equality with the `[equals][Any.equals]` function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.  
`@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")@SinceKotlin("1.1")@DeprecatedSinceKotlin(hiddenSince = "1.4") public expect infix fun <T> Array<out T>.contentEquals(other: Array<out T>): Boolean`  
Returns `true` if the two specified arrays are *structurally* equal to one another, i.e. contain the same number of the same elements in the same order. The elements are compared for equality with the `[equals][Any.equals]` function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.  
`@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")@SinceKotlin("1.1")@DeprecatedSinceKotlin(hiddenSince = "1.4") public expect infix fun ByteArray.contentEquals(other: ByteArray): Boolean`  
Returns `true` if the two specified arrays are *structurally* equal to one another, i.e. contain the same number of the same elements in the same order. The elements are compared for equality with the `[equals][Any.equals]` function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.  
`@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")@SinceKotlin("1.1")@DeprecatedSinceKotlin(hiddenSince = "1.4") public expect infix fun ShortArray.contentEquals(other: ShortArray): Boolean`  
Returns `true` if the two specified arrays

are *structurally* equal to one another, \n \* i.e. contain the same number of the same elements in the same order. \n \* \n \* The elements are compared for equality with the [equals][Any.equals] function. \n \* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`. \n \*/\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic expect infix fun IntArray.contentEquals(other: IntArray): Boolean\n\n/\*\*\n \* Returns `true` if the two specified arrays are *structurally* equal to one another, \n \* i.e. contain the same number of the same elements in the same order. \n \* \n \* The elements are compared for equality with the [equals][Any.equals] function. \n \* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`. \n \*/\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic expect infix fun LongArray.contentEquals(other: LongArray): Boolean\n\n/\*\*\n \* Returns `true` if the two specified arrays are *structurally* equal to one another, \n \* i.e. contain the same number of the same elements in the same order. \n \* \n \* The elements are compared for equality with the [equals][Any.equals] function. \n \* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`. \n \*/\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic expect infix fun FloatArray.contentEquals(other: FloatArray): Boolean\n\n/\*\*\n \* Returns `true` if the two specified arrays are *structurally* equal to one another, \n \* i.e. contain the same number of the same elements in the same order. \n \* \n \* The elements are compared for equality with the [equals][Any.equals] function. \n \* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`. \n \*/\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic expect infix fun DoubleArray.contentEquals(other: DoubleArray): Boolean\n\n/\*\*\n \* Returns `true` if the two specified arrays are *structurally* equal to one another, \n \* i.e. contain the same number of the same elements in the same order. \n \* \n \* The elements are compared for equality with the [equals][Any.equals] function. \n \* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`. \n \*/\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic expect infix fun BooleanArray.contentEquals(other: BooleanArray): Boolean\n\n/\*\*\n \* Returns `true` if the two specified arrays are *structurally* equal to one another, \n \* i.e. contain the same number of the same elements in the same order. \n \* \n \* The elements are compared for equality with the [equals][Any.equals] function. \n \* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`. \n \*/\n@SinceKotlin("1.4")\npublic expect infix fun <T> Array<out T>?.contentEquals(other: Array<out T>?): Boolean\n\n/\*\*\n \* Returns `true` if the two specified arrays are *structurally* equal to one another, \n \* i.e. contain the same number of the same elements in the same order. \n \* \n \* The elements are compared for equality with the [equals][Any.equals] function. \n \* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`. \n \*/\n@SinceKotlin("1.4")\npublic expect infix fun ByteArray?.contentEquals(other: ByteArray?): Boolean\n\n/\*\*\n \* Returns `true` if the two specified arrays are *structurally* equal to one another, \n \* i.e. contain the same number of the same elements in the same order. \n \* \n \* The elements are compared for equality with the [equals][Any.equals] function. \n \* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`. \n \*/\n@SinceKotlin("1.4")\npublic expect infix fun ShortArray?.contentEquals(other: ShortArray?): Boolean\n\n/\*\*\n \* Returns `true` if the two specified arrays are *structurally* equal to one another, \n \* i.e. contain the same number of the same elements in the same order. \n \* \n \* The elements are compared for equality with the

[equals][Any.equals] function.  
 \* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.  
 \* Since Kotlin 1.4: public expect infix fun IntArray?.contentEquals(other: IntArray?): Boolean  
 \* Returns `true` if the two specified arrays are *structurally* equal to one another, i.e. contain the same number of the same elements in the same order.  
 \* The elements are compared for equality with the [equals][Any.equals] function.  
 \* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.  
 \* Since Kotlin 1.4: public expect infix fun LongArray?.contentEquals(other: LongArray?): Boolean  
 \* Returns `true` if the two specified arrays are *structurally* equal to one another, i.e. contain the same number of the same elements in the same order.  
 \* The elements are compared for equality with the [equals][Any.equals] function.  
 \* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.  
 \* Since Kotlin 1.4: public expect infix fun FloatArray?.contentEquals(other: FloatArray?): Boolean  
 \* Returns `true` if the two specified arrays are *structurally* equal to one another, i.e. contain the same number of the same elements in the same order.  
 \* The elements are compared for equality with the [equals][Any.equals] function.  
 \* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.  
 \* Since Kotlin 1.4: public expect infix fun DoubleArray?.contentEquals(other: DoubleArray?): Boolean  
 \* Returns `true` if the two specified arrays are *structurally* equal to one another, i.e. contain the same number of the same elements in the same order.  
 \* The elements are compared for equality with the [equals][Any.equals] function.  
 \* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.  
 \* Since Kotlin 1.4: public expect infix fun BooleanArray?.contentEquals(other: BooleanArray?): Boolean  
 \* Returns `true` if the two specified arrays are *structurally* equal to one another, i.e. contain the same number of the same elements in the same order.  
 \* The elements are compared for equality with the [equals][Any.equals] function.  
 \* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.  
 \* Since Kotlin 1.4: public expect infix fun CharArray?.contentEquals(other: CharArray?): Boolean  
 \* Returns a hash code based on the contents of this array as if it is [List].  
 \* @Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")  
 \* Since Kotlin 1.1: @DeprecatedSinceKotlin(hiddenSince = "1.4") public expect fun <T> Array<out T>.contentHashCode(): Int  
 \* Returns a hash code based on the contents of this array as if it is [List].  
 \* @Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")  
 \* Since Kotlin 1.1: @DeprecatedSinceKotlin(hiddenSince = "1.4") public expect fun ByteArray.contentHashCode(): Int  
 \* Returns a hash code based on the contents of this array as if it is [List].  
 \* @Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")  
 \* Since Kotlin 1.1: @DeprecatedSinceKotlin(hiddenSince = "1.4") public expect fun ShortArray.contentHashCode(): Int  
 \* Returns a hash code based on the contents of this array as if it is [List].  
 \* @Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")  
 \* Since Kotlin 1.1: @DeprecatedSinceKotlin(hiddenSince = "1.4") public expect fun IntArray.contentHashCode(): Int  
 \* Returns a hash code based on the contents of this array as if it is [List].  
 \* @Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")  
 \* Since Kotlin 1.1: @DeprecatedSinceKotlin(hiddenSince = "1.4") public expect fun LongArray.contentHashCode(): Int  
 \* Returns a hash code based on the contents of this array as if it is [List].  
 \* @Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")  
 \* Since Kotlin 1.1: @DeprecatedSinceKotlin(hiddenSince = "1.4") public expect fun FloatArray.contentHashCode(): Int  
 \* Returns a hash code based on the contents of this array as if it is [List].  
 \* @Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")  
 \* Since Kotlin 1.1: @DeprecatedSinceKotlin(hiddenSince = "1.4") public expect fun DoubleArray.contentHashCode(): Int  
 \* Returns a hash code based on the contents of this array as if it is [List].  
 \* @Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")  
 \* Since Kotlin 1.1: @DeprecatedSinceKotlin(hiddenSince = "1.4") public expect fun BooleanArray.contentHashCode(): Int  
 \* Returns a hash code based on the contents of this array as if it is

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[List].\n *\n@Deprecated(\nUse Kotlin compiler 1.4 to avoid deprecation
warning.\n)\n@SinceKotlin(\n1.1\n)\n@DeprecatedSinceKotlin(hiddenSince = \n1.4\n)\npublic expect fun
CharArray.contentHashCode(): Int\n\n**\n * Returns a hash code based on the contents of this array as if it is
[List].\n *\n@SinceKotlin(\n1.4\n)\npublic expect fun <T> Array<out T>?.contentHashCode(): Int\n\n**\n
 * Returns a hash code based on the contents of this array as if it is [List].\n *\n@SinceKotlin(\n1.4\n)\npublic
expect fun ByteArray?.contentHashCode(): Int\n\n**\n * Returns a hash code based on the contents of this array as
if it is [List].\n *\n@SinceKotlin(\n1.4\n)\npublic expect fun ShortArray?.contentHashCode(): Int\n\n**\n *
Returns a hash code based on the contents of this array as if it is [List].\n *\n@SinceKotlin(\n1.4\n)\npublic expect
fun IntArray?.contentHashCode(): Int\n\n**\n * Returns a hash code based on the contents of this array as if it is
[List].\n *\n@SinceKotlin(\n1.4\n)\npublic expect fun LongArray?.contentHashCode(): Int\n\n**\n * Returns a
hash code based on the contents of this array as if it is [List].\n *\n@SinceKotlin(\n1.4\n)\npublic expect fun
FloatArray?.contentHashCode(): Int\n\n**\n * Returns a hash code based on the contents of this array as if it is
[List].\n *\n@SinceKotlin(\n1.4\n)\npublic expect fun DoubleArray?.contentHashCode():
Int\n\n**\n * Returns a hash code based on the contents of this array as if it is [List].\n
*\n@SinceKotlin(\n1.4\n)\npublic expect fun BooleanArray?.contentHashCode(): Int\n\n**\n * Returns a hash
code based on the contents of this array as if it is [List].\n *\n@SinceKotlin(\n1.4\n)\npublic expect fun
CharArray?.contentHashCode(): Int\n\n**\n * Returns a string representation of the contents of the specified array
as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*\n@Deprecated(\nUse Kotlin compiler 1.4 to avoid deprecation
warning.\n)\n@SinceKotlin(\n1.1\n)\n@DeprecatedSinceKotlin(hiddenSince = \n1.4\n)\npublic expect fun <T>
Array<out T>.contentToString(): String\n\n**\n * Returns a string representation of the contents of the specified
array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*\n@Deprecated(\nUse Kotlin compiler 1.4 to avoid deprecation
warning.\n)\n@SinceKotlin(\n1.1\n)\n@DeprecatedSinceKotlin(hiddenSince
= \n1.4\n)\npublic expect fun ByteArray.contentToString(): String\n\n**\n * Returns a string representation of the
contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n *\n@Deprecated(\nUse Kotlin compiler 1.4 to
avoid deprecation warning.\n)\n@SinceKotlin(\n1.1\n)\n@DeprecatedSinceKotlin(hiddenSince = \n1.4\n)\npublic
expect fun ShortArray.contentToString(): String\n\n**\n * Returns a string representation of the contents of the
specified array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*\n@Deprecated(\nUse Kotlin compiler 1.4 to avoid deprecation
warning.\n)\n@SinceKotlin(\n1.1\n)\n@DeprecatedSinceKotlin(hiddenSince = \n1.4\n)\npublic expect fun
IntArray.contentToString(): String\n\n**\n * Returns a string representation of the contents of the specified array as
if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n *\n@Deprecated(\nUse Kotlin compiler 1.4 to
avoid deprecation warning.\n)\n@SinceKotlin(\n1.1\n)\n@DeprecatedSinceKotlin(hiddenSince = \n1.4\n)\npublic
expect fun LongArray.contentToString(): String\n\n**\n * Returns a string representation of the contents of the
specified array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*\n@Deprecated(\nUse Kotlin compiler 1.4 to avoid deprecation
warning.\n)\n@SinceKotlin(\n1.1\n)\n@DeprecatedSinceKotlin(hiddenSince = \n1.4\n)\npublic expect fun
FloatArray.contentToString(): String\n\n**\n * Returns a string representation of the contents of the specified array
as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*\n@Deprecated(\nUse Kotlin compiler 1.4 to avoid deprecation
warning.\n)\n@SinceKotlin(\n1.1\n)\n@DeprecatedSinceKotlin(hiddenSince = \n1.4\n)\npublic expect fun
DoubleArray.contentToString():
String\n\n**\n * Returns a string representation of the contents of the specified array as if it is [List].\n * \n *
@sample samples.collections.Arrays.ContentOperations.contentToString\n *\n@Deprecated(\nUse Kotlin compiler
1.4 to avoid deprecation warning.\n)\n@SinceKotlin(\n1.1\n)\n@DeprecatedSinceKotlin(hiddenSince =

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\1.4\)\npublic expect fun BooleanArray.contentToString(): String\n\n/**\n * Returns a string representation of the
contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4 to
avoid deprecation warning.")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic
expect fun CharArray.contentToString(): String\n\n/**\n * Returns a string representation of the contents of the
specified array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*/\n@SinceKotlin("1.4")\npublic
expect fun <T> Array<out T>?.contentToString(): String\n\n/**\n * Returns a string representation of the contents
of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@SinceKotlin("1.4")\npublic expect fun
ByteArray?.contentToString(): String\n\n/**\n * Returns a string representation of the contents of the specified array
as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*/\n@SinceKotlin("1.4")\npublic expect fun ShortArray?.contentToString(): String\n\n/**\n * Returns a string
representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@SinceKotlin("1.4")\npublic expect fun
IntArray?.contentToString(): String\n\n/**\n * Returns a string representation of the contents of the specified array
as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*/\n@SinceKotlin("1.4")\npublic expect fun LongArray?.contentToString(): String\n\n/**\n * Returns a string
representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@SinceKotlin("1.4")\npublic expect fun
FloatArray?.contentToString(): String\n\n/**\n * Returns a string representation of the contents of the specified
array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*/\n@SinceKotlin("1.4")\npublic expect fun DoubleArray?.contentToString(): String\n\n/**\n * Returns a string
representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@SinceKotlin("1.4")\npublic expect fun
BooleanArray?.contentToString(): String\n\n/**\n * Returns a string representation of the contents of the specified
array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*/\n@SinceKotlin("1.4")\npublic expect fun CharArray?.contentToString(): String\n\n/**\n * Copies this array or
its subrange into the [destination] array and returns that array.\n * \n * It's allowed to pass the same array in the
[destination] and even specify the subrange so that it overlaps with the destination range.\n * \n * @param
destination the array to copy to.\n * @param destinationOffset the position in the [destination] array to copy to, 0 by
default.\n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param
endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * \n * @throws
IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this
array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange
doesn't
fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the
[destination] array indices range.\n * \n * @return the [destination] array.\n */\n@SinceKotlin("1.3")\npublic
expect fun <T> Array<out T>.copyInto(destination: Array<T>, destinationOffset: Int = 0, startIndex: Int = 0,
endIndex: Int = size): Array<T>\n\n/**\n * Copies this array or its subrange into the [destination] array and returns
that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it
overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset
the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of
the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this
array by default.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException]
when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws
IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified
[destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the

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[destination] array.\n \*^n@SinceKotlin("1.3")\npublic expect fun ByteArray.copyInto(destination: ByteArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): ByteArray\n/n/\*\*\n \* Copies this array or its subrange into the [destination] array and returns that array.\n \* \n \* It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n \* \n \* @param destination the array to copy to.\n \* @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n \* @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n \* @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n \* \n \* @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n \* @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n \* or when that index is out of the [destination] array indices range.\n \* \n \* @return the [destination] array.\n \*^n@SinceKotlin("1.3")\npublic expect fun ShortArray.copyInto(destination: ShortArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): ShortArray\n/n/\*\*\n \* Copies this array or its subrange into the [destination] array and returns that array.\n \* \n \* It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n \* \n \* @param destination the array to copy to.\n \* @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n \* @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n \* @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n \* \n \* @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n \* @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n \* or when that index is out of the [destination] array indices range.\n \* \n \* @return the [destination] array.\n \*^n@SinceKotlin("1.3")\npublic expect fun IntArray.copyInto(destination: IntArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): IntArray\n/n/\*\*\n \* Copies this array or its subrange into the [destination] array and returns that array.\n \* \n \* It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n \* \n \* @param destination the array to copy to.\n \* @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n \* @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n \* @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n \* \n \* @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n \* @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n \* or when that index is out of the [destination] array indices range.\n \* \n \* @return the [destination] array.\n \*^n@SinceKotlin("1.3")\npublic expect fun LongArray.copyInto(destination: LongArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): LongArray\n/n/\*\*\n \* Copies this array or its subrange into the [destination] array and returns that array.\n \* \n \* It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n \* \n \* @param destination the array to copy to.\n \* @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n \* @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n \* @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n \* \n \* @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n \* @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n \* or when that index is out of the [destination] array indices range.\n \* \n \* @return the [destination] array.\n \*^n@SinceKotlin("1.3")\npublic expect fun FloatArray.copyInto(destination: FloatArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): FloatArray\n/n/\*\*\n \* Copies this array or its subrange into the [destination] array and returns that array.\n \* \n \* It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n \* \n \* @param destination the array to copy to.\n \* @param destinationOffset the position in the

[destination] array to copy to, 0 by default.\n \* @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n \* @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n \* \n \* @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n

\* @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n \* or when that index is out of the [destination] array indices range.\n \* \n \* @return the [destination] array.\n \* \n \* @SinceKotlin("1.3")\n \* \n \* public expect fun DoubleArray.copyInto(destination: DoubleArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): DoubleArray\n \* \n \* Copies this array or its subrange into the [destination] array and returns that array.\n \* \n \* It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n \* \n \* @param destination the array to copy to.\n \* @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n \* @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n \* @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n

\n \* \n \* @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n \* @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n \* or when that index is out of the [destination] array indices range.\n \* \n \* @return the [destination] array.\n

\* \n \* @SinceKotlin("1.3")\n \* \n \* public expect fun BooleanArray.copyInto(destination: BooleanArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): BooleanArray\n \* \n \* Copies this array or its subrange into the [destination] array and returns that array.\n \* \n \* It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n \* \n \* @param destination the array to copy to.\n \* @param destinationOffset the position in the [destination] array to copy to, 0 by

default.\n \* @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n \* @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n \* \n \* @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n \* @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n \* or when that index is out of the [destination] array indices range.\n \* \n \* @return the [destination] array.\n \* \n \* @SinceKotlin("1.3")\n \* \n \* public expect fun CharArray.copyInto(destination: CharArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): CharArray\n \* \n \* Returns new array which is a copy of the original array.\n \* \n \* @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n

\* \n \* @Suppress("NO\_ACTUAL\_FOR\_EXPECT")\n \* \n \* public expect fun <T>

Array<T>.copyOf(): Array<T>\n \* \n \* Returns new array which is a copy of the original array.\n \* \n \* @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n

\* \n \* public expect fun ByteArray.copyOfOf():

ByteArray\n \* \n \* Returns new array which is a copy of the original array.\n \* \n \* @sample

samples.collections.Arrays.CopyOfOperations.copyOfOf\n \* \n \* public expect fun ShortArray.copyOfOf():

ShortArray\n \* \n \* Returns new array which is a copy of the original array.\n \* \n \* @sample

samples.collections.Arrays.CopyOfOperations.copyOfOf\n \* \n \* public expect fun IntArray.copyOfOf(): IntArray\n \* \n \* Returns new array which is a copy of the original array.\n \* \n \* @sample

samples.collections.Arrays.CopyOfOperations.copyOfOf\n \* \n \* public expect fun LongArray.copyOfOf():

LongArray\n \* \n \* Returns new array which is a copy of the original array.\n \* \n \* @sample

samples.collections.Arrays.CopyOfOperations.copyOfOf\n \* \n \* public expect fun FloatArray.copyOfOf():

FloatArray\n \* \n \* Returns new

array which is a copy of the original array.\n \* \n \* @sample

samples.collections.Arrays.CopyOfOperations.copyOfOf\n \* \n \* public expect fun DoubleArray.copyOfOf():

DoubleArray\n \* \n \* Returns new array which is a copy of the original array.\n \* \n \* @sample

samples.collections.Arrays.CopyOfOperations.copyOfOf\n \* \n \* public expect fun BooleanArray.copyOfOf():

BooleanArray\n \* \n \* Returns new array which is a copy of the original array.\n \* \n \* @sample

samples.collections.Arrays.CopyOfOperations.copyOf\n \*/\npublic expect fun CharArray.copyOf():  
 CharArray\n\n/\*\*\n \* Returns new array which is a copy of the original array, resized to the given [newSize].\n \*  
 The copy is either truncated or padded at the end with zero values if necessary.\n \* \n \* - If [newSize] is less than the  
 size of the original array, the copy array is truncated to the [newSize].\n \* - If [newSize] is greater than the size of  
 the original array, the extra elements in the copy array are filled with zero values.\n \* \n  
 \* @sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n \*/\npublic expect fun  
 ByteArray.copyOf(newSize: Int): ByteArray\n\n/\*\*\n \* Returns new array which is a copy of the original array,  
 resized to the given [newSize].\n \* The copy is either truncated or padded at the end with zero values if necessary.\n  
 \* \n \* - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n \* - If  
 [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero  
 values.\n \* \n \* @sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n \*/\npublic  
 expect fun ShortArray.copyOf(newSize: Int): ShortArray\n\n/\*\*\n \* Returns new array which is a copy of the  
 original array, resized to the given [newSize].\n \* The copy is either truncated or padded at the end with zero values  
 if necessary.\n \* \n \* - If [newSize] is less than the size of the original array, the copy array is  
 truncated to the [newSize].\n \* - If [newSize] is greater than the size of the original array, the extra elements in the  
 copy array are filled with zero values.\n \* \n \* @sample  
 samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n \*/\npublic expect fun  
 IntArray.copyOf(newSize: Int): IntArray\n\n/\*\*\n \* Returns new array which is a copy of the original array, resized  
 to the given [newSize].\n \* The copy is either truncated or padded at the end with zero values if necessary.\n \* \n \* -  
 If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n \* - If [newSize]  
 is greater than the size of the original array, the extra elements in the copy array are filled with zero values.\n \* \n \*  
 @sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n \*/\npublic expect fun  
 LongArray.copyOf(newSize: Int): LongArray\n\n/\*\*\n \* Returns new array which is a copy of the original array,  
 resized to the given [newSize].\n \* The  
 copy is either truncated or padded at the end with zero values if necessary.\n \* \n \* - If [newSize] is less than the  
 size of the original array, the copy array is truncated to the [newSize].\n \* - If [newSize] is greater than the size of  
 the original array, the extra elements in the copy array are filled with zero values.\n \* \n \* @sample  
 samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n \*/\npublic expect fun  
 FloatArray.copyOf(newSize: Int): FloatArray\n\n/\*\*\n \* Returns new array which is a copy of the original array,  
 resized to the given [newSize].\n \* The copy is either truncated or padded at the end with zero values if necessary.\n  
 \* \n \* - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n \* - If  
 [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero  
 values.\n \* \n \* @sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n \*/\npublic  
 expect fun DoubleArray.copyOf(newSize: Int): DoubleArray\n\n/\*\*\n \* Returns new array which is a copy of the  
 original array, resized to the given [newSize].\n \* The copy is either truncated or padded at the end with `false`  
 values if necessary.\n \* \n \* - If [newSize] is less than the size of the original array, the copy array is truncated to the  
 [newSize].\n \* - If [newSize] is greater than the size of the original array, the extra elements in the copy array are  
 filled with `false` values.\n \* \n \* @sample  
 samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n \*/\npublic expect fun  
 BooleanArray.copyOf(newSize: Int): BooleanArray\n\n/\*\*\n \* Returns new array which is a copy of the original  
 array, resized to the given [newSize].\n \* The copy is either truncated or padded at the end with null char (`\u0000`)  
 values if necessary.\n \* \n \* - If [newSize] is less than the size of the original array, the copy array is truncated to the  
 [newSize].\n \* - If [newSize] is greater  
 than the size of the original array, the extra elements in the copy array are filled with null char (`\u0000`) values.\n  
 \* \n \* @sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n \*/\npublic expect fun  
 CharArray.copyOf(newSize: Int): CharArray\n\n/\*\*\n \* Returns new array which is a copy of the original array,  
 resized to the given [newSize].\n \* The copy is either truncated or padded at the end with `null` values if  
 necessary.\n \* \n \* - If [newSize] is less than the size of the original array, the copy array is truncated to the

[newSize].\n \* - If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with `null` values.\n \* \n \* @sample samples.collections.Arrays.CopyOfOperations.resizingCopyOf\n \* \n \* @SuppressWarnings("NO\_ACTUAL\_FOR\_EXPECT")\n \* public expect fun <T> Array<T>.copyOf(newSize: Int): Array<T?>\n \* \n \* Returns a new array which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n \* @SuppressWarnings("NO\_ACTUAL\_FOR\_EXPECT")\n \* public expect fun <T> Array<T>.copyOfRange(fromIndex: Int, toIndex: Int): Array<T>\n \* \n \* Returns a new array which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n \* public expect fun ByteArray.copyOfRange(fromIndex: Int, toIndex: Int): ByteArray\n \* \n \* Returns a new array which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n \* public expect fun ShortArray.copyOfRange(fromIndex: Int, toIndex: Int): ShortArray\n \* \n \* Returns a new array which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n \* public expect fun IntArray.copyOfRange(fromIndex: Int, toIndex: Int): IntArray\n \* \n \* Returns a new array which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n \* public expect fun LongArray.copyOfRange(fromIndex: Int, toIndex: Int): LongArray\n \* \n \* Returns a new array which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n \* public expect fun FloatArray.copyOfRange(fromIndex: Int, toIndex: Int): FloatArray\n \* \n \* Returns a new array which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n \* public expect fun DoubleArray.copyOfRange(fromIndex: Int, toIndex: Int): DoubleArray\n \* \n \* Returns a new array which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n \* public expect fun BooleanArray.copyOfRange(fromIndex: Int, toIndex: Int): BooleanArray\n \* \n \* Returns a new array which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* \n \*

@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n public expect fun  
 CharArray.copyOfRange(fromIndex: Int, toIndex: Int): CharArray\n \* \n \* Fills this array or its subrange with the  
 specified [element] value.\n \* \n \* @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n \* \n \*  
 @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n \* \n \* @throws  
 IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n  
 \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n @SinceKotlin("1.3")\n public  
 expect fun <T> Array<T>.fill(element: T, fromIndex: Int = 0, toIndex: Int = size): Unit\n \* \n \* Fills this array or  
 its subrange with the specified [element] value.\n \* \n \* @param fromIndex the start of the range (inclusive) to fill,  
 0 by default.\n \* @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n \* \n \*  
 @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this  
 array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n  
 \* \n @SinceKotlin("1.3")\n public expect fun ByteArray.fill(element: Byte, fromIndex: Int = 0, toIndex: Int = size):  
 Unit\n \* \n \* Fills this array or its subrange with the specified [element] value.\n \* \n \* @param fromIndex the  
 start of the range (inclusive) to fill, 0 by default.\n \* @param toIndex the end of the range (exclusive)  
 to fill, size of this array by default.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero  
 or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater  
 than [toIndex].\n \* \n @SinceKotlin("1.3")\n public expect fun ShortArray.fill(element: Short, fromIndex: Int = 0,  
 toIndex: Int = size): Unit\n \* \n \* Fills this array or its subrange with the specified [element] value.\n \* \n \*  
 @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n \* @param toIndex the end of the range  
 (exclusive) to fill, size of this array by default.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less  
 than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is  
 greater than [toIndex].\n \* \n @SinceKotlin("1.3")\n public expect fun IntArray.fill(element: Int, fromIndex: Int = 0,  
 toIndex: Int = size): Unit\n \* \n \* Fills this array or  
 its subrange with the specified [element] value.\n \* \n \* @param fromIndex the start of the range (inclusive) to fill,  
 0 by default.\n \* @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n \* \n \*  
 @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this  
 array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n  
 \* \n @SinceKotlin("1.3")\n public expect fun LongArray.fill(element: Long, fromIndex: Int = 0, toIndex: Int =  
 size): Unit\n \* \n \* Fills this array or its subrange with the specified [element] value.\n \* \n \* @param fromIndex  
 the start of the range (inclusive) to fill, 0 by default.\n \* @param toIndex the end of the range (exclusive) to fill, size  
 of this array by default.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex]  
 is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater  
 than [toIndex].\n \* \n @SinceKotlin("1.3")\n public expect fun FloatArray.fill(element: Float, fromIndex: Int = 0,  
 toIndex: Int = size): Unit\n \* \n \* Fills this array or its subrange with the specified [element] value.\n \* \n \*  
 @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n \* @param toIndex the end of the range  
 (exclusive) to fill, size of this array by default.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less  
 than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is  
 greater than [toIndex].\n \* \n @SinceKotlin("1.3")\n public expect fun DoubleArray.fill(element: Double,  
 fromIndex: Int = 0, toIndex: Int = size): Unit\n \* \n \* Fills this array or its subrange with the specified [element]  
 value.\n \* \n \* @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n \* @param toIndex the end  
 of the range (exclusive) to fill, size of this array by default.\n \* \n \*  
 \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this  
 array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n  
 \* \n @SinceKotlin("1.3")\n public expect fun BooleanArray.fill(element: Boolean, fromIndex: Int = 0, toIndex: Int  
 = size): Unit\n \* \n \* Fills this array or its subrange with the specified [element] value.\n \* \n \* @param  
 fromIndex the start of the range (inclusive) to fill, 0 by default.\n \* @param toIndex the end of the range (exclusive)  
 to fill, size of this array by default.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero  
 or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater

than [toIndex].\n \*\n@SinceKotlin("1.3")\npublic expect fun CharArray.fill(element: Char, fromIndex: Int = 0, toIndex: Int = size): Unit\n\n\*\*\n \* Returns the range of valid indices for the array.\n \*\npublic val <T> Array<out T>.indices: IntRange\n get() = IntRange(0, lastIndex)\n\n\*\*\n \* Returns the range of valid indices for the array.\n \*\npublic val ByteArray.indices: IntRange\n get() = IntRange(0, lastIndex)\n\n\*\*\n \* Returns the range of valid indices for the array.\n \*\npublic val ShortArray.indices: IntRange\n get() = IntRange(0, lastIndex)\n\n\*\*\n \* Returns the range of valid indices for the array.\n \*\npublic val IntArray.indices: IntRange\n get() = IntRange(0, lastIndex)\n\n\*\*\n \* Returns the range of valid indices for the array.\n \*\npublic val LongArray.indices: IntRange\n get() = IntRange(0, lastIndex)\n\n\*\*\n \* Returns the range of valid indices for the array.\n \*\npublic val FloatArray.indices: IntRange\n get() = IntRange(0, lastIndex)\n\n\*\*\n \* Returns the range of valid indices for the array.\n \*\npublic val DoubleArray.indices: IntRange\n get() = IntRange(0, lastIndex)\n\n\*\*\n \* Returns the range of valid indices for the array.\n \*\npublic val BooleanArray.indices: IntRange\n get() = IntRange(0, lastIndex)\n\n\*\*\n \* Returns the range of valid indices for the array.\n \*\npublic val CharArray.indices: IntRange\n get() = IntRange(0, lastIndex)\n\n\*\*\n \* Returns `true` if the array is empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.isEmpty(): Boolean {\n return size == 0\n}\n\n\*\*\n \* Returns `true` if the array is empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.isEmpty(): Boolean {\n return size == 0\n}\n\n\*\*\n \* Returns `true` if the array is empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.isEmpty(): Boolean {\n return size == 0\n}\n\n\*\*\n \* Returns `true` if the array is empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.isEmpty(): Boolean {\n return size == 0\n}\n\n\*\*\n \* Returns `true` if the array is empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.isEmpty(): Boolean {\n return size == 0\n}\n\n\*\*\n \* Returns `true` if the array is empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.isEmpty(): Boolean {\n return size == 0\n}\n\n\*\*\n \* Returns `true` if the array is empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.isEmpty(): Boolean {\n return size == 0\n}\n\n\*\*\n \* Returns `true` if the array is empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.isEmpty(): Boolean {\n return size == 0\n}\n\n\*\*\n \* Returns `true` if the array is not empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.isNotEmpty(): Boolean {\n return !isEmpty()\n}\n\n\*\*\n \* Returns `true` if the array is not empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.isNotEmpty(): Boolean {\n return !isEmpty()\n}\n\n\*\*\n \* Returns `true` if the array is not empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.isNotEmpty(): Boolean {\n return !isEmpty()\n}\n\n\*\*\n \* Returns `true` if the array is not empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.isNotEmpty(): Boolean {\n return !isEmpty()\n}\n\n\*\*\n \* Returns `true` if the array is not empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.isNotEmpty(): Boolean {\n return !isEmpty()\n}\n\n\*\*\n \* Returns `true` if the array is not empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.isNotEmpty(): Boolean {\n return !isEmpty()\n}\n\n\*\*\n \* Returns `true` if the array is not empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.isNotEmpty(): Boolean {\n return !isEmpty()\n}\n\n\*\*\n \* Returns `true` if the array is not empty.\n \*\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.isNotEmpty(): Boolean {\n return !isEmpty()\n}\n\n\*\*\n \* Returns the last valid index for the array.\n \*\npublic val <T> Array<out T>.lastIndex: Int\n get() = size - 1\n\n\*\*\n \* Returns the last valid index for the array.\n \*\npublic val ByteArray.lastIndex: Int\n get() = size - 1\n\n\*\*\n \* Returns the last valid index for the array.\n \*\npublic val ShortArray.lastIndex: Int\n get() = size - 1\n\n\*\*\n \* Returns the last valid index for the array.\n \*\npublic val IntArray.lastIndex: Int\n get() = size - 1\n\n\*\*\n \* Returns the last valid index for the array.\n \*\npublic val LongArray.lastIndex: Int\n get() = size - 1\n\n\*\*\n \* Returns the last valid index for the array.\n \*\npublic val FloatArray.lastIndex: Int\n get() = size - 1\n\n\*\*\n \* Returns the last valid index for the array.\n \*\npublic val

DoubleArray.lastIndex: Int\n get() = size - 1\n\n\*\*\n
 \* Returns the last valid index for the array.\n \*\npublic val BooleanArray.lastIndex: Int\n get() = size - 1\n\n\*\*\n
 \* Returns the last valid index for the array.\n \*\npublic val CharArray.lastIndex: Int\n get() = size - 1\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then the given [element].\n
 \*\n\n@Suppress("NO\_ACTUAL\_FOR\_EXPECT")\n\npublic expect operator fun <T> Array<T>.plus(element: T): Array<T>\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then the given [element].\n
 \*\n\npublic expect operator fun ByteArray.plus(element: Byte): ByteArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then the given [element].\n
 \*\n\npublic expect operator fun ShortArray.plus(element: Short): ShortArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then the given [element].\n
 \*\n\npublic expect operator fun IntArray.plus(element: Int): IntArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then the given [element].\n
 \*\n\npublic expect operator fun LongArray.plus(element: Long): LongArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then the given [element].\n
 \*\n\npublic expect operator fun FloatArray.plus(element: Float): FloatArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then the given [element].\n
 \*\n\npublic expect operator fun DoubleArray.plus(element: Double): DoubleArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then the given [element].\n
 \*\n\npublic expect operator fun BooleanArray.plus(element: Boolean): BooleanArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then the given [element].\n
 \*\n\npublic expect operator fun CharArray.plus(element: Char): CharArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n
 \*\n\n@Suppress("NO\_ACTUAL\_FOR\_EXPECT")\n\npublic expect operator fun <T> Array<T>.plus(elements: Collection<T>): Array<T>\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n
 \*\n\npublic expect operator fun ByteArray.plus(elements: Collection<Byte>): ByteArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n
 \*\n\npublic expect operator fun ShortArray.plus(elements: Collection<Short>): ShortArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n
 \*\n\npublic expect operator fun IntArray.plus(elements: Collection<Int>): IntArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n
 \*\n\npublic expect operator fun LongArray.plus(elements: Collection<Long>): LongArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n
 \*\n\npublic expect operator fun FloatArray.plus(elements: Collection<Float>): FloatArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n
 \*\n\npublic expect operator fun DoubleArray.plus(elements: Collection<Double>): DoubleArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n
 \*\n\npublic expect operator fun BooleanArray.plus(elements: Collection<Boolean>): BooleanArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n
 \*\n\npublic expect operator fun CharArray.plus(elements: Collection<Char>): CharArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n
 \*\n\n@Suppress("NO\_ACTUAL\_FOR\_EXPECT")\n\npublic expect operator fun <T> Array<T>.plus(elements: Array<out T>): Array<T>\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n
 \*\n\npublic expect operator fun ByteArray.plus(elements: ByteArray): ByteArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n
 \*\n\npublic expect operator fun ShortArray.plus(elements: ShortArray): ShortArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n
 \*\n\npublic expect operator fun IntArray.plus(elements: IntArray): IntArray\n\n\*\*\n
 \* Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n
 \*\n\npublic expect operator fun LongArray.plus(elements: LongArray): LongArray\n\n\*\*\n



\* Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n \*/\npublic expect operator fun FloatArray.plus(elements: FloatArray): FloatArray\n\n/\*\*\n \* Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n \*/\npublic expect operator fun DoubleArray.plus(elements: DoubleArray): DoubleArray\n\n/\*\*\n \* Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n \*/\npublic expect operator fun BooleanArray.plus(elements: BooleanArray): BooleanArray\n\n/\*\*\n \* Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n \*/\npublic expect operator fun CharArray.plus(elements: CharArray): CharArray\n\n/\*\*\n \* Returns an array containing all elements of the original array and then the given [element].\n \*/\n@Suppress("NO\_ACTUAL\_FOR\_EXPECT")\npublic expect fun <T> Array<T>.plusElement(element: T): Array<T>\n\n/\*\*\n \* Sorts the array in-place.\n \*/\n \* \n \* @sample samples.collections.Arrays.Sorting.sortArray\n \*/\npublic expect fun IntArray.sort(): Unit\n\n/\*\*\n \* Sorts the array in-place.\n \*/\n \* \n \* @sample samples.collections.Arrays.Sorting.sortArray\n \*/\npublic expect fun LongArray.sort(): Unit\n\n/\*\*\n \* Sorts the array in-place.\n \*/\n \* \n \* @sample samples.collections.Arrays.Sorting.sortArray\n \*/\npublic expect fun ByteArray.sort(): Unit\n\n/\*\*\n \* Sorts the array in-place.\n \*/\n \* \n \* @sample samples.collections.Arrays.Sorting.sortArray\n \*/\npublic expect fun ShortArray.sort(): Unit\n\n/\*\*\n \* Sorts the array in-place.\n \*/\n \* \n \* @sample samples.collections.Arrays.Sorting.sortArray\n \*/\npublic expect fun DoubleArray.sort(): Unit\n\n/\*\*\n \* Sorts the array in-place.\n \*/\n \* \n \* @sample samples.collections.Arrays.Sorting.sortArray\n \*/\npublic expect fun FloatArray.sort(): Unit\n\n/\*\*\n \* Sorts the array in-place according to the natural order of its elements.\n \*/\n \* \n \* The sort is `_stable_`. It means that equal elements preserve their order relative to each other after sorting.\n \*/\n \* \n \* @sample samples.collections.Arrays.Sorting.sortArrayOfComparable\n \*/\npublic expect fun <T : Comparable<T>> Array<out T>.sort(): Unit\n\n/\*\*\n \* Sorts a range in the array in-place.\n \*/\n \* \n \* The sort is `_stable_`. It means that equal elements preserve their order relative to each other after sorting.\n \*/\n \* \n \* @param fromIndex the start of the range (inclusive) to sort, 0 by default.\n \*/\n \* @param toIndex the end of the range (exclusive) to sort, size of this array by default.\n \*/\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \*/\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \*/\n \* \n \* @sample samples.collections.Arrays.Sorting.sortRangeOfArrayOfComparable\n \*/\n@SinceKotlin("1.4")\npublic expect fun <T : Comparable<T>> Array<out T>.sort(fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/\*\*\n \* Sorts a range in the array in-place.\n \*/\n \* \n \* @param fromIndex the start of the range (inclusive) to sort, 0 by default.\n \*/\n \* @param toIndex the end of the range (exclusive) to sort, size of this array by default.\n \*/\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \*/\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \*/\n \* \n \* @sample samples.collections.Arrays.Sorting.sortRangeOfArray\n \*/\n@SinceKotlin("1.4")\npublic expect fun ByteArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/\*\*\n \* Sorts a range in the array in-place.\n \*/\n \* \n \* @param fromIndex the start of the range (inclusive) to sort, 0 by default.\n \*/\n \* @param toIndex the end of the range (exclusive) to sort, size of this array by default.\n \*/\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \*/\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \*/\n \* \n \* @sample samples.collections.Arrays.Sorting.sortRangeOfArray\n \*/\n@SinceKotlin("1.4")\npublic expect fun ShortArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/\*\*\n \* Sorts a range in the array in-place.\n \*/\n \* \n \* @param fromIndex the start of the range (inclusive) to sort, 0 by default.\n \*/\n \* @param toIndex the end of the range (exclusive) to sort, size of this array by default.\n \*/\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \*/\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \*/\n \* \n \* @sample samples.collections.Arrays.Sorting.sortRangeOfArray\n \*/\n@SinceKotlin("1.4")\npublic expect fun IntArray.sort(fromIndex: Int = 0, toIndex:

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Int = size): Unit\n\n/**\n * Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the range
(inclusive) to sort, 0 by default.\n * @param toIndex the end of the range (exclusive) to sort, size of this array by
default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than
the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n *
@sample samples.collections.Arrays.Sorting.sortRangeOfArray\n *\n@SinceKotlin("1.4")\npublic expect fun
LongArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n * Sorts a range in the array in-place.\n * \n *
@param fromIndex the start of the range (inclusive) to sort, 0 by default.\n * @param toIndex the end of the range
(exclusive) to sort, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is
less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException
if [fromIndex] is greater than [toIndex].\n * \n * @sample samples.collections.Arrays.Sorting.sortRangeOfArray\n
*\n@SinceKotlin("1.4")\npublic expect fun FloatArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n
* Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the range (inclusive) to sort, 0 by
default.\n * @param toIndex the end of the range (exclusive) to sort, size of this array by default.\n * \n *
@throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n *
@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n * @sample
samples.collections.Arrays.Sorting.sortRangeOfArray\n *\n@SinceKotlin("1.4")\npublic expect fun
DoubleArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n * Sorts a range in the array in-place.\n * \n
@param fromIndex the start of the range (inclusive) to sort, 0 by default.\n * @param toIndex
the end of the range (exclusive) to sort, size of this array by default.\n * \n * @throws IndexOutOfBoundsException
if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n * @sample
samples.collections.Arrays.Sorting.sortRangeOfArray\n *\n@SinceKotlin("1.4")\npublic expect fun
CharArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n * Sorts elements of the array in the specified
range in-place.\n * The elements are sorted descending according to their natural sort order.\n * \n * The sort is
stable. It means that equal elements preserve their order relative to each other after sorting.\n * \n * @param
fromIndex the start of the range (inclusive) to sort.\n * @param toIndex the end of the range (exclusive) to sort.\n *
@throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of
this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\n@SinceKotlin("1.4")\npublic fun <T :
Comparable<T>> Array<out T>.sortDescending(fromIndex: Int, toIndex: Int): Unit {\n sortWith(reverseOrder(),
fromIndex, toIndex)\n}\n\n/**\n * Sorts elements of the array in the specified range in-place.\n * The elements are
sorted descending according to their natural sort order.\n * \n * @param fromIndex the start of the range (inclusive)
to sort.\n * @param toIndex the end of the range (exclusive) to sort.\n * \n * @throws IndexOutOfBoundsException
if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\n@SinceKotlin("1.4")\npublic fun
ByteArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {\n sort(fromIndex, toIndex)\n reverse(fromIndex,
toIndex)\n}\n\n/**\n * Sorts elements of the array in the specified range in-place.\n * The elements are
sorted descending according to their natural sort order.\n * \n * @param fromIndex the start of the range (inclusive)
to sort.\n * @param toIndex the end of the range (exclusive) to sort.\n * \n * @throws IndexOutOfBoundsException
if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\n@SinceKotlin("1.4")\npublic fun
ShortArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {\n sort(fromIndex, toIndex)\n reverse(fromIndex,
toIndex)\n}\n\n/**\n * Sorts elements of the array in the specified range in-place.\n * The
elements are sorted descending according to their natural sort order.\n * \n * @param fromIndex the start of the
range (inclusive) to sort.\n * @param toIndex the end of the range (exclusive) to sort.\n * \n * @throws
IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n *
@throws IllegalArgumentException

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if [fromIndex] is greater than [toIndex].\n *\n@SinceKotlin("1.4")\npublic fun
IntArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {\n sort(fromIndex, toIndex)\n reverse(fromIndex,
toIndex)\n}\n\n/**\n * Sorts elements of the array in the specified range in-place.\n * The elements are sorted
descending according to their natural sort order.\n * \n * @param fromIndex the start of the range (inclusive) to
sort.\n * @param toIndex the end of the range (exclusive) to sort.\n * \n * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\n@SinceKotlin("1.4")\npublic fun
LongArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {\n sort(fromIndex, toIndex)\n reverse(fromIndex,
toIndex)\n}\n\n/**\n * Sorts elements of the array in the specified range in-place.\n * The
elements are sorted descending according
to their natural sort order.\n * \n * @param fromIndex the start of the range (inclusive) to sort.\n * @param toIndex
the end of the range (exclusive) to sort.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than
zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is
greater than [toIndex].\n *\n@SinceKotlin("1.4")\npublic fun FloatArray.sortDescending(fromIndex: Int, toIndex:
Int): Unit {\n sort(fromIndex, toIndex)\n reverse(fromIndex, toIndex)\n}\n\n/**\n * Sorts elements of the array
in the specified range in-place.\n * The elements are sorted descending according to their natural sort order.\n * \n *
@param fromIndex the start of the range (inclusive) to sort.\n * @param toIndex the end of the range (exclusive) to
sort.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the
size of this array.\n * @throws IllegalArgumentException if [fromIndex]
is greater than [toIndex].\n *\n@SinceKotlin("1.4")\npublic fun DoubleArray.sortDescending(fromIndex: Int,
toIndex: Int): Unit {\n sort(fromIndex, toIndex)\n reverse(fromIndex, toIndex)\n}\n\n/**\n * Sorts elements of
the array in the specified range in-place.\n * The elements are sorted descending according to their natural sort
order.\n * \n * @param fromIndex the start of the range (inclusive) to sort.\n * @param toIndex the end of the range
(exclusive) to sort.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is
greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
*\n@SinceKotlin("1.4")\npublic fun CharArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {\n sort(fromIndex,
toIndex)\n reverse(fromIndex, toIndex)\n}\n\n/**\n * Sorts the array in-place according to the
order specified by the given [comparator].\n * \n * The sort is _stable_. It means that
equal elements preserve their order relative to each other after sorting.\n *\npublic expect fun <T> Array<out
T>.sortWith(comparator: Comparator<in T>): Unit\n\n/**\n * Sorts a range in the array in-place with the given
[comparator].\n * \n * The sort is _stable_. It means that equal elements preserve their order relative to each other
after sorting.\n * \n * @param fromIndex the start of the range (inclusive) to sort, 0 by default.\n * @param toIndex
the end of the range (exclusive) to sort, size of this array by default.\n * \n * @throws IndexOutOfBoundsException
if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\npublic expect fun <T> Array<out
T>.sortWith(comparator: Comparator<in T>, fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n * Returns an
array of Boolean containing all of the elements of this generic array.\n *\npublic fun Array<out
Boolean>.toBooleanArray():
BooleanArray {\n return BooleanArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of Byte
containing all of the elements of this generic array.\n *\npublic fun Array<out Byte>.toByteArray(): ByteArray {\n
return ByteArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of Char containing all of the
elements of this generic array.\n *\npublic fun Array<out Char>.toCharArray(): CharArray {\n return
CharArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of Double containing all of the elements of
this generic array.\n *\npublic fun Array<out Double>.toDoubleArray(): DoubleArray {\n return
DoubleArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of Float containing all of the elements of
this generic array.\n *\npublic fun Array<out Float>.toFloatArray(): FloatArray {\n return FloatArray(size) {
index -> this[index] }\n}\n\n/**\n * Returns an array of Int containing all of the elements of this

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generic array.\n *\npublic fun Array<out Int>.toIntArray(): IntArray {\n return IntArray(size) { index ->
this[index] }\n}\n\n/**\n * Returns an array of Long containing all of the elements of this generic array.\n *\npublic
fun Array<out Long>.toLongArray(): LongArray {\n return LongArray(size) { index -> this[index] }\n}\n\n/**\n
* Returns an array of Short containing all of the elements of this generic array.\n *\npublic fun Array<out
Short>.toShortArray(): ShortArray {\n return ShortArray(size) { index -> this[index] }\n}\n\n/**\n * Returns a
typed object array containing all of the elements of this primitive array.\n *\npublic expect fun
ByteArray.toTypedArray(): Array<Byte>\n\n/**\n * Returns a *typed* object array containing all of the elements of
this primitive array.\n *\npublic expect fun ShortArray.toTypedArray(): Array<Short>\n\n/**\n * Returns a
typed object array containing all of the elements of this primitive array.\n *\npublic expect fun
IntArray.toTypedArray():
Array<Int>\n\n/**\n * Returns a *typed* object array containing all of the elements of this primitive array.\n
*\npublic expect fun LongArray.toTypedArray(): Array<Long>\n\n/**\n * Returns a *typed* object array
containing all of the elements of this primitive array.\n *\npublic expect fun FloatArray.toTypedArray():
Array<Float>\n\n/**\n * Returns a *typed* object array containing all of the elements of this primitive array.\n
*\npublic expect fun DoubleArray.toTypedArray(): Array<Double>\n\n/**\n * Returns a *typed* object array
containing all of the elements of this primitive array.\n *\npublic expect fun BooleanArray.toTypedArray():
Array<Boolean>\n\n/**\n * Returns a *typed* object array containing all of the elements of this primitive array.\n
*\npublic expect fun CharArray.toTypedArray(): Array<Char>\n\n/**\n * Returns a [Map] containing key-value
pairs provided by [transform] function\n * applied to elements of the given array.\n * \n * If any of two pairs would
have the same key the last one gets added to the map.\n * \n * The returned map preserves the entry iteration order
of the original array.\n * \n * @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n
*\npublic inline fun <T, K, V> Array<out T>.associate(transform: (T) -> Pair<K, V>): Map<K, V> {\n val
capacity = mapCapacity(size).coerceAtLeast(16)\n return associateTo(LinkedHashMap<K, V>(capacity),
transform)\n}\n\n/**\n * Returns a [Map] containing key-value pairs provided by [transform] function\n * applied to
elements of the given array.\n * \n * If any of two pairs would have the same key the last one gets added to the
map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n *\npublic inline fun <K, V>
ByteArray.associate(transform: (Byte) -> Pair<K, V>): Map<K, V> {\n val capacity =
mapCapacity(size).coerceAtLeast(16)\n
return associateTo(LinkedHashMap<K, V>(capacity), transform)\n}\n\n/**\n * Returns a [Map] containing key-
value pairs provided by [transform] function\n * applied to elements of the given array.\n * \n * If any of two pairs
would have the same key the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n *\npublic inline fun <K, V>
ShortArray.associate(transform: (Short) -> Pair<K, V>): Map<K, V> {\n val capacity =
mapCapacity(size).coerceAtLeast(16)\n return associateTo(LinkedHashMap<K, V>(capacity),
transform)\n}\n\n/**\n * Returns a [Map] containing key-value pairs provided by [transform] function\n * applied to
elements of the given array.\n * \n * If any of two pairs would have the same key the last one gets added to the
map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n *\npublic inline fun <K, V>
IntArray.associate(transform: (Int) -> Pair<K, V>): Map<K, V> {\n val capacity =
mapCapacity(size).coerceAtLeast(16)\n return associateTo(LinkedHashMap<K, V>(capacity),
transform)\n}\n\n/**\n * Returns a [Map] containing key-value pairs provided by [transform] function\n * applied to
elements of the given array.\n * \n * If any of two pairs would have the same key the last one gets added to the
map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n *\npublic inline fun <K, V>
LongArray.associate(transform: (Long) -> Pair<K, V>): Map<K, V> {\n val capacity =
mapCapacity(size).coerceAtLeast(16)\n return associateTo(LinkedHashMap<K, V>(capacity),

```

transform)\n}\n\n/\*\*\n \* Returns a [Map] containing key-value pairs provided by [transform] function\n \* applied to elements of the given array.\n \* \n \* If any of two pairs would have the same key the last one gets added to the map.\n \* \n \* The returned map preserves the entry iteration order of the original array.\n \* \n \* @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n \*/\npublic inline fun <K, V> FloatArray.associate(transform: (Float) -> Pair<K, V>): Map<K, V> {\n val capacity = mapCapacity(size).coerceAtLeast(16)\n return associateTo(LinkedHashMap<K, V>(capacity), transform)\n}\n\n/\*\*\n \* Returns a [Map] containing key-value pairs provided by [transform] function\n \* applied to elements of the given array.\n \* \n \* If any of two pairs would have the same key the last one gets added to the map.\n \* \n \* The returned map preserves the entry iteration order of the original array.\n \* \n \* @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n \*/\npublic inline fun <K, V> DoubleArray.associate(transform: (Double) -> Pair<K, V>): Map<K, V> {\n val capacity = mapCapacity(size).coerceAtLeast(16)\n return associateTo(LinkedHashMap<K, V>(capacity), transform)\n}\n\n/\*\*\n \* Returns a [Map] containing key-value pairs provided by [transform] function\n \* applied to elements of the given array.\n \* \n \* If any of two pairs would have the same key the last one gets added to the map.\n \* \n \* The returned map preserves the entry iteration order of the original array.\n \* \n \* @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n \*/\npublic inline fun <K, V> BooleanArray.associate(transform: (Boolean) -> Pair<K, V>): Map<K, V> {\n val capacity = mapCapacity(size).coerceAtLeast(16)\n return associateTo(LinkedHashMap<K, V>(capacity), transform)\n}\n\n/\*\*\n \* Returns a [Map] containing key-value pairs provided by [transform] function\n \* applied to elements of the given array.\n \* \n \* If any of two pairs would have the same key the last one gets added to the map.\n \* \n \* The returned map preserves the entry iteration order of the original array.\n \* \n \* @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n \*/\npublic inline fun <K, V> CharArray.associate(transform: (Char) -> Pair<K, V>): Map<K, V> {\n val capacity = mapCapacity(size).coerceAtLeast(16)\n return associateTo(LinkedHashMap<K, V>(capacity), transform)\n}\n\n/\*\*\n \* Returns a [Map] containing the elements from the given array indexed by the key\n \* returned from [keySelector] function applied to each element.\n \* \n \* If any two elements would have the same key returned by [keySelector] the last one gets added to the map.\n \* \n \* The returned map preserves the entry iteration order of the original array.\n \* \n \* @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n \*/\npublic inline fun <T, K> Array<out T>.associateBy(keySelector: (T) -> K): Map<K, T> {\n val capacity = mapCapacity(size).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K, T>(capacity), keySelector)\n}\n\n/\*\*\n \* Returns a [Map] containing the elements from the given array indexed by the key\n \* returned from [keySelector] function applied to each element.\n \* \n \* If any two elements would have the same key returned by [keySelector] the last one gets added to the map.\n \* \n \* The returned map preserves the entry iteration order of the original array.\n \* \n \* @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n \*/\npublic inline fun <K> ByteArray.associateBy(keySelector: (Byte) -> K): Map<K, Byte> {\n val capacity = mapCapacity(size).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K, Byte>(capacity), keySelector)\n}\n\n/\*\*\n \* Returns a [Map] containing the elements from the given array indexed by the key\n \* returned from [keySelector] function applied to each element.\n \* \n \* If any two elements would have the same key returned by [keySelector] the last one gets added to the map.\n \* \n \* The returned map preserves the entry iteration order of the original array.\n \* \n \* @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n \*/\npublic inline fun <K> ShortArray.associateBy(keySelector: (Short) -> K): Map<K, Short> {\n val capacity = mapCapacity(size).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K, Short>(capacity), keySelector)\n}\n\n/\*\*\n \* Returns a [Map] containing the elements from the given array indexed by the key\n \* returned from [keySelector] function applied to each element.\n \* \n \* If any two elements would have the same key

returned by [keySelector] the last one gets added to the map.\n \* \n \* The returned map preserves the entry iteration order of the original array.\n \* \n \* @sample

```

samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n *\npublic inline fun <K>
IntArray.associateBy(keySelector: (Int) -> K): Map<K, Int> {\n val capacity =
mapCapacity(size).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K,
Int>(capacity), keySelector)\n}\n\n/**\n * Returns a [Map] containing the elements from the given array indexed by
the key\n * returned from [keySelector] function applied to each element.\n * \n * If any two elements would have
the same key returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the
entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n *\npublic inline fun <K>
LongArray.associateBy(keySelector: (Long) -> K): Map<K, Long> {\n val capacity =
mapCapacity(size).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K, Long>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the elements from the given array indexed by the key\n *
returned from [keySelector] function applied to each element.\n * \n * If any two elements would have the same key
returned by [keySelector] the last one gets added to the map.\n *
\n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n *\npublic inline fun <K>
FloatArray.associateBy(keySelector: (Float) -> K): Map<K, Float> {\n val capacity =
mapCapacity(size).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K, Float>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the elements from the given array indexed by the key\n *
returned from [keySelector] function applied to each element.\n * \n * If any two elements would have the same key
returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n *\npublic inline fun <K>
DoubleArray.associateBy(keySelector: (Double) -> K): Map<K, Double> {\n val capacity =
mapCapacity(size).coerceAtLeast(16)\n
return associateByTo(LinkedHashMap<K, Double>(capacity), keySelector)\n}\n\n/**\n * Returns a [Map]
containing the elements from the given array indexed by the key\n * returned from [keySelector] function applied to
each element.\n * \n * If any two elements would have the same key returned by [keySelector] the last one gets
added to the map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n *
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n *\npublic inline fun <K>
BooleanArray.associateBy(keySelector: (Boolean) -> K): Map<K, Boolean> {\n val capacity =
mapCapacity(size).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K, Boolean>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the elements from the given array indexed by the key\n *
returned from [keySelector] function applied to each element.\n * \n * If any two elements would have the same key
returned by [keySelector] the last
one gets added to the map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n
\n * @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n *\npublic inline fun <K>
CharArray.associateBy(keySelector: (Char) -> K): Map<K, Char> {\n val capacity =
mapCapacity(size).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K, Char>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the values provided by [valueTransform] and indexed by
[keySelector] functions applied to elements of the given array.\n * \n * If any two elements would have the same key
returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform\n *\npublic inline
fun <T, K, V> Array<out T>.associateBy(keySelector: (T) -> K, valueTransform: (T) -> V):
Map<K, V> {\n val capacity = mapCapacity(size).coerceAtLeast(16)\n return
associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)\n}\n\n/**\n * Returns a [Map]

```

containing the values provided by [valueTransform] and indexed by [keySelector] functions applied to elements of the given array.

If any two elements would have the same key returned by [keySelector] the last one gets added to the map.

The returned map preserves the entry iteration order of the original array.

```
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform
*/\npublic inline fun <K, V> ByteArray.associateBy(keySelector: (Byte) -> K, valueTransform: (Byte) -> V): Map<K, V> {\n val capacity = mapCapacity(size).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)\n}
```

Returns a [Map] containing the values provided by [valueTransform] and indexed by [keySelector] functions applied to elements of the given array.

If any two elements would have the same key returned by [keySelector] the last one gets added to the map.

The returned map preserves the entry iteration order of the original array.

```
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform
*/\npublic inline fun <K, V> ShortArray.associateBy(keySelector: (Short) -> K, valueTransform: (Short) -> V): Map<K, V> {\n val capacity = mapCapacity(size).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)\n}
```

Returns a [Map] containing the values provided by [valueTransform] and indexed by [keySelector] functions applied to elements of the given array.

If any two elements would have the same key returned by [keySelector] the last one gets added to the map.

The returned map preserves the entry iteration order of the original array.

```
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform
*/\npublic inline fun <K, V> IntArray.associateBy(keySelector: (Int) -> K, valueTransform: (Int) -> V): Map<K, V> {\n val capacity = mapCapacity(size).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)\n}
```

Returns a [Map] containing the values provided by [valueTransform] and indexed by [keySelector] functions applied to elements of the given array.

If any two elements would have the same key returned by [keySelector] the last one gets added to the map.

The returned map preserves the entry iteration order of the original array.

```
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform
*/\npublic inline fun <K, V> LongArray.associateBy(keySelector: (Long) -> K, valueTransform: (Long) -> V): Map<K, V> {\n val capacity = mapCapacity(size).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)\n}
```

Returns a [Map] containing the values provided by [valueTransform] and indexed by [keySelector] functions applied to elements of the given array.

If any two elements would have the same key returned by [keySelector] the last one gets added to the map.

The returned map preserves the entry iteration order of the original array.

```
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform
*/\npublic inline fun <K, V> FloatArray.associateBy(keySelector: (Float) -> K, valueTransform: (Float) -> V): Map<K, V> {\n val capacity = mapCapacity(size).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)\n}
```

Returns a [Map] containing the values provided by [valueTransform] and indexed by [keySelector] functions applied to elements of the given array.

If any two elements would have the same key returned by [keySelector] the last one gets added to the map.

The returned map preserves the entry iteration order of the original array.

```
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform
*/\npublic inline fun <K, V> DoubleArray.associateBy(keySelector: (Double) -> K, valueTransform: (Double) -> V): Map<K, V> {\n val capacity = mapCapacity(size).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)\n}
```

Returns a [Map] containing the values provided by [valueTransform] and indexed by [keySelector] functions applied to elements of the given array.

If any two elements would have the same key returned by [keySelector] the last one gets added to the map.

The returned map preserves the entry iteration order of the original array.

```
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform
```

```

*public inline fun <K, V> BooleanArray.associateBy(keySelector: (Boolean) -> K, valueTransform: (Boolean) -
> V): Map<K, V> {
 val capacity = mapCapacity(size).coerceAtLeast(16)
 return
 associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)
}

* Returns a [Map]
containing the values provided by [valueTransform] and indexed by [keySelector] functions applied to elements of
the given array.
* If any two elements would have the same key returned by [keySelector] the last one gets
added to the map.
* The returned map preserves the entry iteration order of the original array.
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesWithValueTransform
*public inline fun <K, V> CharArray.associateBy(keySelector: (Char) -> K, valueTransform: (Char) -> V):
Map<K, V> {
 val capacity = mapCapacity(size).coerceAtLeast(16)
 return
 associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)
}

* Populates and returns the [destination] mutable map with key-value pairs,
* where key is provided by the
[keySelector] function applied to each element of the given array
* and value is the element itself.
* If any
two elements would have the same key returned by [keySelector] the last one gets added to the map.
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo
*public inline fun <T,
K, M : MutableMap<in K, in T>> Array<out T>.associateByTo(destination: M, keySelector: (T) -> K): M {
 for
(element in this) {
 destination.put(keySelector(element), element)
 }
 return destination
}

* Populates and returns the [destination] mutable map with key-value pairs,
* where key is provided by the
[keySelector] function applied to each element of the given array
* and value is the element itself.
* If any
two elements would have the same key returned by [keySelector] the last
one gets added to the map.
@sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo
*public inline fun <K, M :
MutableMap<in K, in Byte>> ByteArray.associateByTo(destination: M, keySelector: (Byte) -> K): M {
 for
(element in this) {
 destination.put(keySelector(element), element)
 }
 return destination
}

* Populates and returns the [destination] mutable map with key-value pairs,
* where key is provided by the
[keySelector] function applied to each element of the given array
* and value is the element itself.
* If any
two elements would have the same key returned by [keySelector] the last one gets added to the map.
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo
*public inline fun <K,
M : MutableMap<in K, in Short>> ShortArray.associateByTo(destination: M, keySelector: (Short) -> K): M {
 for
(element in this) {
 destination.put(keySelector(element),
 element)
 }
 return destination
}

* Populates and returns the [destination] mutable map with key-
value pairs,
* where key is provided by the [keySelector] function applied to each element of the given array
* and value is the element itself.
* If any two elements would have the same key returned by [keySelector] the
last one gets added to the map.
@sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo
*public inline fun <K, M :
MutableMap<in K, in Int>> IntArray.associateByTo(destination: M, keySelector: (Int) -> K): M {
 for
(element in this) {
 destination.put(keySelector(element), element)
 }
 return destination
}

* Populates and returns the [destination] mutable map with key-value pairs,
* where key is provided by the [keySelector]
function applied to each element of the given array
* and value is the element itself.
* If any two elements
would have the same key returned
by [keySelector] the last one gets added to the map.
@sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo
*public inline fun <K, M :
MutableMap<in K, in Long>> LongArray.associateByTo(destination: M, keySelector: (Long) -> K): M {
 for
(element in this) {
 destination.put(keySelector(element), element)
 }
 return destination
}

* Populates and returns the [destination] mutable map with key-value pairs,
* where key is provided by the
[keySelector] function applied to each element of the given array
* and value is the element itself.
* If any
two elements would have the same key returned by [keySelector] the last one gets added to the map.
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo
*public inline fun <K,
M : MutableMap<in K, in Float>> FloatArray.associateByTo(destination: M, keySelector: (Float) -> K): M {
 for

```



```

(element in this) {\n destination.put(keySelector(element),
element)\n } \n return destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-
value pairs,\n * where key is provided by the [keySelector] function applied to each element of the given array\n *
and value is the element itself.\n * \n * If any two elements would have the same key returned by [keySelector] the
last one gets added to the map.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo\n */\npublic inline fun <K, M :
MutableMap<in K, in Double>> DoubleArray.associateByTo(destination: M, keySelector: (Double) -> K): M {\n
for (element in this) {\n destination.put(keySelector(element), element)\n } \n return destination\n}\n\n/**\n
* Populates and returns the [destination] mutable map with key-value pairs,\n * where key is provided by the
[keySelector] function applied to each element of the given array\n * and value is the element itself.\n * \n * If any
two elements
would have the same key returned by [keySelector] the last one gets added to the map.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo\n */\npublic inline fun <K, M :
MutableMap<in K, in Boolean>> BooleanArray.associateByTo(destination: M, keySelector: (Boolean) -> K): M {\n
for (element in this) {\n destination.put(keySelector(element), element)\n } \n return destination\n}\n\n/**\n
* Populates and returns the [destination] mutable map with key-value pairs,\n * where key is provided by the
[keySelector] function applied to each element of the given array\n * and value is the element itself.\n * \n * If any
two elements would have the same key returned by [keySelector] the last one gets added to the map.\n * \n *
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo\n */\npublic inline fun <K,
M : MutableMap<in K, in Char>> CharArray.associateByTo(destination: M, keySelector: (Char) -> K): M {\n
for (element in this) {\n destination.put(keySelector(element), element)\n } \n return
destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs,\n * where key is
provided by the [keySelector] function and\n * and value is provided by the [valueTransform] function applied to
elements of the given array.\n * \n * If any two elements would have the same key returned by [keySelector] the last
one gets added to the map.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform\n */\npublic
inline fun <T, K, V, M : MutableMap<in K, in V>> Array<out T>.associateByTo(destination: M, keySelector: (T) -
> K, valueTransform: (T) -> V): M {\n for (element in this) {\n destination.put(keySelector(element),
valueTransform(element))\n } \n return destination\n}\n\n/**\n * Populates and returns the [destination] mutable
map with key-value pairs,\n * where key is provided by the [keySelector]
function and\n * and value is provided by the [valueTransform] function applied to elements of the given array.\n *
\n * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.\n *
\n * @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform\n
*/\npublic inline fun <K, V, M : MutableMap<in K, in V>> ByteArray.associateByTo(destination: M, keySelector:
(Byte) -> K, valueTransform: (Byte) -> V): M {\n for (element in this) {\n
destination.put(keySelector(element), valueTransform(element))\n } \n return destination\n}\n\n/**\n * Populates
and returns the [destination] mutable map with key-value pairs,\n * where key is provided by the [keySelector]
function and\n * and value is provided by the [valueTransform] function applied to elements of the given array.\n *
\n * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.\n *
\n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform\n */\npublic
inline fun <K, V, M : MutableMap<in K, in V>> ShortArray.associateByTo(destination: M, keySelector: (Short) ->
K, valueTransform: (Short) -> V): M {\n for (element in this) {\n destination.put(keySelector(element),
valueTransform(element))\n } \n return destination\n}\n\n/**\n * Populates and returns the [destination] mutable
map with key-value pairs,\n * where key is provided by the [keySelector] function and\n * and value is provided by
the [valueTransform] function applied to elements of the given array.\n * \n * If any two elements would have the
same key returned by [keySelector] the last one gets added to the map.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform\n */\npublic

```

```

inline fun <K, V, M : MutableMap<in K, in V>> IntArray.associateByTo(destination: M, keySelector: (Int) -> K,
valueTransform:
(Int) -> V): M {\n for (element in this) {\n destination.put(keySelector(element), valueTransform(element))\n
}\n return destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs,\n *
where key is provided by the [keySelector] function and\n * and value is provided by the [valueTransform] function
applied to elements of the given array.\n * \n * If any two elements would have the same key returned by
[keySelector] the last one gets added to the map.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform\n */\npublic
inline fun <K, V, M : MutableMap<in K, in V>> LongArray.associateByTo(destination: M, keySelector: (Long) ->
K, valueTransform: (Long) -> V): M {\n for (element in this) {\n destination.put(keySelector(element),
valueTransform(element))\n }\n return destination\n}\n\n/**\n * Populates and returns the [destination] mutable
map with key-value
pairs,\n * where key is provided by the [keySelector] function and\n * and value is provided by the
[valueTransform] function applied to elements of the given array.\n * \n * If any two elements would have the same
key returned by [keySelector] the last one gets added to the map.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform\n */\npublic
inline fun <K, V, M : MutableMap<in K, in V>> FloatArray.associateByTo(destination: M, keySelector: (Float) ->
K, valueTransform: (Float) -> V): M {\n for (element in this) {\n destination.put(keySelector(element),
valueTransform(element))\n }\n return destination\n}\n\n/**\n * Populates and returns the [destination] mutable
map with key-value pairs,\n * where key is provided by the [keySelector] function and\n * and value is provided by
the [valueTransform] function applied to elements of the given array.\n * \n * If any two elements would have the
same key returned by
[keySelector] the last one gets added to the map.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform\n */\npublic
inline fun <K, V, M : MutableMap<in K, in V>> DoubleArray.associateByTo(destination: M, keySelector:
(Double) -> K, valueTransform: (Double) -> V): M {\n for (element in this) {\n
destination.put(keySelector(element), valueTransform(element))\n }\n return destination\n}\n\n/**\n * Populates
and returns the [destination] mutable map with key-value pairs,\n * where key is provided by the [keySelector]
function and\n * and value is provided by the [valueTransform] function applied to elements of the given array.\n *
\n * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.\n *
\n * @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform\n */\n
public inline fun <K, V, M : MutableMap<in K, in V>> BooleanArray.associateByTo(destination:
M, keySelector: (Boolean) -> K, valueTransform: (Boolean) -> V): M {\n for (element in this) {\n
destination.put(keySelector(element), valueTransform(element))\n }\n return destination\n}\n\n/**\n * Populates
and returns the [destination] mutable map with key-value pairs,\n * where key is provided by the [keySelector]
function and\n * and value is provided by the [valueTransform] function applied to elements of the given array.\n *
\n * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.\n *
\n * @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform\n */\n
public inline fun <K, V, M : MutableMap<in K, in V>> CharArray.associateByTo(destination: M, keySelector:
(Char) -> K, valueTransform: (Char) -> V): M {\n for (element in this) {\n
destination.put(keySelector(element), valueTransform(element))\n }\n return destination\n}\n\n/**\n * Populates
and returns the [destination] mutable map with key-value pairs\n * provided by [transform] function
applied to each element of the given array.\n * \n * If any of two pairs would have the same key the last one gets
added to the map.\n * \n * @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo\n */\n
public inline fun <T, K, V, M : MutableMap<in K, in V>> Array<out T>.associateTo(destination: M, transform:
(T) -> Pair<K, V>): M {\n for (element in this) {\n destination += transform(element)\n }\n return
destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs\n * provided by
[transform] function applied to each element of the given array.\n * \n * If any of two pairs would have the same key

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the last one gets added to the map.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo\n *^npublic inline fun <K, V, M :
MutableMap<in K, in V>> ByteArray.associateTo(destination:
M, transform: (Byte) -> Pair<K, V>): M {\n for (element in this) {\n destination += transform(element)\n
}\n return destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs\n *
provided by [transform] function applied to each element of the given array.\n * \n * If any of two pairs would have
the same key the last one gets added to the map.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo\n *^npublic inline fun <K, V, M :
MutableMap<in K, in V>> ShortArray.associateTo(destination: M, transform: (Short) -> Pair<K, V>): M {\n for
(element in this) {\n destination += transform(element)\n }\n return destination\n}\n\n/**\n * Populates and
returns the [destination] mutable map with key-value pairs\n * provided by [transform] function applied to each
element of the given array.\n * \n * If any of two pairs would have the same key the last one gets added to the
map.\n * \n * @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo\n *^npublic
inline fun <K, V, M : MutableMap<in K, in V>> IntArray.associateTo(destination: M, transform: (Int) -> Pair<K,
V>): M {\n for (element in this) {\n destination += transform(element)\n }\n return destination\n}\n\n/**\n
* Populates and returns the [destination] mutable map with key-value pairs\n * provided by [transform] function
applied to each element of the given array.\n * \n * If any of two pairs would have the same key the last one gets
added to the map.\n * \n * @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo\n
*^npublic inline fun <K, V, M : MutableMap<in K, in V>> LongArray.associateTo(destination: M, transform:
(Long) -> Pair<K, V>): M {\n for (element in this) {\n destination += transform(element)\n }\n return
destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs\n
* provided by [transform] function applied to each element of the given array.\n * \n * If any of two pairs would
have the same key the last one gets added to the map.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo\n *^npublic inline fun <K, V, M :
MutableMap<in K, in V>> FloatArray.associateTo(destination: M, transform: (Float) -> Pair<K, V>): M {\n for
(element in this) {\n destination += transform(element)\n }\n return destination\n}\n\n/**\n * Populates and
returns the [destination] mutable map with key-value pairs\n * provided by [transform] function applied to each
element of the given array.\n * \n * If any of two pairs would have the same key the last one gets added to the
map.\n * \n * @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo\n *^npublic
inline fun <K, V, M : MutableMap<in K, in V>> DoubleArray.associateTo(destination: M, transform: (Double) ->
Pair<K, V>): M {\n for (element
in this) {\n destination += transform(element)\n }\n return destination\n}\n\n/**\n * Populates and returns
the [destination] mutable map with key-value pairs\n * provided by [transform] function applied to each element of
the given array.\n * \n * If any of two pairs would have the same key the last one gets added to the map.\n * \n *
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo\n *^npublic inline fun <K, V,
M : MutableMap<in K, in V>> BooleanArray.associateTo(destination: M, transform: (Boolean) -> Pair<K, V>): M
{\n for (element in this) {\n destination += transform(element)\n }\n return destination\n}\n\n/**\n *
Populates and returns the [destination] mutable map with key-value pairs\n * provided by [transform] function
applied to each element of the given array.\n * \n * If any of two pairs would have the same key the last one gets
added to the map.\n * \n * @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo\n
*^npublic inline fun <K, V, M : MutableMap<in K, in V>> CharArray.associateTo(destination: M, transform:
(Char) -> Pair<K, V>): M {\n for (element in this) {\n destination += transform(element)\n }\n return
destination\n}\n\n/**\n * Returns a [Map] where keys are elements from the given array and values are\n * produced
by the [valueSelector] function applied to each element.\n * \n * If any two elements are equal, the last one gets
added to the map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n *
@sample samples.collections.Collections.Transformations.associateWith\n *^n@SinceKotlin("1.4")\npublic inline
fun <K, V> Array<out K>.associateWith(valueSelector: (K) -> V): Map<K, V> {\n val result =
LinkedHashMap<K, V>(mapCapacity(size).coerceAtLeast(16))\n return associateWithTo(result,

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valueSelector)\n}\n\n/**\n * Returns a [Map] where keys are elements from the given array and values are\n *
produced by the [valueSelector] function applied to each element.\n * \n * If any two elements are equal, the last
one gets added to the map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n
* @sample samples.collections.Collections.Transformations.associateWith\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V>
ByteArray.associateWith(valueSelector: (Byte) -> V): Map<Byte, V> {\n val result = LinkedHashMap<Byte,
V>(mapCapacity(size).coerceAtLeast(16))\n return associateWithTo(result, valueSelector)\n}\n\n/**\n * Returns a
[Map] where keys are elements from the given array and values are\n * produced by the [valueSelector] function
applied to each element.\n * \n * If any two elements are equal, the last one gets added to the map.\n * \n * The
returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Collections.Transformations.associateWith\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic
inline fun <V> ShortArray.associateWith(valueSelector: (Short) -> V): Map<Short, V> {\n val result =
LinkedHashMap<Short, V>(mapCapacity(size).coerceAtLeast(16))\n return associateWithTo(result,
valueSelector)\n}\n\n/**\n * Returns a [Map] where keys are elements from the given array and values are\n *
produced by the [valueSelector] function applied to each element.\n * \n * If any two elements are equal, the last one
gets added to the map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n
* @sample samples.collections.Collections.Transformations.associateWith\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V>
IntArray.associateWith(valueSelector: (Int) -> V): Map<Int, V> {\n val result = LinkedHashMap<Int,
V>(mapCapacity(size).coerceAtLeast(16))\n return associateWithTo(result, valueSelector)\n}\n\n/**\n * Returns a
[Map] where keys are elements from the
given array and values are\n * produced by the [valueSelector] function applied to each element.\n * \n * If any two
elements are equal, the last one gets added to the map.\n * \n * The returned map preserves the entry iteration order
of the original array.\n * \n * @sample samples.collections.Collections.Transformations.associateWith\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V>
LongArray.associateWith(valueSelector: (Long) -> V): Map<Long, V> {\n val result = LinkedHashMap<Long,
V>(mapCapacity(size).coerceAtLeast(16))\n return associateWithTo(result, valueSelector)\n}\n\n/**\n * Returns a
[Map] where keys are elements from the given array and values are\n * produced by the [valueSelector] function
applied to each element.\n * \n * If any two elements are equal, the last one gets added to the map.\n * \n * The
returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Collections.Transformations.associateWith\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V>
FloatArray.associateWith(valueSelector: (Float) -> V): Map<Float, V> {\n val result = LinkedHashMap<Float,
V>(mapCapacity(size).coerceAtLeast(16))\n return associateWithTo(result, valueSelector)\n}\n\n/**\n * Returns a
[Map] where keys are elements from the given array and values are\n * produced by the [valueSelector] function
applied to each element.\n * \n * If any two elements are equal, the last one gets added to the map.\n * \n * The
returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Collections.Transformations.associateWith\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V>
DoubleArray.associateWith(valueSelector: (Double) -> V): Map<Double, V> {\n val result =
LinkedHashMap<Double, V>(mapCapacity(size).coerceAtLeast(16))\n return associateWithTo(result,
valueSelector)\n}\n\n/**\n * Returns
a [Map] where keys are elements from the given array and values are\n * produced by the [valueSelector] function
applied to each element.\n * \n * If any two elements are equal, the last one gets added to the map.\n * \n * The
returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Collections.Transformations.associateWith\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V>

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BooleanArray.associateWith(valueSelector: (Boolean) -> V): Map<Boolean, V> {
 val result =
 LinkedHashMap<Boolean, V>(mapCapacity(size).coerceAtLeast(16))
 return associateWithTo(result,
 valueSelector)
}

/**
 * Returns a [Map] where keys are elements from the given array and values are
 * produced by the [valueSelector] function applied to each element.
 * If any two elements are equal, the last one
 * gets added to the map.
 * The returned map preserves the entry iteration order of the original array.
 *
 * @sample samples.collections.Collections.Transformations.associateWith
 */
@SinceKotlin("1.4")@kotlin.internal.InlineOnly
public inline fun <V>

CharArray.associateWith(valueSelector: (Char) -> V): Map<Char, V> {
 val result = LinkedHashMap<Char,
 V>(mapCapacity(size.coerceAtMost(128)).coerceAtLeast(16))
 return associateWithTo(result,
 valueSelector)
}

/**
 * Populates and returns the [destination] mutable map with key-value pairs for each
 * element of the given array,
 * where key is the element itself and value is provided by the [valueSelector] function
 * applied to that key.
 * If any two elements are equal, the last one overwrites the former value in the map.
 *
 * @sample samples.collections.Collections.Transformations.associateWithTo
 */
@SinceKotlin("1.4")@kotlin.internal.InlineOnly
public inline fun <K, V, M : MutableMap<in K, in V>> Array<out K>.associateWithTo(destination: M, valueSelector: (K)
-> V): M {
 for (element in this) {
 destination.put(element, valueSelector(element))
 }
 return destination
}

/**
 * Populates and returns the [destination] mutable map with key-value pairs
 * for each element of the given array,
 * where key is the element itself and value is provided by the [valueSelector]
 * function applied to that key.
 * If any two elements are equal, the last one overwrites the former value in the
 * map.
 *
 * @sample samples.collections.Collections.Transformations.associateWithTo
 */
@SinceKotlin("1.4")@kotlin.internal.InlineOnly
public inline fun <V, M : MutableMap<in Byte, in V>>

ByteArray.associateWithTo(destination: M, valueSelector: (Byte) -> V): M {
 for (element in this) {
 destination.put(element, valueSelector(element))
 }
 return destination
}

/**
 * Populates and returns the
 * [destination] mutable map with key-value pairs for each element of the given array,
 * where key is the element
 * itself and value is provided by the [valueSelector] function applied to that key.
 *
 * If any two elements are equal, the last one overwrites the former value in the map.
 *
 * @sample
 * samples.collections.Collections.Transformations.associateWithTo
 */
@SinceKotlin("1.4")@kotlin.internal.InlineOnly
public inline fun <V, M : MutableMap<in Short, in V>>

ShortArray.associateWithTo(destination: M, valueSelector: (Short) -> V): M {
 for (element in this) {
 destination.put(element, valueSelector(element))
 }
 return destination
}

/**
 * Populates and returns the
 * [destination] mutable map with key-value pairs for each element of the given array,
 * where key is the element
 * itself and value is provided by the [valueSelector] function applied to that key.
 *
 * If any two elements are
 * equal, the last one overwrites the former value in the map.
 *
 * @sample
 * samples.collections.Collections.Transformations.associateWithTo
 */
@SinceKotlin("1.4")@kotlin.internal.InlineOnly
public inline fun <V, M : MutableMap<in Int, in V>>

IntArray.associateWithTo(destination:
M, valueSelector: (Int) -> V): M {
 for (element in this) {
 destination.put(element,
 valueSelector(element))
 }
 return destination
}

/**
 * Populates and returns the [destination] mutable
 * map with key-value pairs for each element of the given array,
 * where key is the element itself and value is
 * provided by the [valueSelector] function applied to that key.
 *
 * If any two elements are equal, the last one
 * overwrites the former value in the map.
 *
 * @sample
 * samples.collections.Collections.Transformations.associateWithTo
 */
@SinceKotlin("1.4")@kotlin.internal.InlineOnly
public inline fun <V, M : MutableMap<in Long, in V>>

LongArray.associateWithTo(destination: M, valueSelector: (Long) -> V): M {
 for (element in this) {
 destination.put(element, valueSelector(element))
 }
 return destination
}

/**
 * Populates and returns the
 * [destination] mutable map with key-value pairs for each element
 * of the given array,
 * where key is the element itself and value is provided by the [valueSelector] function applied
 * to that key.
 *
 * If any two elements are equal, the last one overwrites the former value in the map.
 *
 * @sample samples.collections.Collections.Transformations.associateWithTo
 */

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*^@SinceKotlin("1.4")@kotlin.internal.InlineOnly\npublic inline fun <V, M : MutableMap<in Float, in V>>
FloatArray.associateWithTo(destination: M, valueSelector: (Float) -> V): M {\n for (element in this) {\n
destination.put(element, valueSelector(element))\n }\n return destination\n}\n\n/**\n * Populates and returns the
[destination] mutable map with key-value pairs for each element of the given array,\n * where key is the element
itself and value is provided by the [valueSelector] function applied to that key.\n * \n * If any two elements are
equal, the last one overwrites the former value in the map.\n * \n * @sample
samples.collections.Collections.Transformations.associateWithTo\n
*^@SinceKotlin("1.4")@kotlin.internal.InlineOnly\npublic inline fun <V, M : MutableMap<in Double, in
V>> DoubleArray.associateWithTo(destination: M, valueSelector: (Double) -> V): M {\n for (element in this) {\n
destination.put(element, valueSelector(element))\n }\n return destination\n}\n\n/**\n * Populates and returns
the [destination] mutable map with key-value pairs for each element of the given array,\n * where key is the element
itself and value is provided by the [valueSelector] function applied to that key.\n * \n * If any two elements are
equal, the last one overwrites the former value in the map.\n * \n * @sample
samples.collections.Collections.Transformations.associateWithTo\n
*^@SinceKotlin("1.4")@kotlin.internal.InlineOnly\npublic inline fun <V, M : MutableMap<in Boolean, in
V>> BooleanArray.associateWithTo(destination: M, valueSelector: (Boolean) -> V): M {\n for (element in this)
{\n destination.put(element,
valueSelector(element))\n }\n return destination\n}\n\n/**\n * Populates and returns the [destination] mutable
map with key-value pairs for each element of the given array,\n * where key is the element itself and value is
provided by the [valueSelector] function applied to that key.\n * \n * If any two elements are equal, the last one
overwrites the former value in the map.\n * \n * @sample
samples.collections.Collections.Transformations.associateWithTo\n
*^@SinceKotlin("1.4")@kotlin.internal.InlineOnly\npublic inline fun <V, M : MutableMap<in Char, in V>>
CharArray.associateWithTo(destination: M, valueSelector: (Char) -> V): M {\n for (element in this) {\n
destination.put(element, valueSelector(element))\n }\n return destination\n}\n\n/**\n * Appends all elements to
the given [destination] collection.\n *^@public fun <T, C : MutableCollection<in T>> Array<out
T>.toCollection(destination: C): C {\n for (item in this) {\n destination.add(item)\n
}\n return destination\n}\n\n/**\n * Appends all elements to the given [destination] collection.\n *^@public fun
<C : MutableCollection<in Byte>> ByteArray.toCollection(destination: C): C {\n for (item in this) {\n
destination.add(item)\n }\n return destination\n}\n\n/**\n * Appends all elements to the given [destination]
collection.\n *^@public fun <C : MutableCollection<in Short>> ShortArray.toCollection(destination: C): C {\n for
(item in this) {\n destination.add(item)\n }\n return destination\n}\n\n/**\n * Appends all elements to the
given [destination] collection.\n *^@public fun <C : MutableCollection<in Int>> IntArray.toCollection(destination:
C): C {\n for (item in this) {\n destination.add(item)\n }\n return destination\n}\n\n/**\n * Appends all
elements to the given [destination] collection.\n *^@public fun <C : MutableCollection<in Long>>
LongArray.toCollection(destination: C): C {\n for (item in this) {\n
destination.add(item)\n }\n return destination\n}\n\n/**\n * Appends all elements to the given [destination]
collection.\n *^@public fun <C : MutableCollection<in Float>> FloatArray.toCollection(destination: C): C {\n for
(item in this) {\n destination.add(item)\n }\n return destination\n}\n\n/**\n * Appends all elements to the
given [destination] collection.\n *^@public fun <C : MutableCollection<in Double>>
DoubleArray.toCollection(destination: C): C {\n for (item in this) {\n destination.add(item)\n }\n return
destination\n}\n\n/**\n * Appends all elements to the given [destination] collection.\n *^@public fun <C :
MutableCollection<in Boolean>> BooleanArray.toCollection(destination: C): C {\n for (item in this) {\n
destination.add(item)\n }\n return destination\n}\n\n/**\n * Appends all elements to the given [destination]
collection.\n *^@public fun <C : MutableCollection<in Char>> CharArray.toCollection(destination: C): C
{\n for (item in this) {\n destination.add(item)\n }\n return destination\n}\n\n/**\n * Returns a new
[HashSet] of all elements.\n *^@public fun <T> Array<out T>.toHashSet(): HashSet<T> {\n return
toCollection(HashSet<T>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n *^@public

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fun ByteArray.toHashSet(): HashSet<Byte> {\n return
toCollection(HashSet<Byte>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun ShortArray.toHashSet(): HashSet<Short> {\n return
toCollection(HashSet<Short>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun IntArray.toHashSet(): HashSet<Int> {\n return
toCollection(HashSet<Int>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun LongArray.toHashSet(): HashSet<Long> {\n return
toCollection(HashSet<Long>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun FloatArray.toHashSet(): HashSet<Float> {\n return
toCollection(HashSet<Float>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun DoubleArray.toHashSet(): HashSet<Double> {\n return
toCollection(HashSet<Double>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun BooleanArray.toHashSet(): HashSet<Boolean> {\n return
toCollection(HashSet<Boolean>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun CharArray.toHashSet(): HashSet<Char> {\n return
toCollection(HashSet<Char>(mapCapacity(size.coerceAtMost(128))))\n}\n\n/**\n * Returns a [List] containing all
elements.\n
*/\npublic fun <T> Array<out T>.toList(): List<T> {\n return when (size) {\n 0 -> emptyList()\n
1 -> listOf(this[0])\n else -> this.toMutableList()\n }\n}\n\n/**\n * Returns a [List] containing all
elements.\n
*/\npublic fun ByteArray.toList(): List<Byte> {\n
return when (size) {\n 0 -> emptyList()\n 1 -> listOf(this[0])\n else -> this.toMutableList()\n
}\n}\n\n/**\n * Returns a [List] containing all elements.\n
*/\npublic fun ShortArray.toList(): List<Short> {\n
return when (size) {\n 0 -> emptyList()\n 1 -> listOf(this[0])\n else -> this.toMutableList()\n
}\n}\n\n/**\n * Returns a [List] containing all elements.\n
*/\npublic fun IntArray.toList(): List<Int> {\n return
when (size) {\n 0 -> emptyList()\n 1 -> listOf(this[0])\n else -> this.toMutableList()\n }\n}\n\n/**\n *
Returns a [List] containing all elements.\n
*/\npublic fun LongArray.toList(): List<Long> {\n return when (size)
{\n 0 -> emptyList()\n 1 -> listOf(this[0])\n else -> this.toMutableList()\n }\n}\n\n/**\n * Returns a
[List] containing all elements.\n
*/\npublic fun FloatArray.toList(): List<Float> {\n return when (size) {\n 0 ->
emptyList()\n 1 ->
listOf(this[0])\n else -> this.toMutableList()\n }\n}\n\n/**\n * Returns a [List] containing all elements.\n
*/\npublic fun DoubleArray.toList(): List<Double> {\n return when (size) {\n 0 -> emptyList()\n 1 ->
listOf(this[0])\n else -> this.toMutableList()\n }\n}\n\n/**\n * Returns a [List] containing all elements.\n
*/\npublic fun BooleanArray.toList(): List<Boolean> {\n return when (size) {\n 0 -> emptyList()\n 1 ->
listOf(this[0])\n else -> this.toMutableList()\n }\n}\n\n/**\n * Returns a [List] containing all elements.\n
*/\npublic fun CharArray.toList(): List<Char> {\n return when (size) {\n 0 -> emptyList()\n 1 ->
listOf(this[0])\n else -> this.toMutableList()\n }\n}\n\n/**\n * Returns a new [MutableList] filled with all
elements of this array.\n
*/\npublic fun <T> Array<out T>.toMutableList(): MutableList<T> {\n return
ArrayList(this.asCollection())\n}\n\n/**\n * Returns a new [MutableList]
filled with all elements of this array.\n
*/\npublic fun ByteArray.toMutableList(): MutableList<Byte> {\n val list
= ArrayList<Byte>(size)\n for (item in this) list.add(item)\n return list\n}\n\n/**\n * Returns a new
[MutableList] filled with all elements of this array.\n
*/\npublic fun ShortArray.toMutableList():
MutableList<Short> {\n val list = ArrayList<Short>(size)\n for (item in this) list.add(item)\n return
list\n}\n\n/**\n * Returns a new [MutableList] filled with all elements of this array.\n
*/\npublic fun
IntArray.toMutableList(): MutableList<Int> {\n val list = ArrayList<Int>(size)\n for (item in this)
list.add(item)\n return list\n}\n\n/**\n * Returns a new [MutableList] filled with all elements of this array.\n
*/\npublic fun LongArray.toMutableList(): MutableList<Long> {\n val list = ArrayList<Long>(size)\n for (item
in this) list.add(item)\n return list\n}\n\n/**\n * Returns a new [MutableList] filled with all elements of this
array.\n
*/\n}

```

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*^/npublic fun FloatArray.toMutableList(): MutableList<Float> {
 val list = ArrayList<Float>(size)
 for (item in this) list.add(item)
 return list
}
// Returns a new [MutableList] filled with all elements of this array.

*^/npublic fun DoubleArray.toMutableList(): MutableList<Double> {
 val list = ArrayList<Double>(size)
 for (item in this) list.add(item)
 return list
}
// Returns a new [MutableList] filled with all elements of this array.

*^/npublic fun BooleanArray.toMutableList(): MutableList<Boolean> {
 val list = ArrayList<Boolean>(size)
 for (item in this) list.add(item)
 return list
}
// Returns a new [MutableList] filled with all elements of this array.

*^/npublic fun CharArray.toMutableList(): MutableList<Char> {
 val list = ArrayList<Char>(size)
 for (item in this) list.add(item)
 return list
}
// Returns a [Set] of all elements.
// The returned set preserves the element iteration order of the original array.

*^/npublic fun <T> Array<out T>.toSet(): Set<T> {
 return when (size) {
 0 -> emptySet()
 1 -> setOf(this[0])
 else -> toCollection(LinkedHashSet<T>(mapCapacity(size)))
 }
}
// Returns a [Set] of all elements.
// The returned set preserves the element iteration order of the original array.

*^/npublic fun ByteArray.toSet(): Set<Byte> {
 return when (size) {
 0 -> emptySet()
 1 -> setOf(this[0])
 else -> toCollection(LinkedHashSet<Byte>(mapCapacity(size)))
 }
}
// Returns a [Set] of all elements.
// The returned set preserves the element iteration order of the original array.

*^/npublic fun ShortArray.toSet(): Set<Short> {
 return when (size) {
 0 -> emptySet()
 1 -> setOf(this[0])
 else -> toCollection(LinkedHashSet<Short>(mapCapacity(size)))
 }
}
// Returns a [Set] of all elements.
// The returned set preserves the element iteration order of the original array.

*^/npublic fun IntArray.toSet(): Set<Int> {
 return when (size) {
 0 -> emptySet()
 1 -> setOf(this[0])
 else -> toCollection(LinkedHashSet<Int>(mapCapacity(size)))
 }
}
// Returns a [Set] of all elements.
// The returned set preserves the element iteration order of the original array.

*^/npublic fun LongArray.toSet(): Set<Long> {
 return when (size) {
 0 -> emptySet()
 1 -> setOf(this[0])
 else -> toCollection(LinkedHashSet<Long>(mapCapacity(size)))
 }
}
// Returns a [Set] of all elements.
// The returned set preserves the element iteration order of the original array.

*^/npublic fun FloatArray.toSet(): Set<Float> {
 return when (size) {
 0 -> emptySet()
 1 -> setOf(this[0])
 else -> toCollection(LinkedHashSet<Float>(mapCapacity(size)))
 }
}
// Returns a [Set] of all elements.
// The returned set preserves the element iteration order of the original array.

*^/npublic fun DoubleArray.toSet(): Set<Double> {
 return when (size) {
 0 -> emptySet()
 1 -> setOf(this[0])
 else -> toCollection(LinkedHashSet<Double>(mapCapacity(size)))
 }
}
// Returns a [Set] of all elements.
// The returned set preserves the element iteration order of the original array.

*^/npublic fun BooleanArray.toSet(): Set<Boolean> {
 return when (size) {
 0 -> emptySet()
 1 -> setOf(this[0])
 else -> toCollection(LinkedHashSet<Boolean>(mapCapacity(size)))
 }
}
// Returns a [Set] of all elements.
// The returned set preserves the element iteration order of the original array.

*^/npublic fun CharArray.toSet(): Set<Char> {
 return when (size) {
 0 -> emptySet()
 1 -> setOf(this[0])
 else -> toCollection(LinkedHashSet<Char>(mapCapacity(size.coerceAtMost(128))))
 }
}
// Returns a single list of all elements yielded from results of [transform] function being invoked on each element of original array.

@sample samples.collections.Collections.Transformations.flatMap
*^/npublic inline fun <T, R> Array<out T>.flatMap(transform: (T) -> Iterable<R>): List<R> {
 return flatMapTo(ArrayList<R>(), transform)
}
// Returns a single list of all elements yielded from results of [transform] function being invoked on each element of original array.

@sample
samples.collections.Collections.Transformations.flatMap
*^/npublic inline fun <R> ByteArray.flatMap(transform: (Byte) -> Iterable<R>): List<R> {
 return flatMapTo(ArrayList<R>(), transform)
}
// Returns a single list of all elements yielded from results of [transform] function being invoked on each element of original array.

@sample samples.collections.Collections.Transformations.flatMap
*^/npublic inline fun <R> ShortArray.flatMap(transform: (Short) -> Iterable<R>):

```



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List<R> {\n return flatMapTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements
yielded from results of [transform] function being invoked on each element of original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n */\npublic inline fun <R> IntArray.flatMap(transform:
(Int) -> Iterable<R>): List<R> {\n return flatMapTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single
list of all elements yielded from results of [transform] function being invoked on each element of original array.\n *
\n * @sample samples.collections.Collections.Transformations.flatMap\n */\npublic inline fun <R>
LongArray.flatMap(transform: (Long) -> Iterable<R>): List<R> {\n return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element of original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n */\npublic inline fun <R> FloatArray.flatMap(transform: (Float) -> Iterable<R>): List<R> {\n return
flatMapTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of
[transform] function being invoked on each element of original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n */\npublic inline fun <R>
DoubleArray.flatMap(transform: (Double) -> Iterable<R>): List<R> {\n return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element of original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n */\npublic inline fun <R>
BooleanArray.flatMap(transform: (Boolean) -> Iterable<R>): List<R> {\n return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element
of original array.\n * \n * @sample samples.collections.Collections.Transformations.flatMap\n */\npublic inline fun
<R> CharArray.flatMap(transform: (Char) -> Iterable<R>): List<R> {\n return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element of original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapSequence")\npublic inline fun <T, R> Array<out
T>.flatMap(transform: (T) -> Sequence<R>): List<R> {\n return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element\n * and its index in the original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMapIndexed\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <T, R> Array<out T>.flatMapIndexed(transform: (index: Int, T) -> Iterable<R>): List<R> {\n return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
\n * @sample samples.collections.Collections.Transformations.flatMapIndexed\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> ByteArray.flatMapIndexed(transform: (index: Int, Byte) -> Iterable<R>): List<R> {\n return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being invoked on each element\n
* and its index in the original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMapIndexed\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> ShortArray.flatMapIndexed(transform: (index: Int, Short) -> Iterable<R>): List<R> {\n return

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flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> IntArray.flatMapIndexed(transform: (index: Int, Int) -> Iterable<R>): List<R> {\n return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> LongArray.flatMapIndexed(transform: (index: Int, Long) -> Iterable<R>): List<R> {\n return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original
array.\n * \n * @sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> FloatArray.flatMapIndexed(transform: (index: Int, Float) -> Iterable<R>): List<R> {\n return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> DoubleArray.flatMapIndexed(transform: (index: Int, Double)
-> Iterable<R>): List<R> {\n return flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a
single list of all elements yielded from results of [transform] function being invoked on each element\n * and its
index in the original array.\n * \n * @sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> BooleanArray.flatMapIndexed(transform: (index: Int, Boolean) -> Iterable<R>): List<R> {\n
return flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded
from results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> CharArray.flatMapIndexed(transform: (index: Int, Char) -> Iterable<R>): List<R> {\n return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\flatMapIndexedSequence")\n@kotlin.internal.InlineOnly\npubli
c inline fun <T, R> Array<out T>.flatMapIndexed(transform: (index: Int, T) -> Sequence<R>): List<R> {\n return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Appends all elements yielded from results of
[transform] function being invoked on each element\n * and its index in the original array, to the given
[destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\flatMapIndexedIterableTo")\n@kotlin.internal.InlineOnly\npubli
c inline fun <T, R, C : MutableCollection<in R>> Array<out T>.flatMapIndexedTo(destination: C, transform:

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(index: Int, T) -> Iterable<R>): C {
 var index = 0
 for (element in this) {
 val list = transform(index++,
element)
 destination.addAll(list)
 }
 return destination
}

/** Appends all elements yielded from
results of [transform] function being invoked on each element
* and its index in the original array, to the given
[destination].

*/
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@kotlin.jvm.JvmName("flatMapIndexedIterableTo")
@kotlin.internal.InlineOnly
public
inline fun <R, C : MutableCollection<in R>> ByteArray.flatMapIndexedTo(destination: C, transform: (index: Int,
Byte) -> Iterable<R>): C {
 var index = 0
 for (element in this) {
 val list = transform(index++,
element)
 destination.addAll(list)
 }
 return destination
}

/** Appends all elements yielded from
results of [transform] function being invoked on each element
* and its index in the original array, to the given
[destination].

*/
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@kotlin.jvm.JvmName("flatMapIndexedIterableTo")
@kotlin.internal.InlineOnly
public
inline fun <R, C : MutableCollection<in R>> ShortArray.flatMapIndexedTo(destination: C, transform: (index: Int,
Short) -> Iterable<R>): C {
 var index = 0
 for (element in this) {
 val list = transform(index++,
element)
 destination.addAll(list)
 }
 return destination
}

/** Appends all elements yielded from results of [transform] function being
invoked on each element
* and its index in the original array, to the given [destination].

*/
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@kotlin.jvm.JvmName("flatMapIndexedIterableTo")
@kotlin.internal.InlineOnly
public
inline fun <R, C : MutableCollection<in R>> IntArray.flatMapIndexedTo(destination: C, transform: (index: Int,
Int) -> Iterable<R>): C {
 var index = 0
 for (element in this) {
 val list = transform(index++, element)
 destination.addAll(list)
 }
 return destination
}

/** Appends all elements yielded from results of
[transform] function being invoked on each element
* and its index in the original array, to the given
[destination].

*/
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@kotlin.jvm.JvmName("flatMapIndexedIterableTo")
@kotlin.internal.InlineOnly
public
inline fun <R, C : MutableCollection<in R>> LongArray.flatMapIndexedTo(destination: C, transform: (index: Int,
Long) -> Iterable<R>): C {
 var index = 0
 for (element in this) {
 val list = transform(index++,
element)
 destination.addAll(list)
 }
 return destination
}

/** Appends all elements yielded from
results of [transform] function being invoked on each element
* and its index in the original array, to the given
[destination].

*/
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@kotlin.jvm.JvmName("flatMapIndexedIterableTo")
@kotlin.internal.InlineOnly
public
inline fun <R, C : MutableCollection<in R>> FloatArray.flatMapIndexedTo(destination: C, transform: (index: Int,
Float) -> Iterable<R>): C {
 var index = 0
 for (element in this) {
 val list = transform(index++, element)
 destination.addAll(list)
 }
 return destination
}

/** Appends all elements yielded from results of [transform] function being invoked on each element
* and its index
in the original array, to the given [destination].

*/
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@kotlin.jvm.JvmName("flatMapIndexedIterableTo")
@kotlin.internal.InlineOnly
public
inline fun <R, C : MutableCollection<in R>> DoubleArray.flatMapIndexedTo(destination: C, transform: (index:
Int, Double) -> Iterable<R>): C {
 var index = 0
 for (element in this) {
 val list = transform(index++,
element)
 destination.addAll(list)
 }
 return destination
}

/** Appends all elements yielded from
results of [transform] function being invoked on each element
* and its index in the original array, to the given
[destination].

*/

```



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to the given [destination].\n *^public inline fun <R, C : MutableCollection<in R>>
BooleanArray.flatMapTo(destination: C, transform: (Boolean) -> Iterable<R>): C {\n for (element in this) {\n
val list = transform(element)\n destination.addAll(list)\n }\n return destination\n}\n\n/**\n * Appends all
elements yielded from results of [transform] function being invoked on each element of original array, to the given
[destination].\n *^public inline fun <R, C : MutableCollection<in R>> CharArray.flatMapTo(destination: C,
transform: (Char) -> Iterable<R>): C {\n for (element in this) {\n val list = transform(element)\n
destination.addAll(list)\n }\n return destination\n}\n\n/**\n * Appends all elements yielded from results of
[transform] function being invoked on each element of original array, to the given [destination].\n
*^@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapSequenceTo")\npublic
inline fun <T, R, C : MutableCollection<in R>> Array<out T>.flatMapTo(destination: C, transform: (T) ->
Sequence<R>): C {\n for (element in this) {\n val list = transform(element)\n destination.addAll(list)\n
}\n return destination\n}\n\n/**\n * Groups elements of the original array by the key returned by the given
[keySelector] function\n * applied to each element and returns a map where each group key is associated with a list
of corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced from
the original array.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n *^public inline
fun <T, K> Array<out T>.groupBy(keySelector: (T) -> K): Map<K, List<T>> {\n return
groupByTo(LinkedHashMap<K, MutableList<T>>(), keySelector)\n}\n\n/**\n * Groups elements of the original
array by the key returned by the given [keySelector] function\n *
applied to each element and returns a map where each group key is associated with a list of corresponding
elements.\n * \n * The returned map preserves the entry iteration order of the keys produced from the original
array.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n *^public inline fun <K>
ByteArray.groupBy(keySelector: (Byte) -> K): Map<K, List<Byte>> {\n return groupByTo(LinkedHashMap<K,
MutableList<Byte>>(), keySelector)\n}\n\n/**\n * Groups elements of the original array by the key returned by the
given [keySelector] function\n * applied to each element and returns a map where each group key is associated with
a list of corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced
from the original array.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n *^public
inline fun <K> ShortArray.groupBy(keySelector: (Short) -> K): Map<K, List<Short>> {\n return
groupByTo(LinkedHashMap<K,
MutableList<Short>>(), keySelector)\n}\n\n/**\n * Groups elements of the original array by the key returned by the
given [keySelector] function\n * applied to each element and returns a map where each group key is associated with
a list of corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced
from the original array.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n *^public
inline fun <K> IntArray.groupBy(keySelector: (Int) -> K): Map<K, List<Int>> {\n return
groupByTo(LinkedHashMap<K, MutableList<Int>>(), keySelector)\n}\n\n/**\n * Groups elements of the original
array by the key returned by the given [keySelector] function\n * applied to each element and returns a map where
each group key is associated with a list of corresponding elements.\n * \n * The returned map preserves the entry
iteration order of the keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n
*^public inline fun <K> LongArray.groupBy(keySelector: (Long) -> K): Map<K, List<Long>> {\n return
groupByTo(LinkedHashMap<K, MutableList<Long>>(), keySelector)\n}\n\n/**\n * Groups elements of the
original array by the key returned by the given [keySelector] function\n * applied to each element and returns a map
where each group key is associated with a list of corresponding elements.\n * \n * The returned map preserves the
entry iteration order of the keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n
*^public inline fun <K>
FloatArray.groupBy(keySelector: (Float) -> K): Map<K, List<Float>> {\n return groupByTo(LinkedHashMap<K,
MutableList<Float>>(), keySelector)\n}\n\n/**\n * Groups elements of the original array by the key returned by the
given [keySelector] function\n * applied to each element and returns a map where each group key is associated with

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a list of corresponding elements.\n

```
* \n * The returned map preserves the entry iteration order of the keys produced from the original array.\n * \n *
@sample samples.collections.Collections.Transformations.groupBy\n * \n public inline fun <K>
DoubleArray.groupBy(keySelector: (Double) -> K): Map<K, List<Double>> {\n return
groupByTo(LinkedHashMap<K, MutableList<Double>>(), keySelector)\n}\n\n/**\n * Groups elements of the
original array by the key returned by the given [keySelector] function\n * applied to each element and returns a map
where each group key is associated with a list of corresponding elements.\n * \n * The returned map preserves the
entry iteration order of the keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n * \n public inline fun <K>
BooleanArray.groupBy(keySelector: (Boolean) -> K): Map<K, List<Boolean>> {\n return
groupByTo(LinkedHashMap<K, MutableList<Boolean>>(), keySelector)\n}\n\n/**\n * Groups elements of the
original array
by the key returned by the given [keySelector] function\n * applied to each element and returns a map where each
group key is associated with a list of corresponding elements.\n * \n * The returned map preserves the entry iteration
order of the keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n * \n public inline fun <K>
CharArray.groupBy(keySelector: (Char) -> K): Map<K, List<Char>> {\n return groupByTo(LinkedHashMap<K,
MutableList<Char>>(), keySelector)\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied
to each element of the original array\n * by the key returned by the given [keySelector] function applied to the
element\n * and returns a map where each group key is associated with a list of corresponding values.\n * \n * The
returned map preserves the entry iteration order of the keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeysAndValues\n * \n public inline fun <T, K, V> Array<out T>.groupBy(keySelector: (T) -> K, valueTransform: (T) -> V): Map<K,
List<V>> {\n return groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector,
valueTransform)\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of
the original array\n * by the key returned by the given [keySelector] function applied to the element\n * and returns
a map where each group key is associated with a list of corresponding values.\n * \n * The returned map preserves
the entry iteration order of the keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeysAndValues\n * \n public inline fun <K, V>
ByteArray.groupBy(keySelector: (Byte) -> K, valueTransform: (Byte) -> V): Map<K, List<V>> {\n return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups values
returned by the [valueTransform] function applied
to each element of the original array\n * by the key returned by the given [keySelector] function applied to the
element\n * and returns a map where each group key is associated with a list of corresponding values.\n * \n * The
returned map preserves the entry iteration order of the keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeysAndValues\n * \n public inline fun <K, V>
ShortArray.groupBy(keySelector: (Short) -> K, valueTransform: (Short) -> V): Map<K, List<V>> {\n return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups values
returned by the [valueTransform] function applied to each element of the original array\n * by the key returned by
the given [keySelector] function applied to the element\n * and returns a map where each group key is associated
with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys
produced from
the original array.\n * \n * @sample samples.collections.Collections.Transformations.groupByKeysAndValues\n * \n public inline fun <K, V> IntArray.groupBy(keySelector: (Int) -> K, valueTransform: (Int) -> V): Map<K,
List<V>> {\n return groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector,
valueTransform)\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of
the original array\n * by the key returned by the given [keySelector] function applied to the element\n * and returns
a map where each group key is associated with a list of corresponding values.\n * \n * The returned map preserves
```

the entry iteration order of the keys produced from the original array.\n \* \n \* @sample

```

samples.collections.Collections.Transformations.groupByKeyAndValues\n */\npublic inline fun <K, V>
LongArray.groupBy(keySelector: (Long) -> K, valueTransform: (Long) -> V): Map<K, List<V>> {\n return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n }\n\n/**\n
* Groups values returned by the [valueTransform] function applied to each element of the original array\n * by the
key returned by the given [keySelector] function applied to the element\n * and returns a map where each group key
is associated with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the
keys produced from the original array.\n * \n * @sample

```

samples.collections.Collections.Transformations.groupByKeyAndValues\n \*/\npublic inline fun <K, V>

```

FloatArray.groupBy(keySelector: (Float) -> K, valueTransform: (Float) -> V): Map<K, List<V>> {\n return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n }\n\n/**\n
* Groups values returned by the [valueTransform] function applied to each element of the original array\n * by the key
returned by the given [keySelector] function applied to the element\n * and returns a map where each group key is
associated with a list of corresponding values.\n

```

\* \n \* The returned map preserves the entry iteration order of the keys produced from the original array.\n \* \n \* @sample

```

samples.collections.Collections.Transformations.groupByKeyAndValues\n */\npublic inline fun <K, V>
DoubleArray.groupBy(keySelector: (Double) -> K, valueTransform: (Double) -> V): Map<K, List<V>> {\n return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n }\n\n/**\n
* Groups values returned by the [valueTransform] function applied to each element of the original array\n * by the key
returned by the given [keySelector] function applied to the element\n * and returns a map where each group key is
associated with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the
keys produced from the original array.\n * \n * @sample

```

samples.collections.Collections.Transformations.groupByKeyAndValues\n \*/\npublic inline fun <K, V>

```

BooleanArray.groupBy(keySelector: (Boolean) -> K, valueTransform:
(Boolean) -> V): Map<K, List<V>> {\n return groupByTo(LinkedHashMap<K, MutableList<V>>(),
keySelector, valueTransform)\n }\n\n/**\n
* Groups values returned by the [valueTransform] function applied to
each element of the original array\n * by the key returned by the given [keySelector] function applied to the
element\n * and returns a map where each group key is associated with a list of corresponding values.\n * \n * The
returned map preserves the entry iteration order of the keys produced from the original array.\n * \n * @sample

```

samples.collections.Collections.Transformations.groupByKeyAndValues\n \*/\npublic inline fun <K, V>

```

CharArray.groupBy(keySelector: (Char) -> K, valueTransform: (Char) -> V): Map<K, List<V>> {\n return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n }\n\n/**\n
* Groups elements of the original array by the key returned by the given [keySelector] function\n * applied to each
element and puts to the [destination] map each group
key associated with a list of corresponding elements.\n * \n * @return The [destination] map.\n * \n * @sample

```

samples.collections.Collections.Transformations.groupBy\n \*/\npublic inline fun <T, K, M : MutableMap<in K, MutableList<T>>> Array<out T>.groupByTo(destination: M, keySelector: (T) -> K): M {\n for (element in this) {\n val key = keySelector(element)\n val list = destination.getOrPut(key) { ArrayList<T>() }\n list.add(element)\n }\n return destination\n }\n\n/\*\*\n \* Groups elements of the original array by the key returned by the given [keySelector] function\n \* applied to each element and puts to the [destination] map each group key associated with a list of corresponding elements.\n \* \n \* @return The [destination] map.\n \* \n \* @sample

```

samples.collections.Collections.Transformations.groupBy\n */\npublic inline fun <K, M : MutableMap<in K, MutableList<Byte>>> ByteArray.groupByTo(destination: M, keySelector: (Byte) -> K): M {\n for (element in this) {\n val key = keySelector(element)\n val list = destination.getOrPut(key) { ArrayList<Byte>() }\n list.add(element)\n }\n return destination\n }\n\n/**\n * Groups elements of the original array by the key returned by the given [keySelector] function\n * applied to each element and puts to the [destination] map each group key associated with a list of corresponding elements.\n * \n * @return The [destination] map.\n * \n * @sample

```

samples.collections.Collections.Transformations.groupBy\n \*/\npublic inline fun <K, M : MutableMap<in K,

```

MutableList<Short>>> ShortArray.groupByTo(destination: M, keySelector: (Short) -> K): M {
 for (element in this) {
 val key = keySelector(element)
 val list = destination.getOrPut(key) { ArrayList<Short>() }
 list.add(element)
 }
 return destination
}

/**
 * Groups elements of the original array by the key returned
 * by the given [keySelector] function
 * applied to each element and puts
 * to the [destination] map each group key associated with a list of corresponding elements.
 * @return The [destination] map.
 * @sample samples.collections.Collections.Transformations.groupBy
 */
public inline fun <K, M : MutableMap<in K, MutableList<Int>>> IntArray.groupByTo(destination: M, keySelector: (Int) -> K):
M {
 for (element in this) {
 val key = keySelector(element)
 val list = destination.getOrPut(key) {
 ArrayList<Int>()
 }
 list.add(element)
 }
 return destination
}

/**
 * Groups elements of the original
 * array by the key returned by the given [keySelector] function
 * applied to each element and puts to the
 * [destination] map each group key associated with a list of corresponding elements.
 * @return The [destination] map.
 * @sample samples.collections.Collections.Transformations.groupBy
 */
public inline fun <K, M : MutableMap<in K, MutableList<Long>>> LongArray.groupByTo(destination: M, keySelector: (Long)
-> K): M {
 for (element in this) {
 val key = keySelector(element)
 val list =
 destination.getOrPut(key) { ArrayList<Long>() }
 list.add(element)
 }
 return destination
}

/**
 * Groups elements of the original array by the key returned by the given [keySelector] function
 * applied to each element and puts to the [destination] map each group key associated with a list of corresponding elements.
 * @return The [destination] map.
 * @sample samples.collections.Collections.Transformations.groupBy
 */
public inline fun <K, M : MutableMap<in K, MutableList<Float>>> FloatArray.groupByTo(destination: M,
keySelector: (Float) -> K): M {
 for (element in this) {
 val key = keySelector(element)
 val list =
 destination.getOrPut(key) { ArrayList<Float>() }
 list.add(element)
 }
 return destination
}

/**
 * Groups elements of the original array by the key returned by the given [keySelector] function
 * applied to each element and puts to the [destination] map each group key associated with a list of corresponding
 * elements.
 * @return The [destination] map.
 * @sample
 * samples.collections.Collections.Transformations.groupBy
 */
public inline fun <K, M : MutableMap<in K,
MutableList<Double>>> DoubleArray.groupByTo(destination: M, keySelector: (Double) -> K): M {
 for
(element in this) {
 val key = keySelector(element)
 val list = destination.getOrPut(key) {
 ArrayList<Double>()
 }
 list.add(element)
 }
 return destination
}

/**
 * Groups elements of the
 * original array by the key returned by the given [keySelector] function
 * applied to each element and puts to the
 * [destination] map each group key associated with a list of corresponding elements.
 * @return The
 * [destination] map.
 * @sample samples.collections.Collections.Transformations.groupBy
 */
public inline fun <K, M : MutableMap<in K, MutableList<Boolean>>>
BooleanArray.groupByTo(destination: M, keySelector: (Boolean) -> K): M {
 for (element in this) {
 val
 key = keySelector(element)
 val list = destination.getOrPut(key) { ArrayList<Boolean>() }
 list.add(element)
 }
 return destination
}

/**
 * Groups elements of the original array by the key returned
 * by the given [keySelector] function
 * applied to each element and puts to the [destination] map each group key
 * associated with a list of corresponding elements.
 * @return The [destination] map.
 * @sample
 * samples.collections.Collections.Transformations.groupBy
 */
public inline fun <K, M : MutableMap<in K,
MutableList<Char>>> CharArray.groupByTo(destination: M, keySelector: (Char) -> K): M {
 for (element in
this) {
 val key = keySelector(element)
 val list = destination.getOrPut(key) { ArrayList<Char>() }
 list.add(element)
 }
 return destination
}

/**
 * Groups values returned by the [valueTransform]
 * function applied to each element of the original array
 * by the key returned by the given [keySelector] function
 * applied to the element
 * and puts to the [destination] map each group key associated with a list of corresponding
 * values.
 * @return The [destination] map.
 * @sample
 * samples.collections.Collections.Transformations.groupByKeysAndValues
 */
public inline fun <T, K, V, M :
MutableMap<in K, MutableList<V>>> Array<out T>.groupByTo(destination: M, keySelector: (T) -> K,
valueTransform: (T) -> V): M {
 for (element in this) {
 val key = keySelector(element)
 val list =
 destination.getOrPut(key) { ArrayList<V>() }
 list.add(valueTransform(element))
 }
 return
}

```



destination\n}\n\n/\*\*\n \* Groups values returned by the [valueTransform] function applied to each element of the original array\n \* by the key returned by the given [keySelector] function applied to the element\n \* and puts to the [destination] map each group key associated with a list of corresponding values.\n \* \n \* @return The [destination] map.\n \* \n \* @sample samples.collections.Collections.Transformations.groupByKeyAndValues\n \*/\n\npublic inline fun <K, V, M : MutableMap<in K, MutableList<V>>> ByteArray.groupByTo(destination: M, keySelector: (Byte) -> K, valueTransform: (Byte) -> V): M {\n for (element in this) {\n val key = keySelector(element)\n val list = destination.getOrPut(key) { ArrayList<V>() }\n list.add(valueTransform(element))\n }\n return destination\n}\n\n/\*\*\n \* Groups values returned by the [valueTransform] function applied to each element of the original array\n \* by the key returned by the given [keySelector] function applied to the element\n \* and puts to the [destination] map each group key associated with a list of corresponding values.\n \* \n \* @return The [destination] map.\n \* \n \* @sample samples.collections.Collections.Transformations.groupByKeyAndValues\n \*/\n\npublic inline fun <K, V, M : MutableMap<in K, MutableList<V>>> ShortArray.groupByTo(destination: M, keySelector: (Short) -> K, valueTransform: (Short) -> V): M {\n for (element in this) {\n val key = keySelector(element)\n val list = destination.getOrPut(key) { ArrayList<V>() }\n list.add(valueTransform(element))\n }\n return destination\n}\n\n/\*\*\n \* Groups values returned by the [valueTransform] function applied to each element of the original array\n \* by the key returned by the given [keySelector] function applied to the element\n \* and puts to the [destination] map each group key associated with a list of corresponding values.\n \* \n \* @return The [destination] map.\n \* \n \* @sample samples.collections.Collections.Transformations.groupByKeyAndValues\n \*/\n\npublic inline fun <K, V, M : MutableMap<in K, MutableList<V>>> IntArray.groupByTo(destination: M, keySelector: (Int) -> K, valueTransform: (Int) -> V): M {\n for (element in this) {\n val key = keySelector(element)\n val list = destination.getOrPut(key) { ArrayList<V>() }\n list.add(valueTransform(element))\n }\n return destination\n}\n\n/\*\*\n \* Groups values returned by the [valueTransform] function applied to each element of the original array\n \* by the key returned by the given [keySelector] function applied to the element\n \* and puts to the [destination] map each group key associated with a list of corresponding values.\n \* \n \* @return The [destination] map.\n \* \n \* @sample samples.collections.Collections.Transformations.groupByKeyAndValues\n \*/\n\npublic inline fun <K, V, M : MutableMap<in K, MutableList<V>>> LongArray.groupByTo(destination: M, keySelector: (Long) -> K, valueTransform: (Long) -> V): M {\n for (element in this) {\n val key = keySelector(element)\n val list = destination.getOrPut(key) { ArrayList<V>() }\n list.add(valueTransform(element))\n }\n return destination\n}\n\n/\*\*\n \* Groups values returned by the [valueTransform] function applied to each element of the original array\n \* by the key returned by the given [keySelector] function applied to the element\n \* and puts to the [destination] map each group key associated with a list of corresponding values.\n \* \n \* @return The [destination] map.\n \* \n \* @sample samples.collections.Collections.Transformations.groupByKeyAndValues\n \*/\n\npublic inline fun <K, V, M : MutableMap<in K, MutableList<V>>> FloatArray.groupByTo(destination: M, keySelector: (Float) -> K, valueTransform: (Float) -> V): M {\n for (element in this) {\n val key = keySelector(element)\n val list = destination.getOrPut(key) { ArrayList<V>() }\n list.add(valueTransform(element))\n }\n return destination\n}\n\n/\*\*\n \* Groups values returned by the [valueTransform] function applied to each element of the original array\n \* by the key returned by the given [keySelector] function applied to the element\n \* and puts to the [destination] map each group key associated with a list of corresponding values.\n \* \n \* @return The [destination] map.\n \* \n \* @sample samples.collections.Collections.Transformations.groupByKeyAndValues\n \*/\n\npublic inline fun <K, V, M : MutableMap<in K, MutableList<V>>> DoubleArray.groupByTo(destination: M, keySelector: (Double) -> K, valueTransform: (Double) -> V): M {\n for (element in this) {\n val key = keySelector(element)\n val list = destination.getOrPut(key) { ArrayList<V>() }\n list.add(valueTransform(element))\n }\n return destination\n}\n\n/\*\*\n \* Groups values returned by the [valueTransform] function applied to each element of the

original array by the key returned by the given [keySelector] function applied to the element and puts to the [destination] map each group key associated with a list of corresponding values. @return The [destination] map. @sample samples.collections.Collections.Transformations.groupByKeyAndValues

```

public inline
fun <K, V, M : MutableMap<in K, MutableList<V>>> BooleanArray.groupByTo(destination: M, keySelector:
(Boolean) -> K, valueTransform: (Boolean) -> V): M {
 for (element in this) {
 val key =
keySelector(element)
 val list = destination.getOrPut(key) { ArrayList<V>() }
list.add(valueTransform(element))
 }
 return destination
}

```

\* Groups values returned by the [valueTransform] function applied to each element of the original array by the key returned by the given [keySelector] function applied to the element and puts to the [destination] map each group key associated with a list of corresponding values. @return The [destination] map. @sample samples.collections.Collections.Transformations.groupByKeyAndValues

```

public inline fun <K, V, M :
MutableMap<in K, MutableList<V>>> CharArray.groupByTo(destination: M, keySelector: (Char) -> K,
valueTransform: (Char) -> V): M {
 for (element in this) {
 val key =
keySelector(element)
 val list = destination.getOrPut(key) { ArrayList<V>() }
list.add(valueTransform(element))
 }
 return destination
}

```

\* Creates a [Grouping] source from an array to be used later with one of group-and-fold operations using the specified [keySelector] function to extract a key from each element. @sample samples.collections.Grouping.groupingByEachCount

```

@SinceKotlin("1.1")
public inline fun <T, K> Array<out T>.groupingBy(crossinline keySelector: (T) -> K):
Grouping<T, K> {
 return object : Grouping<T, K> {
 override fun sourceIterator(): Iterator<T> =
this@groupingBy.iterator()
 override fun keyOf(element: T): K = keySelector(element)
 }
}

```

\* Returns a list containing the results of applying the given [transform] function to each element in the original array. @sample samples.collections.Collections.Transformations.map

```

public inline fun <T, R>
Array<out T>.map(transform:
(T) -> R): List<R> {
 return mapTo(ArrayList<R>(size), transform)
}

```

\* Returns a list containing the results of applying the given [transform] function to each element in the original array. @sample samples.collections.Collections.Transformations.map

```

public inline fun <R> ByteArray.map(transform: (Byte)
-> R): List<R> {
 return mapTo(ArrayList<R>(size), transform)
}

```

\* Returns a list containing the results of applying the given [transform] function to each element in the original array. @sample samples.collections.Collections.Transformations.map

```

public inline fun <R> ShortArray.map(transform:
(Short) -> R): List<R> {
 return mapTo(ArrayList<R>(size), transform)
}

```

\* Returns a list containing the results of applying the given [transform] function to each element in the original array. @sample samples.collections.Collections.Transformations.map

```

public inline fun <R> IntArray.map(transform:
(Int) -> R): List<R> {
 return mapTo(ArrayList<R>(size), transform)
}

```

\* Returns a list containing the results of applying the given [transform] function to each element in the original array. @sample samples.collections.Collections.Transformations.map

```

public inline fun <R> LongArray.map(transform:
(Long) -> R): List<R> {
 return mapTo(ArrayList<R>(size), transform)
}

```

\* Returns a list containing the results of applying the given [transform] function to each element in the original array. @sample samples.collections.Collections.Transformations.map

```

public inline fun <R> FloatArray.map(transform: (Float)
-> R): List<R> {
 return mapTo(ArrayList<R>(size), transform)
}

```

\* Returns a list containing the results of applying the given [transform] function to each element in the original array. @sample samples.collections.Collections.Transformations.map

```

public inline fun <R> DoubleArray.map(transform:
(Double) -> R): List<R> {
 return mapTo(ArrayList<R>(size), transform)
}

```

\* Returns a list containing the results of applying the given [transform] function to each element in the original array. @sample samples.collections.Collections.Transformations.map

```

public inline fun <R> BooleanArray.map(transform:
(Boolean) -> R): List<R> {
 return mapTo(ArrayList<R>(size), transform)
}

```

\* Returns a list containing the results of applying the given [transform] function to each element in the original array. @sample samples.collections.Collections.Transformations.map

```

public inline fun <R>

```

```

CharArray.map(transform: (Char) -> R): List<R> {\n return mapTo(ArrayList<R>(size), transform)\n}\n\n/**\n * Returns a list containing the results of applying the given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function that takes the index of an element and the element itself\n * and returns the result of the transform applied to the element.\n */\npublic inline fun <T, R> Array<out T>.mapIndexed(transform: (index: Int, T) -> R): List<R> {\n return mapIndexedTo(ArrayList<R>(size), transform)\n}\n\n/**\n * Returns a list containing the results of applying the given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function that takes the index of an element and the element itself\n * and returns the result of the transform applied to the element.\n */\npublic inline fun <R> ByteArray.mapIndexed(transform: (index: Int, Byte) -> R): List<R> {\n return mapIndexedTo(ArrayList<R>(size), transform)\n}\n\n/**\n * Returns a list containing the results of applying the given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function that takes the index of an element and the element itself\n * and returns the result of the transform applied to the element.\n */\npublic inline fun <R> ShortArray.mapIndexed(transform: (index: Int, Short) -> R): List<R> {\n return mapIndexedTo(ArrayList<R>(size), transform)\n}\n\n/**\n * Returns a list containing the results of applying the given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function that takes the index of an element and the element itself\n * and returns the result of the transform applied to the element.\n */\npublic inline fun <R> IntArray.mapIndexed(transform: (index: Int, Int) -> R): List<R> {\n return mapIndexedTo(ArrayList<R>(size), transform)\n}\n\n/**\n * Returns a list containing the results of applying the given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function that takes the index of an element and the element itself\n * and returns the result of the transform applied to the element.\n */\npublic inline fun <R> LongArray.mapIndexed(transform: (index: Int, Long) -> R): List<R> {\n return mapIndexedTo(ArrayList<R>(size), transform)\n}\n\n/**\n * Returns a list containing the results of applying the given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function that takes the index of an element and the element itself\n * and returns the result of the transform applied to the element.\n */\npublic inline fun <R> FloatArray.mapIndexed(transform: (index: Int, Float) -> R): List<R> {\n return mapIndexedTo(ArrayList<R>(size), transform)\n}\n\n/**\n * Returns a list containing the results of applying the given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function that takes the index of an element and the element itself\n * and returns the result of the transform applied to the element.\n */\npublic inline fun <R> DoubleArray.mapIndexed(transform: (index: Int, Double) -> R): List<R> {\n return mapIndexedTo(ArrayList<R>(size), transform)\n}\n\n/**\n * Returns a list containing the results of applying the given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function that takes the index of an element and the element itself\n * and returns the result of the transform applied to the element.\n */\npublic inline fun <R> BooleanArray.mapIndexed(transform: (index: Int, Boolean) -> R): List<R> {\n return mapIndexedTo(ArrayList<R>(size), transform)\n}\n\n/**\n * Returns a list containing the results of applying the given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function that takes the index of an element and the element itself\n * and returns the result of the transform applied to the element.\n */\npublic inline fun <R> CharArray.mapIndexed(transform: (index: Int, Char) -> R): List<R> {\n return mapIndexedTo(ArrayList<R>(size), transform)\n}\n\n/**\n * Returns a list containing only the non-null results of applying the given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function that takes the index of an element and the element itself\n * and returns the result of the transform applied to the element.\n */\npublic inline fun <T, R : Any> Array<out T>.mapIndexedNotNull(transform: (index: Int, T) -> R?): List<R> {\n return mapIndexedNotNullTo(ArrayList<R>(), transform)\n}\n\n/**\n * Applies the given [transform] function to each element and its index in the original array\n * and appends only the non-null results to the given [destination].\n * @param [transform] function that takes the index of an element and the element itself\n * and returns the result of the transform applied to the element.\n */\npublic inline fun <T, R : Any, C :>

```



```

R>> CharArray.mapIndexedTo(destination: C, transform: (index: Int, Char) -> R): C {\n var index = 0\n for
(item in this)\n destination.add(transform(index++, item))\n return destination\n}\n\n/**\n * Returns a list
containing only the non-null results of applying the given [transform] function\n * to each element in the original
array.\n * \n * @sample samples.collections.Collections.Transformations.mapNotNull\n */\npublic inline fun <T, R
: Any> Array<out T>.mapNotNull(transform: (T) -> R?): List<R> {\n return mapNotNullTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Applies the given [transform] function to each element in the original array\n * and
appends only the non-null results to the given [destination].\n */\npublic inline fun <T, R : Any, C :
MutableCollection<in R>> Array<out T>.mapNotNullTo(destination: C, transform: (T) -> R?): C {\n forEach {
element -> transform(element)?.let { destination.add(it) } }\n return destination\n}\n\n/**\n * Applies
the given [transform] function to each element of the original array\n * and appends the results to the given
[destination].\n */\npublic inline fun <T, R, C : MutableCollection<in R>> Array<out T>.mapTo(destination: C,
transform: (T) -> R): C {\n for (item in this)\n destination.add(transform(item))\n return
destination\n}\n\n/**\n * Applies the given [transform] function to each element of the original array\n * and
appends the results to the given [destination].\n */\npublic inline fun <R, C : MutableCollection<in R>>
ByteArray.mapTo(destination: C, transform: (Byte) -> R): C {\n for (item in this)\n
destination.add(transform(item))\n return destination\n}\n\n/**\n * Applies the given [transform] function to each
element of the original array\n * and appends the results to the given [destination].\n */\npublic inline fun <R, C :
MutableCollection<in R>> ShortArray.mapTo(destination: C, transform: (Short) -> R): C {\n for (item in this)\n
destination.add(transform(item))\n return destination\n}\n\n/**\n * Applies the given [transform] function to each
element of the original array\n * and appends the results to the given [destination].\n */\npublic inline fun <R, C :
MutableCollection<in R>> IntArray.mapTo(destination: C, transform: (Int) -> R): C {\n for (item in this)\n
destination.add(transform(item))\n return destination\n}\n\n/**\n * Applies the given [transform] function to each
element of the original array\n * and appends the results to the given [destination].\n */\npublic inline fun <R, C :
MutableCollection<in R>> LongArray.mapTo(destination: C, transform: (Long) -> R): C {\n for (item in this)\n
destination.add(transform(item))\n return destination\n}\n\n/**\n * Applies the given [transform] function to
each element of the original array\n * and appends the results to the given [destination].\n */\npublic inline fun <R,
C : MutableCollection<in R>> FloatArray.mapTo(destination: C, transform:
(Float) -> R): C {\n for (item in this)\n destination.add(transform(item))\n return destination\n}\n\n/**\n *
Applies the given [transform] function to each element of the original array\n * and appends the results to the
given [destination].\n */\npublic inline fun <R, C : MutableCollection<in R>> DoubleArray.mapTo(destination: C,
transform: (Double) -> R): C {\n for (item in this)\n destination.add(transform(item))\n return
destination\n}\n\n/**\n * Applies the given [transform] function to each element of the original array\n * and
appends the results to the given [destination].\n */\npublic inline fun <R, C : MutableCollection<in R>>
BooleanArray.mapTo(destination: C, transform: (Boolean) -> R): C {\n for (item in this)\n
destination.add(transform(item))\n return destination\n}\n\n/**\n * Applies the given [transform] function to each
element of the original array\n * and appends the results to the given [destination].\n */\npublic inline
fun <R, C : MutableCollection<in R>> CharArray.mapTo(destination: C, transform: (Char) -> R): C {\n for (item
in this)\n destination.add(transform(item))\n return destination\n}\n\n/**\n * Returns a lazy [Iterable] that
wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the
element itself.\n */\npublic fun <T> Array<out T>.withIndex(): Iterable<IndexedValue<T>> {\n return
IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of the original
array\n * into an [IndexedValue] containing the index of that element and the element itself.\n */\npublic fun
ByteArray.withIndex(): Iterable<IndexedValue<Byte>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n *
Returns a lazy [Iterable] that wraps each element of the original array\n * into an [IndexedValue] containing the
index of that element and the element itself.\n */\npublic fun ShortArray.withIndex():
Iterable<IndexedValue<Short>>

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 {\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of the
original array\n * into an [IndexedValue] containing the index of that element and the element itself.\n */\npublic
fun IntArray.withIndex(): Iterable<IndexedValue<Int>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n *
Returns a lazy [Iterable] that wraps each element of the original array\n * into an [IndexedValue] containing the
index of that element and the element itself.\n */\npublic fun LongArray.withIndex():
Iterable<IndexedValue<Long>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable]
that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the
element itself.\n */\npublic fun FloatArray.withIndex(): Iterable<IndexedValue<Float>> {\n return
IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of
the original array\n * into an [IndexedValue] containing the index of that element and the element itself.\n */\n
public fun DoubleArray.withIndex(): Iterable<IndexedValue<Double>> {\n return IndexingIterable {
iterator() }\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of the original array\n * into an
[IndexedValue] containing the index of that element and the element itself.\n */\npublic fun
BooleanArray.withIndex(): Iterable<IndexedValue<Boolean>> {\n return IndexingIterable { iterator()
}\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of the original array\n * into an [IndexedValue]
containing the index of that element and the element itself.\n */\npublic fun CharArray.withIndex():
Iterable<IndexedValue<Char>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a list containing
only distinct elements from the given array.\n * \n * Among equal elements of the given array, only the first one will
be present in the resulting list.\n
* The elements in the resulting list are in the same order as they were in the source array.\n * \n * @sample
samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\npublic fun <T> Array<out
T>.distinct(): List<T> {\n return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list containing only distinct
elements from the given array.\n * \n * The elements in the resulting list are in the same order as they were in the
source array.\n * \n * @sample samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\npublic
fun ByteArray.distinct(): List<Byte> {\n return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list containing
only distinct elements from the given array.\n * \n * The elements in the resulting list are in the same order as they
were in the source array.\n * \n * @sample
samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\npublic fun ShortArray.distinct():
List<Short> {\n return this.toMutableSet().toList()\n}\n\n/**\n
* Returns a list containing only distinct elements from the given array.\n * \n * The elements in the resulting list are
in the same order as they were in the source array.\n * \n * @sample
samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\npublic fun IntArray.distinct():
List<Int> {\n return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list containing only distinct elements from
the given array.\n * \n * The elements in the resulting list are in the same order as they were in the source array.\n
* \n * @sample samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\npublic fun
LongArray.distinct(): List<Long> {\n return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list containing
only distinct elements from the given array.\n * \n * The elements in the resulting list are in the same order as they
were in the source array.\n * \n * @sample
samples.collections.Collections.Transformations.distinctAndDistinctBy\n
*/\npublic fun FloatArray.distinct(): List<Float> {\n return this.toMutableSet().toList()\n}\n\n/**\n * Returns a
list containing only distinct elements from the given array.\n * \n * The elements in the resulting list are in the same
order as they were in the source array.\n * \n * @sample
samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\npublic fun DoubleArray.distinct():
List<Double> {\n return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list containing only distinct elements
from the given array.\n * \n * The elements in the resulting list are in the same order as they were in the source
array.\n * \n * @sample samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\npublic fun
BooleanArray.distinct(): List<Boolean> {\n return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list
containing only distinct elements from the given array.\n * \n * The elements in the resulting list are in the same

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order

as they were in the source array.\n \* \n \* @sample

samples.collections.Collections.Transformations.distinctAndDistinctBy\n \*^\npublic fun CharArray.distinct():

List<Char> {\n return this.toMutableSet().toList()\n}\n\n/\*\*\n \* Returns a list containing only elements from the given array\n \* having distinct keys returned by the given [selector] function.\n \* \n \* Among elements of the given array with equal keys, only the first one will be present in the resulting list.\n \* The elements in the resulting list are in the same order as they were in the source array.\n \* \n \* @sample

samples.collections.Collections.Transformations.distinctAndDistinctBy\n \*^\npublic inline fun <T, K> Array<out T>.distinctBy(selector: (T) -> K): List<T> {\n val set = HashSet<K>()\n val list = ArrayList<T>()\n for (e in this) {\n val key = selector(e)\n if (set.add(key))\n list.add(e)\n }\n return list\n}\n\n/\*\*\n \*

Returns a list containing only elements from the given

array\n \* having distinct keys returned by the given [selector] function.\n \* \n \* The elements in the resulting list are in the same order as they were in the source array.\n \* \n \* @sample

samples.collections.Collections.Transformations.distinctAndDistinctBy\n \*^\npublic inline fun <K>

ByteArray.distinctBy(selector: (Byte) -> K): List<Byte> {\n val set = HashSet<K>()\n val list = ArrayList<Byte>()\n for (e in this) {\n val key = selector(e)\n if (set.add(key))\n list.add(e)\n }\n return list\n}\n\n/\*\*\n \* Returns a list containing only elements from the given array\n \* having distinct keys returned by the given [selector] function.\n \* \n \* The elements in the resulting list are in the same order as they were in the source array.\n \* \n \* @sample

samples.collections.Collections.Transformations.distinctAndDistinctBy\n \*^\npublic inline fun <K>

ShortArray.distinctBy(selector: (Short) -> K): List<Short> {\n val set = HashSet<K>()\n val list = ArrayList<Short>()\n for (e in this) {\n val key = selector(e)\n if (set.add(key))\n list.add(e)\n }\n return list\n}\n\n/\*\*\n \* Returns a list containing only elements from the given array\n \* having distinct keys returned by the given [selector] function.\n \* \n \* The elements in the resulting list are in the same order as they were in the source array.\n \* \n \* @sample

samples.collections.Collections.Transformations.distinctAndDistinctBy\n \*^\npublic inline fun <K>

IntArray.distinctBy(selector: (Int) -> K): List<Int> {\n val set = HashSet<K>()\n val list = ArrayList<Int>()\n for (e in this) {\n val key = selector(e)\n if (set.add(key))\n list.add(e)\n }\n return list\n}\n\n/\*\*\n \* Returns a list containing only elements from the given array\n \* having distinct keys returned by the given [selector] function.\n \* \n \* The elements in the resulting list are in the same order as they were in the source array.\n \* \n \*

\* \n \* @sample samples.collections.Collections.Transformations.distinctAndDistinctBy\n \*^\npublic inline fun <K>

LongArray.distinctBy(selector: (Long) -> K): List<Long> {\n val set = HashSet<K>()\n val list = ArrayList<Long>()\n for (e in this) {\n val key = selector(e)\n if (set.add(key))\n list.add(e)\n }\n return list\n}\n\n/\*\*\n \* Returns a list containing only elements from the given array\n \* having distinct keys returned by the given [selector] function.\n \* \n \* The elements in the resulting list are in the same order as they were in the source array.\n \* \n \* @sample

samples.collections.Collections.Transformations.distinctAndDistinctBy\n \*^\npublic inline fun <K>

FloatArray.distinctBy(selector: (Float) -> K): List<Float> {\n val set = HashSet<K>()\n val list = ArrayList<Float>()\n for (e in this) {\n val key = selector(e)\n if (set.add(key))\n list.add(e)\n }\n return list\n}\n\n/\*\*\n \* Returns a

list containing only elements from the given array\n \* having distinct keys returned by the given [selector] function.\n \* \n \* The elements in the resulting list are in the same order as they were in the source array.\n \* \n \*

@sample samples.collections.Collections.Transformations.distinctAndDistinctBy\n \*^\npublic inline fun <K>

DoubleArray.distinctBy(selector: (Double) -> K): List<Double> {\n val set = HashSet<K>()\n val list = ArrayList<Double>()\n for (e in this) {\n val key = selector(e)\n if (set.add(key))\n list.add(e)\n }\n return list\n}\n\n/\*\*\n \* Returns a list containing only elements from the given array\n \* having distinct keys returned by the given [selector] function.\n \* \n \* The elements in the resulting list are in the same order as they

were in the source array.

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 @sample
 samples.collections.Collections.Transformations.distinctAndDistinctBy<K>
 BooleanArray.distinctBy(selector: (Boolean) -> K):
 List<Boolean> {
 val set = HashSet<K>()
 val list = ArrayList<Boolean>()
 for (e in this) {
 val key = selector(e)
 if (set.add(key))
 list.add(e)
 }
 return list
 }
 Returns a list containing only elements from the given array having distinct keys returned by the given [selector] function. The elements in the resulting list are in the same order as they were in the source array.
 @sample
 samples.collections.Collections.Transformations.distinctAndDistinctBy<K>
 CharArray.distinctBy(selector: (Char) -> K): List<Char> {
 val set = HashSet<K>()
 val list = ArrayList<Char>()
 for (e in this) {
 val key = selector(e)
 if (set.add(key))
 list.add(e)
 }
 return list
 }
 Returns a set containing all elements that are contained by both this array and the specified collection. The returned set preserves the element iteration order of the original array.
 To get a set containing all elements that are contained at least in one of these collections use [union].
 public infix fun <T> Array<out T>.intersect(other: Iterable<T>): Set<T> {
 val set = this.toMutableSet()
 set.retainAll(other)
 return set
 }
 Returns a set containing all elements that are contained by both this array and the specified collection. The returned set preserves the element iteration order of the original array.
 To get a set containing all elements that are contained at least in one of these collections use [union].
 public infix fun ByteArray.intersect(other: Iterable<Byte>): Set<Byte> {
 val set = this.toMutableSet()
 set.retainAll(other)
 return set
 }
 Returns a set containing all elements that are contained by both this array and the specified collection. The returned set preserves the element iteration order of the original array.
 To get a set containing all elements that are contained at least in one of these collections use [union].
 public infix fun ShortArray.intersect(other: Iterable<Short>): Set<Short> {
 val set = this.toMutableSet()
 set.retainAll(other)
 return set
 }
 Returns a set containing all elements that are contained by both this array and the specified collection. The returned set preserves the element iteration order of the original array.
 To get a set containing all elements that are contained at least in one of these collections use [union].
 public infix fun IntArray.intersect(other: Iterable<Int>): Set<Int> {
 val set = this.toMutableSet()
 set.retainAll(other)
 return set
 }
 Returns a set containing all elements that are contained by both this array and the specified collection. The returned set preserves the element iteration order of the original array.
 To get a set containing all elements that are contained at least in one of these collections use [union].
 public infix fun LongArray.intersect(other: Iterable<Long>): Set<Long> {
 val set = this.toMutableSet()
 set.retainAll(other)
 return set
 }
 Returns a set containing all elements that are contained by both this array and the specified collection. The returned set preserves the element iteration order of the original array.
 To get a set containing all elements that are contained at least in one of these collections use [union].
 public infix fun FloatArray.intersect(other: Iterable<Float>): Set<Float> {
 val set = this.toMutableSet()
 set.retainAll(other)
 return set
 }
 Returns a set containing all elements that are contained by both this array and the specified collection. The returned set preserves the element iteration order of the original array.
 To get a set containing all elements that are contained at least in one of these collections use [union].
 public infix fun DoubleArray.intersect(other: Iterable<Double>): Set<Double> {
 val set = this.toMutableSet()
 set.retainAll(other)
 return set
 }
 Returns a set containing all elements that are contained by both this array and the specified collection. The returned set preserves the element iteration order of the original array.
 To get a set containing all elements that are contained at least in one of these collections use [union].
 public infix fun BooleanArray.intersect(other: Iterable<Boolean>): Set<Boolean> {
 val set = this.toMutableSet()
 set.retainAll(other)
 return set
 }
 Returns a set containing all elements that are contained by both this array and the specified collection. The returned set preserves the element iteration order of the original array.
 To get a set containing all elements that are contained at least in one of these collections use [union].

```



```

fun CharArray.intersect(other: Iterable<Char>): Set<Char> {
 val set = this.toMutableSet()
 set.retainAll(other)
 return set
}

Returns a set containing all elements that are contained by this array and not contained by the specified collection.

The returned set preserves the element iteration order of the original array.

public infix fun <T> Array<out T>.subtract(other: Iterable<T>): Set<T> {
 val set = this.toMutableSet()
 set.removeAll(other)
 return set
}

Returns a set containing all elements that are contained by this array and not contained by the specified collection.

The returned set preserves the element iteration order of the original array.

public infix fun ByteArray.subtract(other: Iterable<Byte>): Set<Byte> {
 val set = this.toMutableSet()
 set.removeAll(other)
 return set
}

Returns a set containing all elements that are contained by this array and not contained by the specified collection.

The returned set preserves the element iteration order of the original array.

public infix fun ShortArray.subtract(other: Iterable<Short>): Set<Short> {
 val set = this.toMutableSet()
 set.removeAll(other)
 return set
}

Returns a set containing all elements that are contained by this array and not contained by the specified collection.

The returned set preserves the element iteration order of the original array.

public infix fun IntArray.subtract(other: Iterable<Int>): Set<Int> {
 val set = this.toMutableSet()
 set.removeAll(other)
 return set
}

Returns a set containing all elements that are contained by this array and not contained by the specified collection.

The returned set preserves the element iteration order of the original array.

public infix fun LongArray.subtract(other: Iterable<Long>): Set<Long> {
 val set = this.toMutableSet()
 set.removeAll(other)
 return set
}

Returns a set containing all elements that are contained by this array and not contained by the specified collection.

The returned set preserves the element iteration order of the original array.

public infix fun FloatArray.subtract(other: Iterable<Float>): Set<Float> {
 val set = this.toMutableSet()
 set.removeAll(other)
 return set
}

Returns a set containing all elements that are contained by this array and not contained by the specified collection.

The returned set preserves the element iteration order of the original array.

public infix fun DoubleArray.subtract(other: Iterable<Double>): Set<Double> {
 val set = this.toMutableSet()
 set.removeAll(other)
 return set
}

Returns a set containing all elements that are contained by this array and not contained by the specified collection.

The returned set preserves the element iteration order of the original array.

public infix fun BooleanArray.subtract(other: Iterable<Boolean>): Set<Boolean> {
 val set = this.toMutableSet()
 set.removeAll(other)
 return set
}

Returns a set containing all elements that are contained by this array and not contained by the specified collection.

The returned set preserves the element iteration order of the original array.

public infix fun CharArray.subtract(other: Iterable<Char>): Set<Char> {
 val set = this.toMutableSet()
 set.removeAll(other)
 return set
}

Returns a new [MutableSet] containing all distinct elements from the given array.

The returned set preserves the element iteration order of the original array.

public fun <T> Array<out T>.toMutableSet(): MutableSet<T> {
 return toCollection(LinkedHashSet<T>(mapCapacity(size)))
}

Returns a new [MutableSet] containing all distinct elements from the given array.

The returned set preserves the element iteration order of the original array.

public fun ByteArray.toMutableSet(): MutableSet<Byte> {
 return toCollection(LinkedHashSet<Byte>(mapCapacity(size)))
}

Returns a new [MutableSet] containing all distinct elements from the given array.

The returned set preserves the element iteration order of the original array.

public fun ShortArray.toMutableSet(): MutableSet<Short> {
 return toCollection(LinkedHashSet<Short>(mapCapacity(size)))
}

Returns a new [MutableSet] containing all distinct elements from the given array.

The returned set preserves the element iteration order of the original array.

public fun IntArray.toMutableSet(): MutableSet<Int> {
 return toCollection(LinkedHashSet<Int>(mapCapacity(size)))
}

Returns a new [MutableSet] containing all distinct elements from the given array.

The returned set preserves the element iteration order of the original array.

public fun LongArray.toMutableSet(): MutableSet<Long> {
 return toCollection(LinkedHashSet<Long>(mapCapacity(size)))
}

Returns a new [MutableSet] containing all distinct elements from the given array.

The returned set preserves the element iteration order

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iteration order of the original array.\n * Those elements of the [other] collection that are unique are iterated in the
end\n * in the order of the [other] collection.\n * \n * To get a set containing all elements that are contained in both
collections use [intersect].\n */\npublic infix fun BooleanArray.union(other: Iterable<Boolean>): Set<Boolean> {\n
val set = this.toMutableSet()\n set.addAll(other)\n return set\n}\n\n/**\n * Returns a set containing all distinct
elements from both collections.\n * \n * The returned set preserves the element iteration order of the original array.\n
* Those elements of the [other] collection that
are unique are iterated in the end\n * in the order of the [other] collection.\n * \n * To get a set containing all
elements that are contained in both collections use [intersect].\n */\npublic infix fun CharArray.union(other:
Iterable<Char>): Set<Char> {\n val set = this.toMutableSet()\n set.addAll(other)\n return set\n}\n\n/**\n *
Returns `true` if all elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n */\npublic inline fun <T> Array<out T>.all(predicate: (T) ->
Boolean): Boolean {\n for (element in this) if (!predicate(element)) return false\n return true\n}\n\n/**\n *
Returns `true` if all elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n */\npublic inline fun ByteArray.all(predicate: (Byte) -> Boolean):
Boolean {\n for (element in this) if (!predicate(element)) return false\n return true\n}\n\n/**\n * Returns `true` if
all elements match the given [predicate].\n * \n * @sample samples.collections.Collections.Aggregates.all\n */\npublic
inline fun ShortArray.all(predicate: (Short) -> Boolean): Boolean {\n for (element in this) if (!predicate(element))
return false\n return true\n}\n\n/**\n * Returns `true` if all elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n */\npublic inline fun IntArray.all(predicate: (Int) -> Boolean):
Boolean {\n for (element in this) if (!predicate(element)) return false\n return true\n}\n\n/**\n * Returns `true` if
all elements match the given [predicate].\n * \n * @sample samples.collections.Collections.Aggregates.all\n */\npublic
inline fun LongArray.all(predicate: (Long) -> Boolean): Boolean {\n for (element in this) if (!predicate(element))
return false\n return true\n}\n\n/**\n * Returns `true` if all elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n */\npublic inline fun FloatArray.all(predicate: (Float) -> Boolean):
Boolean {\n for (element in this) if (!predicate(element)) return false\n return true\n}\n\n/**\n * Returns `true`
if all elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n */\npublic inline fun DoubleArray.all(predicate: (Double) ->
Boolean): Boolean {\n for (element in this) if (!predicate(element)) return false\n return true\n}\n\n/**\n *
Returns `true` if all elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n */\npublic inline fun BooleanArray.all(predicate: (Boolean) ->
Boolean): Boolean {\n for (element in this) if (!predicate(element)) return false\n return true\n}\n\n/**\n *
Returns `true` if all elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n */\npublic inline fun CharArray.all(predicate: (Char) -> Boolean):
Boolean {\n for (element in this) if (!predicate(element))
return false\n return true\n}\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic fun <T> Array<out T>.any(): Boolean {\n return
!isEmpty()\n}\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic fun ByteArray.any(): Boolean {\n return
!isEmpty()\n}\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic fun ShortArray.any(): Boolean {\n return
!isEmpty()\n}\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic fun IntArray.any(): Boolean {\n return
!isEmpty()\n}\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic fun LongArray.any(): Boolean {\n
return !isEmpty()\n}\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic fun FloatArray.any(): Boolean {\n return

```

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isEmpty()\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n *\npublic fun DoubleArray.any(): Boolean {\n return
isEmpty()\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n *\npublic fun BooleanArray.any(): Boolean {\n return
isEmpty()\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n *\npublic fun CharArray.any(): Boolean {\n return
isEmpty()\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.anyWithPredicate\n *\npublic inline fun <T> Array<out
T>.any(predicate: (T) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return true\n return
false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.anyWithPredicate\n *\npublic inline fun ByteArray.any(predicate:
(Byte) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return true\n return
false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.anyWithPredicate\n *\npublic inline fun ShortArray.any(predicate:
(Short) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return true\n return
false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.anyWithPredicate\n *\npublic inline fun IntArray.any(predicate: (Int) -
> Boolean):
Boolean {\n for (element in this) if (predicate(element)) return true\n return false\n}\n\n/**\n * Returns `true` if
at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.anyWithPredicate\n *\npublic inline fun LongArray.any(predicate:
(Long) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return true\n return
false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.anyWithPredicate\n *\npublic inline fun FloatArray.any(predicate:
(Float) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return true\n return
false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.anyWithPredicate\n *\npublic inline fun DoubleArray.any(predicate:
(Double) -> Boolean): Boolean {\n for (element
in this) if (predicate(element)) return true\n return false\n}\n\n/**\n * Returns `true` if at least one element
matches the given [predicate].\n * \n * @sample samples.collections.Collections.Aggregates.anyWithPredicate\n
*\npublic inline fun BooleanArray.any(predicate: (Boolean) -> Boolean): Boolean {\n for (element in this) if
(predicate(element)) return true\n return false\n}\n\n/**\n * Returns `true` if at least one element matches the
given [predicate].\n * \n * @sample samples.collections.Collections.Aggregates.anyWithPredicate\n
*\npublic inline fun CharArray.any(predicate: (Char) -> Boolean): Boolean {\n for (element in this) if
(predicate(element))
return true\n return false\n}\n\n/**\n * Returns the number of elements in this array.\n
\n\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.count(): Int {\n return size\n}\n\n/**\n *
Returns the number of elements in this array.\n * \n*\n@kotlin.internal.InlineOnly\npublic inline fun
ByteArray.count():
Int {\n return size\n}\n\n/**\n * Returns the number of elements in this array.\n
\n\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.count(): Int {\n return size\n}\n\n/**\n * Returns
the number of elements in this array.\n * \n*\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.count(): Int {\n
return size\n}\n\n/**\n * Returns the number of elements in this array.\n * \n*\n@kotlin.internal.InlineOnly\npublic
inline fun LongArray.count(): Int {\n return size\n}\n\n/**\n * Returns the number of elements in this array.\n
\n\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.count(): Int {\n return size\n}\n\n/**\n * Returns
the number of elements in this array.\n * \n*\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.count(): Int {\n
return size\n}\n\n/**\n * Returns the number of elements in this array.\n * \n*\n@kotlin.internal.InlineOnly\npublic
inline fun BooleanArray.count(): Int {\n return size\n}\n\n/**\n * Returns the number of

```

```

elements in this array.\n *\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.count(): Int {\n return
size\n}\n\n/**\n * Returns the number of elements matching the given [predicate].\n *\npublic inline fun <T>
Array<out T>.count(predicate: (T) -> Boolean): Int {\n var count = 0\n for (element in this) if
(predicate(element)) ++count\n return count\n}\n\n/**\n * Returns the number of elements matching the given
[predicate].\n *\npublic inline fun ByteArray.count(predicate: (Byte) -> Boolean): Int {\n var count = 0\n for
(element in this) if (predicate(element)) ++count\n return count\n}\n\n/**\n * Returns the number of elements
matching the given [predicate].\n *\npublic inline fun ShortArray.count(predicate: (Short) -> Boolean): Int {\n var
count = 0\n for (element in this) if (predicate(element)) ++count\n return count\n}\n\n/**\n * Returns the
number of elements matching the given [predicate].\n *\npublic inline fun IntArray.count(predicate:
(Int) -> Boolean): Int {\n var count = 0\n for (element in this) if (predicate(element)) ++count\n return
count\n}\n\n/**\n * Returns the number of elements matching the given [predicate].\n *\npublic inline fun
LongArray.count(predicate: (Long) -> Boolean): Int {\n var count = 0\n for (element in this) if
(predicate(element)) ++count\n return count\n}\n\n/**\n * Returns the number of elements matching the given
[predicate].\n *\npublic inline fun FloatArray.count(predicate: (Float) -> Boolean): Int {\n var count = 0\n for
(element in this) if (predicate(element)) ++count\n return count\n}\n\n/**\n * Returns the number of elements
matching the given [predicate].\n *\npublic inline fun DoubleArray.count(predicate: (Double) -> Boolean): Int {\n var
count = 0\n for (element in this) if (predicate(element)) ++count\n return count\n}\n\n/**\n * Returns the
number of elements matching the given [predicate].\n *\npublic inline fun BooleanArray.count(predicate:
(Boolean) -> Boolean): Int {\n var count = 0\n for (element in this) if (predicate(element)) ++count\n return
count\n}\n\n/**\n * Returns the number of elements matching the given [predicate].\n *\npublic inline fun
CharArray.count(predicate: (Char) -> Boolean): Int {\n var count = 0\n for (element in this) if
(predicate(element)) ++count\n return count\n}\n\n/**\n * Accumulates value starting with [initial] value and
applying [operation] from left to right\n * to current accumulator value and each element.\n * \n * Returns the
specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes current accumulator
value and an element, and calculates the next accumulator value.\n *\npublic inline fun <T, R> Array<out
T>.fold(initial: R, operation: (acc: R, T) -> R): R {\n var accumulator = initial\n for (element in this)
accumulator = operation(accumulator, element)\n return accumulator\n}\n\n/**\n * Accumulates value
starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each
element.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that
takes current accumulator value and an element, and calculates the next accumulator value.\n *\npublic inline fun
<R> ByteArray.fold(initial: R, operation: (acc: R, Byte) -> R): R {\n var accumulator = initial\n for (element in
this) accumulator = operation(accumulator, element)\n return accumulator\n}\n\n/**\n * Accumulates value
starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each
element.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that
takes current accumulator value and an element, and calculates the next accumulator value.\n *\npublic inline fun
<R> ShortArray.fold(initial: R, operation: (acc: R, Short) -> R): R
{\n var accumulator = initial\n for (element in this) accumulator = operation(accumulator, element)\n return
accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to
right\n * to current accumulator value and each element.\n * \n * Returns the specified [initial] value if the array is
empty.\n * \n * @param [operation] function that takes current accumulator value and an element, and calculates the
next accumulator value.\n *\npublic inline fun <R> IntArray.fold(initial: R, operation: (acc: R, Int) -> R): R {\n var
accumulator = initial\n for (element in this) accumulator = operation(accumulator, element)\n return
accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to
right\n * to current accumulator value and each element.\n * \n * Returns the specified [initial] value if the array is
empty.\n * \n * @param [operation] function that takes current accumulator
value and an element, and calculates the next accumulator value.\n *\npublic inline fun <R>
LongArray.fold(initial: R, operation: (acc: R, Long) -> R): R {\n var accumulator = initial\n for (element in this)
accumulator = operation(accumulator, element)\n return accumulator\n}\n\n/**\n * Accumulates value starting

```



\* @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

```

public inline fun <R> LongArray.foldIndexed(initial: R,
operation: (index: Int, acc: R, Long) -> R): R {
 var index = 0
 var accumulator = initial
 for (element in this) accumulator = operation(index++, accumulator, element)
 return accumulator
}

```

\* Accumulates value starting with [initial] value and applying [operation] from left to right to current accumulator value and each element with its index in the original array.

\* Returns the specified [initial] value if the array is empty.

\* @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

```

public inline fun <R> FloatArray.foldIndexed(initial: R, operation: (index: Int, acc: R, Float) -> R): R {
 var index = 0
 var accumulator = initial
 for (element in this) accumulator = operation(index++, accumulator, element)
 return accumulator
}

```

\* Accumulates value starting with [initial] value and applying [operation] from left to right to current accumulator value and each element with its index in the original array.

\* Returns the specified [initial] value if the array is empty.

\* @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

```

public inline fun <R> DoubleArray.foldIndexed(initial: R, operation: (index: Int, acc: R, Double) -> R): R {
 var index = 0
 var accumulator = initial
 for (element in this) accumulator = operation(index++, accumulator, element)
 return accumulator
}

```

\* Accumulates value starting with [initial] value and applying [operation] from left to right to current accumulator value and each element with its index in the original array.

\* Returns the specified [initial] value if the array is empty.

\* @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

```

public inline fun <R> BooleanArray.foldIndexed(initial: R, operation: (index: Int, acc: R, Boolean) -> R): R {
 var index = 0
 var accumulator = initial
 for (element in this) accumulator = operation(index++, accumulator, element)
 return accumulator
}

```

\* Accumulates value starting with [initial] value and applying [operation] from left to right to current accumulator value and each element with its index in the original array.

\* Returns the specified [initial] value if the array is empty.

\* @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

```

public inline fun <R> CharArray.foldIndexed(initial: R, operation: (index: Int, acc: R, Char) -> R): R {
 var index = 0
 var accumulator = initial
 for (element in this) accumulator = operation(index++, accumulator, element)
 return accumulator
}

```

\* Accumulates value starting with [initial] value and applying [operation] from right to left to each element and current accumulator value.

\* Returns the specified [initial] value if the array is empty.

\* @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.

```

public inline fun <T, R> Array<out T>.foldRight(initial: R, operation: (T, acc: R) -> R): R {
 var index = lastIndex
 var accumulator = initial
 while (index >= 0) {
 accumulator = operation(get(index--), accumulator)
 }
 return accumulator
}

```

\* Accumulates value starting with [initial] value and applying [operation] from right to left to each element and current accumulator value.

\* Returns the specified [initial] value if the array is empty.

\* @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.

```

public inline fun <R> ByteArray.foldRight(initial: R, operation: (Byte, acc: R) -> R): R {
 var index = lastIndex
 var accumulator = initial
 while (index >= 0) {
 accumulator = operation(get(index--), accumulator)
 }
 return accumulator
}

```

\* Accumulates value starting with [initial] value and applying [operation] from right to left to each element and current accumulator value.

```

public inline fun <R> ShortArray.foldRight(initial: R, operation: (Short, acc: R) -> R): R {
 var index = lastIndex
 var accumulator = initial
 while (index >= 0) {
 accumulator = operation(get(index--), accumulator)
 }
 return accumulator
}

```

\* Accumulates value starting with [initial] value and applying [operation] from right to left to each element and current accumulator value.

```

* \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes an
element and current accumulator value, and calculates the next accumulator value.\n */\npublic inline fun <R>
IntArray.foldRight(initial: R, operation: (Int, acc: R) -> R): R {\n var index = lastIndex\n var accumulator =
initial\n while (index >= 0) {\n accumulator = operation(get(index--), accumulator)\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to
left\n * to each element and current accumulator value.\n * \n * Returns the specified [initial] value if the array is
empty.\n * \n * @param [operation] function that takes an element and current accumulator value, and calculates the
next accumulator value.\n */\npublic inline fun <R> LongArray.foldRight(initial: R, operation: (Long, acc: R) -> R):
R {\n var index = lastIndex\n var accumulator = initial\n while
(index >= 0) {\n accumulator = operation(get(index--), accumulator)\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to left\n * to each element and
current accumulator value.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param
[operation] function that takes an element and current accumulator value, and calculates the next accumulator
value.\n */\npublic inline fun <R> FloatArray.foldRight(initial: R, operation: (Float, acc: R) -> R): R {\n var index
= lastIndex\n var accumulator = initial\n while (index >= 0) {\n accumulator = operation(get(index--),
accumulator)\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns the specified [initial] value if the array is
empty.\n * \n * @param [operation] function that takes an element and current accumulator value, and calculates the
next accumulator value.\n */\npublic inline fun <R> BooleanArray.foldRight(initial: R, operation: (Boolean, acc: R)
-> R): R {\n var index = lastIndex\n var accumulator = initial\n while (index >= 0) {\n accumulator =
operation(get(index--), accumulator)\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to
left\n * to each element and current accumulator value.\n * \n * Returns the specified [initial] value if the array is
empty.\n * \n * @param [operation] function that takes an element and current accumulator value, and calculates the
next accumulator value.\n */\npublic inline fun <R> CharArray.foldRight(initial: R, operation: (Char, acc: R) -> R):
R {\n var index = lastIndex\n var accumulator = initial\n while (index >= 0) {\n accumulator =
operation(get(index--), accumulator)\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to left\n * to each element with its index in the original array and
current accumulator value.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param
[operation] function that takes the index of an element, the element itself\n * and current accumulator value, and calculates the next accumulator value.\n */\npublic inline fun <T, R>
Array<out T>.foldRightIndexed(initial: R, operation: (index: Int, T, acc: R) -> R): R {\n var index = lastIndex\n
var accumulator = initial\n while (index >= 0) {\n accumulator = operation(index, get(index), accumulator)\n
 --index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to left\n * to each element with its index in the original array and current accumulator value.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the
index of an element, the element itself\n * and current accumulator value, and calculates the next accumulator
value.\n */\npublic inline fun <R> ByteArray.foldRightIndexed(initial: R, operation: (index: Int, Byte, acc: R) -> R):
R {\n var index = lastIndex\n var accumulator = initial\n
while (index >= 0) {\n accumulator = operation(index, get(index), accumulator)\n --index\n }\n
return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right
to left\n * to each element with its index in the original array and current accumulator value.\n * \n * Returns the

```



```

specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the index of an
element, the element itself\n * and current accumulator value, and calculates the next accumulator value.\n
*/\npublic inline fun <R> ShortArray.foldRightIndexed(initial: R, operation: (index: Int, Short, acc: R) -> R): R {\n
var index = lastIndex\n var accumulator = initial\n while (index >= 0) {\n accumulator = operation(index,
get(index), accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with
[initial] value and applying [operation] from right to left\n
* to each element with its index in the original array and current accumulator value.\n * \n * Returns the specified
[initial] value if the array is empty.\n * \n * @param [operation] function that takes the index of an element, the
element itself\n * and current accumulator value, and calculates the next accumulator value.\n */\npublic inline fun
<R> IntArray.foldRightIndexed(initial: R, operation: (index: Int, Int, acc: R) -> R): R {\n var index = lastIndex\n
var accumulator = initial\n while (index >= 0) {\n accumulator = operation(index, get(index), accumulator)\n
--index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying
[operation] from right to left\n * to each element with its index in the original array and current accumulator value.\n
* \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the
index of an element, the element itself\n * and
current accumulator value, and calculates the next accumulator value.\n */\npublic inline fun <R>
LongArray.foldRightIndexed(initial: R, operation: (index: Int, Long, acc: R) -> R): R {\n var index = lastIndex\n
var accumulator = initial\n while (index >= 0) {\n accumulator = operation(index, get(index), accumulator)\n
--index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying
[operation] from right to left\n * to each element with its index in the original array and current accumulator value.\n
* \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the
index of an element, the element itself\n * and current accumulator value, and calculates the next accumulator
value.\n */\npublic inline fun <R> FloatArray.foldRightIndexed(initial: R, operation: (index: Int, Float, acc: R) ->
R): R {\n var index = lastIndex\n var accumulator = initial\n
while (index >= 0) {\n accumulator = operation(index, get(index), accumulator)\n --index\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to
left\n * to each element with its index in the original array and current accumulator value.\n * \n * Returns the
specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the index of an
element, the element itself\n * and current accumulator value, and calculates the next accumulator value.\n
*/\npublic inline fun <R> DoubleArray.foldRightIndexed(initial: R, operation: (index: Int, Double, acc: R) -> R): R
{\n var index = lastIndex\n var accumulator = initial\n
while (index >= 0) {\n accumulator =
operation(index, get(index), accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates
value starting with [initial] value and applying [operation] from right to left\n * to each
element with its index in the original array and current accumulator value.\n * \n * Returns the specified [initial]
value if the array is empty.\n * \n * @param [operation] function that takes the index of an element, the element
itself\n * and current accumulator value, and calculates the next accumulator value.\n */\npublic inline fun <R>
BooleanArray.foldRightIndexed(initial: R, operation: (index: Int, Boolean, acc: R) -> R): R {\n var index =
lastIndex\n var accumulator = initial\n while (index >= 0) {\n accumulator = operation(index, get(index),
accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial]
value and applying [operation] from right to left\n * to each element with its index in the original array and current
accumulator value.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation]
function that takes the index of an element, the element itself\n * and
current accumulator value, and calculates the next accumulator value.\n */\npublic inline fun <R>
CharArray.foldRightIndexed(initial: R, operation: (index: Int, Char, acc: R) -> R): R {\n var index = lastIndex\n
var accumulator = initial\n while (index >= 0) {\n accumulator = operation(index, get(index), accumulator)\n
--index\n }\n return accumulator\n}\n\n/**\n * Performs the given [action] on each element.\n */\npublic
inline fun <T> Array<out T>.forEach(action: (T) -> Unit): Unit {\n for (element in this)
action(element)\n}\n\n/**\n * Performs the given [action] on each element.\n */\npublic inline fun

```

```

ByteArray.forEach(action: (Byte) -> Unit): Unit {
 for (element in this) action(element)
}
// Performs the given [action] on each element.
public inline fun ShortArray.forEach(action: (Short) -> Unit): Unit {
 for (element in this) action(element)
}
// Performs the given [action] on each element.
public inline fun IntArray.forEach(action: (Int) -> Unit): Unit {
 for (element in this) action(element)
}
// Performs the given [action] on each element.
public inline fun LongArray.forEach(action: (Long) -> Unit): Unit {
 for (element in this) action(element)
}
// Performs the given [action] on each element.
public inline fun FloatArray.forEach(action: (Float) -> Unit): Unit {
 for (element in this) action(element)
}
// Performs the given [action] on each element.
public inline fun DoubleArray.forEach(action: (Double) -> Unit): Unit {
 for (element in this) action(element)
}
// Performs the given [action] on each element.
public inline fun BooleanArray.forEach(action: (Boolean) -> Unit): Unit {
 for (element in this) action(element)
}
// Performs the given [action] on each element.
public inline fun CharArray.forEach(action: (Char) -> Unit): Unit {
 for (element in this) action(element)
}
// Performs the given [action] on each element, providing sequential index with the element.
@param [action] function that takes the index of an element and the element itself
and performs the action on the element.
public inline fun <T> Array<out T>.forEachIndexed(action: (index: Int, T) -> Unit): Unit {
 var index = 0
 for (item in this) action(index++, item)
}
// Performs the given [action] on each element, providing sequential index with the element.
@param [action] function that takes the index of an element and the element itself
and performs the action on the element.
public inline fun ByteArray.forEachIndexed(action: (index: Int, Byte) -> Unit): Unit {
 var index = 0
 for (item in this) action(index++, item)
}
// Performs the given [action] on each element, providing sequential index with the element.
@param [action] function that takes the index of an element and the element itself
and performs the action on the element.
public inline fun ShortArray.forEachIndexed(action: (index: Int, Short) -> Unit): Unit {
 var index = 0
 for (item in this) action(index++, item)
}
// Performs the given [action] on each element, providing sequential index with the element.
@param [action] function that takes the index of an element and the element itself
and performs the action on the element.
public inline fun IntArray.forEachIndexed(action: (index: Int, Int) -> Unit): Unit {
 var index = 0
 for (item in this) action(index++, item)
}
// Performs the given [action] on each element, providing sequential index with the element.
@param [action] function that takes the index of an element and the element itself
and performs the action on the element.
public inline fun LongArray.forEachIndexed(action: (index: Int, Long) -> Unit): Unit {
 var index = 0
 for (item in this) action(index++, item)
}
// Performs the given [action] on each element, providing sequential index with the element.
@param [action] function that takes the index of an element and the element itself
and performs the action on the element.
public inline fun FloatArray.forEachIndexed(action: (index: Int, Float) -> Unit): Unit {
 var index = 0
 for (item in this) action(index++, item)
}
// Performs the given [action] on each element, providing sequential index with the element.
@param [action] function that takes the index of an element and the element itself
and performs the action on the element.
public inline fun DoubleArray.forEachIndexed(action: (index: Int, Double) -> Unit): Unit {
 var index = 0
 for (item in this) action(index++, item)
}
// Performs the given [action] on each element, providing sequential index with the element.
@param [action] function that takes the index of an element and the element itself
and performs the action on the element.
public inline fun BooleanArray.forEachIndexed(action: (index: Int, Boolean) -> Unit): Unit {
 var index = 0
 for (item in this) action(index++, item)
}
// Performs the given [action] on each element, providing sequential index with the element.
@param [action] function that takes the index of an element and the element itself
and performs the action on the element.
public inline fun CharArray.forEachIndexed(action: (index: Int, Char) -> Unit): Unit {
 var index = 0
 for (item in this) action(index++, item)
}
// Returns the largest element.
// If any of elements is NaN returns NaN.
// @throws NoSuchElementException if the array is empty.
@SinceKotlin("1.7")
@kotlin.jvm.JvmName("maxOrNull")
@Suppress("CONFLICTING_OVERLOAD")

```

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DS`)npublic fun Array<out Double>.max(): Double {n if (isEmpty()) throw NoSuchElementException()n var
max = this[0]n for (i in 1..lastIndex) {n val e = this[i]n max = maxOf(max,
e)n }n return max\n}\n\n/**n * Returns the largest element.n * n * If any of elements is `NaN` returns
`NaN`.n * n * @throws NoSuchElementException if the array is empty.n
*/n\n@SinceKotlin("1.7")n@kotlin.jvm.JvmName("maxOrThrow")n@Suppress("CONFLICTING_OVERLOA
DS`)npublic fun Array<out Float>.max(): Float {n if (isEmpty()) throw NoSuchElementException()n var
max = this[0]n for (i in 1..lastIndex) {n val e = this[i]n max = maxOf(max, e)n }n return
max\n}\n\n/**n * Returns the largest element.n * n * @throws NoSuchElementException if the array is empty.n
*/n\n@SinceKotlin("1.7")n@kotlin.jvm.JvmName("maxOrThrow")n@Suppress("CONFLICTING_OVERLOA
DS`)npublic fun <T : Comparable<T>> Array<out T>.max(): T {n if (isEmpty()) throw
NoSuchElementException()n var max = this[0]n for (i in 1..lastIndex) {n val e = this[i]n if (max < e)
max = e\n }n return max\n}\n\n/**n * Returns the largest element.n
* n * @throws NoSuchElementException if the array is empty.n
*/n\n@SinceKotlin("1.7")n@kotlin.jvm.JvmName("maxOrThrow")n@Suppress("CONFLICTING_OVERLOA
DS`)npublic fun ByteArray.max(): Byte {n if (isEmpty()) throw NoSuchElementException()n var max =
this[0]n for (i in 1..lastIndex) {n val e = this[i]n if (max < e) max = e\n }n return max\n}\n\n/**n *
Returns the largest element.n * n * @throws NoSuchElementException if the array is empty.n
*/n\n@SinceKotlin("1.7")n@kotlin.jvm.JvmName("maxOrThrow")n@Suppress("CONFLICTING_OVERLOA
DS`)npublic fun ShortArray.max(): Short {n if (isEmpty()) throw NoSuchElementException()n var max =
this[0]n for (i in 1..lastIndex) {n val e = this[i]n if (max < e) max = e\n }n return max\n}\n\n/**n *
Returns the largest element.n * n * @throws NoSuchElementException if the array is empty.n
*/n\n@SinceKotlin("1.7")n@kotlin.jvm.JvmName("maxOrThrow")n@Suppress("CONFLICTING_OVERLOA
DS`)npublic
fun IntArray.max(): Int {n if (isEmpty()) throw NoSuchElementException()n var max = this[0]n for (i in
1..lastIndex) {n val e = this[i]n if (max < e) max = e\n }n return max\n}\n\n/**n * Returns the largest
element.n * n * @throws NoSuchElementException if the array is empty.n
*/n\n@SinceKotlin("1.7")n@kotlin.jvm.JvmName("maxOrThrow")n@Suppress("CONFLICTING_OVERLOA
DS`)npublic fun LongArray.max(): Long {n if (isEmpty()) throw NoSuchElementException()n var max =
this[0]n for (i in 1..lastIndex) {n val e = this[i]n if (max < e) max = e\n }n return max\n}\n\n/**n *
Returns the largest element.n * n * If any of elements is `NaN` returns `NaN`.n * n * @throws
NoSuchElementException if the array is empty.n
*/n\n@SinceKotlin("1.7")n@kotlin.jvm.JvmName("maxOrThrow")n@Suppress("CONFLICTING_OVERLOA
DS`)npublic fun FloatArray.max(): Float {n if (isEmpty()) throw
NoSuchElementException()n var max = this[0]n for (i in 1..lastIndex) {n val e = this[i]n max =
maxOf(max, e)n }n return max\n}\n\n/**n * Returns the largest element.n * n * If any of elements is `NaN`
returns `NaN`.n * n * @throws NoSuchElementException if the array is empty.n
*/n\n@SinceKotlin("1.7")n@kotlin.jvm.JvmName("maxOrThrow")n@Suppress("CONFLICTING_OVERLOA
DS`)npublic fun DoubleArray.max(): Double {n if (isEmpty()) throw NoSuchElementException()n var max =
this[0]n for (i in 1..lastIndex) {n val e = this[i]n max = maxOf(max, e)n }n return max\n}\n\n/**n *
Returns the largest element.n * n * @throws NoSuchElementException if the array is empty.n
*/n\n@SinceKotlin("1.7")n@kotlin.jvm.JvmName("maxOrThrow")n@Suppress("CONFLICTING_OVERLOA
DS`)npublic fun CharArray.max(): Char {n if (isEmpty()) throw NoSuchElementException()n var max =
this[0]n for (i in 1..lastIndex) {n val
e = this[i]n if (max < e) max = e\n }n return max\n}\n\n/**n * Returns the first element yielding the
largest value of the given function.n * n * @throws NoSuchElementException if the array is empty.n * n *
@sample samples.collections.Collections.Aggregates.maxBy\n
*/n\n@SinceKotlin("1.7")n@kotlin.jvm.JvmName("maxByOrThrow")n@Suppress("CONFLICTING_OVERL
OADS`)npublic inline fun <T, R : Comparable<R>> Array<out T>.maxBy(selector: (T) -> R): T {n if

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(isEmpty()) throw NoSuchElementException()\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function.\n * \n
* @throws NoSuchElementException
if the array is empty.\n * \n * @sample samples.collections.Collections.Aggregates.maxBy\n
\n\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxByOrThrow")\n@Suppress("CONFLICTING_OVERL
OADS")\npublic inline fun <R : Comparable<R>> ByteArray.maxBy(selector: (Byte) -> R): Byte {\n if
(isEmpty()) throw NoSuchElementException()\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function.\n * \n
* @throws NoSuchElementException if the array is empty.\n * \n * @sample
samples.collections.Collections.Aggregates.maxBy\n
\n\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxByOrThrow")\n@Suppress("CONFLICTING_OVERL
OADS")\npublic
inline fun <R : Comparable<R>> ShortArray.maxBy(selector: (Short) -> R): Short {\n if (isEmpty()) throw
NoSuchElementException()\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0)
return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v
= selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return
maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function.\n * \n * @throws
NoSuchElementException if the array is empty.\n * \n * @sample
samples.collections.Collections.Aggregates.maxBy\n
\n\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxByOrThrow")\n@Suppress("CONFLICTING_OVERL
OADS")\npublic inline fun <R : Comparable<R>> IntArray.maxBy(selector: (Int) -> R): Int {\n if (isEmpty())
throw NoSuchElementException()\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n
 if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e
= this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function.\n * \n
* @throws NoSuchElementException if the array is empty.\n * \n * @sample
samples.collections.Collections.Aggregates.maxBy\n
\n\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxByOrThrow")\n@Suppress("CONFLICTING_OVERL
OADS")\npublic inline fun <R : Comparable<R>> LongArray.maxBy(selector: (Long) -> R): Long {\n if
(isEmpty()) throw NoSuchElementException()\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (maxValue < v)
{\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first
element yielding the largest value of the given function.\n * \n * @throws NoSuchElementException if the array is
empty.\n * \n * @sample samples.collections.Collections.Aggregates.maxBy\n
\n\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxByOrThrow")\n@Suppress("CONFLICTING_OVERL
OADS")\npublic inline fun <R : Comparable<R>> FloatArray.maxBy(selector: (Float) -> R): Float {\n if
(isEmpty()) throw NoSuchElementException()\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function.\n * \n
* @throws
NoSuchElementException if the array is empty.\n * \n * @sample
samples.collections.Collections.Aggregates.maxBy\n

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*^@SinceKotlin("1.7")@kotlin.jvm.JvmName("maxByOrThrow")@Suppress("CONFLICTING_OVERLOADS")\npublic inline fun <R : Comparable<R>> DoubleArray.maxBy(selector: (Double) -> R): Double {\n if (isEmpty()) throw NoSuchElementException()\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function.\n * \n * @throws NoSuchElementException if the array is empty.\n * \n * @sample\n samples.collections.Collections.Aggregates.maxBy\n
*^@SinceKotlin("1.7")@kotlin.jvm.JvmName("maxByOrThrow")@Suppress("CONFLICTING_OVERLOADS")\npublic inline fun <R : Comparable<R>> BooleanArray.maxBy(selector: (Boolean) -> R): Boolean {\n if (isEmpty()) throw NoSuchElementException()\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function.\n * \n * @throws NoSuchElementException if the array is empty.\n * \n * @sample\n samples.collections.Collections.Aggregates.maxBy\n
*^@SinceKotlin("1.7")@kotlin.jvm.JvmName("maxByOrThrow")@Suppress("CONFLICTING_OVERLOADS")\npublic inline fun <R : Comparable<R>> CharArray.maxBy(selector: (Char) -> R): Char {\n if (isEmpty()) throw NoSuchElementException()\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample\n samples.collections.Collections.Aggregates.maxByOrNull\n
*^@SinceKotlin("1.4")\npublic inline fun <T, R : Comparable<R>> Array<out T>.maxByOrNull(selector: (T) -> R): T? {\n if (isEmpty()) return null\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample\n samples.collections.Collections.Aggregates.maxByOrNull\n
*^@SinceKotlin("1.4")\npublic inline fun <R : Comparable<R>> ByteArray.maxByOrNull(selector: (Byte) -> R): Byte? {\n if (isEmpty()) return null\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample\n samples.collections.Collections.Aggregates.maxByOrNull\n
*^@SinceKotlin("1.4")\npublic inline fun <R : Comparable<R>> ShortArray.maxByOrNull(selector: (Short) -> R): Short? {\n if (isEmpty()) return null\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample\n samples.collections.Collections.Aggregates.maxByOrNull\n
*^@SinceKotlin("1.4")\npublic inline fun <R : Comparable<R>> IntArray.maxByOrNull(selector: (Int) -> R): Int? {\n if (isEmpty()) return null\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if

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(maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample samples.collections.Collections.Aggregates.maxByOrNull\n */\n@SinceKotlin("1.4")\npublic inline fun

<R : Comparable<R>> LongArray.maxByOrNull(selector: (Long) -> R): Long? {\n if (isEmpty()) return null\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v)\n {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample samples.collections.Collections.Aggregates.maxByOrNull\n */\n@SinceKotlin("1.4")\npublic inline fun

<R : Comparable<R>> FloatArray.maxByOrNull(selector: (Float) -> R): Float? {\n if (isEmpty()) return null\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v)\n {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample samples.collections.Collections.Aggregates.maxByOrNull\n */\n@SinceKotlin("1.4")\npublic inline fun

<R : Comparable<R>> DoubleArray.maxByOrNull(selector: (Double) -> R): Double? {\n if (isEmpty()) return null\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v)\n {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample samples.collections.Collections.Aggregates.maxByOrNull\n */\n@SinceKotlin("1.4")\npublic inline fun <R : Comparable<R>> BooleanArray.maxByOrNull(selector: (Boolean) -> R): Boolean? {\n if (isEmpty()) return null\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v)\n {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample samples.collections.Collections.Aggregates.maxByOrNull\n */\n@SinceKotlin("1.4")\npublic inline fun <R : Comparable<R>> CharArray.maxByOrNull(selector: (Char) -> R): Char? {\n if (isEmpty()) return null\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v)\n {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.maxOf(selector: (T) -> Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.maxOf(selector: (Byte) -> Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v

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= selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n\n*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.maxOf(selector: (Short) -> Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n\n*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.maxOf(selector: (Int) -> Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n\n*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.maxOf(selector: (Long) -> Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n\n*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.maxOf(selector: (Float) -> Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n\n*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.maxOf(selector: (Double) -> Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n\n*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.maxOf(selector: (Boolean) -> Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is

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`NaN`.n * .n * @throws NoSuchElementException if the array is empty.n
*/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.internal.InlineOnlynpublic
inline fun CharArray.maxOf(selector: (Char) -> Double): Double {n if (isEmpty()) throw
NoSuchElementException()n var maxValue = selector(this[0])n for (i in 1..lastIndex) {n val v =
selector(this[i])n maxValue = maxOf(maxValue, v)n }n return maxValue}n/n/**n * Returns the
largest value among all values produced by [selector] functionn * applied to each element in the array.n * n * If
any of values produced by [selector] function is `NaN`, the returned result is `NaN`.n * n * @throws
NoSuchElementException if the array is empty.n
*/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.internal.InlineOnlynpublic inline fun <T> Array<out T>.maxOf(selector: (T) ->
Float): Float {n if (isEmpty()) throw NoSuchElementException()n var maxValue = selector(this[0])n for (i
in 1..lastIndex) {n val v = selector(this[i])n
maxValue = maxOf(maxValue, v)n }n return maxValue}n/n/**n * Returns the largest value among all
values produced by [selector] functionn * applied to each element in the array.n * n * If any of values produced by
[selector] function is `NaN`, the returned result is `NaN`.n * n * @throws NoSuchElementException if the array is
empty.n
*/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.internal.InlineOnlynpublic inline fun ByteArray.maxOf(selector: (Byte) -> Float):
Float {n if (isEmpty()) throw NoSuchElementException()n var maxValue = selector(this[0])n for (i in
1..lastIndex) {n val v = selector(this[i])n
maxValue = maxOf(maxValue, v)n }n return
maxValue}n/n/**n * Returns the largest value among all values produced by [selector] functionn * applied to
each element in the array.n * n * If any of values produced by [selector] function is `NaN`,
the returned result is `NaN`.n * n * @throws NoSuchElementException if the array is empty.n
*/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.internal.InlineOnlynpublic inline fun ShortArray.maxOf(selector: (Short) ->
Float): Float {n if (isEmpty()) throw NoSuchElementException()n var maxValue = selector(this[0])n for (i
in 1..lastIndex) {n val v = selector(this[i])n
maxValue = maxOf(maxValue, v)n }n return
maxValue}n/n/**n * Returns the largest value among all values produced by [selector] functionn * applied to
each element in the array.n * n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.n * n * @throws NoSuchElementException if the array is empty.n
*/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.internal.InlineOnlynpublic
inline fun IntArray.maxOf(selector: (Int) -> Float): Float {n if (isEmpty()) throw NoSuchElementException()n
var maxValue = selector(this[0])n for (i in 1..lastIndex) {n val v = selector(this[i])n
maxValue =
maxOf(maxValue, v)n }n return maxValue}n/n/**n * Returns the largest value among all values produced
by [selector] functionn * applied to each element in the array.n * n * If any of values produced by [selector]
function is `NaN`, the returned result is `NaN`.n * n * @throws NoSuchElementException if the array is empty.n
*/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.internal.InlineOnlynpublic inline fun LongArray.maxOf(selector: (Long) ->
Float): Float {n if (isEmpty()) throw NoSuchElementException()n var maxValue = selector(this[0])n for (i
in 1..lastIndex) {n val v = selector(this[i])n
maxValue = maxOf(maxValue,
v)n }n return maxValue}n/n/**n * Returns the largest value among all values produced by [selector]
functionn * applied to each element in the array.n * n * If any of values produced by [selector] function is `NaN`,
the returned result is `NaN`.n * n * @throws NoSuchElementException if the array is empty.n
*/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.internal.InlineOnlynpublic inline fun FloatArray.maxOf(selector: (Float) ->
Float): Float {n if (isEmpty()) throw NoSuchElementException()n var maxValue = selector(this[0])n for (i

```



```

in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n } \n return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.maxOf(selector: (Double) ->
Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i
in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.maxOf(selector:
(Boolean) -> Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n
 }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n *
applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned
result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.maxOf(selector: (Char) -> Float):
Float {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in
1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n
 return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n *
applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>> Array<out
T>.maxOf(selector: (T) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n
maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
by [selector] function\n * applied to each element in the array.\n * \n * @throws NoSuchElementException if the
array is empty.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <R : Comparable<R>> ByteArray.maxOf(selector: (Byte) -> R): R {\n if (isEmpty()) throw
NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (maxValue < v) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n
 * Returns the largest value among all values produced by [selector] function\n * applied to each element in the
array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
ShortArray.maxOf(selector: (Short) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue
< v) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all
values produced by [selector] function\n * applied to each element in the array.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
IntArray.maxOf(selector: (Int) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue =

```

```

selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n
maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
by [selector] function\n * applied to each element in the array.\n * \n * @throws NoSuchElementException if the
array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <R : Comparable<R>> LongArray.maxOf(selector: (Long) -> R): R {\n if (isEmpty()) throw
NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (maxValue < v) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the
array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
FloatArray.maxOf(selector: (Float) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n maxValue = v\n }\n }\n return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
DoubleArray.maxOf(selector: (Double) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n maxValue = v\n }\n }\n return
maxValue\n}\n\n/**\n * Returns the largest value among all values
produced by [selector] function\n * applied to each element in the array.\n * \n * @throws
NoSuchElementException if the array is
empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
BooleanArray.maxOf(selector: (Boolean) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n maxValue = v\n }\n }\n return
maxValue\n}\n\n/**\n * Returns the largest value among all values
produced by [selector] function\n * applied to each element in the array.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
CharArray.maxOf(selector: (Char) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n maxValue = v\n }\n }\n return
maxValue\n}\n\n/**\n * Returns the largest value among all values
produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If
any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.maxOfOrNull(selector:
(T) -> Double): Double? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in
1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function
is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution

```

ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.maxOrNull(selector: (Byte) -> Double): Double? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/\*\*\n \* Returns the largest value among all values produced by [selector] function\n \* applied to each element in the array or `null` if there are no elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

\*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic

inline fun ShortArray.maxOrNull(selector: (Short) -> Double): Double? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/\*\*\n \* Returns the largest value among all values produced by [selector] function\n \* applied to each element in the array or `null` if there are no elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

\*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.maxOrNull(selector: (Int) ->

Double): Double? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/\*\*\n \* Returns the largest value among all values produced by [selector] function\n \* applied to each element in the array or `null` if there are no elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

\*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.maxOrNull(selector: (Long) -

> Double): Double? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/\*\*\n \* Returns the largest value among all values produced by [selector] function\n \* applied to each element in the array or `null` if there are no elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

\*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic

inline fun FloatArray.maxOrNull(selector: (Float) -> Double): Double? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/\*\*\n \* Returns the largest value among all values produced by [selector] function\n \* applied to each element in the array or `null` if there are no elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

\*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.maxOrNull(selector:

(Double) -> Double): Double? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/\*\*\n \* Returns the largest value among all values produced by [selector] function\n \* applied to each element in the array or `null` if there are no elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

\*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.maxOrNull(selector:

(Boolean) -> Double): Double? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/\*\*\n \* Returns the largest value among all values produced by [selector] function\n \* applied to each element in the array or `null` if there are no

elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n \*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.maxOfOrNull(selector: (Char) -> Double): Double? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/\*\*\n \* Returns the largest value among all values produced by [selector] function\n \* applied to each element in the array or `null` if there are no elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

\n \*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.maxOfOrNull(selector: (T) -> Float): Float? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/\*\*\n \* Returns the largest value among all values produced by [selector] function\n \* applied to each element in the array or `null` if there are no elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

\n \*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.maxOfOrNull(selector: (Byte) -> Float): Float? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/\*\*\n \* Returns the largest value among all values produced by [selector] function\n \* applied to each element in the array or `null` if there are no elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

\n \*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.maxOfOrNull(selector: (Short) -> Float): Float? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/\*\*\n \* Returns the largest value among all values produced by [selector] function\n \* applied to each element in the array or `null` if there are no elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

\n \*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.maxOfOrNull(selector: (Int) -> Float): Float? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/\*\*\n \* Returns the largest value among all values produced by [selector] function\n \* applied to each element in the array or `null` if there are no elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

\n \*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.maxOfOrNull(selector: (Long) -> Float): Float? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/\*\*\n \* Returns the largest value among all values produced by [selector] function\n \* applied to each element in the array or `null` if there are no elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

\n \*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.maxOfOrNull(selector: (Float) -> Float): Float? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/\*\*\n \* Returns the largest value among all values produced by [selector] function\n \* applied to each element in the array or `null`

if there are no elements.\n \* \n \* If any of values produced by [selector] function is

`NaN`, the returned result is `NaN`.\n

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.maxOfOrNull(selector:
```

```
(Double) -> Float): Float? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in
1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return
```

```
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function
is `NaN`, the returned result is `NaN`.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.maxOfOrNull(selector:
```

```
(Boolean) -> Float): Float? {\n if (isEmpty())
```

```
return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all
```

```
values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.maxOfOrNull(selector: (Char) ->
```

```
Float): Float? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns
```

```
the largest value among all values produced by [selector] function\n * applied to each
element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>> Array<out
```

```
T>.maxOfOrNull(selector: (T) -> R): R? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for
(i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n maxValue = v\n }\n }\n return
```

```
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n *
applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
```

```
ByteArray.maxOfOrNull(selector: (Byte) -> R): R? {\n if (isEmpty()) return null\n var maxValue
= selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v)\n maxValue = v\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
```

```
by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
```

```
ShortArray.maxOfOrNull(selector: (Short) -> R): R? {\n if (isEmpty()) return null\n var maxValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v)\n maxValue = v\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
```

```
by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
```

```
inline fun <R : Comparable<R>> IntArray.maxOfOrNull(selector: (Int) -> R): R? {\n if (isEmpty()) return null\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v)
```

```
{\n maxValue = v\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values
produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
```

```

LongArray.maxOfOrNull(selector: (Long) -> R): R? {\n if (isEmpty()) return null\n var maxValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val
v = selector(this[i])\n if (maxValue < v) {\n maxValue = v\n }\n }\n return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
FloatArray.maxOfOrNull(selector: (Float) -> R): R? {\n if (isEmpty()) return null\n var maxValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n
maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <R : Comparable<R>> DoubleArray.maxOfOrNull(selector: (Double) -> R): R? {\n if (isEmpty())
return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n
if (maxValue < v) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value
among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no
elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
BooleanArray.maxOfOrNull(selector: (Boolean) -> R): R? {\n if (isEmpty()) return null\n var maxValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n
maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values
produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
CharArray.maxOfOrNull(selector: (Char) -> R): R? {\n if (isEmpty()) return null\n var maxValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n
maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value according to the provided
[comparator]\n * among all values produced by [selector] function applied to each element in the array.\n * \n *
@throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <T, R> Array<out T>.maxOfWith(comparator: Comparator<in R>, selector: (T) -> R): R {\n if
(isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n
val v = selector(this[i])\n if (comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n
return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all
values produced by [selector] function applied to each element in the array.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> ByteArray.maxOfWith(comparator:
Comparator<in R>, selector: (Byte) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n
var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> ShortArray.maxOfWith(comparator:

```

```

Comparator<in R>, selector: (Short) -> R): R {
 if (isEmpty()) throw NoSuchElementException()
 var
 maxVAlue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if
 (comparator.compare(maxVAlue, v) < 0) {
 maxVAlue = v
 }
 }
 return maxVAlue
}

* Returns the largest value according to the provided [comparator]
* among all values produced by [selector]
function applied to each element in the array.
* @throws NoSuchElementException if the array is empty.
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> IntArray.maxOfWith(comparator:
Comparator<in R>, selector: (Int) -> R): R {
 if (isEmpty()) throw NoSuchElementException()
 var maxVAlue
= selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if
 (comparator.compare(maxVAlue, v) < 0) {
 maxVAlue = v
 }
 }
 return maxVAlue
}

Returns the largest value according to the provided [comparator]
* among all values produced by [selector]
function applied to each element in the array.
* @throws NoSuchElementException if the array is empty.
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <R> LongArray.maxOfWith(comparator: Comparator<in R>, selector: (Long) -> R): R {
 if
 (isEmpty()) throw NoSuchElementException()
 var maxVAlue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if (comparator.compare(maxVAlue, v) < 0) {
 maxVAlue = v
 }
 }
 return maxVAlue
}

* Returns the largest value according to the provided [comparator]
* among all
values produced by [selector] function applied to each element in the array.
* @throws
NoSuchElementException if the array is empty.
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> FloatArray.maxOfWith(comparator:
Comparator<in R>, selector:
(Float) -> R): R {
 if (isEmpty()) throw NoSuchElementException()
 var maxVAlue = selector(this[0])
 for
 (i in 1..lastIndex) {
 val v = selector(this[i])
 if (comparator.compare(maxVAlue, v) < 0) {

 maxVAlue = v
 }
 }
 return maxVAlue
}

* Returns the largest value according to the provided
[comparator]
* among all values produced by [selector] function applied to each element in the array.
* @throws
NoSuchElementException if the array is empty.
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> DoubleArray.maxOfWith(comparator:
Comparator<in R>, selector: (Double) -> R): R {
 if (isEmpty()) throw NoSuchElementException()
 var
 maxVAlue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if
 (comparator.compare(maxVAlue, v) < 0) {

 maxVAlue = v
 }
 }
 return maxVAlue
}

* Returns the largest value according to the
provided [comparator]
* among all values produced by [selector] function applied to each element in the array.
* @throws
NoSuchElementException if the array is empty.
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> BooleanArray.maxOfWith(comparator:
Comparator<in R>, selector: (Boolean) -> R): R {
 if (isEmpty()) throw NoSuchElementException()
 var
 maxVAlue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if
 (comparator.compare(maxVAlue, v) < 0) {

 maxVAlue = v
 }
 }
 return maxVAlue
}

Returns the largest value according to the provided [comparator]
* among all values produced by [selector]
function applied to each element in the array.
*
* @throws NoSuchElementException if the array is empty.
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> CharArray.maxOfWith(comparator:
Comparator<in R>, selector: (Char) -> R): R {
 if (isEmpty()) throw NoSuchElementException()
 var
 maxVAlue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if

```

```

(comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R> Array<out T>.maxOfWithOrNull(comparator: Comparator<in R>, selector: (T) -> R): R? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> ByteArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Byte) -> R): R? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> ShortArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Short) -> R): R? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> IntArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Int) -> R): R? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> LongArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Long) -> R): R? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> FloatArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Float) -> R): R? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value according to the

```



provided [comparator] \* among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.

```

*\/n@SinceKotlin("1.4")\/n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\/n@OverloadResolution
ByLambdaReturnType\/n@kotlin.internal.InlineOnly\/npublic inline fun <R>
DoubleArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Double) -> R): R? {\/n if (isEmpty())
return null\/n var maxVal = selector(this[0])\/n for (i in 1..lastIndex) {\/n val v = selector(this[i])\/n if
(comparator.compare(maxVal, v) < 0) {\/n maxVal = v\/n }\/n }\/n return maxVal\/n}\/n\/n**\/n *
Returns the largest value according to the provided [comparator] * among all values produced by [selector]
function applied to each element in the array or `null` if there are no elements.\/n
*\/n@SinceKotlin("1.4")\/n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\/n@OverloadResolution
ByLambdaReturnType\/n@kotlin.internal.InlineOnly\/npublic
inline fun <R> BooleanArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Boolean) -> R): R? {\/n
 if (isEmpty()) return null\/n var maxVal = selector(this[0])\/n for (i in 1..lastIndex) {\/n val v =
selector(this[i])\/n if (comparator.compare(maxVal, v) < 0) {\/n maxVal = v\/n }\/n }\/n return
maxVal\/n}\/n\/n**\/n * Returns the largest value according to the provided [comparator] * among all values
produced by [selector] function applied to each element in the array or `null` if there are no elements.\/n
*\/n@SinceKotlin("1.4")\/n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\/n@OverloadResolution
ByLambdaReturnType\/n@kotlin.internal.InlineOnly\/npublic inline fun <R>
CharArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Char) -> R): R? {\/n if (isEmpty()) return
null\/n var maxVal = selector(this[0])\/n for (i in 1..lastIndex) {\/n val v = selector(this[i])\/n
 if (comparator.compare(maxVal, v) < 0) {\/n maxVal = v\/n }\/n }\/n return
maxVal\/n}\/n\/n**\/n * Returns the largest element or `null` if there are no elements.\/n *\/n * If any of elements is
`NaN` returns `NaN`.\/n *\/n@SinceKotlin("1.4")\/npublic fun Array<out Double>.maxOrNull(): Double? {\/n if
(isEmpty()) return null\/n var max = this[0]\/n for (i in 1..lastIndex) {\/n val e = this[i]\/n max =
maxOf(max, e)\/n }\/n return max\/n}\/n\/n**\/n * Returns the largest element or `null` if there are no elements.\/n *
If any of elements is `NaN` returns `NaN`.\/n *\/n@SinceKotlin("1.4")\/npublic fun Array<out
Float>.maxOrNull(): Float? {\/n if (isEmpty()) return null\/n var max = this[0]\/n for (i in 1..lastIndex) {\/n
 val e = this[i]\/n max = maxOf(max, e)\/n }\/n return max\/n}\/n\/n**\/n * Returns the largest element or `null` if
there are no elements.\/n *\/n@SinceKotlin("1.4")\/npublic fun <T : Comparable<T>>
Array<out T>.maxOrNull(): T? {\/n if (isEmpty()) return null\/n var max = this[0]\/n for (i in 1..lastIndex) {\/n
 val e = this[i]\/n if (max < e) max = e\/n }\/n return max\/n}\/n\/n**\/n * Returns the largest element or `null` if
there are no elements.\/n *\/n@SinceKotlin("1.4")\/npublic fun ByteArray.maxOrNull(): Byte? {\/n if (isEmpty())
return null\/n var max = this[0]\/n for (i in 1..lastIndex) {\/n val e = this[i]\/n if (max < e) max = e\/n }\/n
return max\/n}\/n\/n**\/n * Returns the largest element or `null` if there are no elements.\/n
*\/n@SinceKotlin("1.4")\/npublic fun ShortArray.maxOrNull(): Short? {\/n if (isEmpty()) return null\/n var max
= this[0]\/n for (i in 1..lastIndex) {\/n val e = this[i]\/n if (max < e) max = e\/n }\/n return max\/n}\/n\/n**\/n
* Returns the largest element or `null` if there are no elements.\/n *\/n@SinceKotlin("1.4")\/npublic fun
IntArray.maxOrNull(): Int? {\/n if (isEmpty())
return null\/n var max = this[0]\/n for (i in 1..lastIndex) {\/n val e = this[i]\/n if (max < e) max = e\/n }\/n
return max\/n}\/n\/n**\/n * Returns the largest element or `null` if there are no elements.\/n
*\/n@SinceKotlin("1.4")\/npublic fun LongArray.maxOrNull(): Long? {\/n if (isEmpty()) return null\/n var max
= this[0]\/n for (i in 1..lastIndex) {\/n val e = this[i]\/n if (max < e) max = e\/n }\/n return max\/n}\/n\/n**\/n
* Returns the largest element or `null` if there are no elements.\/n *\/n * If any of elements is `NaN` returns `NaN`.\/n
*\/n@SinceKotlin("1.4")\/npublic fun FloatArray.maxOrNull(): Float? {\/n if (isEmpty()) return null\/n var max
= this[0]\/n for (i in 1..lastIndex) {\/n val e = this[i]\/n max = maxOf(max, e)\/n }\/n return
max\/n}\/n\/n**\/n * Returns the largest element or `null` if there are no elements.\/n *\/n * If any of elements is `NaN`
returns `NaN`.\/n *\/n@SinceKotlin("1.4")\/npublic fun DoubleArray.maxOrNull():

```



largest value according to the provided [comparator].\n \* \n \* @throws NoSuchElementException if the array is empty.\n

```
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxWithOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun BooleanArray.maxWith(comparator: Comparator<in Boolean>): Boolean {\n if (isEmpty()) throw NoSuchElementException()\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return max\n}\n\n/**\n * Returns the first element having the largest value
```

according to the provided [comparator].\n \* \n \* @throws NoSuchElementException if the array is empty.\n

```
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxWithOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun CharArray.maxWith(comparator: Comparator<in Char>): Char {\n if (isEmpty()) throw NoSuchElementException()\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return max\n}\n\n/**\n * Returns the first element having the largest value according to the provided [comparator] or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\npublic fun <T> Array<out T>.maxWithOrNull(comparator: Comparator<in T>): T? {\n if (isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return max\n}\n\n/**\n * Returns the first element having the largest value according
```

to the provided [comparator] or `null` if there are no elements.\n \* \n@SinceKotlin("1.4")\npublic fun

```
ByteArray.maxWithOrNull(comparator: Comparator<in Byte>): Byte? {\n if (isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return max\n}\n\n/**\n * Returns the first element having the largest value according to the provided [comparator]
```

```
or `null` if there are no elements.\n * \n@SinceKotlin("1.4")\npublic fun ShortArray.maxWithOrNull(comparator: Comparator<in Short>): Short? {\n if (isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return max\n}\n\n/**\n * Returns the first element having the largest value according to the provided [comparator] or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\npublic fun IntArray.maxWithOrNull(comparator:
```

```
Comparator<in Int>): Int? {\n if (isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return max\n}\n\n/**\n * Returns the first element having the largest value according to the provided [comparator] or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\npublic fun LongArray.maxWithOrNull(comparator: Comparator<in Long>): Long? {\n if (isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return max\n}\n\n/**\n * Returns the first element having the largest value according to the provided [comparator] or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\npublic fun FloatArray.maxWithOrNull(comparator: Comparator<in Float>): Float? {\n if (isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return max\n}\n\n/**\n * Returns the first element having the largest value according to the provided [comparator] or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\npublic fun DoubleArray.maxWithOrNull(comparator: Comparator<in Double>): Double? {\n if (isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return max\n}\n\n/**\n * Returns the first element having the largest value according to the provided [comparator] or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\npublic fun BooleanArray.maxWithOrNull(comparator: Comparator<in Boolean>): Boolean? {\n if (isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return max\n}\n\n/**\n * Returns the first element having the largest value according to the provided [comparator] or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\npublic fun CharArray.maxWithOrNull(comparator: Comparator<in Char>): Char? {\n if (isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return max\n}\n\n/**\n * Returns the smallest element.\n * \n * \n
```

```

If any of elements is `NaN` returns `NaN`. \n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun Array<out Double>.min(): Double {\n if (isEmpty()) throw NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n min = minOf(min, e)\n }\n return min\n}\n\n/**\n * Returns the smallest element.\n * \n * If any of elements is `NaN` returns `NaN`. \n * \n * @throws NoSuchElementException if the array is empty.\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun Array<out Float>.min(): Float {\n if (isEmpty()) throw NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n min = minOf(min, e)\n }\n return min\n}\n\n/**\n * Returns the smallest element.\n * \n * @throws NoSuchElementException if the array is empty.\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun <T : Comparable<T>> Array<out T>.min(): T {\n if (isEmpty()) throw NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return min\n}\n\n/**\n * Returns the smallest element.\n * \n * @throws NoSuchElementException if the array is empty.\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun ByteArray.min(): Byte {\n if (isEmpty()) throw NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return min\n}\n\n/**\n * Returns the smallest element.\n * \n * @throws NoSuchElementException if the array is empty.\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun ShortArray.min(): Short {\n if (isEmpty()) throw NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return min\n}\n\n/**\n * Returns the smallest element.\n * \n * @throws NoSuchElementException if the array is empty.\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun IntArray.min(): Int {\n if (isEmpty()) throw NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return min\n}\n\n/**\n * Returns the smallest element.\n * \n * @throws NoSuchElementException if the array is empty.\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun LongArray.min(): Long {\n if (isEmpty()) throw NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return min\n}\n\n/**\n * Returns the smallest element.\n * \n * If any of elements is `NaN` returns `NaN`. \n * \n * @throws NoSuchElementException if the array is empty.\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun FloatArray.min(): Float {\n if (isEmpty()) throw NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n min = minOf(min, e)\n }\n return min\n}\n\n/**\n * Returns the smallest element.\n * \n * If any of elements is `NaN` returns `NaN`. \n * \n * @throws NoSuchElementException if the array is empty.\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun DoubleArray.min(): Double {\n if (isEmpty()) throw NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n min = minOf(min, e)\n }\n return min\n}\n\n/**\n * Returns the smallest element.\n * \n * @throws NoSuchElementException if the array is empty.\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun CharArray.min(): Char {\n if (isEmpty()) throw NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return min\n}\n\n/**\n * Returns the first element yielding the smallest value of the given function.\n * \n * @throws NoSuchElementException if the array is empty.\n * \n * @sample samples.collections.Collections.Aggregates.minBy\n
```

```

*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow")\n@Suppress("CONFLICTING_OVERLO
ADS")\npublic inline fun <T, R : Comparable<R>> Array<out T>.minBy(selector: (T) -> R): T {\n if (isEmpty())
throw NoSuchElementException()\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex ==
0) return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val
v = selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n }\n }\n return
minElem\n}\n\n/**\n * Returns the first element yielding the smallest value of the given function.\n * \n * @throws
NoSuchElementException if the array is empty.\n * \n * @sample
samples.collections.Collections.Aggregates.minBy\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow")\n@Suppress("CONFLICTING_OVERLO
ADS")\npublic
inline fun <R : Comparable<R>> ByteArray.minBy(selector: (Byte) -> R): Byte {\n if (isEmpty()) throw
NoSuchElementException()\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0)
return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v =
selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n }\n }\n return
minElem\n}\n\n/**\n * Returns the first element yielding the smallest value of the given function.\n * \n * @throws
NoSuchElementException if the array is empty.\n * \n * @sample
samples.collections.Collections.Aggregates.minBy\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow")\n@Suppress("CONFLICTING_OVERLO
ADS")\npublic inline fun <R : Comparable<R>> ShortArray.minBy(selector: (Short) -> R): Short {\n if
(isEmpty()) throw NoSuchElementException()\n
var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var minValue
= selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue >
v) {\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function.\n * \n * @throws NoSuchElementException if the array is
empty.\n * \n * @sample samples.collections.Collections.Aggregates.minBy\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow")\n@Suppress("CONFLICTING_OVERLO
ADS")\npublic inline fun <R : Comparable<R>> IntArray.minBy(selector: (Int) -> R): Int {\n if (isEmpty())
throw NoSuchElementException()\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex ==
0) return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n
val e = this[i]\n val v = selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n
}\n }\n return minElem\n}\n\n/**\n * Returns the first element yielding the smallest value of the given
function.\n * \n * @throws NoSuchElementException if the array is empty.\n * \n * @sample
samples.collections.Collections.Aggregates.minBy\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow")\n@Suppress("CONFLICTING_OVERLO
ADS")\npublic inline fun <R : Comparable<R>> LongArray.minBy(selector: (Long) -> R): Long {\n if
(isEmpty()) throw NoSuchElementException()\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n
}\n }\n return minElem\n}\n\n/**\n * Returns the
first element yielding the smallest value of the given function.\n * \n * @throws NoSuchElementException if the
array is empty.\n * \n * @sample samples.collections.Collections.Aggregates.minBy\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow")\n@Suppress("CONFLICTING_OVERLO
ADS")\npublic inline fun <R : Comparable<R>> FloatArray.minBy(selector: (Float) -> R): Float {\n if
(isEmpty()) throw NoSuchElementException()\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n
}\n }\n return minElem\n}\n\n/**\n * Returns the first element yielding the smallest value of the given function.\n * \n * @throws
NoSuchElementException if the array is empty.\n * \n * @sample

```

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samples.collections.Collections.Aggregates.minBy\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow")\n@Suppress("CONFLICTING_OVERLO
ADS")\npublic inline fun <R : Comparable<R>> DoubleArray.minBy(selector: (Double) -> R): Double {\n if
(isEmpty()) throw NoSuchElementException()\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n**\n * Returns the first element yielding the smallest value of the given function.\n * \n
* @throws NoSuchElementException if the array is empty.\n * \n * @sample
samples.collections.Collections.Aggregates.minBy\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow")\n@Suppress("CONFLICTING_OVERLO
ADS")\npublic inline fun <R : Comparable<R>> BooleanArray.minBy(selector: (Boolean) ->
R): Boolean {\n if (isEmpty()) throw NoSuchElementException()\n var minElem = this[0]\n val lastIndex =
this.lastIndex\n if (lastIndex == 0) return minElem\n var minValue = selector(minElem)\n for (i in
1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue > v) {\n minElem = e\n
minValue = v\n }\n }\n return minElem\n}\n\n**\n * Returns the first element yielding the smallest value
of the given function.\n * \n * @throws NoSuchElementException if the array is empty.\n * \n * @sample
samples.collections.Collections.Aggregates.minBy\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow")\n@Suppress("CONFLICTING_OVERLO
ADS")\npublic inline fun <R : Comparable<R>> CharArray.minBy(selector: (Char) -> R): Char {\n if
(isEmpty()) throw NoSuchElementException()\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue > v) {\n minElem
= e\n minValue = v\n }\n }\n return minElem\n}\n\n**\n * Returns the first element yielding the
smallest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n
*\n@SinceKotlin("1.4")\npublic inline fun <T, R :
Comparable<R>> Array<out T>.minByOrNull(selector: (T) -> R): T? {\n if (isEmpty()) return null\n var
minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var minValue =
selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue > v)
{\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n**\n * Returns the first
element yielding the smallest value of the given function
or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n
*\n@SinceKotlin("1.4")\npublic inline fun <R : Comparable<R>> ByteArray.minByOrNull(selector: (Byte) ->
R): Byte? {\n if (isEmpty()) return null\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n**\n * Returns the first element yielding the smallest value of the given function or
`null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n
*\n@SinceKotlin("1.4")\npublic inline fun <R : Comparable<R>> ShortArray.minByOrNull(selector: (Short) ->
R): Short? {\n if (isEmpty()) return null\n var minElem = this[0]\n val lastIndex
= this.lastIndex\n if (lastIndex == 0) return minElem\n var minValue = selector(minElem)\n for (i in
1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue > v) {\n minElem = e\n
minValue = v\n }\n }\n return minElem\n}\n\n**\n * Returns the first element yielding the smallest value
of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n
*\n@SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> IntArray.minByOrNull(selector: (Int) -> R): Int? {\n if (isEmpty()) return null\n var minElem
= this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var minValue =
selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue > v)
{\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n**\n

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* Returns the first element yielding the smallest value of the given function or `null` if there are no elements.\n * \n
* @sample samples.collections.Collections.Aggregates.minByOrNull\n *^\n@SinceKotlin("1.4")\npublic inline
fun <R : Comparable<R>> LongArray.minByOrNull(selector: (Long) -> R): Long? {\n if (isEmpty()) return
null\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var
minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if
(minValue > v) {\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the first element yielding the smallest value of the given function or `null` if there are no elements.\n * \n
* @sample samples.collections.Collections.Aggregates.minByOrNull\n *^\n@SinceKotlin("1.4")\npublic inline fun
<R : Comparable<R>> FloatArray.minByOrNull(selector: (Float) ->
R): Float? {\n if (isEmpty()) return null\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the first element yielding the smallest value of the given function or
`null` if there are no elements.\n * \n
* @sample samples.collections.Collections.Aggregates.minByOrNull\n *^\n@SinceKotlin("1.4")\npublic inline fun
<R : Comparable<R>> DoubleArray.minByOrNull(selector: (Double)
-> R): Double? {\n if (isEmpty()) return null\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (minValue > v)\n {\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function or `null` if there are no elements.\n * \n
* @sample
samples.collections.Collections.Aggregates.minByOrNull\n *^\n@SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> BooleanArray.minByOrNull(selector: (Boolean) -> R): Boolean? {\n if (isEmpty()) return
null\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var
minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if
(minValue > v) {\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the first element yielding the smallest value of the given function or `null` if there are no elements.\n * \n
* @sample samples.collections.Collections.Aggregates.minByOrNull\n *^\n@SinceKotlin("1.4")\npublic
inline fun <R : Comparable<R>> CharArray.minByOrNull(selector: (Char) -> R): Char? {\n if (isEmpty()) return
null\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var
minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if
(minValue > v) {\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the
array.\n * \n
* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n
* @throws NoSuchElementException if the array is empty.\n
*^\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.minOf(selector: (T) ->
Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for
(i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n
* If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n
* @throws NoSuchElementException if the array is empty.\n
*^\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.minOf(selector: (Byte) ->
Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for
(i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the
array.\n * \n
* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n

```

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@throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.minOf(selector: (Short) ->
Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for
(i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException\n * if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.minOf(selector: (Int) -> Double):
Double {\n if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for (i in
1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.minOf(selector: (Long) ->
Double): Double
{\n if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for (i in
1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.minOf(selector: (Float) ->
Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for
(i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.minOf(selector: (Double) ->
Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for
(i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array
is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.minOf(selector: (Boolean) ->
Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for
(i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution

```



```

ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.minOf(selector: (Char) ->
Double): Double {\n
 if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex)
{\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n *
Returns the smallest value among all values produced by [selector] function\n * applied to each element in the
array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n *
@throws NoSuchElementException if the array is empty.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.minOf(selector: (T) ->
Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for (i in
1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest
value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of
values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.minOf(selector: (Byte) -> Float):
Float {\n if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for (i in
1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.minOf(selector: (Short) ->
Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for (i in
1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.minOf(selector: (Int) -> Float):
Float {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest
value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of
values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.minOf(selector: (Long) ->
Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for (i in
1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values
produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by
[selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is
empty.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.minOf(selector: (Float) -> Float):
Float {\n if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for (i in

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1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n } \n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun DoubleArray.minOf(selector: (Double) -> Float): Float {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest
value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of
values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.minOf(selector: (Boolean) ->
Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n
 var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue =
minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector]
function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.minOf(selector: (Char) -> Float):
Float {\n if (isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for (i in
1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by
[selector] function\n * applied to each element in the array.\n * \n * @throws NoSuchElementException if the array
is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>> Array<out
T>.minOf(selector: (T) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the array.\n * \n * @throws NoSuchElementException if the
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ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
ByteArray.minOf(selector: (Byte) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values
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*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
ShortArray.minOf(selector: (Short) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the
array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution

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ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
IntArray.minOf(selector: (Int) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the array.\n * \n * @throws NoSuchElementException if the
array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <R : Comparable<R>> LongArray.minOf(selector: (Long) -> R): R {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (minValue > v) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n *
Returns the smallest value among all values produced by [selector] function\n * applied to each element in the
array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
FloatArray.minOf(selector: (Float) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue
= v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by
[selector] function\n * applied to each element in the array.\n * \n * @throws NoSuchElementException if the array
is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
DoubleArray.minOf(selector: (Double) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values
produced by [selector] function\n * applied to each element in the array.\n * \n * @throws
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ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <R : Comparable<R>> BooleanArray.minOf(selector: (Boolean) -> R): R {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (minValue > v) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n *
Returns the smallest value among all values produced by [selector] function\n * applied to each element in the
array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
CharArray.minOf(selector: (Char) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var minValue
= selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (minValue > v) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n *
Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array
or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned
result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.minOfOrNull(selector:
(T) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in
1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to

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each element in the array or `null` if there are no elements. \n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`. \n

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.minOfOrNull(selector: (Byte) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`. \n
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```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.minOfOrNull(selector: (Short) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`. \n
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```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.minOfOrNull(selector: (Int) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`. \n
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```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.minOfOrNull(selector: (Long) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`. \n
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```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.minOfOrNull(selector: (Float) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`. \n
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```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.minOfOrNull(selector: (Double) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`. \n
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```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.minOfOrNull(selector: (Boolean) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`. \n
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minValue\n}\n\n/\*\*\n \* Returns the smallest value among all values produced by [selector] function\n \* applied to each element in the array or `null` if there are no elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.minOrNull(selector: (Char) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
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```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.minOrNull(selector: (T) -> Float): Float? {\n if (isEmpty())\n return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
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```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.minOrNull(selector: (Byte) -> Float): Float? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
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```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.minOrNull(selector: (Short) -> Float): Float? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
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```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.minOrNull(selector: (Int) -> Float): Float? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
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```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.minOrNull(selector: (Long) -> Float): Float? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
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```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.minOrNull(selector: (Float) -> Float): Float? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n
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val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the
smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if
there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun DoubleArray.minOrNull(selector: (Double) -> Float): Float? {\n if (isEmpty()) return null\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue =
minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of
values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.minOrNull(selector:
(Boolean) -> Float): Float? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n
 for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function
is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.minOrNull(selector: (Char) ->
Float): Float? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n
val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the
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there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>> Array<out
T>.minOrNull(selector: (T) -> R): R? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for
(i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n minValue = v\n }\n }\n
return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n *
applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
ByteArray.minOrNull(selector: (Byte) -> R): R? {\n if (isEmpty()) return null\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n
 val v = selector(this[i])\n if (minValue > v) {\n minValue = v\n }\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
ShortArray.minOrNull(selector: (Short) -> R): R? {\n if (isEmpty()) return null\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <R : Comparable<R>> IntArray.minOrNull(selector: (Int) -> R): R? {\n if (isEmpty()) return null\n
var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v)
{\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all

```

```

values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
LongArray.minOfOrNull(selector: (Long) -> R): R? {\n if (isEmpty()) return null\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue}\n\n/**\n * Returns the smallest value among all values
produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
FloatArray.minOfOrNull(selector: (Float) -> R): R? {\n if (isEmpty()) return null\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue}\n\n/**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <R : Comparable<R>> DoubleArray.minOfOrNull(selector: (Double) -> R): R? {\n if (isEmpty())
return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(minValue > v) {\n minValue = v\n }\n }\n return minValue}\n\n/**\n * Returns the smallest value
among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no
elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
BooleanArray.minOfOrNull(selector: (Boolean) -> R): R? {\n if (isEmpty()) return null\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return
minValue}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
CharArray.minOfOrNull(selector: (Char) -> R): R? {\n if (isEmpty()) return null\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue}\n\n/**\n * Returns the smallest value according to the provided
[comparator]\n * among all values produced by [selector] function applied to each element in the array.\n * \n *
@throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <T, R> Array<out T>.minOfWith(comparator: Comparator<in R>, selector: (T) -> R): R {\n if
(isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n
val v = selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n
return minValue}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all
values produced by [selector] function applied to each element in the array.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> ByteArray.minOfWith(comparator:
Comparator<in R>, selector: (Byte) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
minValue = selector(this[0])\n
for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n
minValue = v\n }\n }\n return minValue}\n\n/**\n * Returns the smallest value according to the provided

```

[comparator] among all values produced by [selector] function applied to each element in the array. throws NoSuchElementException if the array is empty.

```

*\/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <R> ShortArray.minOfWith(comparator:
Comparator<in R>, selector: (Short) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n*/
Returns the smallest value according
to the provided [comparator] among all values produced by [selector] function applied to each element in the
array. throws NoSuchElementException if the array is empty.
*\/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <R> IntArray.minOfWith(comparator:
Comparator<in R>, selector: (Int) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var minValue
= selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(minValue,
v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n*/
Returns the smallest value
according to the provided [comparator] among all values produced by [selector] function applied to each
element in the array. throws NoSuchElementException if the array is empty.
*\/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic
inline fun <R> LongArray.minOfWith(comparator: Comparator<in R>, selector: (Long) -> R): R {\n if
(isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n
val v = selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n
return minValue\n}\n\n*/
Returns the smallest value according to the provided [comparator] among all
values produced by [selector] function applied to each element in the array. throws
NoSuchElementException if the array is empty.
*\/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <R> FloatArray.minOfWith(comparator:
Comparator<in R>, selector: (Float) -> R): R {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return
minValue\n}\n\n*/
Returns the smallest value according to the provided [comparator] among all values
produced by [selector] function applied to each element in the array. throws
NoSuchElementException if
the array is empty.
*\/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <R> DoubleArray.minOfWith(comparator:
Comparator<in R>, selector: (Double) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return
minValue\n}\n\n*/
Returns the smallest value according to the provided [comparator] among all
values produced by [selector] function applied to each element in the array. throws
NoSuchElementException if the array is empty.
*\/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <R> BooleanArray.minOfWith(comparator:
Comparator<in R>, selector: (Boolean) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return
minValue\n}\n\n*/
Returns the smallest value according to the provided [comparator] among all values produced by [selector]
function applied to each element in the array. throws NoSuchElementException

```



if the array is empty.\n

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> CharArray.minOfWith(comparator:\nComparator<in R>, selector: (Char) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var\nminValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if\n(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]\n function applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R> Array<out\nT>.minOfWithOrNull(comparator: Comparator<in R>,\nselector: (T) -> R): R? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex)\n{\n val v = selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n}\n return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among\n all values produced by [selector] function applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nByteArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Byte) -> R): R? {\n if (isEmpty()) return\nnull\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if\n(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]\n function applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nShortArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Short) -> R): R? {\n if (isEmpty())\nreturn null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if\n(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]\n function applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic\ninline fun <R> IntArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Int) -> R): R? {\n if\n(isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =\nselector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return\nminValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values\n produced by [selector] function applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nLongArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Long) -> R): R? {\n if (isEmpty()) return\nnull\n var minValue = selector(this[0])\n\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n \nminValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value according to the provided\n [comparator]\n * among all values produced by [selector] function applied to each element in the array or `null` if\n there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nFloatArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Float) -> R): R? {\n if (isEmpty()) return\nnull\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
```

```

(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> DoubleArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Double) -> R): R? {\n if (isEmpty())\n return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> BooleanArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Boolean) -> R): R? {\n if (isEmpty())\n return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> CharArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Char) -> R): R? {\n if (isEmpty())\n return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n */\n@SinceKotlin("1.4")\npublic fun Array<out Double>.minOrNull(): Double? {\n if (isEmpty())\n return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n min = minOf(min, e)\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n */\n@SinceKotlin("1.4")\npublic fun Array<out Float>.minOrNull(): Float? {\n if (isEmpty())\n return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n min = minOf(min, e)\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\npublic fun <T : Comparable<T>> Array<out T>.minOrNull(): T? {\n if (isEmpty())\n return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e)\n min = e\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\npublic fun ByteArray.minOrNull(): Byte? {\n if (isEmpty())\n return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e)\n min = e\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\npublic fun ShortArray.minOrNull(): Short? {\n if (isEmpty())\n return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e)\n min = e\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\npublic fun IntArray.minOrNull(): Int? {\n if (isEmpty())\n return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e)\n min = e\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\npublic fun LongArray.minOrNull(): Long? {\n if (isEmpty())\n return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e)\n min = e\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n */\n@SinceKotlin("1.4")\npublic fun FloatArray.minOrNull(): Float? {\n if (isEmpty())\n return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n min = minOf(min, e)\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n */\n@SinceKotlin("1.4")\npublic fun

```

DoubleArray.minOrNull(): Double?

```
{\n if (isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n min =\n minOf(min, e)\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n *\n * @SinceKotlin("1.4")\n */\npublic fun CharArray.minOrNull(): Char? {\n if (isEmpty()) return null\n var min =\n this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return min\n}\n\n/**\n * Returns the first element having the smallest value according to the provided [comparator].\n * @throws\n * NoSuchElementException if the array is empty.\n */
```

```
@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minWithOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun <T> Array<out T>.minWith(comparator: Comparator<in T>): T {\n if (isEmpty()) throw\n NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if\n (comparator.compare(min, e)
```

```
> 0) min = e\n }\n return min\n}\n\n/**\n * Returns the first element having the smallest value according to the\n * provided [comparator].\n * @throws NoSuchElementException if the array is empty.\n */
```

```
@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minWithOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun ByteArray.minWith(comparator: Comparator<in Byte>): Byte {\n if (isEmpty()) throw\n NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if\n (comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n/**\n * Returns the first element having the\n * smallest value according to the provided [comparator].\n * @throws NoSuchElementException if the array is\n * empty.\n */
```

```
@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minWithOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun ShortArray.minWith(comparator: Comparator<in Short>): Short {\n if (isEmpty()) throw\n NoSuchElementException()\n var min
```

```
= this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n/**\n * Returns the first element having the smallest value according to the provided\n * [comparator].\n * @throws NoSuchElementException if the array is empty.\n */
```

```
@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minWithOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun IntArray.minWith(comparator: Comparator<in Int>): Int {\n if (isEmpty()) throw\n NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if\n (comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n/**\n * Returns the first element having the\n * smallest value according to the provided [comparator].\n * @throws NoSuchElementException if the array is\n * empty.\n */
```

```
@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minWithOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun LongArray.minWith(comparator:
```

```
Comparator<in Long>): Long {\n if (isEmpty()) throw NoSuchElementException()\n var min = this[0]\n for (i\n in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(min, e) > 0) min = e\n }\n return\n min\n}\n\n/**\n * Returns the first element having the smallest value according to the provided [comparator].\n * @throws\n * NoSuchElementException if the array is empty.\n */
```

```
@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minWithOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun FloatArray.minWith(comparator: Comparator<in Float>): Float {\n if (isEmpty()) throw\n NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if\n (comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n/**\n * Returns the first element having the\n * smallest value according to the provided [comparator].\n * @throws NoSuchElementException if the array is\n * empty.\n */
```

```
@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minWithOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic
```

```
fun DoubleArray.minWith(comparator: Comparator<in Double>): Double {\n if (isEmpty()) throw\n NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if\n (comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n/**\n * Returns the first element having the
```



```

elements.\n * \n * @sample samples.collections.Collections.Aggregates.none\n * \n\npublic fun <T> Array<out
T>.none(): Boolean {\n return isEmpty()\n}\n\n/**\n * Returns `true` if the array has no elements.\n * \n *
@sample samples.collections.Collections.Aggregates.none\n * \n\npublic fun ByteArray.none(): Boolean {\n return
isEmpty()\n}\n\n/**\n * Returns `true` if the array has no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.none\n * \n\npublic fun ShortArray.none(): Boolean {\n return
isEmpty()\n}\n\n/**\n * Returns
`true` if the array has no elements.\n * \n * @sample samples.collections.Collections.Aggregates.none\n * \n\npublic
fun IntArray.none(): Boolean {\n return isEmpty()\n}\n\n/**\n * Returns `true` if the array has no elements.\n * \n
* @sample samples.collections.Collections.Aggregates.none\n * \n\npublic fun LongArray.none(): Boolean {\n
return isEmpty()\n}\n\n/**\n * Returns `true` if the array has no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.none\n * \n\npublic fun FloatArray.none(): Boolean {\n return
isEmpty()\n}\n\n/**\n * Returns `true` if the array has no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.none\n * \n\npublic fun DoubleArray.none(): Boolean {\n return
isEmpty()\n}\n\n/**\n * Returns `true` if the array has no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.none\n * \n\npublic fun BooleanArray.none(): Boolean {\n return
isEmpty()\n}\n\n/**\n * Returns `true` if the array has no elements.\n
* \n * @sample samples.collections.Collections.Aggregates.none\n * \n\npublic fun CharArray.none(): Boolean {\n
return isEmpty()\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.none\n * \n\npublic inline fun <T> Array<out
T>.none(predicate: (T) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return false\n return
true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.none\n * \n\npublic inline fun ByteArray.none(predicate:
(Byte) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return false\n return
true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.none\n * \n\npublic inline fun ShortArray.none(predicate:
(Short) -> Boolean): Boolean {\n
for (element in this) if (predicate(element)) return false\n return true\n}\n\n/**\n * Returns `true` if no elements
match the given [predicate].\n * \n * @sample samples.collections.Collections.Aggregates.none\n * \n\npublic inline fun
IntArray.none(predicate: (Int) -> Boolean): Boolean {\n for (element in this) if
(predicate(element)) return false\n return true\n}\n\n/**\n * Returns `true` if no elements match the given
[predicate].\n * \n * @sample samples.collections.Collections.Aggregates.none\n * \n\npublic inline fun
LongArray.none(predicate: (Long) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return
false\n return true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.none\n * \n\npublic inline fun FloatArray.none(predicate:
(Float) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return false\n
return true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.none\n * \n\npublic inline fun DoubleArray.none(predicate:
(Double) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return false\n return
true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.none\n * \n\npublic inline fun
BooleanArray.none(predicate: (Boolean) -> Boolean): Boolean {\n for (element in this) if (predicate(element))
return false\n return true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.none\n * \n\npublic inline fun CharArray.none(predicate:
(Char) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return false\n return
true\n}\n\n/**\n * Performs the given [action]
on each element and returns the array itself afterwards.\n
* \n * @since Kotlin("1.4")\n * \n\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.onEach(action: (T) ->
Unit): Array<out T> {\n return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given

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[action] on each element and returns the array itself afterwards.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.onEach(action: (Byte) ->
Unit): ByteArray {\n return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given
[action] on each element and returns the array itself afterwards.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.onEach(action: (Short) ->
Unit): ShortArray {\n return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given
[action] on each element and returns the array itself afterwards.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic
inline fun IntArray.onEach(action: (Int) -> Unit): IntArray {\n return apply { for (element in this) action(element)
}\n}\n\n/**\n * Performs the given [action] on each element and returns the array itself afterwards.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.onEach(action: (Long) ->
Unit): LongArray {\n return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given
[action] on each element and returns the array itself afterwards.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.onEach(action: (Float) ->
Unit): FloatArray {\n return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given
[action] on each element and returns the array itself afterwards.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.onEach(action: (Double) ->
Unit): DoubleArray {\n return apply { for (element in this) action(element) }\n}\n\n/**\n
* Performs the given [action] on each element and returns the array itself afterwards.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.onEach(action: (Boolean)
-> Unit): BooleanArray {\n return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given
[action] on each element and returns the array itself afterwards.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.onEach(action: (Char) ->
Unit): CharArray {\n return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given
[action] on each element, providing sequential index with the element,\n * and returns the array itself afterwards.\n *
@param [action] function that takes the index of an element and the element itself\n * and performs the action on
the element.\n *\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out
T>.onEachIndexed(action: (index: Int, T) -> Unit):
Array<out T> {\n return apply { forEachIndexed(action) }\n}\n\n/**\n * Performs the given [action] on each
element, providing sequential index with the element,\n * and returns the array itself afterwards.\n * @param
[action] function that takes the index of an element and the element itself\n * and performs the action on the
element.\n *\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
ByteArray.onEachIndexed(action: (index: Int, Byte) -> Unit): ByteArray {\n return apply {
forEachIndexed(action) }\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index
with the element,\n * and returns the array itself afterwards.\n * @param [action] function that takes the index of an
element and the element itself\n * and performs the action on the element.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.onEachIndexed(action:
(index: Int, Short) -> Unit): ShortArray {\n return apply { forEachIndexed(action)
}\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index with the element,\n *
and returns the array itself afterwards.\n * @param [action] function that takes the index of an element and the
element itself\n * and performs the action on the element.\n *\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic
inline fun IntArray.onEachIndexed(action: (index: Int, Int) -> Unit): IntArray {\n return apply {
forEachIndexed(action) }\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index
with the element,\n * and returns the array itself afterwards.\n * @param [action] function that takes the index of an
element and the element itself\n * and performs the action on the element.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.onEachIndexed(action:
(index: Int, Long) -> Unit): LongArray {\n return apply { forEachIndexed(action) }\n}\n\n/**\n * Performs the
given [action]

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on each element, providing sequential index with the element,\n \* and returns the array itself afterwards.\n \*  
@params [action] function that takes the index of an element and the element itself\n \* and performs the action on the element.\n \*  
@SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun  
FloatArray.onEachIndexed(action: (index: Int, Float) -> Unit): FloatArray {\n return apply {  
forEachIndexed(action) }\n }\n\n/\*\*\n \* Performs the given [action] on each element, providing sequential index with the element,\n \* and returns the array itself afterwards.\n \* @param [action] function that takes the index of an element and the element itself\n \* and performs the action on the element.\n \*  
@SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun DoubleArray.onEachIndexed(action: (index: Int, Double) -> Unit): DoubleArray {\n return apply {  
forEachIndexed(action) }\n }\n\n/\*\*\n \* Performs the given [action] on each element, providing sequential index with the element,\n \* and returns the array itself afterwards.\n \* @param [action] function that takes the index of an element and the element itself\n \* and performs the action on the element.\n \*  
@SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun BooleanArray.onEachIndexed(action: (index: Int, Boolean) -> Unit): BooleanArray {\n return apply {  
forEachIndexed(action) }\n }\n\n/\*\*\n \* Performs the given [action] on each element, providing sequential index with the element,\n \* and returns the array itself afterwards.\n \* @param [action] function that takes the index of an element and the element itself\n \* and performs the action on the element.\n \*  
@SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun CharArray.onEachIndexed(action: (index: Int, Char) -> Unit): CharArray {\n return apply {  
forEachIndexed(action) }\n }\n\n/\*\*\n \* Accumulates value starting with the first element and applying [operation] from left to right\n \* to current accumulator value and each element.\n \* \n \* Throws an exception if this array is empty. If the array can be empty in an expected way,\n \* please use [reduceOrNull] instead. It returns `null` when its receiver is empty.\n \* \n \* @param [operation] function that takes current accumulator value and an element,\n \* and calculates the next accumulator value.\n \* \n \* @sample samples.collections.Collections.Aggregates.reduce\n \*  
@public inline fun <S, T : S> Array<out T>.reduce(operation: (acc: S, T) -> S): S {\n if (isEmpty())\n throw  
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator: S = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n }\n\n/\*\*\n \* Accumulates value starting with the first element and applying [operation] from left to right\n \* to current accumulator value and each element.\n \* \n \* Throws an exception if this array is empty. If the array can be empty in an expected way,\n \* please use [reduceOrNull] instead. It returns `null` when its receiver is empty.\n \* \n \* @param [operation] function that takes current accumulator value and an element,\n \* and calculates the next accumulator value.\n \* \n \* @sample samples.collections.Collections.Aggregates.reduce\n \*  
@public inline fun  
ByteArray.reduce(operation: (acc: Byte, Byte) -> Byte): Byte {\n if (isEmpty())\n throw  
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n }\n\n/\*\*\n \* Accumulates value starting with the first element and applying [operation] from left to right\n \* to current accumulator value and each element.\n \* \n \* Throws an exception if this array is empty. If the array can be empty in an expected way,\n \* please use [reduceOrNull] instead. It returns `null` when its receiver is empty.\n \* \n \* @param [operation] function that takes current accumulator value and an element,\n \* and calculates the next accumulator value.\n \* \n \* @sample samples.collections.Collections.Aggregates.reduce\n \*  
@public inline fun  
ShortArray.reduce(operation: (acc: Short, Short) -> Short): Short {\n if (isEmpty())\n throw  
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n }\n\n/\*\*\n \* Accumulates value starting with the first element and applying [operation] from left to right\n \* to current accumulator value and each element.\n \* \n \* Throws an exception if this array is empty. If the array can be empty in an expected way,\n \* please use [reduceOrNull] instead. It returns `null` when its receiver is empty.\n \* \n \* @param [operation] function that takes current accumulator value and an element,\n \* and calculates

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the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n * \n\npublic
inline fun IntArray.reduce(operation: (acc: Int, Int) -> Int): Int {\n if (isEmpty())\n throw
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in
1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n *
Accumulates value starting with the first element and applying [operation] from left to right\n * to current
accumulator value and each element.\n * \n * Throws an exception if this array is empty. If the array can be empty
in an expected way,\n * please use [reduceOrNull] instead. It returns `null` when its receiver is empty.\n * \n *
@param [operation] function that takes current accumulator value and an element,\n * and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n * \n\npublic
inline fun LongArray.reduce(operation: (acc: Long, Long) -> Long): Long {\n if (isEmpty())\n throw
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in
1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n *
Accumulates value starting with the first element and applying [operation] from left to right\n * to current
accumulator value and each element.\n * \n * Throws an exception if this array is empty. If the array can be empty
in an expected way,\n * please use [reduceOrNull] instead. It returns `null` when its receiver is empty.\n * \n *
@param [operation] function that takes current accumulator value and an element,\n * and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n * \n\npublic inline fun
FloatArray.reduce(operation: (acc: Float, Float) -> Float): Float {\n if (isEmpty())\n throw
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in
1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n *
Accumulates value starting with the first element and applying [operation] from left to right\n * to current
accumulator value and each element.\n * \n * Throws an exception if this array is empty. If the array can be empty
in an expected way,\n * please use [reduceOrNull] instead. It returns `null` when its receiver is empty.\n * \n *
@param [operation] function that takes current accumulator value and an element,\n * and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n * \n\npublic inline fun
DoubleArray.reduce(operation: (acc: Double, Double) -> Double): Double {\n if (isEmpty())\n throw
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n
for (index in 1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to
right\n * to current accumulator value and each element.\n * \n * Throws an exception if this array is empty. If the
array can be empty in an expected way,\n * please use [reduceOrNull] instead. It returns `null` when its receiver is
empty.\n * \n * @param [operation] function that takes current accumulator value and an element,\n * and calculates
the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n * \n\npublic inline
fun BooleanArray.reduce(operation: (acc: Boolean, Boolean) -> Boolean): Boolean {\n if (isEmpty())\n throw
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in
1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation]
from left to right\n * to current accumulator value and each element.\n * \n * Throws an exception if this array is
empty. If the array can be empty in an expected way,\n * please use [reduceOrNull] instead. It returns `null` when its
receiver is empty.\n * \n * @param [operation] function that takes current accumulator value and an element,\n *
and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n * \n\npublic inline fun CharArray.reduce(operation: (acc: Char, Char) -> Char): Char {\n if (isEmpty())\n throw
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in
1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation]
from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n *
Throws an exception if this array is empty. If the array can be empty in an expected way,\n * please use
[reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function

```



that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

```

@sample samples.collections.Collections.Aggregates.reduce
public inline fun <S,
T : S> Array<out T>.reduceIndexed(operation: (index: Int, acc: S, T) -> S): S {
 if (isEmpty()) throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator: S = this[0]
 for (index
in 1..lastIndex) {
 accumulator = operation(index, accumulator, this[index])
 }
 return
accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element with its index in the original array. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

```

@sample samples.collections.Collections.Aggregates.reduce
public inline fun
ByteArray.reduceIndexed(operation: (index: Int, acc: Byte, Byte) -> Byte): Byte {
 if (isEmpty()) throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = this[0]
 for (index in
1..lastIndex) {
 accumulator = operation(index, accumulator, this[index])
 }
 return
accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element with its index in the original array. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

```

@sample samples.collections.Collections.Aggregates.reduce
public inline fun
ShortArray.reduceIndexed(operation: (index: Int, acc: Short, Short) -> Short): Short {
 if (isEmpty()) throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = this[0]
 for (index in
1..lastIndex) {
 accumulator = operation(index, accumulator, this[index])
 }
 return
accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element with its index in the original array. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

```

@sample samples.collections.Collections.Aggregates.reduce
public inline fun
IntArray.reduceIndexed(operation: (index: Int, acc: Int, Int) -> Int): Int {
 if (isEmpty()) throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = this[0]
 for (index in
1..lastIndex) {
 accumulator = operation(index, accumulator, this[index])
 }
 return
accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element with its index in the original array. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

```

@sample samples.collections.Collections.Aggregates.reduce
public inline fun
LongArray.reduceIndexed(operation: (index: Int, acc: Long, Long) -> Long): Long {
 if (isEmpty()) throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = this[0]
 for (index in
1..lastIndex) {
 accumulator = operation(index, accumulator, this[index])
 }
 return
accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element with its index in the original array. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

```

@sample samples.collections.Collections.Aggregates.reduce
public inline fun
FloatArray.reduceIndexed(operation:

```

```
(index: Int, acc: Float, Float) -> Float): Float {
 if (isEmpty())
 throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(index, accumulator, this[index])
 }
 return accumulator
}
// Accumulates value starting with the first element and applying [operation] from left to right
* to current accumulator value and each element with its index in the original array.
* Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.
* @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.
* @sample samples.collections.Collections.Aggregates.reduce
// public inline fun DoubleArray.reduceIndexed(operation: (index: Int, acc: Double, Double) -> Double): Double {
 if (isEmpty())
 throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(index, accumulator, this[index])
 }
 return accumulator
}
// Accumulates value starting with the first element and applying [operation] from left to right
* to current accumulator value and each element with its index in the original array.
* Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.
* @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.
* @sample samples.collections.Collections.Aggregates.reduce
// public inline fun BooleanArray.reduceIndexed(operation: (index: Int, acc: Boolean, Boolean) -> Boolean): Boolean {
 if (isEmpty())
 throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(index, accumulator, this[index])
 }
 return accumulator
}
// Accumulates value starting with the first element and applying [operation] from left to right
* to current accumulator value and each element with its index in the original array.
* Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.
* @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.
* @sample samples.collections.Collections.Aggregates.reduce
// public inline fun CharArray.reduceIndexed(operation: (index: Int, acc: Char, Char) -> Char): Char {
 if (isEmpty())
 throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(index, accumulator, this[index])
 }
 return accumulator
}
// Accumulates value starting with the first element and applying [operation] from left to right
* to current accumulator value and each element with its index in the original array.
* Returns `null` if the array is empty.
* @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.
* @sample samples.collections.Collections.Aggregates.reduceOrNull
// @SinceKotlin("1.4")
// public inline fun <S, T : S> Array<out T>.reduceIndexedOrNull(operation: (index: Int, acc: S, T) -> S): S? {
 if (isEmpty())
 return null
 var accumulator: S = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(index, accumulator, this[index])
 }
 return accumulator
}
// Accumulates value starting with the first element and applying [operation] from left to right
* to current accumulator value and each element with its index in the original array.
* Returns `null` if the array is empty.
* @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.
* @sample samples.collections.Collections.Aggregates.reduceOrNull
// @SinceKotlin("1.4")
// public inline fun ByteArray.reduceIndexedOrNull(operation: (index: Int, acc: Byte, Byte) -> Byte): Byte? {
 if (isEmpty())
 return null
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(index, accumulator, this[index])
 }
 return accumulator
}

```



```

function that takes the index of an element, current accumulator value and the element itself,
and calculates the next accumulator value.
@sample samples.collections.Collections.Aggregates.reduceOrNull
*/
@SinceKotlin("1.4")
public inline fun CharArray.reduceIndexedOrNull(operation: (index: Int, acc: Char,
Char) -> Char): Char? {
 if (isEmpty())
 return null
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(index, accumulator, this[index])
 }
 return accumulator
}
*/
Accumulates value starting with the first element and applying [operation] from left to
right to current accumulator value and each element.
Returns `null` if the array is empty.
@param [operation] function that takes current accumulator value and an element,
and calculates the next accumulator value.
@sample samples.collections.Collections.Aggregates.reduceOrNull
*/
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public inline fun <S, T : S>
Array<out T>.reduceOrNull(operation: (acc: S, T) -> S): S? {
 if (isEmpty())
 return null
 var accumulator:
 S = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(accumulator, this[index])
 }
 return accumulator
}
*/
Accumulates value starting with the first element and applying [operation] from left to
right to current accumulator value and each element.
Returns `null` if the array is empty.
@param [operation] function that takes current accumulator value and an element,
and calculates the next accumulator value.
@sample samples.collections.Collections.Aggregates.reduceOrNull
*/
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public inline fun
ByteArray.reduceOrNull(operation: (acc: Byte, Byte) -> Byte): Byte? {
 if (isEmpty())
 return null
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(accumulator, this[index])
 }
 return accumulator
}
*/
Accumulates value starting with the first element and applying
[operation] from left to right to current accumulator value and each element.
Returns `null` if the array
is empty.
@param [operation] function that takes current accumulator value and an element,
and calculates the next accumulator value.
@sample samples.collections.Collections.Aggregates.reduceOrNull
*/
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public inline fun
ShortArray.reduceOrNull(operation: (acc: Short, Short) -> Short): Short? {
 if (isEmpty())
 return null
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(accumulator, this[index])
 }
 return accumulator
}
*/
Accumulates value starting with the first element and applying [operation]
from left to right to current accumulator value and each element.
Returns `null` if the array is empty.
@param [operation] function that takes current accumulator value and an element,
and calculates the next accumulator value.
@sample
samples.collections.Collections.Aggregates.reduceOrNull
*/
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public inline fun
IntArray.reduceOrNull(operation: (acc: Int, Int) -> Int): Int? {
 if (isEmpty())
 return null
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(accumulator, this[index])
 }
 return accumulator
}
*/
Accumulates value starting with the first element and applying [operation]
from left to right to current accumulator value and each element.
Returns `null` if the array is empty.
@param [operation] function that takes current accumulator value and an element,
and calculates the next accumulator value.
@sample samples.collections.Collections.Aggregates.reduceOrNull
*/
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public inline fun
LongArray.reduceOrNull(operation:
(acc: Long, Long) -> Long): Long? {
 if (isEmpty())
 return null
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(accumulator, this[index])
 }
 return accumulator
}
*/
Accumulates value starting with the first element and applying [operation] from left to
right to current accumulator value and each element.
Returns `null` if the array is empty.
@param [operation] function that takes current accumulator value and an element,
and calculates the next accumulator value.
@sample samples.collections.Collections.Aggregates.reduceOrNull
*/
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public inline fun

```

```

FloatArray.reduceOrNull(operation: (acc: Float, Float) -> Float): Float? {
 if (isEmpty())
 return null
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(accumulator, this[index])
 }
 return accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element. Returns `null` if the array is empty.

@param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.reduceOrNull

```

*
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public inline fun
DoubleArray.reduceOrNull(operation: (acc: Double, Double) -> Double): Double? {
 if (isEmpty())
 return null
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(accumulator, this[index])
 }
 return accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element. Returns `null` if the array is empty.

@param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.reduceOrNull

```

*
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public inline fun
BooleanArray.reduceOrNull(operation: (acc: Boolean, Boolean) -> Boolean): Boolean? {
 if (isEmpty())
 return null
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(accumulator, this[index])
 }
 return accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element. Returns `null` if the array is empty.

@param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.reduceOrNull

```

*
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public inline fun
CharArray.reduceOrNull(operation: (acc: Char, Char) -> Char): Char? {
 if (isEmpty())
 return null
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(accumulator, this[index])
 }
 return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.reduceRight

```

*
public inline fun <S, T : S> Array<out T>.reduceRight(operation: (T, acc: S) -> S): S {
 var index = lastIndex
 if (index < 0) throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator: S = get(index--)
 while (index >= 0) {
 accumulator = operation(get(index--), accumulator)
 }
 return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.reduceRight

```

*
public inline fun
ByteArray.reduceRight(operation: (Byte, acc: Byte) -> Byte): Byte {
 var index = lastIndex
 if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = get(index--)
 while (index >= 0) {
 accumulator = operation(get(index--), accumulator)
 }
 return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.reduceRight

```

*
public inline fun
ShortArray.reduceRight(operation:

```

(Short, acc: Short) -> Short): Short {  
var index = lastIndex  
if (index < 0) throw  
UnsupportedOperationException("Empty array can't be  
reduced.")  
var accumulator = get(index--)  
while (index >= 0) {  
accumulator = operation(get(index--),  
accumulator)  
}  
return accumulator  
}

**Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value.**  
**Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.**  
**@param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.**  
**@sample**

`samples.collections.Collections.Aggregates.reduceRight`  
`public inline fun IntArray.reduceRight(operation: (Int, acc: Int) -> Int): Int {  
var index = lastIndex  
if (index < 0) throw  
UnsupportedOperationException("Empty array can't be reduced.")  
var accumulator = get(index--)  
while (index >= 0) {  
accumulator  
= operation(get(index--), accumulator)  
}  
return accumulator  
}`

**Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value.**  
**Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.**  
**@param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.**  
**@sample**

`samples.collections.Collections.Aggregates.reduceRight`  
`public inline fun LongArray.reduceRight(operation: (Long, acc: Long) -> Long): Long {  
var index = lastIndex  
if (index < 0) throw  
UnsupportedOperationException("Empty array can't be reduced.")  
var accumulator = get(index--)  
while (index >= 0) {  
accumulator = operation(get(index--), accumulator)  
}  
return accumulator  
}`

**Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value.**  
**Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.**  
**@param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.**  
**@sample**

`samples.collections.Collections.Aggregates.reduceRight`  
`public inline fun FloatArray.reduceRight(operation: (Float, acc: Float) -> Float): Float {  
var index = lastIndex  
if (index < 0) throw  
UnsupportedOperationException("Empty array can't be reduced.")  
var accumulator = get(index--)  
while (index >= 0) {  
accumulator = operation(get(index--), accumulator)  
}  
return  
accumulator  
}`

**Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value.**  
**Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.**  
**@param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.**  
**@sample**

`samples.collections.Collections.Aggregates.reduceRight`  
`public inline fun DoubleArray.reduceRight(operation: (Double, acc: Double) -> Double): Double {  
var index = lastIndex  
if (index < 0) throw  
UnsupportedOperationException("Empty array can't be reduced.")  
var accumulator = get(index--)  
while (index >= 0) {  
accumulator = operation(get(index--), accumulator)  
}  
return accumulator  
}`

**Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value.**  
**Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.**  
**@param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.**  
**@sample**

`samples.collections.Collections.Aggregates.reduceRight`  
`public inline fun BooleanArray.reduceRight(operation: (Boolean, acc: Boolean) -> Boolean): Boolean {  
var index = lastIndex  
if (index < 0) throw  
UnsupportedOperationException("Empty array can't be reduced.")  
var accumulator =  
get(index--)  
while (index >= 0) {  
accumulator = operation(get(index--), accumulator)  
}  
return  
accumulator  
}`

**Accumulates value starting with the last element and applying [operation] from right to**

left to each element and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty. @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value. @sample

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun CharArray.reduceRight(operation:
(Char, acc: Char) -> Char): Char {
 var index = lastIndex
 if (index < 0) throw
UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = get(index--)
 while
(index >= 0) {
 accumulator = operation(get(index--), accumulator)
 }
 return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element with its index in the original array and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty. @param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value. @sample

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun <S, T : S> Array<out T>.reduceRightIndexed(operation: (index: Int, T, acc: S) -> S): S {
 var index = lastIndex
 if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator: S = get(index--)
 while (index >= 0) {
 accumulator = operation(index, get(index),
accumulator)
 --index
 }
 return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element with its index in the original array and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty. @param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value. @sample

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun
ByteArray.reduceRightIndexed(operation: (index: Int, Byte, acc: Byte) -> Byte): Byte {
 var index = lastIndex
 if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator =
get(index--)
 while (index >= 0) {
 accumulator = operation(index, get(index), accumulator)
 --index
 }
 return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element with its index in the original array and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty. @param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value. @sample

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun
ShortArray.reduceRightIndexed(operation: (index: Int, Short, acc: Short) -> Short): Short {
 var index =
lastIndex
 if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")
 var
accumulator = get(index--)
 while (index >= 0) {
 accumulator = operation(index, get(index),
accumulator)
 --index
 }
 return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element with its index in the original array and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty. @param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value. @sample

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun
IntArray.reduceRightIndexed(operation: (index: Int, Int, acc: Int) -> Int): Int {
 var index = lastIndex
 if (index
< 0) throw UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = get(index--)
 while (index >= 0) {
 accumulator = operation(index, get(index), accumulator)
 --index
 }
 return

```

```

accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to
left\n * to each element with its index
in the original array and current accumulator value.\n * \n * Throws an exception if this array is empty. If the array
can be empty in an expected way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its
receiver is empty.\n * \n * @param [operation] function that takes the index of an element, the element itself and
current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n */\npublic inline fun
LongArray.reduceRightIndexed(operation: (index: Int, Long, acc: Long) -> Long): Long {\n var index =
lastIndex\n if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n var
accumulator = get(index--)\n while (index >= 0) {\n accumulator = operation(index, get(index),
accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the last
element and applying [operation] from right to left\n * to each element with its index in the original array and current
accumulator value.\n * \n * Throws an exception if this array is empty. If the array can be empty in an expected
way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function that takes the index of an
element, the element itself and current accumulator value,\n * and calculates the next accumulator value.\n * \n *
@sample samples.collections.Collections.Aggregates.reduceRight\n */\npublic inline fun
FloatArray.reduceRightIndexed(operation: (index: Int, Float, acc: Float) -> Float): Float {\n var index =
lastIndex\n if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n var
accumulator = get(index--)\n while (index >= 0) {\n accumulator = operation(index, get(index),
accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the last
element
and applying [operation] from right to left\n * to each element with its index in the original array and current
accumulator value.\n * \n * Throws an exception if this array is empty. If the array can be empty in an expected
way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator value,\n
* and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n */\npublic inline fun
DoubleArray.reduceRightIndexed(operation: (index: Int, Double, acc: Double) -> Double): Double {\n var index =
lastIndex\n if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n var
accumulator = get(index--)\n while (index >= 0) {\n accumulator = operation(index, get(index),
accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates
value starting with the last element and applying [operation] from right to left\n * to each element with its index in
the original array and current accumulator value.\n * \n * Throws an exception if this array is empty. If the array can
be empty in an expected way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver
is empty.\n * \n * @param [operation] function that takes the index of an element, the element itself and current
accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n */\npublic inline fun
BooleanArray.reduceRightIndexed(operation: (index: Int, Boolean, acc: Boolean) -> Boolean): Boolean {\n var
index = lastIndex\n if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n var
accumulator = get(index--)\n while (index >= 0) {\n accumulator = operation(index, get(index),
accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation]
from right to left\n * to each element with its index in the original array and current accumulator value.\n * \n *
Throws an exception if this array is empty. If the array can be empty in an expected way,\n * please use
[reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation]
function that takes the index of an element, the element itself and current accumulator value,\n * and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRight\n */\npublic

```



```

inline fun CharArray.reduceRightIndexed(operation: (index: Int, Char, acc: Char) -> Char): Char {
 var index = lastIndex
 if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = get(index--)
 while (index >= 0) {
 accumulator = operation(index, get(index), accumulator)
 --index
 }
 return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element with its index in the original array and current accumulator value. Returns `null` if the array is empty.
 @param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value.
 @sample samples.collections.Collections.Aggregates.reduceRightOrNull

```

*SinceKotlin("1.4")
public inline fun <S, T : S> Array<out T>.reduceRightIndexedOrNull(operation: (index: Int, T, acc: S) -> S): S? {
 var index = lastIndex
 if (index < 0) return null
 var accumulator: S = get(index--)
 while (index >= 0) {
 accumulator = operation(index, get(index), accumulator)
 --index
 }
 return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element with its index in the original array and current accumulator value. Returns `null` if the array is empty.
 @param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value.
 @sample samples.collections.Collections.Aggregates.reduceRightOrNull

```

*SinceKotlin("1.4")
public inline fun ByteArray.reduceRightIndexedOrNull(operation: (index: Int, Byte, acc: Byte) -> Byte): Byte? {
 var index = lastIndex
 if (index < 0) return null
 var accumulator = get(index--)
 while (index >= 0) {
 accumulator = operation(index, get(index), accumulator)
 --index
 }
 return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element with its index in the original array and current accumulator value. Returns `null` if the array is empty.
 @param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value.
 @sample samples.collections.Collections.Aggregates.reduceRightOrNull

```

*SinceKotlin("1.4")
public inline fun ShortArray.reduceRightIndexedOrNull(operation: (index: Int, Short, acc: Short) -> Short): Short? {
 var index = lastIndex
 if (index < 0) return null
 var accumulator = get(index--)
 while (index >= 0) {
 accumulator = operation(index, get(index), accumulator)
 --index
 }
 return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element with its index in the original array and current accumulator value. Returns `null` if the array is empty.
 @param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value.
 @sample samples.collections.Collections.Aggregates.reduceRightOrNull

```

*SinceKotlin("1.4")
public inline fun IntArray.reduceRightIndexedOrNull(operation: (index: Int, Int, acc: Int) -> Int): Int? {
 var index = lastIndex
 if (index < 0) return null
 var accumulator = get(index--)
 while (index >= 0) {
 accumulator = operation(index, get(index), accumulator)
 --index
 }
 return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element with its index in the original array and current accumulator value. Returns `null` if the array is empty.
 @param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value.
 @sample samples.collections.Collections.Aggregates.reduceRightOrNull

```

*SinceKotlin("1.4")
public inline fun LongArray.reduceRightIndexedOrNull(operation: (index: Int, Long, acc: Long) -> Long): Long? {
 var index = lastIndex
 if (index < 0) return null
 var accumulator = get(index--)
 while (index >= 0) {
 accumulator = operation(index, get(index), accumulator)
 --index
 }
 return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element with its index in the original array and current accumulator value. Returns `null` if the array is empty.
 @param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value.
 @sample samples.collections.Collections.Aggregates.reduceRightOrNull



```

*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic
inline fun ShortArray.reduceRightOrNull(operation: (Short, acc: Short) -> Short): Short? {\n var index =
lastIndex\n if (index < 0) return null\n var accumulator = get(index--)\n while (index >= 0) {\n
accumulator = operation(get(index--), accumulator)\n }\n return accumulator\n}\n\n/**\n * Accumulates value
starting with the last element and applying [operation] from right to left\n * to each element and current accumulator
value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and
current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
IntArray.reduceRightOrNull(operation: (Int, acc: Int) -> Int): Int? {\n var index = lastIndex\n if (index < 0)
return null\n var accumulator = get(index--)\n while
(index >= 0) {\n accumulator = operation(get(index--), accumulator)\n }\n return accumulator\n}\n\n/**\n *
Accumulates value starting with the last element and applying [operation] from right to left\n * to each element and
current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that
takes an element and current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
LongArray.reduceRightOrNull(operation: (Long, acc: Long) -> Long): Long? {\n var index = lastIndex\n if
(index < 0) return null\n var accumulator = get(index--)\n while (index >= 0) {\n accumulator =
operation(get(index--), accumulator)\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the
last element and applying [operation] from
right to left\n * to each element and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n *
@param [operation] function that takes an element and current accumulator value,\n * and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
FloatArray.reduceRightOrNull(operation: (Float, acc: Float) -> Float): Float? {\n var index = lastIndex\n if
(index < 0) return null\n var accumulator = get(index--)\n while (index >= 0) {\n accumulator =
operation(get(index--), accumulator)\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the
last element and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n *
Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and current
accumulator
value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
DoubleArray.reduceRightOrNull(operation: (Double, acc: Double) -> Double): Double? {\n var index =
lastIndex\n if (index < 0) return null\n var accumulator = get(index--)\n while (index >= 0) {\n
accumulator = operation(get(index--), accumulator)\n }\n return accumulator\n}\n\n/**\n * Accumulates value
starting with the last element and applying [operation] from right to left\n * to each element and current accumulator
value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and
current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic
inline fun BooleanArray.reduceRightOrNull(operation: (Boolean, acc: Boolean) -> Boolean): Boolean? {\n var
index = lastIndex\n if (index < 0) return null\n var accumulator = get(index--)\n while (index >= 0) {\n
accumulator = operation(get(index--), accumulator)\n }\n return accumulator\n}\n\n/**\n * Accumulates value
starting with the last element and applying [operation] from right to left\n * to each element and current accumulator
value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and
current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample

```

```

samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
CharArray.reduceRightOrNull(operation: (Char, acc: Char) -> Char): Char? {\n var index = lastIndex\n if (index
< 0) return null\n var
 accumulator = get(index--)\n while (index >= 0) {\n accumulator = operation(get(index--), accumulator)\n
}\n return accumulator\n}\n\n/**\n * Returns a list containing successive accumulation values generated by
applying [operation] from left to right\n * to each element and current accumulator value that starts with [initial]
value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would
affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value
and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\npublic inline fun <T, R>
Array<out T>.runningFold(initial: R, operation: (acc: R, T) -> R): List<R> {\n if (isEmpty()) return
listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for
(element in
 this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n return
result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from
left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n * Note that `acc`
value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in
resulting list.\n * \n * @param [operation] function that takes current accumulator value and an element, and
calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> ByteArray.runningFold(initial: R,
operation: (acc: R, Byte) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size
+ 1).apply { add(initial) }\n var accumulator = initial\n for (element
 in this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n return
result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from
left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n * Note that `acc`
value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in
resulting list.\n * \n * @param [operation] function that takes current accumulator value and an element, and
calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> ShortArray.runningFold(initial: R,
operation: (acc: R, Short) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size
+ 1).apply { add(initial) }\n var accumulator = initial\n for
(element in this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n return
result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying
[operation] from left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n
* Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the
previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value and an
element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> IntArray.runningFold(initial: R,
operation: (acc: R, Int) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size +
1).apply { add(initial) }\n var accumulator = initial\n for
(element in this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n return
result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying
[operation] from left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n
* Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the
previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value and an
element, and calculates the next accumulator value.\n * \n * @sample

```

samples.collections.Collections.Aggregates.runningFold

```
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> LongArray.runningFold(initial: R,\noperation: (acc: R, Long) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size\n+ 1).apply { add(initial) }\n var accumulator = initial\n for (element in this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying\n [operation] from left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the\n previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value and an\n element, and calculates the next accumulator value.\n * \n * @sample
```

samples.collections.Collections.Aggregates.runningFold

```
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> FloatArray.runningFold(initial: R,\noperation: (acc: R, Float) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size\n+ 1).apply { add(initial) }\n var accumulator = initial\n for (element in this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying\n [operation] from left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the\n previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value and an\n element, and calculates the next accumulator value.\n * \n * @sample
```

samples.collections.Collections.Aggregates.runningFold

```
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> DoubleArray.runningFold(initial: R,\noperation: (acc: R, Double) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result =\n ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator\n = initial\n for (element in this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation\n values generated by applying [operation] from left to right\n * to each element and current accumulator value that\n starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes current\n accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample
```

samples.collections.Collections.Aggregates.runningFold

```
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> BooleanArray.runningFold(initial:\nR, operation: (acc: R, Boolean) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result =\n ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator\n = initial\n for (element in this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation\n values generated by applying [operation] from left to right\n * to each element and current accumulator value that\n starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes current\n accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample
```

samples.collections.Collections.Aggregates.runningFold

```
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> CharArray.runningFold(initial: R,\noperation: (acc: R, Char) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size\n+ 1).apply { add(initial) }\n var\n accumulator = initial\n for (element in this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation\n values generated by applying [operation] from left to right\n * to each element, its index in the original array and\n current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function
```

should not be mutated;\n \* otherwise it would affect the previous value in resulting list.\n \* \n \* @param [operation] function that takes the index of an element, current accumulator value\n \* and the element itself, and calculates the next accumulator value.\n \* \n \* @sample samples.collections.Collections.Aggregates.runningFold\n

```

*\n@SinceKotlin("1.4")\npublic inline fun <T, R> Array<out T>.runningFoldIndexed(initial: R, operation:
(index: Int, acc: R, T) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R>
ByteArray.runningFoldIndexed(initial:
R, operation: (index: Int, acc: R, Byte) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result =
ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> ShortArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Short) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R>
IntArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Int) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R>
LongArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Long) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n

```

```
for (index in indices) {
 accumulator = operation(index, accumulator, this[index])
}
result.add(accumulator)
}
return result
```

\* Returns a list containing successive accumulation values generated by applying [operation] from left to right to each element, its index in the original array and current accumulator value that starts with [initial] value.

\* Note that `acc` value passed to [operation] function should not be mutated; otherwise

it would affect the previous value in resulting list.

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.runningFold

```
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R>
```

```
FloatArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Float) -> R): List<R> {
 if (isEmpty())
 return listOf(initial)
 val result = ArrayList<R>(size + 1).apply { add(initial) }
 var accumulator = initial
 for (index in indices) {
 accumulator = operation(index, accumulator, this[index])
 }
 result.add(accumulator)
}
return result
```

\* Returns a list containing successive accumulation values generated by applying [operation] from left to right to each element, its index in the original array and current accumulator value that starts with [initial]

value.

\* Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting list.

\* @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.runningFold

```
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R>
```

```
DoubleArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Double) -> R): List<R> {
 if (isEmpty())
 return listOf(initial)
 val result = ArrayList<R>(size + 1).apply { add(initial) }
 var accumulator = initial
 for (index in indices) {
 accumulator = operation(index, accumulator, this[index])
 }
 result.add(accumulator)
}
return result
```

\* Returns a list containing successive accumulation values generated by applying [operation] from left to

right to each element, its index in the original array and current accumulator value that starts with [initial] value.

\* Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting list.

\* @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.runningFold

```
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R>
```

```
BooleanArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Boolean) -> R): List<R> {
 if (isEmpty())
 return listOf(initial)
 val result = ArrayList<R>(size + 1).apply { add(initial) }
 var accumulator = initial
 for (index in indices) {
 accumulator = operation(index, accumulator, this[index])
 }
 result.add(accumulator)
}
return result
```

\* Returns a list containing successive accumulation values generated by applying [operation] from left to right to each element, its index in the original array and current accumulator value that starts with [initial] value.

\* Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting list.

\* @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.runningFold

```
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R>
```

```
CharArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Char) -> R): List<R> {
 if (isEmpty())
 return listOf(initial)
 val result = ArrayList<R>(size + 1).apply { add(initial) }
 var accumulator = initial
 for (index in indices) {
 accumulator = operation(index,
 accumulator, this[index])
 }
 result.add(accumulator)
}
return result
```

\* Returns a list

containing successive accumulation values generated by applying [operation] from left to right to each element and current accumulator value that starts with the first element of this array.

\* Note that `acc` value passed to

[operation] function should not be mutated;\n \* otherwise it would affect the previous value in resulting list.\n \* \n \* @param [operation] function that takes current accumulator value and the element, and calculates the next accumulator value.\n \* \n \* @sample samples.collections.Collections.Aggregates.runningReduce\n \* \n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public inline fun <S, T : S> Array<out T>.runningReduce(operation: (acc: S, T) -> S): List<S> {\n if (isEmpty()) return emptyList()\n var accumulator: S = this[0]\n val result = ArrayList<S>(size).apply { add(accumulator) }\n for (index in 1 until size) {\n accumulator = operation(accumulator, this[index])\n result.add(accumulator)\n }\n return result\n }\n\n /\*\*\n \* Returns a list containing successive accumulation values generated by applying [operation] from left to right\n \* to each element and current accumulator value that starts with the first element of this array.\n \* \n \* @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.\n \* \n \* @sample samples.collections.Collections.Aggregates.runningReduce\n \* \n @SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun ByteArray.runningReduce(operation: (acc: Byte, Byte) -> Byte): List<Byte> {\n if (isEmpty()) return emptyList()\n var accumulator = this[0]\n val result = ArrayList<Byte>(size).apply { add(accumulator) }\n for (index in 1 until size) {\n accumulator = operation(accumulator, this[index])\n result.add(accumulator)\n }\n return result\n }\n\n /\*\*\n \* Returns a list containing successive accumulation values generated by applying [operation] from left to right\n \* to each element and current accumulator value that starts with the first element of this array.\n \* \n \* @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.\n \* \n \* @sample samples.collections.Collections.Aggregates.runningReduce\n \* \n @SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun ShortArray.runningReduce(operation: (acc: Short, Short) -> Short): List<Short> {\n if (isEmpty()) return emptyList()\n var accumulator = this[0]\n val result = ArrayList<Short>(size).apply { add(accumulator) }\n for (index in 1 until size) {\n accumulator = operation(accumulator, this[index])\n result.add(accumulator)\n }\n return result\n }\n\n /\*\*\n \* Returns a list containing successive accumulation values generated by applying [operation] from left to right\n \* to each element and current accumulator value that starts with the first element of this array.\n \* \n \* @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.\n \* \n \* @sample samples.collections.Collections.Aggregates.runningReduce\n \* \n @SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun IntArray.runningReduce(operation: (acc: Int, Int) -> Int): List<Int> {\n if (isEmpty()) return emptyList()\n var accumulator = this[0]\n val result = ArrayList<Int>(size).apply { add(accumulator) }\n for (index in 1 until size) {\n accumulator = operation(accumulator, this[index])\n result.add(accumulator)\n }\n return result\n }\n\n /\*\*\n \* Returns a list containing successive accumulation values generated by applying [operation] from left to right\n \* to each element and current accumulator value that starts with the first element of this array.\n \* \n \* @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.\n \* \n \* @sample samples.collections.Collections.Aggregates.runningReduce\n \* \n @SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun LongArray.runningReduce(operation: (acc: Long, Long) -> Long): List<Long> {\n if (isEmpty()) return emptyList()\n var accumulator = this[0]\n val result = ArrayList<Long>(size).apply { add(accumulator) }\n for (index in 1 until size) {\n accumulator = operation(accumulator, this[index])\n result.add(accumulator)\n }\n return result\n }\n\n /\*\*\n \* Returns a list containing successive accumulation values generated by applying [operation] from left to right\n \* to each element and current accumulator value that starts with the first element of this array.\n \* \n \* @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.\n \* \n \* @sample samples.collections.Collections.Aggregates.runningReduce\n \* \n @SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun FloatArray.runningReduce(operation: (acc: Float, Float) -> Float): List<Float> {\n if (isEmpty()) return emptyList()\n var accumulator = this[0]\n val result = ArrayList<Float>(size).apply { add(accumulator) }\n for (index in 1 until size) {\n accumulator = operation(accumulator, this[index])\n result.add(accumulator)\n }\n return result\n }\n\n /\*\*\n \* Returns a list containing successive accumulation values generated by applying [operation] from left to right\n \* to each element



and current accumulator value that starts with the first element of this array.

```

\n * \n * @param [operation] function
that takes current accumulator value and an element, and calculates the next accumulator value.
\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce
*/
@SinceKotlin("1.4")
@kotlin.internal.InlineOnly
public
inline fun DoubleArray.runningReduce(operation: (acc: Double, Double) -> Double): List<Double> {
 if (isEmpty()) return emptyList()
 var accumulator = this[0]
 val result = ArrayList<Double>(size).apply {
 add(accumulator)
 }
 for (index in 1 until size) {
 accumulator = operation(accumulator, this[index])
 result.add(accumulator)
 }
 return result
}
\n\n/**
 * Returns a list containing successive accumulation
values generated by applying [operation] from left to right
 * to each element and current accumulator value that
starts with the first element of this array.
\n * \n * @param [operation] function that takes current accumulator value
and an element, and calculates the next accumulator value.
\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce
*/
@SinceKotlin("1.4")
@kotlin.internal.InlineOnly
public inline fun BooleanArray.runningReduce(operation:
(acc: Boolean, Boolean) -> Boolean): List<Boolean> {
 if (isEmpty()) return emptyList()
 var accumulator = this[0]
 val result = ArrayList<Boolean>(size).apply {
 add(accumulator)
 }
 for (index in 1 until size) {
 accumulator = operation(accumulator, this[index])
 result.add(accumulator)
 }
 return result
}
\n\n/**
 * Returns a list containing successive accumulation
values generated by applying [operation] from left to right
 * to each element and current accumulator value that
starts with the first element of this array.
\n * \n * @param [operation] function that takes current accumulator value
and an element, and calculates the next accumulator value.
\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce
*/
@SinceKotlin("1.4")
@kotlin.internal.InlineOnly
public inline fun CharArray.runningReduce(operation:
(acc: Char, Char) -> Char): List<Char> {
 if (isEmpty()) return emptyList()
 var accumulator = this[0]
 val result = ArrayList<Char>(size).apply {
 add(accumulator)
 }
 for (index in 1 until size) {
 accumulator = operation(accumulator, this[index])
 result.add(accumulator)
 }
 return result
}
\n\n/**
 * Returns a list containing successive accumulation
values generated by applying [operation] from left to right
 * to each element, its index in the original array and
current accumulator value that starts with the first element of this array.
\n * \n * Note that `acc` value passed to
[operation] function should not be mutated;
 * otherwise it would affect the previous value in resulting list.
\n * \n *
@param [operation] function that takes the index of an element, current accumulator value
 * and the element
itself, and calculates the next accumulator value.
\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce
*/
@SinceKotlin("1.4")
public inline fun <S, T :
S> Array<out T>.runningReduceIndexed(operation: (index: Int, acc: S, T) -> S): List<S> {
 if (isEmpty()) return
emptyList()
 var accumulator: S = this[0]
 val result = ArrayList<S>(size).apply {
 add(accumulator)
 }
 for (index in 1
until size) {
 accumulator = operation(index, accumulator, this[index])
 result.add(accumulator)
 }
 return result
}
\n\n/**
 * Returns a list containing successive accumulation
values generated by applying
[operation] from left to right
 * to each element, its index in the original array and current accumulator value that
starts with the first element of this array.
\n * \n * @param [operation] function that takes the index of an element,
current accumulator value
 * and the element itself, and calculates the next accumulator value.
\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce
*/
@SinceKotlin("1.4")
@kotlin.internal.InlineOnly
public inline fun
ByteArray.runningReduceIndexed(operation: (index: Int, acc: Byte, Byte) -> Byte): List<Byte> {
 if (isEmpty())
return emptyList()
 var accumulator = this[0]
 val result = ArrayList<Byte>(size).apply {
 add(accumulator)
 }
 for (index in 1 until size) {
 accumulator
= operation(index, accumulator, this[index])
 result.add(accumulator)
 }
 return result
}
\n\n/**
 * Returns a list containing successive accumulation
values generated by applying [operation] from left to right
 * to each element, its index in the original array and current accumulator value that starts with the first element of this

```

```

array.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and
the element itself, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
ShortArray.runningReduceIndexed(operation: (index: Int, acc: Short, Short) -> Short): List<Short> {\n if
(isEmpty()) return emptyList()\n var accumulator = this[0]\n val result = ArrayList<Short>(size).apply
{ add(accumulator) }\n for (index in 1 until size) {\n accumulator = operation(index, accumulator,
this[index])\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive
accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original
array and current accumulator value that starts with the first element of this array.\n * \n * @param [operation]
function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
IntArray.runningReduceIndexed(operation: (index: Int, acc: Int, Int) -> Int): List<Int> {\n if (isEmpty()) return
emptyList()\n var accumulator = this[0]\n val result = ArrayList<Int>(size).apply { add(accumulator)
}\n for (index in 1 until size) {\n accumulator = operation(index, accumulator, this[index])\n
result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element, its index in the original array and
current accumulator value that starts with the first element of this array.\n * \n * @param [operation] function that
takes the index of an element, current accumulator value\n * and the element itself, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
LongArray.runningReduceIndexed(operation: (index: Int, acc: Long, Long) -> Long): List<Long> {\n if
(isEmpty()) return emptyList()\n var accumulator = this[0]\n val result = ArrayList<Long>(size).apply {
add(accumulator) }\n for (index in 1 until
size) {\n accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n
return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying
[operation] from left to right\n * to each element, its index in the original array and current accumulator value that
starts with the first element of this array.\n * \n * @param [operation] function that takes the index of an element,
current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
FloatArray.runningReduceIndexed(operation: (index: Int, acc: Float, Float) -> Float): List<Float> {\n if
(isEmpty()) return emptyList()\n var accumulator = this[0]\n val result = ArrayList<Float>(size).apply {
add(accumulator) }\n for (index in 1 until size) {\n accumulator
= operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n}\n\n/**\n *
Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to
each element, its index in the original array and current accumulator value that starts with the first element of this
array.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and
the element itself, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
DoubleArray.runningReduceIndexed(operation: (index: Int, acc: Double, Double) -> Double): List<Double> {\n if
(isEmpty()) return emptyList()\n var accumulator = this[0]\n val result = ArrayList<Double>(size).apply {
add(accumulator) }\n for (index in 1 until size) {\n accumulator = operation(index,
accumulator, this[index])\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list
containing successive accumulation values generated by applying [operation] from left to right\n * to each element,
its index in the original array and current accumulator value that starts with the first element of this array.\n * \n *

```

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.

```

samples.collections.Collections.Aggregates.runningReduce
*/n@SinceKotlin("1.4")n@kotlin.internal.InlineOnlynpublic inline fun
BooleanArray.runningReduceIndexed(operation: (index: Int, acc: Boolean, Boolean) -> Boolean): List<Boolean>
{n if (isEmpty()) return emptyList()n var accumulator = this[0]n val result =
ArrayList<Boolean>(size).apply { add(accumulator) }n for (index in 1 until size) {n accumulator =
operation(index, accumulator,
this[index])n result.add(accumulator)n }n return resultn}n/n/**n * Returns a list containing successive
accumulation values generated by applying [operation] from left to rightn * to each element, its index in the original
array and current accumulator value that starts with the first element of this array.n * n * @param [operation]
function that takes the index of an element, current accumulator value and the element itself, and calculates the
next accumulator value.n * n * @sample samples.collections.Collections.Aggregates.runningReduce
*/n@SinceKotlin("1.4")n@kotlin.internal.InlineOnlynpublic inline fun
CharArray.runningReduceIndexed(operation: (index: Int, acc: Char, Char) -> Char): List<Char> {n if (isEmpty())
return emptyList()n var accumulator = this[0]n val result = ArrayList<Char>(size).apply { add(accumulator)
}n for (index in 1 until size) {n accumulator = operation(index, accumulator, this[index])n
result.add(accumulator)n }n return resultn}n/n/**n * Returns a list containing successive accumulation
values generated by applying [operation] from left to rightn * to each element and current accumulator value that
starts with [initial] value.n * n * Note that `acc` value passed to [operation] function should not be mutated;n *
otherwise it would affect the previous value in resulting list.n * n * @param [operation] function that takes current
accumulator value and an element, and calculates the next accumulator value.n * n * @sample
samples.collections.Collections.Aggregates.scan
*/n@SinceKotlin("1.4")n@WasExperimental(ExperimentalStdlibApi::class)npublic inline fun <T, R>
Array<out T>.scan(initial: R, operation: (acc: R, T) -> R): List<R> {n return runningFold(initial,
operation)n}n/n/**n * Returns a list containing successive accumulation values generated by applying [operation]
from left to rightn * to each element and current accumulator value that
starts with [initial] value.n * n * Note that `acc` value passed to [operation] function should not be mutated;n *
otherwise it would affect the previous value in resulting list.n * n * @param [operation] function that takes current
accumulator value and an element, and calculates the next accumulator value.n * n * @sample
samples.collections.Collections.Aggregates.scan
*/n@SinceKotlin("1.4")n@WasExperimental(ExperimentalStdlibApi::class)n@kotlin.internal.InlineOnlynpublic
inline fun <R> ByteArray.scan(initial: R, operation: (acc: R, Byte) -> R): List<R> {n return runningFold(initial,
operation)n}n/n/**n * Returns a list containing successive accumulation values generated by applying [operation]
from left to rightn * to each element and current accumulator value that starts with [initial] value.n * n * Note that
`acc` value passed to [operation] function should not be mutated;n * otherwise it would affect the previous value in
resulting list.n * n * @param
[operation] function that takes current accumulator value and an element, and calculates the next accumulator
value.n * n * @sample samples.collections.Collections.Aggregates.scan
*/n@SinceKotlin("1.4")n@WasExperimental(ExperimentalStdlibApi::class)n@kotlin.internal.InlineOnlynpublic
inline fun <R> ShortArray.scan(initial: R, operation: (acc: R, Short) -> R): List<R> {n return
runningFold(initial, operation)n}n/n/**n * Returns a list containing successive accumulation values generated by
applying [operation] from left to rightn * to each element and current accumulator value that starts with [initial]
value.n * n * Note that `acc` value passed to [operation] function should not be mutated;n * otherwise it would
affect the previous value in resulting list.n * n * @param [operation] function that takes current accumulator value
and an element, and calculates the next accumulator value.n * n * @sample
samples.collections.Collections.Aggregates.scan
*/n@SinceKotlin("1.4")n@WasExperimental(ExperimentalStdlibApi::class)n@kotlin.internal.InlineOnlynpublic

```

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```
inline fun <R> IntArray.scan(initial: R, operation: (acc: R, Int) -> R): List<R> {\n return runningFold(initial,
operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation]
from left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n * Note that
`acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in
resulting list.\n * \n * @param [operation] function that takes current accumulator value and an element, and
calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
\n\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
inline fun <R> LongArray.scan(initial: R, operation: (acc: R, Long) -> R): List<R> {\n return
runningFold(initial,
operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation]
from left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n * Note that
`acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in
resulting list.\n * \n * @param [operation] function that takes current accumulator value and an element, and
calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
\n\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
inline fun <R> FloatArray.scan(initial: R, operation: (acc: R, Float) -> R): List<R> {\n return
runningFold(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by
applying [operation] from left to right\n * to each element and current accumulator
value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be
mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that
takes current accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.scan\n
\n\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
inline fun <R> DoubleArray.scan(initial: R, operation: (acc: R, Double) -> R): List<R> {\n return
runningFold(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by
applying [operation] from left to right\n * to each element and current accumulator value that starts with [initial]
value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would
affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value
and an element, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
\n\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
inline fun <R> BooleanArray.scan(initial: R, operation: (acc: R, Boolean) -> R): List<R> {\n return
runningFold(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by
applying [operation] from left to right\n * to each element and current accumulator value that starts with [initial]
value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would
affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value
and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.scan\n
\n\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
inline fun <R> CharArray.scan(initial: R, operation: (acc: R, Char) -> R): List<R> {\n return runningFold(initial,
operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation]
from left to right\n * to each element, its index in the original array and current accumulator value that starts with
[initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it
would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an
element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n *
@sample samples.collections.Collections.Aggregates.scan\n
\n\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <T, R>
```

Array<out T>.scanIndexed(initial:

R, operation: (index: Int, acc: R, T) -> R): List<R> {\n return runningFoldIndexed(initial, operation)\n}\n\n/\*\*\n \* Returns a list containing successive accumulation values generated by applying [operation] from left to right\n \* to each element, its index in the original array and current accumulator value that starts with [initial] value.\n \* \n \* Note that `acc` value passed to [operation] function should not be mutated;\n \* otherwise it would affect the previous value in resulting list.\n \* \n \* @param [operation] function that takes the index of an element, current accumulator value\n \* and the element itself, and calculates the next accumulator value.\n \* \n \* @sample samples.collections.Collections.Aggregates.scan\n

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun <R> ByteArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Byte) -> R): List<R> {\n return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun <R> ShortArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Short) -> R): List<R> {\n return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun <R> IntArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Int) -> R): List<R> {\n return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun <R> LongArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Long) -> R): List<R> {\n return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun <R> FloatArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Float) -> R): List<R> {\n return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should
```

not be mutated;\n \* otherwise it would affect the previous value in resulting list.\n \*

\n \* @param [operation] function that takes the index of an element, current accumulator value\n \* and the element itself, and calculates the next accumulator value.\n \* \n \* @sample

samples.collections.Collections.Aggregates.scan\n

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun <R> DoubleArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Double) -> R): List<R> {\n return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample
```

samples.collections.Collections.Aggregates.scan\n

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun <R> BooleanArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Boolean) -> R): List<R> {\n return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample
```

samples.collections.Collections.Aggregates.scan\n

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun <R> CharArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Char) -> R): List<R> {\n return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n *\n@Deprecated("Use sumOf instead.", ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun <T> Array<out T>.sumBy(selector: (T) -> Int): Int {\n var sum: Int = 0\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n *\n@Deprecated("Use sumOf instead.", ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun ByteArray.sumBy(selector: (Byte) -> Int): Int {\n var sum: Int = 0\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n *\n@Deprecated("Use sumOf instead.", ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun ShortArray.sumBy(selector: (Short) -> Int): Int {\n var sum: Int = 0\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n *\n@Deprecated("Use sumOf instead.", ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun IntArray.sumBy(selector: (Int) -> Int): Int {\n var sum: Int = 0\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n *\n@Deprecated("Use sumOf instead.", ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun LongArray.sumBy(selector: (Long) -> Int): Int {\n var sum: Int = 0\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n *\n@Deprecated("Use sumOf instead.", ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun FloatArray.sumBy(selector: (Float) -> Int): Int {\n var sum: Int = 0\n for (element in this) {\n sum +=
```

```

selector(element)\n } \n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n@Deprecated("Use sumOf instead.\n",
ReplaceWith("this.sumOf(selector)\n"))\n@DeprecatedSinceKotlin(warningSince
= "1.5")\npublic inline fun DoubleArray.sumBy(selector: (Double) -> Int): Int {\n var sum: Int = 0\n for
(element in this) {\n sum += selector(element)\n } \n return sum\n}\n\n/**\n * Returns the sum of all values
produced by [selector] function applied to each element in the array.\n */\n@Deprecated("Use sumOf instead.\n",
ReplaceWith("this.sumOf(selector)\n"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun
BooleanArray.sumBy(selector: (Boolean) -> Int): Int {\n var sum: Int = 0\n for (element in this) {\n sum +=
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applied to each element in the array.\n */\n@Deprecated("Use sumOf instead.\n",
ReplaceWith("this.sumOf(selector)\n"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun
CharArray.sumBy(selector: (Char) -> Int): Int {\n var sum: Int = 0\n
for (element in this) {\n sum += selector(element)\n } \n return sum\n}\n\n/**\n * Returns the sum of all
values produced by [selector] function applied to each element in the array.\n */\n@Deprecated("Use sumOf
instead.\n", ReplaceWith("this.sumOf(selector)\n"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline
fun <T> Array<out T>.sumByDouble(selector: (T) -> Double): Double {\n var sum: Double = 0.0\n for (element
in this) {\n sum += selector(element)\n } \n return sum\n}\n\n/**\n * Returns the sum of all values produced
by [selector] function applied to each element in the array.\n */\n@Deprecated("Use sumOf instead.\n",
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ByteArray.sumByDouble(selector: (Byte) -> Double): Double {\n var sum: Double = 0.0\n for (element in this)
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ReplaceWith("this.sumOf(selector)\n"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun
ShortArray.sumByDouble(selector: (Short) -> Double): Double {\n var sum: Double = 0.0\n for (element in this)
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IntArray.sumByDouble(selector: (Int) -> Double): Double {\n var sum: Double = 0.0\n for (element in this) {\n
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= 0.0\n for (element in this) {\n sum += selector(element)\n } \n return sum\n}\n\n/**\n * Returns the sum
of all values produced by [selector] function applied to each element in the array.\n */\n@Deprecated("Use sumOf
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fun FloatArray.sumByDouble(selector: (Float) -> Double): Double {\n var sum: Double = 0.0\n for (element in
this) {\n sum += selector(element)\n } \n return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n */\n@Deprecated("Use sumOf instead.\n",
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DoubleArray.sumByDouble(selector: (Double)
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BooleanArray.sumByDouble(selector: (Boolean) -> Double): Double {\n var sum: Double = 0.0\n for (element
in this) {\n sum += selector(element)\n } \n return sum\n}\n\n/**\n * Returns the sum of all values produced
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ReplaceWith("this.sumOf(selector)\n"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun

```

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CharArray.sumByDouble(selector: (Char) -> Double): Double { \n var sum: Double = 0.0 \n for (element in this)
{\n sum += selector(element) \n } \n
return sum \n } \n \n \n \n * Returns the sum of all values produced by [selector] function applied to each element in
the array. \n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfDouble")\n@kotlin.internal.InlineOnly\npublic inline fun
<T> Array<out T>.sumOf(selector: (T) -> Double): Double { \n var sum: Double = 0.toDouble() \n for (element
in this) {\n sum += selector(element) \n } \n return sum \n } \n \n \n \n * Returns the sum of all values produced
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ShortArray.sumOf(selector: (Short) -> Double): Double { \n var sum: Double = 0.toDouble() \n for (element in
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LongArray.sumOf(selector: (Long) -> Double): Double { \n var sum: Double = 0.toDouble() \n for (element in
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FloatArray.sumOf(selector: (Float) -> Double): Double { \n var sum: Double = 0.toDouble() \n for (element in
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*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfInt")\n@kotlin.internal.InlineOnly\npublic inline fun <T>\nArray<out T>.sumOf(selector: (T) -> Int): Int {\n var sum: Int = 0.toInt()\n for (element\nin this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced\n by [selector] function applied to each element in the array.\n
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```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
```

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ByLambdaReturnType\n@kotlin.jvm.JvmName(\\"sumOfInt\\")\n@kotlin.internal.InlineOnly\npublic inline fun
CharArray.sumOf(selector: (Char) -> Int): Int {\n var sum: Int = 0.toInt()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n
*\n\n@SinceKotlin(\"1.4\")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName(\\"sumOfLong\\")\n@kotlin.internal.InlineOnly\npublic inline fun
<T> Array<out T>.sumOf(selector: (T) -> Long): Long {\n var sum: Long = 0.toLong()\n for (element in this)
{\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n
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ByteArray.sumOf(selector: (Byte) -> Long): Long {\n var sum: Long = 0.toLong()\n for (element in this) {\n
sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each element in the array.\n
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ByLambdaReturnType\n@kotlin.jvm.JvmName(\\"sumOfLong\\")\n@kotlin.internal.InlineOnly\npublic inline fun
ShortArray.sumOf(selector: (Short) -> Long): Long {\n var sum: Long = 0.toLong()\n for (element in this) {\n
sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
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ByLambdaReturnType\n@kotlin.jvm.JvmName(\\"sumOfLong\\")\n@kotlin.internal.InlineOnly\npublic inline fun
FloatArray.sumOf(selector: (Float) -> Long): Long {\n var sum: Long = 0.toLong()\n for (element in this) {\n
sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the
sum of all values produced by [selector] function applied to each element in the array.\n
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CharArray.sumOf(selector: (Char) -> Long): Long {\n var sum: Long = 0.toLong()\n for (element in this) {\n
sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]

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function applied to each element in the array.\n

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\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType\ns::class)\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.sumOf(selector: (T) -> UInt): UInt {\n var sum: UInt = 0.toUInt()\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/\n * Returns the sum of all values produced by [selector] function applied to each\n element in the array.\n
```

```
\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType\ns::class)\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.sumOf(selector: (Byte) -> UInt): UInt {\n var\n sum: UInt = 0.toUInt()\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n
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\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType\ns::class)\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.sumOf(selector: (Short) -> UInt): UInt {\n var\n sum: UInt = 0.toUInt()\n for (element in this) {\n sum += selector(element)\n }\n return\n sum\n}\n\n/\n * Returns the sum of all values produced by [selector] function applied to each element in the\n array.\n
```

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\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType\ns::class)\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.sumOf(selector: (Int) -> UInt): UInt {\n var\n sum: UInt = 0.toUInt()\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n
```

```
\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType\ns::class)\n@kotlin.internal.InlineOnly\npublic\n inline fun LongArray.sumOf(selector: (Long) -> UInt): UInt {\n var sum: UInt = 0.toUInt()\n for (element in\n this) {\n sum += selector(element)\n }\n return sum\n }\n\n/\n * Returns the sum of all values produced by\n [selector] function applied to each element in the array.\n
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\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType\ns::class)\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.sumOf(selector: (Float) -> UInt): UInt {\n var\n sum: UInt = 0.toUInt()\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n
```

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\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType\ns::class)\n@kotlin.internal.InlineOnly\npublic\n inline fun DoubleArray.sumOf(selector: (Double) -> UInt): UInt {\n var sum: UInt = 0.toUInt()\n for (element\n in this) {\n sum += selector(element)\n }\n return sum\n }\n\n/\n * Returns the sum of all values produced\n by [selector] function applied to each element in the array.\n
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\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType\ns::class)\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.sumOf(selector: (Boolean) -> UInt): UInt\n{\n var sum: UInt = 0.toUInt()\n for (element in this) {\n sum += selector(element)\n }\n return\n sum\n}\n\n/\n * Returns the sum of all values produced by [selector] function applied to each element in the\n array.\n
```

```
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType
```

```

::class)\n@kotlin.internal.InlineOnly\npublic
inline fun CharArray.sumOf(selector: (Char) -> UInt): UInt {\n var sum: UInt = 0.toUInt()\n for (element in
this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n
*\n@\n@SinceKotlin("1.5")\n@\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@\n@OverloadResolution
ByLambdaReturnType\n@\n@kotlin.jvm.JvmName("sumOfULong")\n@\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.sumOf(selector: (T) -> ULong):
ULong {\n var sum: ULong = 0.toULong()\n for (element in this) {\n sum += selector(element)\n }\n
return sum\n}\n\n/**\n * Returns the sum of all
values produced by [selector] function applied to each element in the array.\n
*\n@\n@SinceKotlin("1.5")\n@\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@\n@OverloadResolution
ByLambdaReturnType\n@\n@kotlin.jvm.JvmName("sumOfULong")\n@\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.sumOf(selector: (Byte) -> ULong): ULong
{\n var sum: ULong = 0.toULong()\n for (element in this) {\n sum += selector(element)\n }\n return
sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the
array.\n
*\n@\n@SinceKotlin("1.5")\n@\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@\n@OverloadResolution
ByLambdaReturnType\n@\n@kotlin.jvm.JvmName("sumOfULong")\n@\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.sumOf(selector: (Short) -> ULong): ULong
{\n var sum: ULong = 0.toULong()\n for (element
in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced
by [selector] function applied to each element in the array.\n
*\n@\n@SinceKotlin("1.5")\n@\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@\n@OverloadResolution
ByLambdaReturnType\n@\n@kotlin.jvm.JvmName("sumOfULong")\n@\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.sumOf(selector: (Int) -> ULong): ULong {\n
var sum: ULong = 0.toULong()\n for (element in this) {\n sum += selector(element)\n }\n return
sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the
array.\n
*\n@\n@SinceKotlin("1.5")\n@\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@\n@OverloadResolution
ByLambdaReturnType\n@\n@kotlin.jvm.JvmName("sumOfULong")\n@\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@\n@kotlin.internal.InlineOnly\npublic inline fun
LongArray.sumOf(selector: (Long) -> ULong): ULong {\n var sum: ULong = 0.toULong()\n for (element in
this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n
*\n@\n@SinceKotlin("1.5")\n@\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@\n@OverloadResolution
ByLambdaReturnType\n@\n@kotlin.jvm.JvmName("sumOfULong")\n@\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.sumOf(selector: (Float) -> ULong): ULong
{\n var sum: ULong = 0.toULong()\n for (element in this) {\n sum += selector(element)\n }\n return
sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the
array.\n
*\n@\n@SinceKotlin("1.5")\n@\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@\n@OverloadResolution
ByLambdaReturnType\n@\n@kotlin.jvm.JvmName("sumOfULong")\n@\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@\n@kotlin.internal.InlineOnly\npublic
inline fun DoubleArray.sumOf(selector: (Double) -> ULong): ULong {\n var sum: ULong = 0.toULong()\n for
(element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values
produced by [selector] function applied to each element in the array.\n
*\n@\n@SinceKotlin("1.5")\n@\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@\n@OverloadResolution
ByLambdaReturnType\n@\n@kotlin.jvm.JvmName("sumOfULong")\n@\n@WasExperimental(ExperimentalUnsignedTy

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pes::class)\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.sumOf(selector: (Boolean) -> ULong):
ULong {\n var sum: ULong = 0.toULong()\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in
the array.\n
*/\n\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfULong")\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@kotlin.internal.InlineOnly\npublic
inline fun CharArray.sumOf(selector: (Char) -> ULong): ULong {\n var sum: ULong = 0.toULong()\n for
(element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns an original collection
containing all the non-`null` elements, throwing an [IllegalArgumentException] if there are any `null` elements.\n
*/\n\npublic fun <T : Any> Array<T>.requireNonNulls(): Array<T> {\n for (element in this) {\n if (element ==
null) {\n throw IllegalArgumentException("null element found in $this.")\n }\n }\n @Suppress("UNCHECKED_CAST")\n return this as Array<T>\n}\n\n/**\n * Splits the original array into pair
of lists,\n * where *first* list contains elements for which [predicate] yielded `true`,\n * while *second* list
contains elements for which [predicate] yielded `false`.\n * \n * @sample
samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n
*/\n\npublic inline fun <T> Array<out
T>.partition(predicate: (T) -> Boolean): Pair<List<T>, List<T>> {\n val first = ArrayList<T>()\n val second =
ArrayList<T>()\n for (element in this) {\n if (predicate(element)) {\n first.add(element)\n } else {\n
 second.add(element)\n }\n }\n return Pair(first, second)\n}\n\n/**\n * Splits the original array into pair
of lists,\n * where *first* list contains elements for which [predicate] yielded `true`,\n * while *second* list contains
elements for which [predicate] yielded `false`.\n * \n * @sample
samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n
*/\n\npublic inline fun
ByteArray.partition(predicate: (Byte) -> Boolean): Pair<List<Byte>, List<Byte>> {\n val first =
ArrayList<Byte>()\n val second = ArrayList<Byte>()\n for (element in this) {\n if (predicate(element)) {\n
 first.add(element)\n } else {\n second.add(element)\n }\n }\n return Pair(first, second)\n}\n\n/**\n * Splits the original array into pair of lists,\n * where *first* list contains elements for which [predicate] yielded `true`,\n * while *second* list contains
elements for which [predicate] yielded `false`.\n * \n * @sample
samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n
*/\n\npublic inline fun
ShortArray.partition(predicate: (Short) -> Boolean): Pair<List<Short>, List<Short>> {\n val first =
ArrayList<Short>()\n val second = ArrayList<Short>()\n for (element in this) {\n if (predicate(element)) {\n
 first.add(element)\n } else {\n second.add(element)\n }\n }\n return Pair(first,
second)\n}\n\n/**\n * Splits the original array into pair of lists,\n * where *first* list contains elements for which
[predicate] yielded `true`,\n * while *second* list contains elements for which [predicate] yielded `false`.\n * \n * @sample
samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n
*/\n\npublic inline fun
IntArray.partition(predicate: (Int) -> Boolean): Pair<List<Int>, List<Int>> {\n val first = ArrayList<Int>()\n val
second = ArrayList<Int>()\n for (element in this) {\n if (predicate(element)) {\n first.add(element)\n
 } else {\n second.add(element)\n }\n }\n return Pair(first, second)\n}\n\n/**\n * Splits the original
array into pair of lists,\n * where *first* list contains elements for which [predicate] yielded `true`,\n * while
second list contains elements for which [predicate] yielded `false`.\n * \n * @sample
samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n
*/\n\npublic inline fun
LongArray.partition(predicate: (Long) -> Boolean): Pair<List<Long>, List<Long>> {\n val first =
ArrayList<Long>()\n val second = ArrayList<Long>()\n for (element in this) {\n if (predicate(element)) {\n
 first.add(element)\n } else {\n second.add(element)\n }\n }\n return Pair(first,
second)\n}\n\n/**\n * Splits the original array into pair of lists,\n * where *first* list contains elements for which
[predicate] yielded `true`,\n * while *second* list contains elements for which [predicate] yielded `false`.\n * \n *

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@sample samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n *\npublic inline fun
FloatArray.partition(predicate: (Float) -> Boolean): Pair<List<Float>, List<Float>> {\n val first =
ArrayList<Float>()\n val second = ArrayList<Float>()\n for (element in this) {\n if (predicate(element)) {\n
 first.add(element)\n } else {\n second.add(element)\n }\n }\n return Pair(first,
second)\n}\n\n/**\n * Splits the original array into pair of lists,\n * where *first*
list contains elements for which [predicate] yielded `true`,\n * while *second* list contains elements for which
[predicate] yielded `false`.\n * \n * @sample
samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n *\npublic inline fun
DoubleArray.partition(predicate: (Double) -> Boolean): Pair<List<Double>, List<Double>> {\n val first =
ArrayList<Double>()\n val second = ArrayList<Double>()\n for (element in this) {\n if (predicate(element))
{\n first.add(element)\n } else {\n second.add(element)\n }\n }\n return Pair(first,
second)\n}\n\n/**\n * Splits the original array into pair of lists,\n * where *first* list contains elements for which
[predicate] yielded `true`,\n * while *second* list contains elements for which [predicate] yielded `false`.\n * \n *
@sample samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n *\npublic inline fun
BooleanArray.partition(predicate: (Boolean) -> Boolean):
Pair<List<Boolean>, List<Boolean>> {\n val first = ArrayList<Boolean>()\n val second =
ArrayList<Boolean>()\n for (element in this) {\n if (predicate(element)) {\n first.add(element)\n }
else {\n second.add(element)\n }\n }\n return Pair(first, second)\n}\n\n/**\n * Splits the original array
into pair of lists,\n * where *first* list contains elements for which [predicate] yielded `true`,\n * while *second* list
contains elements for which [predicate] yielded `false`.\n * \n * @sample
samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n *\npublic inline fun
CharArray.partition(predicate: (Char) -> Boolean): Pair<List<Char>, List<Char>> {\n val first =
ArrayList<Char>()\n val second = ArrayList<Char>()\n for (element in this) {\n if (predicate(element)) {\n
 first.add(element)\n } else {\n second.add(element)\n }\n }\n return Pair(first,
second)\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.\n * The
returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n *\npublic infix fun <T, R> Array<out T>.zip(other:
Array<out R>): List<Pair<T, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs
built from the elements of `this` array and the [other] array with the same index.\n * The returned list has length of
the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n *\npublic infix fun
<R> ByteArray.zip(other: Array<out R>): List<Pair<Byte, R>> {\n return zip(other) { t1, t2 -> t1 to t2
}\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the [other] array with the same
index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <R> ShortArray.zip(other: Array<out R>): List<Pair<Short, R>> {\n return zip(other) { t1, t2
-> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the [other] array with the
same index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n *\npublic infix fun <R> IntArray.zip(other: Array<out R>):
List<Pair<Int, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the
elements of `this` array and the [other] array with the same index.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n *\npublic infix fun <R>
LongArray.zip(other: Array<out R>): List<Pair<Long, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the
[other] array with the same index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n *\npublic infix fun <R> FloatArray.zip(other: Array<out
R>): List<Pair<Float, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from
the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the shortest

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collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n * \npublic infix fun <R>
DoubleArray.zip(other: Array<out R>): List<Pair<Double, R>> {\n return zip(other) { t1, t2 -> t1 to t2
}\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the [other] array with the same
index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n * \npublic infix fun <R> BooleanArray.zip(other: Array<out
R>):
List<Pair<Boolean, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from
the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n * \npublic infix fun <R>
CharArray.zip(other: Array<out R>): List<Pair<Char, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n *
Returns a list of values built from the elements of `this` array and the [other] array with the same index\n * using the
provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n * \npublic inline
fun <T, R, V> Array<out T>.zip(other: Array<out R>, transform: (a: T, b: R) -> V): List<V> {\n val size =
minOf(size, other.size)\n val list = ArrayList<V>(size)\n for (i
in 0 until size) {\n list.add(transform(this[i], other[i]))\n }\n return list\n}\n\n/**\n * Returns a list of values
built from the elements of `this` array and the [other] array with the same index\n * using the provided [transform]
function applied to each pair of elements.\n * The returned list has length of the shortest collection.\n * \n *
@sample samples.collections.Iterables.Operations.zipIterableWithTransform\n * \npublic inline fun <R, V>
ByteArray.zip(other: Array<out R>, transform: (a: Byte, b: R) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i], other[i]))\n
}\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n * \npublic inline fun <R, V>
ShortArray.zip(other: Array<out R>, transform: (a: Short, b: R) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i], other[i]))\n
}\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n * \npublic inline fun <R, V>
IntArray.zip(other: Array<out R>, transform: (a: Int, b: R) -> V): List<V> {\n val size = minOf(size, other.size)\n
val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i], other[i]))\n }\n return
list\n}\n\n/**\n * Returns
a list of values built from the elements of `this` array and the [other] array with the same index\n * using the
provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n * \npublic inline
fun <R, V> LongArray.zip(other: Array<out R>, transform: (a: Long, b: R) -> V): List<V> {\n val size =
minOf(size, other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i],
other[i]))\n }\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the
[other] array with the same index\n * using the provided [transform] function applied to each pair of elements.\n *
The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n * \npublic inline fun <R, V>
FloatArray.zip(other:
Array<out R>, transform: (a: Float, b: R) -> V): List<V> {\n val size = minOf(size, other.size)\n val list =
ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i], other[i]))\n }\n return
list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array with the same
index\n * using the provided [transform] function applied to each pair of elements.\n * The returned list has length

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of the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <R, V> DoubleArray.zip(other: Array<out R>, transform: (a: Double, b: R) -> V): List<V> {\n
 val size = minOf(size, other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n
list.add(transform(this[i], other[i]))\n }\n return list\n}\n\n/**\n * Returns a list of values built from the elements
of `this` array and the [other] array with the same index\n
 * using the provided [transform] function applied to each pair of elements.\n * The returned list has length of the
shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <R, V> BooleanArray.zip(other: Array<out R>, transform: (a: Boolean, b: R) -> V): List<V>
{\n
 val size = minOf(size, other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n
list.add(transform(this[i], other[i]))\n }\n return list\n}\n\n/**\n * Returns a list of values built from the elements
of `this` array and the [other] array with the same index\n
 * using the provided [transform] function applied to each
pair of elements.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <R, V>
CharArray.zip(other: Array<out R>, transform: (a: Char, b: R) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i], other[i]))\n
 }\n return list\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` collection and [other] array with
the same index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <T, R> Array<out T>.zip(other:
Iterable<R>): List<Pair<T, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built
from the elements of `this` collection and [other] array with the same index.\n * The returned list has length of the
shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <R>
ByteArray.zip(other: Iterable<R>): List<Pair<Byte, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n *
Returns a list of pairs built from the elements of `this` collection
and [other] array with the same index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <R> ShortArray.zip(other: Iterable<R>):
List<Pair<Short, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the
elements of `this` collection and [other] array with the same index.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <R>
IntArray.zip(other: Iterable<R>): List<Pair<Int, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n *
Returns a list of pairs built from the elements of `this` collection and [other] array with the same index.\n * The
returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <R> LongArray.zip(other: Iterable<R>):
List<Pair<Long, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the
elements of `this` collection and [other] array with the same index.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <R>
FloatArray.zip(other: Iterable<R>): List<Pair<Float, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n *
Returns a list of pairs built from the elements of `this` collection and [other] array with the same index.\n * The
returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <R> DoubleArray.zip(other:
Iterable<R>): List<Pair<Double, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs
built from the elements of `this` collection and [other] array with the same index.\n * The returned list has length of
the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun
<R> BooleanArray.zip(other: Iterable<R>): List<Pair<Boolean, R>> {\n return zip(other) { t1, t2 -> t1 to t2
}\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` collection and [other] array with the same
index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <R> CharArray.zip(other: Iterable<R>):
List<Pair<Char, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of values built from the
elements of `this` array and the [other] collection with the same index\n
 * using the provided [transform] function

```





```

*^public
inline fun <R, V> BooleanArray.zip(other: Iterable<R>, transform: (a: Boolean, b: R) -> V): List<V> {
 val arraySize = size
 val list = ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))
 var i = 0
 for (element in other) {
 if (i >= arraySize) break
 list.add(transform(this[i++], element))
 }
 return list
}

* Returns a list of values built from the elements of `this` array and the [other] collection with the same index
* using the provided [transform] function applied to each pair of elements.
* The returned list has length of the shortest collection.
* @sample
samples.collections.Iterables.Operations.zipIterableWithTransform

*^public inline fun <R, V> CharArray.zip(other: Iterable<R>, transform: (a: Char, b: R) -> V): List<V> {
 val arraySize = size
 val list = ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))
 var i = 0
 for (element in other) {
 if (i >= arraySize) break
 list.add(transform(this[i++], element))
 }
 return list
}

* Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
* The returned list has length of the shortest collection.
* @sample
samples.collections.Iterables.Operations.zipIterable

*^public infix fun ByteArray.zip(other: ByteArray): List<Pair<Byte, Byte>> {
 return zip(other) { t1, t2 -> t1 to t2 }
}

* Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
* The returned list has length of the shortest collection.
* @sample
samples.collections.Iterables.Operations.zipIterable

*^public infix fun ShortArray.zip(other: ShortArray): List<Pair<Short, Short>> {
 return zip(other) { t1, t2 -> t1 to t2 }
}

* Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
* The returned list has length of the shortest collection.
* @sample
samples.collections.Iterables.Operations.zipIterable

*^public infix fun IntArray.zip(other: IntArray): List<Pair<Int, Int>> {
 return zip(other) { t1, t2 -> t1 to t2 }
}

* Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
* The returned list has length of the shortest collection.
* @sample
samples.collections.Iterables.Operations.zipIterable

*^public infix fun LongArray.zip(other: LongArray): List<Pair<Long, Long>> {
 return zip(other) { t1, t2 -> t1 to t2 }
}

* Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
* The returned list has length of the shortest collection.
* @sample
samples.collections.Iterables.Operations.zipIterable

*^public infix fun FloatArray.zip(other: FloatArray): List<Pair<Float, Float>> {
 return zip(other) { t1, t2 -> t1 to t2 }
}

* Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
* The returned list has length of the shortest collection.
* @sample
samples.collections.Iterables.Operations.zipIterable

*^public infix fun DoubleArray.zip(other: DoubleArray): List<Pair<Double, Double>> {
 return zip(other) { t1, t2 -> t1 to t2 }
}

* Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
* The returned list has length of the shortest collection.
* @sample
samples.collections.Iterables.Operations.zipIterable

*^public infix fun BooleanArray.zip(other: BooleanArray): List<Pair<Boolean, Boolean>> {
 return zip(other) { t1, t2 -> t1 to t2 }
}

* Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
* The returned list has length of the shortest collection.
* @sample
samples.collections.Iterables.Operations.zipIterable

*^public infix fun CharArray.zip(other: CharArray): List<Pair<Char, Char>> {
 return zip(other) { t1, t2 -> t1 to t2 }
}

* Returns a list of values built from the elements of `this` array and the [other] array with the same index
* using the provided [transform] function applied to each pair of elements.
* The returned list has length of the shortest array.
* @sample
samples.collections.Iterables.Operations.zipIterableWithTransform

*^public inline fun <V> ByteArray.zip(other: ByteArray, transform: (a: Byte, b: Byte) -> V): List<V> {
 val size = minOf(size, other.size)
 val list = ArrayList<V>(size)
 for (i in 0 until size) {
 list.add(transform(this[i], other[i]))
 }
 return list
}

* Returns a list of values built from the elements of `this` array and the [other] array with the same index
* using the provided [transform] function applied to each pair of elements.
* The returned list has length

```

```

of the shortest array.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <V> ShortArray.zip(other: ShortArray, transform: (a: Short, b: Short) -> V): List<V> {\n val
size = minOf(size, other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n
list.add(transform(this[i], other[i]))\n }\n return list\n}\n\n/**\n * Returns a list of values built from the elements
of `this` array and the [other] array with the same index\n * using the provided [transform] function applied to each
pair of elements.\n * The returned list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <V> IntArray.zip(other:
IntArray, transform: (a: Int, b: Int) -> V): List<V> {\n val size = minOf(size, other.size)\n val list =
ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i], other[i]))\n }\n
return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array with
the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned list
has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <V>
LongArray.zip(other: LongArray, transform: (a: Long, b: Long) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i],
other[i]))\n }\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun
<V> FloatArray.zip(other: FloatArray, transform: (a: Float, b: Float) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i],
other[i]))\n }\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <V>
DoubleArray.zip(other: DoubleArray, transform: (a: Double, b: Double) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i],
other[i]))\n }\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with
the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned list
has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <V>
BooleanArray.zip(other: BooleanArray, transform: (a: Boolean, b: Boolean) -> V): List<V> {\n val size =
minOf(size, other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i],
other[i]))\n }\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the
[other] array with the same index\n * using the provided [transform] function applied to each pair of elements.\n *
The returned list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <V>
CharArray.zip(other: CharArray, transform: (a: Char, b: Char) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i],
other[i]))\n }\n return list\n}\n\n/**\n * Appends the string from all the elements separated using [separator] and using the
given [prefix] and [postfix] if supplied.\n * \n * If the collection could be huge, you can specify a non-negative value
of [limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string
(which defaults to "...").\n * \n * @sample samples.collections.Collections.Transformations.joinTo\n
*\npublic fun
<T, A : Appendable> Array<out T>.joinTo(buffer: A, separator: CharSequence = "\", \"", prefix: CharSequence = "\",
postfix: CharSequence = "\", limit: Int = -1, truncated: CharSequence = "...", transform: ((T) -> CharSequence)? =
null): A {\n buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count > 1)
buffer.append(separator)\n if (limit < 0 ||

```

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count <= limit) {\n buffer.appendElement(element, transform)\n } else break\n }\n if (limit >= 0 &&
count > limit) buffer.append(truncated)\n buffer.append(postfix)\n return buffer\n}\n\n/**\n * Appends the
string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied.\n * \n
* If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first
[limit]\n * elements will be appended, followed by the [truncated] string (which defaults to "...").\n * \n * @sample
samples.collections.Collections.Transformations.joinTo\n */\npublic fun <A : Appendable>
ByteArray.joinTo(buffer: A, separator: CharSequence = '\n', prefix: CharSequence = "\n", postfix: CharSequence =
"\n", limit: Int = -1, truncated: CharSequence = "...", transform: ((Byte) -> CharSequence)? = null): A {\n
buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count >
1) buffer.append(separator)\n if (limit < 0 || count <= limit) {\n if (transform != null)\n
buffer.append(transform(element))\n } else\n buffer.append(element.toString())\n } else break\n
}\n if (limit >= 0 && count > limit) buffer.append(truncated)\n buffer.append(postfix)\n return
buffer\n}\n\n/**\n * Appends the string from all the elements separated using [separator] and using the given
[prefix] and [postfix] if supplied.\n * \n * If the collection could be huge, you can specify a non-negative value of
[limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string (which
defaults to "...").\n * \n * @sample samples.collections.Collections.Transformations.joinTo\n */\npublic fun <A :
Appendable> ShortArray.joinTo(buffer: A, separator: CharSequence = '\n', prefix: CharSequence = "\n", postfix:
CharSequence = "\n", limit: Int = -1, truncated: CharSequence =
"...", transform: ((Short) -> CharSequence)? = null): A {\n buffer.append(prefix)\n var count = 0\n for
(element in this) {\n if (++count > 1) buffer.append(separator)\n if (limit < 0 || count <= limit) {\n if
(transform != null)\n buffer.append(transform(element))\n } else\n buffer.append(element.toString())\n
 } else break\n }\n if (limit >= 0 && count > limit)
buffer.append(truncated)\n buffer.append(postfix)\n return buffer\n}\n\n/**\n * Appends the string from all the
elements separated using [separator] and using the given [prefix] and [postfix] if supplied.\n * \n * If the collection
could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n * elements will
be appended, followed by the [truncated] string (which defaults to "...").\n * \n * @sample
samples.collections.Collections.Transformations.joinTo\n */\npublic fun <A : Appendable> IntArray.joinTo(buffer:
A, separator: CharSequence = '\n', prefix: CharSequence = "\n", postfix: CharSequence = "\n", limit: Int = -1,
truncated: CharSequence = "...", transform: ((Int) -> CharSequence)? = null): A {\n buffer.append(prefix)\n var
count = 0\n for (element in this) {\n if (++count > 1) buffer.append(separator)\n if (limit < 0 || count <=
limit) {\n if (transform != null)\n buffer.append(transform(element))\n } else\n buffer.append(element.toString())\n
 } else break\n }\n if (limit >= 0 && count > limit)
buffer.append(truncated)\n buffer.append(postfix)\n return buffer\n}\n\n/**\n * Appends the string from all the
elements separated using [separator] and using the given [prefix] and [postfix] if supplied.\n * \n * If the collection
could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n * elements will
be appended, followed by the [truncated]
string (which defaults to "...").\n * \n * @sample samples.collections.Collections.Transformations.joinTo\n */\npublic fun <A : Appendable> LongArray.joinTo(buffer: A, separator: CharSequence = '\n', prefix:
CharSequence = "\n", postfix: CharSequence = "\n", limit: Int = -1, truncated: CharSequence = "...", transform:
((Long) -> CharSequence)? = null): A {\n buffer.append(prefix)\n var count = 0\n for (element in this) {\n
if (++count > 1) buffer.append(separator)\n if (limit < 0 || count <= limit) {\n if (transform != null)\n
buffer.append(transform(element))\n } else\n buffer.append(element.toString())\n } else
break\n }\n if (limit >= 0 && count > limit) buffer.append(truncated)\n buffer.append(postfix)\n return
buffer\n}\n\n/**\n * Appends the string from all the elements separated using [separator] and using the given
[prefix] and [postfix] if supplied.\n * \n * If the collection
could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n * elements will
be appended, followed by the [truncated] string (which defaults to "...").\n * \n * @sample
samples.collections.Collections.Transformations.joinTo\n */\npublic fun <A : Appendable>

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FloatArray.joinTo(buffer: A, separator: CharSequence = ", ", prefix: CharSequence = "\n", postfix: CharSequence =
"\n", limit: Int = -1, truncated: CharSequence = "...", transform: ((Float) -> CharSequence)? = null): A {
 buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count > 1) buffer.append(separator)\n
 if (limit < 0 || count <= limit) {\n if (transform != null)\n buffer.append(transform(element))\n
 else\n buffer.append(element.toString())\n } else break\n }\n if (limit >= 0 && count > limit)
buffer.append(truncated)\n buffer.append(postfix)\n return buffer\n}\n\n/**
 * Appends the string from all the elements separated using [separator] and using the given [prefix] and [postfix] if
supplied.\n * \n * If the collection could be huge, you can specify a non-negative value of [limit], in which case only
the first [limit]\n * elements will be appended, followed by the [truncated] string (which defaults to "...").\n * \n *
@sample samples.collections.Collections.Transformations.joinTo\n */\npublic fun <A : Appendable>
DoubleArray.joinTo(buffer: A, separator: CharSequence = ", ", prefix: CharSequence = "\n", postfix:
CharSequence = "\n", limit: Int = -1, truncated: CharSequence = "...", transform: ((Double) -> CharSequence)? =
null): A {
 buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count > 1)
buffer.append(separator)\n if (limit < 0 || count <= limit) {\n if (transform != null)\n
buffer.append(transform(element))\n else\n buffer.append(element.toString())\n
 } else break\n }\n if (limit >= 0 && count > limit) buffer.append(truncated)\n buffer.append(postfix)\n
return buffer\n}\n\n/**
 * Appends the string from all the elements separated using [separator] and using the given
[prefix] and [postfix] if supplied.\n * \n * If the collection could be huge, you can specify a non-negative value of
[limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string (which
defaults to "...").\n * \n * @sample samples.collections.Collections.Transformations.joinTo\n */\npublic fun <A :
Appendable>
BooleanArray.joinTo(buffer: A, separator: CharSequence = ", ", prefix: CharSequence = "\n",
postfix: CharSequence = "\n", limit: Int = -1, truncated: CharSequence = "...", transform: ((Boolean) ->
CharSequence)? = null): A {
 buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count
> 1) buffer.append(separator)\n if (limit < 0
|| count <= limit) {\n if (transform != null)\n buffer.append(transform(element))\n
 else\n buffer.append(element.toString())\n } else break\n }\n if (limit >= 0 && count > limit)
buffer.append(truncated)\n buffer.append(postfix)\n return buffer\n}\n\n/**
 * Appends the string from all the
elements separated using [separator] and using the given [prefix] and [postfix] if supplied.\n * \n * If the collection
could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n * elements will
be appended, followed by the [truncated] string (which defaults to "...").\n * \n * @sample
samples.collections.Collections.Transformations.joinTo\n */\npublic fun <A : Appendable>
CharArray.joinTo(buffer: A, separator: CharSequence = ", ", prefix: CharSequence = "\n", postfix: CharSequence =
"\n", limit: Int = -1, truncated: CharSequence = "...", transform: ((Char) -> CharSequence)? = null):
A {
 buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count > 1)
buffer.append(separator)\n if (limit < 0 || count <= limit) {\n if (transform != null)\n
buffer.append(transform(element))\n else\n buffer.append(element)\n } else break\n }\n if
(limit >= 0 && count > limit) buffer.append(truncated)\n buffer.append(postfix)\n return buffer\n}\n\n/**
 * Creates a string from all the elements separated using [separator] and using the given [prefix] and [postfix] if
supplied.\n * \n * If the collection could be huge, you can specify a non-negative value of [limit], in which case only
the first [limit]\n * elements will be appended, followed by the [truncated] string (which defaults to "...").\n * \n *
@sample samples.collections.Collections.Transformations.joinToString\n */\npublic fun <T> Array<out
T>.joinToString(separator: CharSequence = ", ", prefix: CharSequence
= "\n", postfix: CharSequence = "\n", limit: Int = -1, truncated: CharSequence = "...", transform: ((T) ->
CharSequence)? = null): String {
 return joinTo(StringBuilder(), separator, prefix, postfix, limit, truncated,
transform).toString()\n}\n\n/**
 * Creates a string from all the elements separated using [separator] and using the
given [prefix] and [postfix] if supplied.\n * \n * If the collection could be huge, you can specify a non-negative value
of [limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string
(which defaults to "...").\n * \n * @sample samples.collections.Collections.Transformations.joinToString\n

```

```

*^public fun ByteArray.joinToString(separator: CharSequence = '|', prefix: CharSequence = '\'', postfix:
CharSequence = '\'', limit: Int = -1, truncated: CharSequence = "...", transform: ((Byte) -> CharSequence)? =
null): String {
 return joinTo(StringBuilder(), separator, prefix, postfix, limit, truncated,
 transform).toString()
}

```

Creates a string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied. If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit] elements will be appended, followed by the [truncated] string (which defaults to "...").

```

@sample samples.collections.Collections.Transformations.joinToString

```

```

*^public fun ShortArray.joinToString(separator: CharSequence = '|', prefix: CharSequence = '\'', postfix:
CharSequence = '\'', limit: Int = -1, truncated: CharSequence = "...", transform: ((Short) -> CharSequence)? =
null): String {
 return joinTo(StringBuilder(), separator, prefix, postfix, limit, truncated,
 transform).toString()
}

```

Creates a string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied. If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit] elements will be appended, followed by the [truncated] string (which defaults to "...").

```

@sample
samples.collections.Collections.Transformations.joinToString

```

```

*^public fun IntArray.joinToString(separator:
CharSequence = '|', prefix: CharSequence = '\'', postfix: CharSequence = '\'', limit: Int = -1, truncated:
CharSequence = "...", transform: ((Int) -> CharSequence)? = null): String {
 return joinTo(StringBuilder(),
 separator, prefix, postfix, limit, truncated, transform).toString()
}

```

Creates a string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied. If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit] elements will be appended, followed by the [truncated] string (which defaults to "...").

```

@sample
samples.collections.Collections.Transformations.joinToString

```

```

*^public fun LongArray.joinToString(separator: CharSequence = '|', prefix: CharSequence = '\'', postfix:
CharSequence = '\'', limit: Int = -1, truncated: CharSequence = "...", transform: ((Long) -> CharSequence)? =
null): String {
 return joinTo(StringBuilder(), separator, prefix, postfix, limit, truncated,
 transform).toString()
}

```

Creates a string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied. If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit] elements will be appended, followed by the [truncated] string (which defaults to "...").

```

@sample samples.collections.Collections.Transformations.joinToString

```

```

*^public fun FloatArray.joinToString(separator: CharSequence = '|', prefix: CharSequence = '\'', postfix:
CharSequence = '\'', limit: Int = -1, truncated: CharSequence = "...", transform:
((Float) -> CharSequence)? = null): String {
 return joinTo(StringBuilder(), separator, prefix, postfix, limit,
 truncated, transform).toString()
}

```

Creates a string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied. If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit] elements will be appended, followed by the [truncated] string (which defaults to "...").

```

@sample
samples.collections.Collections.Transformations.joinToString

```

```

*^public fun DoubleArray.joinToString(separator:
CharSequence = '|', prefix: CharSequence = '\'', postfix: CharSequence = '\'', limit: Int = -1, truncated:
CharSequence = "...", transform: ((Double) -> CharSequence)? = null): String {
 return joinTo(StringBuilder(),
 separator, prefix, postfix, limit, truncated, transform).toString()
}

```

Creates a string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied. If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit] elements will be appended, followed by the [truncated] string (which defaults to "...").

```

@sample
samples.collections.Collections.Transformations.joinToString

```

```

*^public fun BooleanArray.joinToString(separator: CharSequence = '|', prefix: CharSequence = '\'', postfix:
CharSequence = '\'', limit: Int = -1, truncated: CharSequence = "...", transform: ((Boolean) -> CharSequence)? =
null): String {
 return joinTo(StringBuilder(), separator, prefix, postfix, limit, truncated, transform).toString()
}

```

Creates a string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied. If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit] elements will be appended, followed by the [truncated] string (which defaults to "...").

```

@sample
samples.collections.Collections.Transformations.joinToString

```

a string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied.\n \* \n \* If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n \* elements will be appended, followed by the [truncated] string (which defaults to \"...\").\n \* \n \* @sample samples.collections.Transformations.joinToString\n \* \n public fun CharArray.joinToString(separator: CharSequence = \", \", prefix: CharSequence = \"\", postfix: CharSequence = \"\", limit: Int = -1, truncated: CharSequence = \"...\", transform: ((Char) -> CharSequence)? = null): String {\n return joinTo(StringBuilder(), separator, prefix, postfix, limit, truncated, transform).toString()\n }\n \* \n \* Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n \* \n public fun <T> Array<out T>.asIterable(): Iterable<T> {\n if (isEmpty()) return emptyList()\n return Iterable { this.iterator() }\n }\n \* \n \* Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n \* \n public fun ByteArray.asIterable(): Iterable<Byte> {\n if (isEmpty()) return emptyList()\n return Iterable { this.iterator() }\n }\n \* \n \* Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n \* \n public fun ShortArray.asIterable(): Iterable<Short> {\n if (isEmpty()) return emptyList()\n return Iterable { this.iterator() }\n }\n \* \n \* Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n \* \n public fun IntArray.asIterable(): Iterable<Int> {\n if (isEmpty()) return emptyList()\n return Iterable { this.iterator() }\n }\n \* \n \* Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n \* \n public fun LongArray.asIterable(): Iterable<Long> {\n if (isEmpty()) return emptyList()\n return Iterable { this.iterator() }\n }\n \* \n \* Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n \* \n public fun FloatArray.asIterable(): Iterable<Float> {\n if (isEmpty()) return emptyList()\n return Iterable { this.iterator() }\n }\n \* \n \* Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n \* \n public fun DoubleArray.asIterable(): Iterable<Double> {\n if (isEmpty()) return emptyList()\n return Iterable { this.iterator() }\n }\n \* \n \* Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n \* \n public fun BooleanArray.asIterable(): Iterable<Boolean> {\n if (isEmpty()) return emptyList()\n return Iterable { this.iterator() }\n }\n \* \n \* Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n \* \n public fun CharArray.asIterable(): Iterable<Char> {\n if (isEmpty()) return emptyList()\n return Iterable { this.iterator() }\n }\n \* \n \* Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n \* \n \* @sample samples.collections.Sequences.Building.sequenceFromArray\n \* \n public fun <T> Array<out T>.asSequence(): Sequence<T> {\n if (isEmpty()) return emptySequence()\n return Sequence { this.iterator() }\n }\n \* \n \* Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n \* \n \* @sample samples.collections.Sequences.Building.sequenceFromArray\n \* \n public fun ByteArray.asSequence(): Sequence<Byte> {\n if (isEmpty()) return emptySequence()\n return Sequence { this.iterator() }\n }\n \* \n \* Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n \* \n \* @sample samples.collections.Sequences.Building.sequenceFromArray\n \* \n public fun ShortArray.asSequence(): Sequence<Short> {\n if (isEmpty()) return emptySequence()\n return Sequence { this.iterator() }\n }\n \* \n \* Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n \* \n \* @sample samples.collections.Sequences.Building.sequenceFromArray\n \* \n public fun IntArray.asSequence(): Sequence<Int> {\n if (isEmpty()) return emptySequence()\n return Sequence { this.iterator() }\n }\n \* \n \* Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n \* \n \* @sample samples.collections.Sequences.Building.sequenceFromArray\n \* \n public fun LongArray.asSequence(): Sequence<Long> {\n if (isEmpty()) return emptySequence()\n return Sequence { this.iterator() }\n }\n \* \n \* Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n \* \n \* @sample samples.collections.Sequences.Building.sequenceFromArray\n \* \n public fun FloatArray.asSequence(): Sequence<Float> {\n if (isEmpty()) return emptySequence()\n return Sequence { this.iterator() }\n }\n \* \n \* Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n \* \n \* @sample samples.collections.Sequences.Building.sequenceFromArray\n

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*^public fun DoubleArray.asSequence(): Sequence<Double> {
 if (isEmpty()) return emptySequence()
 return Sequence { this.iterator() }
}

*^ Creates a [Sequence] instance that wraps the original array returning
its elements when being iterated.

*^ @sample samples.collections.Sequences.Building.sequenceFromArray

*^public fun BooleanArray.asSequence(): Sequence<Boolean> {
 if (isEmpty()) return emptySequence()
 return Sequence { this.iterator() }
}

*^ Creates a [Sequence] instance that wraps the original array returning
its elements when being iterated.

*^ @sample samples.collections.Sequences.Building.sequenceFromArray

*^public fun CharArray.asSequence(): Sequence<Char> {
 if (isEmpty()) return emptySequence()
 return Sequence { this.iterator() }
}

*^ Returns an average value of elements in the array.

*^@kotlin.jvm.JvmName("averageOfByte")
public fun Array<out Byte>.average():
 Double {
 var sum: Double = 0.0
 var count: Int = 0
 for (element in this) {
 sum += element
 ++count
 }
 return if (count == 0) Double.NaN else sum / count
 }

*^ Returns an average value of
elements in the array.

*^@kotlin.jvm.JvmName("averageOfShort")
public fun Array<out Short>.average():
 Double {
 var sum: Double = 0.0
 var count: Int = 0
 for (element in this) {
 sum += element
 ++count
 }
 return if (count == 0) Double.NaN else sum / count
 }

*^ Returns an average value of
elements in the array.

*^@kotlin.jvm.JvmName("averageOfInt")
public fun Array<out Int>.average(): Double {
 var sum: Double = 0.0
 var count: Int = 0
 for (element in this) {
 sum += element
 ++count
 }
 return if (count == 0) Double.NaN else sum / count
}

*^ Returns an average value of elements in the
array.

*^@kotlin.jvm.JvmName("averageOfLong")
public
fun Array<out Long>.average(): Double {
 var sum: Double = 0.0
 var count: Int = 0
 for (element in this) {
 sum += element
 ++count
 }
 return if (count == 0) Double.NaN else sum / count
}

*^ Returns an average value of elements in the array.

*^@kotlin.jvm.JvmName("averageOfFloat")
public fun
Array<out Float>.average(): Double {
 var sum: Double = 0.0
 var count: Int = 0
 for (element in this) {
 sum += element
 ++count
 }
 return if (count == 0) Double.NaN else sum / count
}

*^ Returns an average value of elements in the array.

*^@kotlin.jvm.JvmName("averageOfDouble")
public fun
Array<out Double>.average(): Double {
 var sum: Double = 0.0
 var count: Int = 0
 for (element in this) {
 sum += element
 ++count
 }
 return if (count == 0) Double.NaN else sum / count
}

*^ Returns an average value of elements in the array.

*^public
fun ByteArray.average(): Double {
 var sum: Double = 0.0
 var count: Int = 0
 for (element in this) {
 sum += element
 ++count
 }
 return if (count == 0) Double.NaN else sum / count
}

*^ Returns
an average value of elements in the array.

*^public fun ShortArray.average(): Double {
 var sum: Double =
 0.0
 var count: Int = 0
 for (element in this) {
 sum += element
 ++count
 }
 return if (count
 == 0) Double.NaN else sum / count
}

*^ Returns an average value of elements in the array.

*^public
fun IntArray.average(): Double {
 var sum: Double = 0.0
 var count: Int = 0
 for (element in this) {
 sum += element
 ++count
 }
 return if (count == 0) Double.NaN else sum / count
}

*^ Returns
an average value of elements in the array.

*^public fun LongArray.average(): Double {
 var sum: Double =
 0.0
 var count: Int = 0
 for (element in this)
 {
 sum += element
 ++count
 }
 return if (count == 0) Double.NaN else sum / count
}

*^ Returns an average value of elements in the array.

*^public fun FloatArray.average(): Double {
 var sum:
 Double = 0.0
 var count: Int = 0
 for (element in this) {
 sum += element
 ++count
 }
 return
 if (count == 0) Double.NaN else sum / count
}

*^ Returns an average value of elements in the array.

*^public fun DoubleArray.average(): Double {
 var sum: Double = 0.0
 var count: Int = 0
 for (element in
 this) {
 sum += element
 ++count
 }
 return if (count == 0) Double.NaN else sum /
 count
}

*^ Returns the sum of all elements in the array.

*^@kotlin.jvm.JvmName("sumOfByte")
public fun Array<out Byte>.sum(): Int {
 var sum: Int = 0
 for
 (element in this) {
 sum += element
 }
 return sum
}

*^ Returns the sum of all elements in the
array.

*^@kotlin.jvm.JvmName("sumOfShort")
public fun Array<out Short>.sum(): Int {
 var sum: Int = 0
 for
 (element in this) {
 sum += element
 }
 return sum
}

*^ Returns the sum of all elements in the

```



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array.\n *^@\n@kotlin.jvm.JvmName("\sumOfInt()\n)public fun Array<out Int>.sum(): Int {\n var sum: Int = 0\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n *^@\n@kotlin.jvm.JvmName("\sumOfLong()\n)public fun Array<out Long>.sum(): Long {\n var sum: Long = 0L\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n *^@\n@kotlin.jvm.JvmName("\sumOfFloat()\n)public fun Array<out Float>.sum(): Float {\n var sum: Float = 0.0f\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n *^@\n@kotlin.jvm.JvmName("\sumOfDouble()\n)public fun Array<out Double>.sum(): Double {\n var sum: Double = 0.0\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n *^@\npublic fun ByteArray.sum(): Int {\n var sum: Int = 0\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n *^@\npublic fun ShortArray.sum(): Int {\n var sum: Int = 0\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n *^@\npublic fun IntArray.sum(): Int {\n var sum: Int = 0\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n *^@\npublic fun LongArray.sum(): Long {\n var sum: Long = 0L\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n *^@\npublic fun FloatArray.sum(): Float {\n var sum: Float = 0.0f\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n *^@\npublic fun DoubleArray.sum(): Double {\n var sum: Double = 0.0\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n", "/*\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *^@\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("\RangesKt()\n)\n\npackage kotlin.ranges\n\n/\n\nNOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n\n See: https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n/\n\nimport kotlin.random.*\n\n/**\n * Returns the first element.\n * \n * @throws NoSuchElementException if the progression is empty.\n *^@\n@SinceKotlin("1.7")\n)public fun IntProgression.first(): Int {\n if (isEmpty())\n throw NoSuchElementException("Progression $this is empty.")\n return this.first\n}\n\n/**\n * Returns the first element.\n * \n * @throws NoSuchElementException if the progression is empty.\n *^@\n@SinceKotlin("1.7")\n)public fun LongProgression.first(): Long {\n if (isEmpty())\n throw NoSuchElementException("Progression $this is empty.")\n return this.first\n}\n\n/**\n * Returns the first element.\n * \n * @throws NoSuchElementException if the progression is empty.\n *^@\n@SinceKotlin("1.7")\n)public fun CharProgression.first(): Char {\n if (isEmpty())\n throw NoSuchElementException("Progression $this is empty.")\n return this.first\n}\n\n/**\n * Returns the first element, or `null` if the progression is empty.\n *^@\n@SinceKotlin("1.7")\n)public fun IntProgression.firstOrNull(): Int? {\n return if (isEmpty()) null else this.first\n}\n\n/**\n * Returns the first element, or `null` if the progression is empty.\n *^@\n@SinceKotlin("1.7")\n)public fun LongProgression.firstOrNull(): Long? {\n return if (isEmpty()) null else this.first\n}\n\n/**\n * Returns the first element, or `null` if the progression is empty.\n *^@\n@SinceKotlin("1.7")\n)public fun CharProgression.firstOrNull(): Char? {\n return if (isEmpty()) null else this.first\n}\n\n/**\n * Returns the last element.\n * \n * @throws NoSuchElementException if the progression is empty.\n * \n * @sample samples.collections.Collections.Elements.last\n *^@\n@SinceKotlin("1.7")\n)public fun IntProgression.last(): Int {\n if (isEmpty())\n throw NoSuchElementException("Progression $this is empty.")\n return this.last\n}\n\n/**\n * Returns the last element.\n * \n * @throws NoSuchElementException if the progression is empty.\n * \n * @sample samples.collections.Collections.Elements.last\n *^@\n@SinceKotlin("1.7")\n)public fun LongProgression.last(): Long {\n if (isEmpty())\n throw NoSuchElementException("Progression $this is empty.")\n return this.last\n}\n\n/**\n * Returns the last element.\n * \n * @throws NoSuchElementException if the progression is empty.\n * \n * @sample samples.collections.Collections.Elements.last\n *^@\n@SinceKotlin("1.7")\n)public fun CharProgression.last(): Char

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{\n if (isEmpty())\n throw NoSuchElementException("Progression $this is empty.")\n return
this.last}\n\n/**\n * Returns the last element, or `null` if the progression is empty.\n * \n * @sample
samples.collections.Collections.Elements.last\n *\n@SinceKotlin("1.7")\npublic fun IntProgression.lastOrNull():
Int? {\n return if (isEmpty()) null else this.last}\n\n/**\n * Returns the last element, or `null` if the progression is
empty.\n * \n * @sample samples.collections.Collections.Elements.last\n *\n@SinceKotlin("1.7")\npublic fun
LongProgression.lastOrNull(): Long? {\n return if (isEmpty()) null else this.last}\n\n/**\n * Returns
the last element, or `null` if the progression is empty.\n * \n * @sample
samples.collections.Collections.Elements.last\n *\n@SinceKotlin("1.7")\npublic fun
CharProgression.lastOrNull(): Char? {\n return if (isEmpty()) null else this.last}\n\n/**\n * Returns a random
element from this range.\n * \n * @throws IllegalArgumentException if this range is empty.\n
*\n@\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun IntRange.random(): Int {\n return
random(Random)\n}\n\n/**\n * Returns a random element from this range.\n * \n * @throws
IllegalArgumentException if this range is empty.\n * \n@\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic
inline fun LongRange.random(): Long {\n return random(Random)\n}\n\n/**\n * Returns a random element from
this range.\n * \n * @throws IllegalArgumentException if this range is empty.\n
*\n@\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun CharRange.random(): Char {\n return
random(Random)\n}\n\n/**\n * Returns a random element from this range using the specified source of randomness.\n
*\n * @throws
IllegalArgumentException if this range is empty.\n * \n@\n@SinceKotlin("1.3")\npublic fun
IntRange.random(random: Random): Int {\n try {\n return random.nextInt(this)\n } catch(e:
IllegalArgumentException) {\n throw NoSuchElementException(e.message)\n }\n}\n\n/**\n * Returns a
random element from this range using the specified source of randomness.\n * \n * @throws
IllegalArgumentException if this range is empty.\n * \n@\n@SinceKotlin("1.3")\npublic fun
LongRange.random(random: Random): Long {\n try {\n return random.nextLong(this)\n } catch(e:
IllegalArgumentException) {\n throw NoSuchElementException(e.message)\n }\n}\n\n/**\n * Returns a
random element from this range using the specified source of randomness.\n * \n * @throws
IllegalArgumentException if this range is empty.\n * \n@\n@SinceKotlin("1.3")\npublic fun
CharRange.random(random:
Random): Char {\n try {\n return random.nextInt(first.code, last.code + 1).toChar()\n } catch(e:
IllegalArgumentException) {\n throw NoSuchElementException(e.message)\n }\n}\n\n/**\n * Returns a
random element from this range, or `null` if this range is empty.\n
*\n@\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c inline fun IntRange.randomOrNull(): Int? {\n return randomOrNull(Random)\n}\n\n/**\n * Returns a random
element from this range, or `null` if this range is empty.\n
*\n@\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c inline fun LongRange.randomOrNull(): Long? {\n return randomOrNull(Random)\n}\n\n/**\n * Returns a
random element from this range, or `null` if this range is empty.\n
*\n@\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c inline fun CharRange.randomOrNull():
Char? {\n return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this range using the
specified source of randomness, or `null` if this range is empty.\n
*\n@\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun
IntRange.randomOrNull(random: Random): Int? {\n if (isEmpty())\n return null\n return
random.nextInt(this)\n}\n\n/**\n * Returns a random element from this range using the specified source of
randomness, or `null` if this range is empty.\n
*\n@\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun
LongRange.randomOrNull(random: Random): Long? {\n if (isEmpty())\n return null\n return
random.nextLong(this)\n}\n\n/**\n * Returns a random element from this range using the specified source of

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randomness, or `null` if this range is empty.

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*\/n@SinceKotlin("1.4")\/n@WasExperimental(ExperimentalStdlibApi::class)\/npublic fun
CharRange.randomOrNull(random: Random): Char? {\/n if
(isEmpty())\/n return null\/n return random.nextInt(first.code, last.code + 1).toChar()\/n}\/n\/n**\/n * Returns
`true` if this range contains the specified [element].\/n *\/n * Always returns `false` if the [element] is `null`.\/n
*\/n@SinceKotlin("1.3")\/n@kotlin.internal.InlineOnly\/npublic inline operator fun IntRange.contains(element:
Int?): Boolean {\/n return element != null && contains(element)\/n}\/n\/n**\/n * Returns `true` if this range contains
the specified [element].\/n *\/n * Always returns `false` if the [element] is `null`.\/n
*\/n@SinceKotlin("1.3")\/n@kotlin.internal.InlineOnly\/npublic inline operator fun LongRange.contains(element:
Long?): Boolean {\/n return element != null && contains(element)\/n}\/n\/n**\/n * Returns `true` if this range
contains the specified [element].\/n *\/n * Always returns `false` if the [element] is `null`.\/n
*\/n@SinceKotlin("1.3")\/n@kotlin.internal.InlineOnly\/npublic inline operator fun CharRange.contains(element:
Char?): Boolean {\/n
 return element != null && contains(element)\/n}\/n\/n**\/n * Checks if the specified [value] belongs to this range.\/n
*\/n@kotlin.jvm.JvmName("intRangeContains")\/npublic operator fun ClosedRange<Int>.contains(value: Byte):
Boolean {\/n return contains(value.toInt())\/n}\/n\/n**\/n * Checks if the specified [value] belongs to this range.\/n
*\/n@kotlin.jvm.JvmName("longRangeContains")\/npublic operator fun ClosedRange<Long>.contains(value:
Byte): Boolean {\/n return contains(value.toLong())\/n}\/n\/n**\/n * Checks if the specified [value] belongs to this
range.\/n *\/n@kotlin.jvm.JvmName("shortRangeContains")\/npublic operator fun
ClosedRange<Short>.contains(value: Byte): Boolean {\/n return contains(value.toShort())\/n}\/n\/n**\/n * Checks if
the specified [value] belongs to this range.\/n *\/n@Deprecated("This `contains` operation mixing integer and
floating point arguments has ambiguous semantics and is going to be
removed.")\/n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince
= "1.4", hiddenSince = "1.5")\/n@kotlin.jvm.JvmName("doubleRangeContains")\/npublic operator fun
ClosedRange<Double>.contains(value: Byte): Boolean {\/n return contains(value.toDouble())\/n}\/n\/n**\/n *
Checks if the specified [value] belongs to this range.\/n *\/n@Deprecated("This `contains` operation mixing integer
and floating point arguments has ambiguous semantics and is going to be
removed.")\/n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince =
"1.5")\/n@kotlin.jvm.JvmName("floatRangeContains")\/npublic operator fun ClosedRange<Float>.contains(value:
Byte): Boolean {\/n return contains(value.toFloat())\/n}\/n\/n**\/n * Checks if the specified [value] belongs to this
range.\/n *\/n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous
semantics and is going to be removed.")\/n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4",
hiddenSince = "1.5")\/n@kotlin.jvm.JvmName("intRangeContains")\/npublic
operator fun ClosedRange<Int>.contains(value: Double): Boolean {\/n return value.toIntExactOrNull().let { if (it
!= null) contains(it) else false }\/n}\/n\/n**\/n * Checks if the specified [value] belongs to this range.\/n
*\/n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous semantics
and is going to be removed.")\/n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince
= "1.5")\/n@kotlin.jvm.JvmName("longRangeContains")\/npublic operator fun
ClosedRange<Long>.contains(value: Double): Boolean {\/n return value.toLongExactOrNull().let { if (it != null)
contains(it) else false }\/n}\/n\/n**\/n * Checks if the specified [value] belongs to this range.\/n
*\/n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous semantics
and is going to be removed.")\/n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince
= "1.5")\/n@kotlin.jvm.JvmName("byteRangeContains")\/npublic
operator fun ClosedRange<Byte>.contains(value: Double): Boolean {\/n return value.toByteExactOrNull().let { if
(it != null) contains(it) else false }\/n}\/n\/n**\/n * Checks if the specified [value] belongs to this range.\/n
*\/n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous semantics
and is going to be removed.")\/n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince
= "1.5")\/n@kotlin.jvm.JvmName("shortRangeContains")\/npublic operator fun

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ClosedRange<Short>.contains(value: Double): Boolean {\n return value.toShortExactOrNull().let { if (it != null)
contains(it) else false }\n}\n\n/**\n * Checks if the specified [value] belongs to this range.\n
*\n@kotlin.jvm.JvmName("floatRangeContains")\npublic operator fun ClosedRange<Float>.contains(value:
Double): Boolean {\n return contains(value.toFloat())\n}\n\n/**\n * Checks if the specified [value] belongs to this
range.\n
*\n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous semantics
and is going to be removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince
= "1.5")\n@kotlin.jvm.JvmName("intRangeContains")\npublic operator fun ClosedRange<Int>.contains(value:
Float): Boolean {\n return value.toIntExactOrNull().let { if (it != null) contains(it) else false }\n}\n\n/**\n *
Checks if the specified [value] belongs to this range.\n
*\n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous semantics
and is going to be removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince =
"1.5")\n@kotlin.jvm.JvmName("longRangeContains")\npublic operator fun ClosedRange<Long>.contains(value:
Float): Boolean {\n return value.toLongExactOrNull().let { if (it != null) contains(it) else false }\n}\n\n/**\n *
Checks if the specified [value] belongs
to this range.\n
*\n@Deprecated("This `contains` operation mixing integer and floating point arguments has
ambiguous semantics and is going to be removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince
= "1.4", hiddenSince = "1.5")\n@kotlin.jvm.JvmName("byteRangeContains")\npublic operator fun
ClosedRange<Byte>.contains(value: Float): Boolean {\n return value.toByteExactOrNull().let { if (it != null)
contains(it) else false }\n}\n\n/**\n * Checks if the specified [value] belongs to this range.\n
*\n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous semantics
and is going to be removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince
= "1.5")\n@kotlin.jvm.JvmName("shortRangeContains")\npublic operator fun
ClosedRange<Short>.contains(value: Float): Boolean {\n return value.toShortExactOrNull().let { if (it != null)
contains(it) else false }\n}\n\n/**\n * Checks if the
specified [value] belongs to this range.\n
*\n@kotlin.jvm.JvmName("doubleRangeContains")\npublic operator
fun ClosedRange<Double>.contains(value: Float): Boolean {\n return contains(value.toDouble())\n}\n\n/**\n *
Checks if the specified [value] belongs to this range.\n
*\n@kotlin.jvm.JvmName("longRangeContains")\npublic
operator fun ClosedRange<Long>.contains(value: Int): Boolean {\n return contains(value.toLong())\n}\n\n/**\n *
Checks if the specified [value] belongs to this range.\n
*\n@kotlin.jvm.JvmName("byteRangeContains")\npublic
operator fun ClosedRange<Byte>.contains(value: Int): Boolean {\n return value.toByteExactOrNull().let { if (it !=
null) contains(it) else false }\n}\n\n/**\n * Checks if the specified [value] belongs to this range.\n
*\n@kotlin.jvm.JvmName("shortRangeContains")\npublic operator fun ClosedRange<Short>.contains(value: Int):
Boolean {\n return value.toShortExactOrNull().let { if (it != null) contains(it) else false }\n}\n\n/**\n * Checks
if the specified [value] belongs to this range.\n
*\n@Deprecated("This `contains` operation mixing integer and
floating point arguments has ambiguous semantics and is going to be
removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince =
"1.5")\n@kotlin.jvm.JvmName("doubleRangeContains")\npublic operator fun
ClosedRange<Double>.contains(value: Int): Boolean {\n return contains(value.toDouble())\n}\n\n/**\n * Checks
if the specified [value] belongs to this range.\n
*\n@Deprecated("This `contains` operation mixing integer and
floating point arguments has ambiguous semantics and is going to be
removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince =
"1.5")\n@kotlin.jvm.JvmName("floatRangeContains")\npublic operator fun ClosedRange<Float>.contains(value:
Int): Boolean {\n return contains(value.toFloat())\n}\n\n/**\n * Checks if the specified [value] belongs to this
range.\n
*\n@kotlin.jvm.JvmName("intRangeContains")\npublic
operator fun ClosedRange<Int>.contains(value: Long): Boolean {\n return value.toIntExactOrNull().let { if (it !=
null) contains(it) else false }\n}\n\n/**\n * Checks if the specified [value] belongs to this range.\n
*\n@kotlin.jvm.JvmName("byteRangeContains")\npublic operator fun ClosedRange<Byte>.contains(value:

```



CharProgression.fromClosedRange(this, to, -1)\n\n/\*\*\n \* Returns a progression from this value down to the specified [to] value with the step -1.\n \* The [to] value should be less than or equal to `this` value.\n \* If the [to] value is greater than `this` value the returned progression is empty.\n \*/\npublic infix fun Int.downTo(to: Int): IntProgression {\n return IntProgression.fromClosedRange(this, to, -1)\n}\n\n/\*\*\n \* Returns a progression from this value down to the specified [to] value with the step -1.\n \* The [to] value should be less than or equal to `this` value.\n \* If the [to] value is greater than `this` value the returned progression is empty.\n \*/\npublic infix fun Long.downTo(to: Int): LongProgression {\n return LongProgression.fromClosedRange(this, to.toLong(), -1L)\n}\n\n/\*\*\n \* Returns a progression from this value down to the specified [to] value with the step -1.\n \* The [to] value should be less than or equal to `this` value.\n \* If the [to] value is greater than `this` value the returned progression is empty.\n \*/\npublic infix fun Byte.downTo(to: Int): IntProgression {\n return IntProgression.fromClosedRange(this.toInt(), to, -1)\n}\n\n/\*\*\n \* Returns a progression from this value down to the specified [to] value with the step -1.\n \* The [to] value should be less than or equal to `this` value.\n \* If the [to] value is greater than `this` value the returned progression is empty.\n \*/\npublic infix fun Short.downTo(to: Int): IntProgression {\n return IntProgression.fromClosedRange(this.toInt(), to, -1)\n}\n\n/\*\*\n \* Returns a progression from this value down to the specified [to] value with the step -1.\n \* The [to] value should be less than or equal to `this` value.\n \* If the [to] value is greater than `this` value the returned progression is empty.\n \*/\npublic infix fun Int.downTo(to: Long): LongProgression {\n return LongProgression.fromClosedRange(this.toLong(), to, -1L)\n}\n\n/\*\*\n \* Returns a progression from this value down to the specified [to] value with the step -1.\n \* The [to] value should be less than or equal to `this` value.\n \* If the [to] value is greater than `this` value the returned progression is empty.\n \*/\npublic infix fun Long.downTo(to: Long): LongProgression {\n return LongProgression.fromClosedRange(this, to, -1L)\n}\n\n/\*\*\n \* Returns a progression from this value down to the specified [to] value with the step -1.\n \* The [to] value should be less than or equal to `this` value.\n \* If the [to] value is greater than `this` value the returned progression is empty.\n \*/\npublic infix fun Byte.downTo(to: Long): LongProgression {\n return LongProgression.fromClosedRange(this.toLong(), to, -1L)\n}\n\n/\*\*\n \* Returns a progression from this value down to the specified [to] value with the step -1.\n \* The [to] value should be less than or equal to `this` value.\n \* If the [to] value is greater than `this` value the returned progression is empty.\n \*/\npublic infix fun Short.downTo(to: Long): LongProgression {\n return LongProgression.fromClosedRange(this.toLong(), to, -1L)\n}\n\n/\*\*\n \* Returns a progression from this value down to the specified [to] value with the step -1.\n \* The [to] value should be less than or equal to `this` value.\n \* If the [to] value is greater than `this` value the returned progression is empty.\n \*/\npublic infix fun Int.downTo(to: Short): IntProgression {\n return IntProgression.fromClosedRange(this, to.toInt(), -1)\n}\n\n/\*\*\n \* Returns a progression from this value down to the specified [to] value with the step -1.\n \* The [to] value should be less than or equal to `this` value.\n \* If the [to] value is greater than `this` value the returned progression is empty.\n \*/\npublic infix fun Long.downTo(to: Short): LongProgression {\n return LongProgression.fromClosedRange(this, to.toLong(), -1L)\n}\n\n/\*\*\n \* Returns a progression from this value down to the specified [to] value with the step -1.\n \* The [to] value should be less than or equal to `this` value.\n \* If the [to] value is greater than `this` value the returned progression is empty.\n \*/\npublic infix fun Byte.downTo(to: Short): IntProgression {\n return IntProgression.fromClosedRange(this.toInt(), to.toInt(), -1)\n}\n\n/\*\*\n \* Returns a progression from this value down to the specified [to] value with the step -1.\n \* The [to] value should be less than or equal to `this` value.\n \* If the [to] value is greater than `this` value the returned progression is empty.\n \*/\npublic infix fun Short.downTo(to: Short): IntProgression {\n return IntProgression.fromClosedRange(this.toInt(), to.toInt(), -1)\n}\n\n/\*\*\n \* Returns a progression that goes over the same range in the opposite direction with the same step.\n \*/\npublic fun IntProgression.reversed(): IntProgression {\n return IntProgression.fromClosedRange(last, first, -step)\n}\n\n/\*\*\n \* Returns a progression that goes over the same range in the opposite direction with the same step.\n \*/\npublic fun LongProgression.reversed(): LongProgression {\n return LongProgression.fromClosedRange(last, first, -step)\n}\n\n/\*\*\n \* Returns a progression that goes over the same range in the opposite direction with the same step.\n \*/\npublic fun

```

CharProgression.reversed(): CharProgression {
 return CharProgression.fromClosedRange(last, first, -
step)
}
Returns a progression that goes over the same range with the given step.
public infix fun
IntProgression.step(step: Int): IntProgression {
 checkStepIsPositive(step > 0, step)
 return
IntProgression.fromClosedRange(first, last, if (this.step > 0) step else -step)
}
Returns a progression that goes over
the same range with the given step.
public infix fun LongProgression.step(step: Long): LongProgression {
 checkStepIsPositive(step > 0, step)
 return LongProgression.fromClosedRange(first, last, if (this.step > 0) step
else -step)
}
Returns a progression that goes over the same range with the given step.
public infix fun CharProgression.step(step: Int): CharProgression {
 checkStepIsPositive(step > 0, step)
 return
CharProgression.fromClosedRange(first, last, if (this.step > 0) step else -step)
}
internal fun
Int.toByteArrayOrNull(): Byte? {
 return if (this in Byte.MIN_VALUE.toInt()..Byte.MAX_VALUE.toInt())
this.toByteArray() else null
}
internal fun Long.toByteArrayOrNull(): Byte? {
 return if (this in
Byte.MIN_VALUE.toLong()..Byte.MAX_VALUE.toLong()) this.toByteArray() else null
}
internal fun
Short.toByteArrayOrNull(): Byte? {
 return if (this in
Byte.MIN_VALUE.toShort()..Byte.MAX_VALUE.toShort()) this.toByteArray() else null
}
internal fun
Double.toByteArrayOrNull(): Byte? {
 return if (this in
Byte.MIN_VALUE.toDouble()..Byte.MAX_VALUE.toDouble()) this.toInt().toByte() else null
}
internal fun
Float.toByteArrayOrNull(): Byte? {
 return if (this in
Byte.MIN_VALUE.toFloat()..Byte.MAX_VALUE.toFloat()) this.toInt().toByte() else null
}
internal fun
Long.toIntExactOrNull(): Int? {
 return if (this in Int.MIN_VALUE.toLong()..Int.MAX_VALUE.toLong())
this.toInt() else null
}
internal fun Double.toIntExactOrNull(): Int? {
 return if (this in
Int.MIN_VALUE.toDouble()..Int.MAX_VALUE.toDouble()) this.toInt() else null
}
internal fun
Float.toIntExactOrNull(): Int? {
 return if (this in Int.MIN_VALUE.toFloat()..Int.MAX_VALUE.toFloat())
this.toInt() else null
}
internal fun Double.toLongExactOrNull(): Long? {
 return if (this in
Long.MIN_VALUE.toDouble()..Long.MAX_VALUE.toDouble()) this.toLong() else null
}
internal fun
Float.toLongExactOrNull(): Long? {
 return if (this
in Long.MIN_VALUE.toFloat()..Long.MAX_VALUE.toFloat()) this.toLong() else null
}
internal fun
Int.toShortExactOrNull(): Short? {
 return if (this in Short.MIN_VALUE.toInt()..Short.MAX_VALUE.toInt())
this.toShort() else null
}
internal fun Long.toShortExactOrNull(): Short? {
 return if (this in
Short.MIN_VALUE.toLong()..Short.MAX_VALUE.toLong()) this.toShort() else null
}
internal fun
Double.toShortExactOrNull(): Short? {
 return if (this in
Short.MIN_VALUE.toDouble()..Short.MAX_VALUE.toDouble()) this.toInt().toShort() else null
}
internal fun
Float.toShortExactOrNull(): Short? {
 return if (this in
Short.MIN_VALUE.toFloat()..Short.MAX_VALUE.toFloat()) this.toInt().toShort() else null
}
Returns
a range from this value up to but excluding the specified [to] value.
If the [to] value is less than or equal to `this` value, then the returned range is empty.
public infix fun Int.until(to: Byte): IntRange {
 return this ..
(to.toInt()
- 1).toInt()
}
Returns a range from this value up to but excluding the specified [to] value.
If the [to] value is less than or equal to `this` value, then the returned range is empty.
public infix fun Long.until(to: Byte): LongRange {
 return this .. (to.toLong() - 1).toLong()
}
Returns a range from this value up to
but excluding the specified [to] value.
If the [to] value is less than or equal to `this` value, then the returned
range is empty.
public infix fun Byte.until(to: Byte): IntRange {
 return this.toInt() .. (to.toInt() -
1).toInt()
}
Returns a range from this value up to but excluding the specified [to] value.
If the [to] value is less than or equal to `this` value, then the returned range is empty.
public infix fun Short.until(to: Byte): IntRange {
 return this.toInt() .. (to.toInt() - 1).toInt()
}
Returns a range from this value up to
but excluding the specified [to]
value.
If the [to] value is less than or equal to `this` value, then the returned range is empty.
public infix fun Char.until(to: Char): CharRange {
 if (to <= "\u0000") return CharRange.EMPTY
 return this .. (to -

```





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* @return this value if it's greater than or equal to the [minimumValue] or the [minimumValue] otherwise.\n * \n *
@sample samples.comparisons.ComparableOps.coerceAtLeast\n *^\npublic fun Int.coerceAtLeast(minimumValue:
Int): Int {\n return if (this < minimumValue) minimumValue else this\n}\n\n/**\n * Ensures that this value is not
less than the specified [minimumValue].\n * \n * @return this value if it's greater than or equal to the
[minimumValue] or the [minimumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtLeast\n *^\npublic
fun Long.coerceAtLeast(minimumValue: Long): Long {\n return if (this < minimumValue) minimumValue else
this\n}\n\n/**\n * Ensures that this value is not less than the specified [minimumValue].\n * \n * @return this value
if it's greater than or equal to the [minimumValue] or the [minimumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtLeast\n *^\npublic fun Float.coerceAtLeast(minimumValue: Float):
Float {\n return if (this < minimumValue) minimumValue else this\n}\n\n/**\n * Ensures that this value is not less
than the specified [minimumValue].\n * \n * @return this value if it's greater than or equal to the [minimumValue]
or the [minimumValue] otherwise.\n * \n * @sample samples.comparisons.ComparableOps.coerceAtLeast\n
*^\npublic fun Double.coerceAtLeast(minimumValue: Double): Double {\n return if (this < minimumValue)
minimumValue else this\n}\n\n/**\n * Ensures that this value is not greater than the specified [maximumValue].\n *
\n * @return
\n * @return
this value if it's less than or equal to the [maximumValue] or the [maximumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtMostComparable\n *^\npublic fun <T : Comparable<T>>
T.coerceAtMost(maximumValue: T): T {\n return if (this > maximumValue) maximumValue else this\n}\n\n/**\n
* Ensures that this value is not greater than the specified [maximumValue].\n * \n * @return this value if it's less
than or equal to the [maximumValue] or the [maximumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtMost\n *^\npublic fun Byte.coerceAtMost(maximumValue: Byte):
Byte {\n return if (this > maximumValue) maximumValue else this\n}\n\n/**\n * Ensures that this value is not
greater than the specified [maximumValue].\n * \n * @return this value if it's less than or equal to the
[maximumValue] or the [maximumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtMost\n *^\npublic fun Short.coerceAtMost(maximumValue:
Short): Short {\n return if (this > maximumValue) maximumValue else this\n}\n\n/**\n * Ensures that this value
is not greater than the specified [maximumValue].\n * \n * @return this value if it's less than or equal to the
[maximumValue] or the [maximumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtMost\n *^\npublic fun Int.coerceAtMost(maximumValue: Int): Int
{\n return if (this > maximumValue) maximumValue else this\n}\n\n/**\n * Ensures that this value is not greater
than the specified [maximumValue].\n * \n * @return this value if it's less than or equal to the [maximumValue] or
the [maximumValue] otherwise.\n * \n * @sample samples.comparisons.ComparableOps.coerceAtMost\n
*^\npublic fun Long.coerceAtMost(maximumValue: Long): Long {\n return if (this > maximumValue)
maximumValue else this\n}\n\n/**\n * Ensures that this value is not greater than the specified [maximumValue].\n *
\n * @return this value if it's less than or equal to the [maximumValue]
or the [maximumValue] otherwise.\n * \n * @sample samples.comparisons.ComparableOps.coerceAtMost\n
*^\npublic fun Float.coerceAtMost(maximumValue: Float): Float {\n return if (this > maximumValue)
maximumValue else this\n}\n\n/**\n * Ensures that this value is not greater than the specified [maximumValue].\n *
\n * @return this value if it's less than or equal to the [maximumValue] or the [maximumValue] otherwise.\n * \n *
@sample samples.comparisons.ComparableOps.coerceAtMost\n *^\npublic fun
Double.coerceAtMost(maximumValue: Double): Double {\n return if (this > maximumValue) maximumValue
else this\n}\n\n/**\n * Ensures that this value lies in the specified range [minimumValue]..[maximumValue].\n * \n
* @return this value if it's in the range, or [minimumValue] if this value is less than [minimumValue], or
[maximumValue] if this value is greater than [maximumValue].\n * \n * @sample
samples.comparisons.ComparableOps.coerceInComparable\n *^\npublic fun <T : Comparable<T>>
T.coerceIn(minimumValue: T?, maximumValue: T?): T {\n if (minimumValue !== null && maximumValue !==
null) {\n if (minimumValue > maximumValue) throw IllegalArgumentException("\Cannot coerce value to an

```

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empty range: maximum $maximumValue is less than minimum $minimumValue.)\n if (this <
minimumValue) return minimumValue\n if (this > maximumValue) return maximumValue\n } \n else {\n
if (minimumValue !== null && this < minimumValue) return minimumValue\n if (maximumValue !== null
&& this > maximumValue) return maximumValue\n } \n return this\n}\n\n/**\n * Ensures that this value lies in
the specified range [minimumValue]..[maximumValue].\n * \n * @return this value if it's in the range, or
[minimumValue] if this value is less than [minimumValue], or [maximumValue] if this value is greater than
[maximumValue].\n * \n * @sample samples.comparisons.ComparableOps.coerceIn\n *\npublic fun
Byte.coerceIn(minimumValue: Byte, maximumValue: Byte): Byte {\n if (minimumValue > maximumValue) throw
IllegalArgumentException("Cannot coerce value to an
empty range: maximum $maximumValue is less than minimum $minimumValue.")\n if (this < minimumValue)
return minimumValue\n if (this > maximumValue) return maximumValue\n return this\n}\n\n/**\n * Ensures
that this value lies in the specified range [minimumValue]..[maximumValue].\n * \n * @return this value if it's
in the range, or [minimumValue] if this value is less than [minimumValue], or [maximumValue] if this value is
greater than [maximumValue].\n * \n * @sample samples.comparisons.ComparableOps.coerceIn\n *\npublic fun
Short.coerceIn(minimumValue: Short, maximumValue: Short): Short {\n if (minimumValue > maximumValue)
throw IllegalArgumentException("Cannot coerce value to an empty range: maximum $maximumValue is less than
minimum $minimumValue.")\n if (this < minimumValue) return minimumValue\n if (this > maximumValue)
return maximumValue\n return this\n}\n\n/**\n * Ensures that this value lies in the specified range
[minimumValue]..[maximumValue].\n * \n * @return this value if it's in the range, or [minimumValue] if this
value is less than [minimumValue], or [maximumValue] if this value is greater than [maximumValue].\n * \n *
@sample samples.comparisons.ComparableOps.coerceIn\n *\npublic fun
Int.coerceIn(minimumValue: Int, maximumValue: Int): Int {\n if (minimumValue > maximumValue) throw
IllegalArgumentException("Cannot coerce value to an empty range: maximum $maximumValue is less than
minimum $minimumValue.")\n if (this < minimumValue) return minimumValue\n if (this > maximumValue)
return maximumValue\n return this\n}\n\n/**\n * Ensures that this value lies in the specified range
[minimumValue]..[maximumValue].\n * \n * @return this value if it's in the range, or [minimumValue] if this
value is less than [minimumValue], or [maximumValue] if this value is greater than [maximumValue].\n * \n *
@sample samples.comparisons.ComparableOps.coerceIn\n
*\npublic fun Long.coerceIn(minimumValue: Long, maximumValue: Long): Long {\n if (minimumValue >
maximumValue) throw IllegalArgumentException("Cannot coerce value to an empty range: maximum
$maximumValue is less than minimum $minimumValue.")\n if (this < minimumValue) return minimumValue\n
if (this > maximumValue) return maximumValue\n return this\n}\n\n/**\n * Ensures that this value lies in the
specified range [minimumValue]..[maximumValue].\n * \n * @return this value if it's in the range, or
[minimumValue] if this value is less than [minimumValue], or [maximumValue] if this value is greater than
[maximumValue].\n * \n * @sample samples.comparisons.ComparableOps.coerceIn\n *\npublic fun
Float.coerceIn(minimumValue: Float, maximumValue: Float): Float {\n if (minimumValue > maximumValue)
throw IllegalArgumentException("Cannot coerce value to an empty range: maximum $maximumValue is less than
minimum $minimumValue.")\n if (this <
minimumValue) return minimumValue\n if (this > maximumValue) return maximumValue\n return
this\n}\n\n/**\n * Ensures that this value lies in the specified range [minimumValue]..[maximumValue].\n * \n *
@return this value if it's in the range, or [minimumValue] if this value is less than [minimumValue], or
[maximumValue] if this value is greater than [maximumValue].\n * \n * @sample
samples.comparisons.ComparableOps.coerceIn\n *\npublic fun Double.coerceIn(minimumValue: Double,
maximumValue: Double): Double {\n if (minimumValue > maximumValue) throw
IllegalArgumentException("Cannot coerce value to an empty range: maximum $maximumValue is less than
minimum $minimumValue.")\n if (this < minimumValue) return minimumValue\n if (this > maximumValue)
return maximumValue\n return this\n}\n\n/**\n * Ensures that this value lies in the specified [range].\n * \n *
@return this value if it's in the [range], or `range.start` if this value is less than `range.start`, or `range.endInclusive`

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if this value is greater than `range.endInclusive`.n * .n * @sample
samples.comparisons.ComparableOps.coerceInFloatingPointRange.n * ^\n@SinceKotlin("1.1")\npublic fun <T :
Comparable<T>> T.coerceIn(range: ClosedFloatingPointRange<T>): T {n if (range.isEmpty()) throw
IllegalArgumentException("Cannot coerce value to an empty range: $range.")n return when {n // this <
start equiv to this <= start && !(this >= start)n range.lessThanOrEqualTo(this, range.start) &&
!range.lessThanOrEqualTo(range.start, this) -> range.start\n // this > end equiv to this >= end && !(this <= end)\n
range.lessThanOrEqualTo(range.endInclusive, this) && !range.lessThanOrEqualTo(this, range.endInclusive) ->
range.endInclusive\n else -> this\n }n}\n\n/**n * Ensures that this value lies in the specified [range].n * .n *
@return this value if it's in the [range], or `range.start` if this value is less than `range.start`, or `range.endInclusive`
if this
value is greater than `range.endInclusive`.n * .n * @sample
samples.comparisons.ComparableOps.coerceInComparable.n * ^\npublic fun <T : Comparable<T>>
T.coerceIn(range: ClosedRange<T>): T {n if (range is ClosedFloatingPointRange) {n return
this.coerceIn<T>(range)\n }n if (range.isEmpty()) throw IllegalArgumentException("Cannot coerce value to an
empty range: $range.")n return when {n this < range.start -> range.start\n this > range.endInclusive ->
range.endInclusive\n else -> this\n }n}\n\n/**n * Ensures that this value lies in the specified [range].n * .n *
@return this value if it's in the [range], or `range.start` if this value is less than `range.start`, or `range.endInclusive`
if this value is greater than `range.endInclusive`.n * .n * @sample samples.comparisons.ComparableOps.coerceIn\n
* ^\npublic fun Int.coerceIn(range: ClosedRange<Int>): Int {n if (range is ClosedFloatingPointRange) {n
return this.coerceIn<Int>(range)\n }n if (range.isEmpty()) throw IllegalArgumentException("Cannot coerce value to an
empty range: $range.")n return when {n this < range.start -> range.start\n this > range.endInclusive -> range.endInclusive\n
else -> this\n }n}\n\n/**n * Ensures that this value lies in the specified [range].n * .n * @return this value if it's
in the [range], or `range.start` if this value is less than `range.start`, or `range.endInclusive` if this value is greater
than `range.endInclusive`.n * .n * @sample samples.comparisons.ComparableOps.coerceIn\n
* ^\npublic fun Long.coerceIn(range: ClosedRange<Long>): Long {n if (range is ClosedFloatingPointRange) {n return
this.coerceIn<Long>(range)\n }n if (range.isEmpty()) throw IllegalArgumentException("Cannot coerce value
to an empty range: $range.")n return when {n this < range.start -> range.start\n this >
range.endInclusive -> range.endInclusive\n else -> this\n }n}\n\n", "/*\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n * ^\n\n//
Auto-generated file. DO NOT EDIT!\n\npackage kotlin\n\nimport kotlin.experimental.*\nimport
kotlin.jvm.*\n\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@JvmInline\npu
blic value class UByte @PublishedApi internal constructor(@PublishedApi internal val data: Byte) :
Comparable<UByte> {n\n companion object {n /**\n * A constant holding the minimum value an
instance of UByte can have.\n * ^\n public const val MIN_VALUE: UByte = UByte(0)\n /**\n *
A constant holding the maximum value an instance of UByte can have.\n * ^\n public const val
MAX_VALUE: UByte = UByte(-1)\n /**\n * The number of bytes used to represent an instance of
UByte in a binary form.\n * ^\n public const val SIZE_BYTES: Int = 1\n /**\n * The number of bits used to represent an
instance of UByte in a binary form.\n * ^\n public const val SIZE_BITS: Int = 8\n }n\n /**\n *
Compares this value with the specified value for order.\n * Returns zero if this value is equal to the specified other
value, a negative number if it's less than other,\n * or a positive number if it's greater than other.\n * ^\n
@kotlin.internal.InlineOnly\n @Suppress("OVERRIDE_BY_INLINE")\n public override inline operator fun
compareTo(other: UByte): Int = this.toInt().compareTo(other.toInt())\n /**\n * Compares this value with the
specified value for order.\n * Returns zero if this value is equal to the specified other value, a negative number if
it's less than other,\n * or a positive number if it's greater than other.\n * ^\n @kotlin.internal.InlineOnly\n
public inline operator fun compareTo(other:

```

```

UShort): Int = this.toInt().compareTo(other.toInt())\n\n /**\n * Compares this value with the specified value for
order.\n * Returns zero if this value is equal to the specified other value, a negative number if it's less than other,\n
* or a positive number if it's greater than other.\n */\n @kotlin.internal.InlineOnly\n public inline operator
fun compareTo(other: UInt): Int = this.toUInt().compareTo(other)\n\n /**\n * Compares this value with the
specified value for order.\n * Returns zero if this value is equal to the specified other value, a negative number if
it's less than other,\n * or a positive number if it's greater than other.\n */\n @kotlin.internal.InlineOnly\n
public inline operator fun compareTo(other: ULong): Int = this.toULong().compareTo(other)\n\n /** Adds the
other value to this value. *\n @kotlin.internal.InlineOnly\n public inline operator fun plus(other: UByte): UInt =
this.toUInt().plus(other.toUInt())\n
/** Adds the other value to this value. *\n @kotlin.internal.InlineOnly\n public inline operator fun plus(other:
UShort): UInt = this.toUInt().plus(other.toUInt())\n\n /** Adds the other value to this value. *\n
@kotlin.internal.InlineOnly\n public inline operator fun plus(other: UInt): UInt = this.toUInt().plus(other)\n\n /**
Adds the other value to this value. *\n @kotlin.internal.InlineOnly\n public inline operator fun plus(other:
ULong): ULong = this.toULong().plus(other)\n\n /** Subtracts the other value from this value. *\n
@kotlin.internal.InlineOnly\n public inline operator fun minus(other: UByte): UInt =
this.toUInt().minus(other.toUInt())\n\n /** Subtracts the other value from this value. *\n
@kotlin.internal.InlineOnly\n public inline operator fun minus(other: UShort): UInt =
this.toUInt().minus(other.toUInt())\n\n /** Subtracts the other value from this value. *\n
@kotlin.internal.InlineOnly\n public inline operator
fun minus(other: UInt): UInt = this.toUInt().minus(other)\n\n /** Subtracts the other value from this value. *\n
@kotlin.internal.InlineOnly\n public inline operator fun minus(other: ULong): ULong =
this.toULong().minus(other)\n\n /** Multiplies this value by the other value. *\n @kotlin.internal.InlineOnly\n
public inline operator fun times(other: UByte): UInt = this.toUInt().times(other.toUInt())\n\n /** Multiplies this
value by the other value. *\n @kotlin.internal.InlineOnly\n public inline operator fun times(other: UShort): UInt
= this.toUInt().times(other.toUInt())\n\n /** Multiplies this value by the other value. *\n
@kotlin.internal.InlineOnly\n public inline operator fun times(other: UInt): UInt = this.toUInt().times(other)\n\n
/** Multiplies this value by the other value. *\n @kotlin.internal.InlineOnly\n public inline operator fun
times(other: ULong): ULong = this.toULong().times(other)\n\n /** Divides this value by the other value,
truncating the result to an integer that is closer to zero. *\n @kotlin.internal.InlineOnly\n public inline operator
fun div(other: UByte): UInt = this.toUInt().div(other.toUInt())\n\n /** Divides this value by the other value,
truncating the result to an integer that is closer to zero. *\n @kotlin.internal.InlineOnly\n public inline operator
fun div(other: UShort): UInt = this.toUInt().div(other.toUInt())\n\n /** Divides this value by the other value,
truncating the result to an integer that is closer to zero. *\n @kotlin.internal.InlineOnly\n public inline operator
fun div(other: UInt): UInt = this.toUInt().div(other)\n\n /** Divides this value by the other value, truncating the
result to an integer that is closer to zero. *\n @kotlin.internal.InlineOnly\n public inline operator fun div(other:
ULong): ULong = this.toULong().div(other)\n\n /**\n * Calculates the remainder of truncating division of this
value by the other value.\n * \n
* The result is always less than the divisor.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun
rem(other: UByte): UInt = this.toUInt().rem(other.toUInt())\n\n /**\n * Calculates the remainder of truncating
division of this value by the other value.\n * \n * The result is always less than the divisor.\n */\n
@kotlin.internal.InlineOnly\n public inline operator fun rem(other: UShort): UInt =
this.toUInt().rem(other.toUInt())\n\n /**\n * Calculates the remainder of truncating division of this value by the
other value.\n * \n * The result is always less than the divisor.\n */\n @kotlin.internal.InlineOnly\n public
inline operator fun rem(other: UInt): UInt = this.toUInt().rem(other)\n\n /**\n * Calculates the remainder of
truncating division of this value by the other value.\n * \n * The result is always less than the divisor.\n */\n
@kotlin.internal.InlineOnly\n public inline operator fun rem(other:
ULong): ULong = this.toULong().rem(other)\n\n /**\n * Divides this value by the other value, flooring the
result to an integer that is closer to negative infinity.\n * \n * For unsigned types, the results of flooring division

```

```

and truncating division are the same.\n
 */\n
 @kotlin.internal.InlineOnly\n
 public inline fun floorDiv(other:
 UByte): UInt = this.toUInt().floorDiv(other.toUInt())\n
 /**\n
 * Divides this value by the other value, flooring
 the result to an integer that is closer to negative infinity.\n
 * \n
 * For unsigned types, the results of flooring
 division and truncating division are the same.\n
 */\n
 @kotlin.internal.InlineOnly\n
 public inline fun
 floorDiv(other: UShort): UInt = this.toUInt().floorDiv(other.toUInt())\n
 /**\n
 * Divides this value by the other
 value, flooring the result to an integer that is closer to negative infinity.\n
 * \n
 * For unsigned types, the results
 of flooring division and truncating
 division are the same.\n
 */\n
 @kotlin.internal.InlineOnly\n
 public inline fun floorDiv(other: UInt): UInt =
 this.toUInt().floorDiv(other)\n
 /**\n
 * Divides this value by the other value, flooring the result to an integer that
 is closer to negative infinity.\n
 * \n
 * For unsigned types, the results of flooring division and truncating division
 are the same.\n
 */\n
 @kotlin.internal.InlineOnly\n
 public inline fun floorDiv(other: ULong): ULong =
 this.toULong().floorDiv(other)\n
 /**\n
 * Calculates the remainder of flooring division of this value by the
 other value.\n
 * \n
 * The result is always less than the divisor.\n
 * \n
 * For unsigned types, the remainders
 of flooring division and truncating division are the same.\n
 */\n
 @kotlin.internal.InlineOnly\n
 public inline
 fun mod(other: UByte): UByte = this.toUInt().mod(other.toUInt()).toUByte()\n
 /**\n
 * Calculates the remainder
 of flooring division of this value by
 the other value.\n
 * \n
 * The result is always less than the divisor.\n
 * \n
 * For unsigned types, the
 remainders of flooring division and truncating division are the same.\n
 */\n
 @kotlin.internal.InlineOnly\n
 public inline fun mod(other: UShort): UShort = this.toUInt().mod(other.toUInt()).toUShort()\n
 /**\n
 *
 Calculates the remainder of flooring division of this value by the other value.\n
 * \n
 * The result is always less
 than the divisor.\n
 * \n
 * For unsigned types, the remainders of flooring division and truncating division are the
 same.\n
 */\n
 @kotlin.internal.InlineOnly\n
 public inline fun mod(other: UInt): UInt =
 this.toUInt().mod(other)\n
 /**\n
 * Calculates the remainder of flooring division of this value by the other
 value.\n
 * \n
 * The result is always less than the divisor.\n
 * \n
 * For unsigned types, the remainders of
 flooring division and truncating division are the same.\n
 */\n
 @kotlin.internal.InlineOnly\n
 public inline fun mod(other: ULong): ULong = this.toULong().mod(other)\n
 /**\n
 * Returns this value
 incremented by one.\n
 * \n
 * @sample samples.misc.Builtins.inc\n
 */\n
 @kotlin.internal.InlineOnly\n
 public inline operator fun inc(): UByte = UByte(data.inc())\n
 /**\n
 * Returns this value decremented by one.\n
 * \n
 * @sample samples.misc.Builtins.dec\n
 */\n
 @kotlin.internal.InlineOnly\n
 public inline operator fun
 dec(): UByte = UByte(data.dec())\n
 /**\n
 * Creates a range from this value to the specified [other] value. *\n
 @kotlin.internal.InlineOnly\n
 public inline operator fun rangeTo(other: UByte): UIntRange =
 UIntRange(this.toUInt(), other.toUInt())\n
 /**\n
 * Performs a bitwise AND operation between the two values. *\n
 @kotlin.internal.InlineOnly\n
 public inline infix fun and(other: UByte): UByte = UByte(this.data and other.data)\n
 /**\n
 * Performs a bitwise OR operation between the two values.
 *\n
 @kotlin.internal.InlineOnly\n
 public inline infix fun or(other: UByte): UByte = UByte(this.data or
 other.data)\n
 /**\n
 * Performs a bitwise XOR operation between the two values. *\n
 @kotlin.internal.InlineOnly\n
 public inline infix fun xor(other: UByte): UByte = UByte(this.data xor other.data)\n
 /**\n
 * Inverts the bits in this
 value. *\n
 @kotlin.internal.InlineOnly\n
 public inline fun inv(): UByte = UByte(data.inv())\n
 /**\n
 *
 Converts this [UByte] value to [Byte].\n
 * \n
 * If this value is less than or equals to [Byte.MAX_VALUE], the
 resulting `Byte` value represents\n
 * the same numerical value as this `UByte`. Otherwise the result is negative.\n
 * \n
 * The resulting `Byte` value has the same binary representation as this `UByte` value.\n
 */\n
 @kotlin.internal.InlineOnly\n
 public inline fun toByte(): Byte = data\n
 /**\n
 * Converts this [UByte] value to
 [Short].\n
 * \n
 * The resulting `Short` value represents
 the same numerical value as this `UByte`.\n
 * \n
 * The least significant 8 bits of the resulting `Short` value are
 the same as the bits of this `UByte` value,\n
 * whereas the most significant 8 bits are filled with zeros.\n
 */\n
 @kotlin.internal.InlineOnly\n
 public inline fun toShort(): Short = data.toShort() and 0xFF\n
 /**\n
 * Converts
 this [UByte] value to [Int].\n
 * \n
 * The resulting `Int` value represents the same numerical value as this
 `UByte`.\n
 * \n
 * The least significant 8 bits of the resulting `Int` value are the same as the bits of this `UByte`

```



```

blic value class UInt @PublishedApi internal constructor(@PublishedApi internal val data: Int) :
Comparable<UInt> {
 companion object {
 /** A constant holding the minimum value an instance of UInt can have.
 * A constant holding the maximum value an instance of UInt can have.
 * The number of bytes used to represent an instance of UInt in a binary form.
 * The number of bits used to represent an instance of UInt in a binary form.
 * Compares this value with the specified value for order.
 * Returns zero if this value is equal to the specified other value, a negative number if it's less than other,
 * or a positive number if it's greater than other.
 * @kotlin.internal.InlineOnly
 * public inline operator fun compareTo(other: UByte): Int = this.compareTo(other.toUInt())
 * Compares this value with the specified value for order.
 * Returns zero if this value is equal to the specified other value, a negative number if it's less than
 * other,
 * or a positive number if it's greater than other.
 * @kotlin.internal.InlineOnly
 * public inline operator fun compareTo(other: UShort): Int = this.compareTo(other.toUInt())
 * Compares this value with the specified value for order.
 * Returns zero if this value is equal to the specified other value, a negative number if it's less than other,
 * or a positive number if it's greater than other.
 * @kotlin.internal.InlineOnly
 * @Suppress("OVERRIDE_BY_INLINE")
 * public override inline operator fun compareTo(other: UInt): Int = uintCompare(this.data, other.data)
 * Compares this value with the specified value for order.
 * Returns zero if this value is equal to the specified other value, a negative number if it's less than other,
 * or a positive number if it's greater than other.
 * @kotlin.internal.InlineOnly
 * public inline operator fun compareTo(other: ULong): Int = this.toULong().compareTo(other)
 * Adds the other value to this value.
 * @kotlin.internal.InlineOnly
 * public inline operator fun plus(other: UByte): UInt = this.plus(other.toUInt())
 * Adds the other value to this value.
 * @kotlin.internal.InlineOnly
 * public inline operator fun plus(other: UShort): UInt = this.plus(other.toUInt())
 * Adds the other value to this value.
 * @kotlin.internal.InlineOnly
 * public inline operator fun plus(other: UInt): UInt = UInt(this.data.plus(other.data))
 * Adds the other value to this value.
 * @kotlin.internal.InlineOnly
 * public inline operator fun plus(other: ULong): ULong = this.toULong().plus(other)
 * Subtracts the other value from this value.
 * @kotlin.internal.InlineOnly
 * public inline operator fun minus(other: UByte): UInt = this.minus(other.toUInt())
 * Subtracts the other value from this value.
 * @kotlin.internal.InlineOnly
 * public inline operator fun minus(other: UShort): UInt = this.minus(other.toUInt())
 * Subtracts the other value from this value.
 * @kotlin.internal.InlineOnly
 * public inline operator fun minus(other: UInt): UInt = UInt(this.data.minus(other.data))
 * Subtracts the other value from this value.
 * @kotlin.internal.InlineOnly
 * public inline operator fun minus(other: ULong): ULong = this.toULong().minus(other)
 * Multiplies this value by the other value.
 * @kotlin.internal.InlineOnly
 * public inline operator fun times(other: UByte): UInt = this.times(other.toUInt())
 * Multiplies this value by the other value.
 * @kotlin.internal.InlineOnly
 * public inline operator fun times(other: UShort): UInt = this.times(other.toUInt())
 * Multiplies this value by the other value.
 * @kotlin.internal.InlineOnly
 * public inline operator fun times(other: UInt): UInt = UInt(this.data.times(other.data))
 * Multiplies this value by the other value.
 * @kotlin.internal.InlineOnly
 * public inline operator fun times(other: ULong): ULong = this.toULong().times(other)
 * Divides this value by the other value, truncating the result to an integer that is closer to zero.
 * @kotlin.internal.InlineOnly
 * public inline operator fun div(other: UByte): UInt = this.div(other.toUInt())
 * Divides this value by the other value, truncating the result to an integer that is closer to zero.
 * @kotlin.internal.InlineOnly
 * public inline operator fun div(other: UShort): UInt = this.div(other.toUInt())
 * Divides this value by the other value, truncating the result to an integer that is closer to zero.
 * @kotlin.internal.InlineOnly
 * public inline operator fun div(other: UInt): UInt = uintDivide(this, other)
 * Divides this value by the other value, truncating the result

```

```

to an integer that is closer to zero. */n @kotlin.internal.InlineOnly\n public inline operator fun div(other:
ULong): ULong =
 this.toULong().div(other)\n\n /**\n * Calculates the remainder of truncating division of this value by the other
value.\n * \n * The result is always less than the divisor.\n */n @kotlin.internal.InlineOnly\n public
inline operator fun rem(other: UByte): UInt = this.rem(other.toUInt())\n /**\n * Calculates the remainder of
truncating division of this value by the other value.\n * \n * The result is always less than the divisor.\n */n
@kotlin.internal.InlineOnly\n public inline operator fun rem(other: UShort): UInt = this.rem(other.toUInt())\n
/**\n * Calculates the remainder of truncating division of this value by the other value.\n * \n * The result is
always less than the divisor.\n */n @kotlin.internal.InlineOnly\n public inline operator fun rem(other: UInt):
UInt = uintRemainder(this, other)\n /**\n * Calculates the remainder of truncating division of this value by the
other value.\n * \n
* The result is always less than the divisor.\n */n @kotlin.internal.InlineOnly\n public inline operator fun
rem(other: ULong): ULong = this.toULong().rem(other)\n\n /**\n * Divides this value by the other value,
flooring the result to an integer that is closer to negative infinity.\n * \n * For unsigned types, the results of
flooring division and truncating division are the same.\n */n @kotlin.internal.InlineOnly\n public inline fun
floorDiv(other: UByte): UInt = this.floorDiv(other.toUInt())\n /**\n * Divides this value by the other value,
flooring the result to an integer that is closer to negative infinity.\n * \n * For unsigned types, the results of
flooring division and truncating division are the same.\n */n @kotlin.internal.InlineOnly\n public inline fun
floorDiv(other: UShort): UInt = this.floorDiv(other.toUInt())\n /**\n * Divides this value by the other value,
flooring the result to an integer that is closer
to negative infinity.\n * \n * For unsigned types, the results of flooring division and truncating division are the
same.\n */n @kotlin.internal.InlineOnly\n public inline fun floorDiv(other: UInt): UInt = div(other)\n /**\n
* Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.\n * \n
* For unsigned types, the results of flooring division and truncating division are the same.\n */n
@kotlin.internal.InlineOnly\n public inline fun floorDiv(other: ULong): ULong =
 this.toULong().floorDiv(other)\n\n /**\n * Calculates the remainder of flooring division of this value by the
other value.\n * \n * The result is always less than the divisor.\n * \n * For unsigned types, the remainders
of flooring division and truncating division are the same.\n */n @kotlin.internal.InlineOnly\n public inline
fun mod(other: UByte): UByte = this.mod(other.toUInt()).toUByte()\n
/**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is
always less than the divisor.\n * \n * For unsigned types, the remainders of flooring division and truncating
division are the same.\n */n @kotlin.internal.InlineOnly\n public inline fun mod(other: UShort): UShort =
 this.mod(other.toUInt()).toUShort()\n /**\n * Calculates the remainder of flooring division of this value by the
other value.\n * \n * The result is always less than the divisor.\n * \n * For unsigned types, the remainders
of flooring division and truncating division are the same.\n */n @kotlin.internal.InlineOnly\n public inline
fun mod(other: UInt): UInt = rem(other)\n /**\n * Calculates the remainder of flooring division of this value by
the other value.\n * \n * The result is always less than the divisor.\n * \n * For unsigned types, the
remainders of flooring division
and truncating division are the same.\n */n @kotlin.internal.InlineOnly\n public inline fun mod(other:
ULong): ULong = this.toULong().mod(other)\n\n /**\n * Returns this value incremented by one.\n * \n *
@sample samples.misc.Builtins.inc\n */n @kotlin.internal.InlineOnly\n public inline operator fun inc(): UInt
= UInt(data.inc())\n\n /**\n * Returns this value decremented by one.\n * \n *
@sample
samples.misc.Builtins.dec\n */n @kotlin.internal.InlineOnly\n public inline operator fun dec(): UInt =
 UInt(data.dec())\n\n /**\n * Creates a range from this value to the specified [other] value. */n
@kotlin.internal.InlineOnly\n public inline operator fun rangeTo(other: UInt): UIntRange = UIntRange(this,
other)\n\n /**\n * Shifts this value left by the [bitCount] number of bits.\n * \n * Note that only the five
lowest-order bits of the [bitCount] are used as the shift distance.\n * The shift distance actually

```



```

used is therefore always in the range `0..31`.
 @kotlin.internal.InlineOnly public inline infix fun
shl(bitCount: Int): UInt = UInt(data shl bitCount)
 /** Shifts this value right by the [bitCount] number of
bits, filling the leftmost bits with zeros.
 Note that only the five lowest-order bits of the [bitCount] are
used as the shift distance.
 The shift distance actually used is therefore always in the range `0..31`.
 @kotlin.internal.InlineOnly public inline infix fun shr(bitCount: Int): UInt = UInt(data ushr bitCount)
 /** Performs a bitwise AND operation between the two values.
 @kotlin.internal.InlineOnly public inline infix fun and(other: UInt): UInt = UInt(this.data and other.data)
 /** Performs a bitwise OR operation between the two
values.
 @kotlin.internal.InlineOnly public inline infix fun or(other: UInt): UInt = UInt(this.data or
other.data)
 /** Performs a bitwise
XOR operation between the two values.
 @kotlin.internal.InlineOnly public inline infix fun xor(other:
UInt): UInt = UInt(this.data xor other.data)
 /** Inverts the bits in this value.
 @kotlin.internal.InlineOnly public inline fun inv(): UInt = UInt(data.inv())
 /** Converts this [UInt] value to [Byte].
 If
this value is less than or equals to [Byte.MAX_VALUE], the resulting `Byte` value represents
the same
numerical value as this `UInt`.
 The resulting `Byte` value is represented by the least significant 8 bits of
this `UInt` value.
 Note that the resulting `Byte` value may be negative.
 @kotlin.internal.InlineOnly public inline fun toByte(): Byte = data.toByte()
 /** Converts this [UInt]
value to [Short].
 If this value is less than or equals to [Short.MAX_VALUE], the resulting `Short` value
represents
the same numerical value as this `UInt`.
 The resulting `Short` value is represented by the least significant 16 bits of this `UInt` value.
 Note
that the resulting `Short` value may be negative.
 @kotlin.internal.InlineOnly public inline fun
toShort(): Short = data.toShort()
 /** Converts this [UInt] value to [Int].
 If this value is less
than or equals to [Int.MAX_VALUE], the resulting `Int` value represents
the same numerical value as this
`UInt`. Otherwise the result is negative.
 The resulting `Int` value has the same binary representation as
this `UInt` value.
 @kotlin.internal.InlineOnly public inline fun toInt(): Int = data
 /** Converts this [UInt] value to [Long].
 The resulting `Long` value represents the same numerical value as
this `UInt`.
 The least significant 32 bits of the resulting `Long` value are the same as the bits of this
`UInt` value,
 whereas the most
significant 32 bits are filled with zeros.
 @kotlin.internal.InlineOnly public inline fun toLong(): Long =
data.toLong() and 0xFFFF_FFFF
 /** Converts this [UInt] value to [UByte].
 If this value
is less than or equals to [UByte.MAX_VALUE], the resulting `UByte` value represents
the same numerical
value as this `UInt`.
 The resulting `UByte` value is represented by the least significant 8 bits of this
`UInt` value.
 @kotlin.internal.InlineOnly public inline fun toUByte(): UByte = data.toUByte()
 /** Converts this [UInt] value to [UShort].
 If this value is less than or equals to
[UShort.MAX_VALUE], the resulting `UShort` value represents
the same numerical value as this `UInt`.
 The resulting `UShort` value is represented by the least significant 16 bits of this `UInt` value.
 @kotlin.internal.InlineOnly public inline fun toUShort():
UShort = data.toUShort()
 /** Returns this value.
 @kotlin.internal.InlineOnly public inline fun
toUInt(): UInt = this
 /** Converts this [UInt] value to [ULong].
 The resulting `ULong` value
represents the same numerical value as this `UInt`.
 The least significant 32 bits of the resulting `ULong`
value are the same as the bits of this `UInt` value,
 whereas the most significant 32 bits are filled with zeros.
 @kotlin.internal.InlineOnly public inline fun toULong(): ULong = ULong(data.toLong() and
0xFFFF_FFFF)
 /** Converts this [UInt] value to [Float].
 The resulting value is the closest
`Float` to this `UInt` value.
 In case when this `UInt` value is exactly between two `Float`s,
the one with
zero at least significant bit of mantissa is selected.
 @kotlin.internal.InlineOnly public inline fun
toFloat(): Float = this.toDouble().toFloat()
 /** Converts this [UInt] value to [Double].
 The resulting `Double` value represents the same
numerical value as this `UInt`.
 @kotlin.internal.InlineOnly public inline fun toDouble(): Double =
uintToDouble(data)
 public override fun toString(): String = toLong().toString()
}
 /** Converts this

```

```

[Byte] value to [UInt].\n * If this value is positive, the resulting `UInt` value represents the same numerical value
as this `Byte`.\n * The least significant 8 bits of the resulting `UInt` value are the same as the bits of this `Byte`
value,\n * whereas the most significant 24 bits are filled with the sign bit of this value.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\
npublic inline fun Byte.toUInt(): UInt = UInt(this.toInt())\n/**\n * Converts this [Short] value to [UInt].\n * If
this value is positive, the resulting `UInt` value represents the same numerical
value as this `Short`.\n * The least significant 16 bits of the resulting `UInt` value are the same as the bits of this
`Short` value,\n * whereas the most significant 16 bits are filled with the sign bit of this value.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\
npublic inline fun Short.toUInt(): UInt = UInt(this.toInt())\n/**\n * Converts this [Int] value to [UInt].\n * If this
value is positive, the resulting `UInt` value represents the same numerical value as this `Int`.\n * The resulting
`UInt` value has the same binary representation as this `Int` value.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\
npublic inline fun Int.toUInt(): UInt = UInt(this)\n/**\n * Converts this [Long] value to [UInt].\n * If this value
is positive and less than or equals to [UInt.MAX_VALUE], the resulting `UInt` value represents\n * the same
numerical value
as this `Long`.\n * The resulting `UInt` value is represented by the least significant 32 bits of this `Long`
value.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\
npublic inline fun Long.toUInt(): UInt = UInt(this.toInt())\n/**\n * Converts this [Float] value to [UInt].\n * The
fractional part, if any, is rounded down towards zero.\n * Returns zero if this `Float` value is negative or `NaN`,
[UInt.MAX_VALUE] if it's bigger than `UInt.MAX_VALUE`.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\
npublic inline fun Float.toUInt(): UInt = doubleToUInt(this.toDouble())\n/**\n * Converts this [Double] value to
[UInt].\n * The fractional part, if any, is rounded down towards zero.\n * Returns zero if this `Double` value is
negative or `NaN`, [UInt.MAX_VALUE] if it's bigger than `UInt.MAX_VALUE`.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\
npublic
inline fun Double.toUInt(): UInt = doubleToUInt(this)\n",/*\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n *\n// Auto-generated file. DO NOT EDIT!\n\npackage kotlin\n\nimport
kotlin.experimental.*\nimport
kotlin.jvm.*\n\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@JvmInline\npu
blic value class UShort @PublishedApi internal constructor(@PublishedApi internal val data: Short) :
Comparable<UShort> {\n\n companion object {\n\n /**\n * A constant holding the minimum value an
instance of UShort can have.\n *\n public const val MIN_VALUE: UShort = UShort(0)\n\n /**\n
 * A constant holding the maximum value an instance of UShort can have.\n *\n public const val
MAX_VALUE: UShort = UShort(-1)\n\n /**\n * The number of bytes used to represent an instance of UShort in a binary form.\n *\n
 public const val SIZE_BYTES: Int = 2\n\n /**\n * The number of bits used to represent an instance of
UShort in a binary form.\n *\n public const val SIZE_BITS: Int = 16\n }\n\n /**\n * Compares this
value with the specified value for order.\n * Returns zero if this value is equal to the specified other value, a
negative number if it's less than other,\n * or a positive number if it's greater than other.\n *\n
 @kotlin.internal.InlineOnly\n public inline operator fun compareTo(other: UByte): Int =
this.toInt().compareTo(other.toInt())\n\n /**\n * Compares this value with the specified value for order.\n *
Returns zero if this value is equal to the specified other value, a negative number if it's less than other,\n * or a
positive number if it's greater than other.\n *\n @kotlin.internal.InlineOnly\n

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@Suppress("OVERRIDE_BY_INLINE")\n public override inline operator fun compareTo(other: UShort): Int
= this.toInt().compareTo(other.toInt())\n\n /**\n * Compares this value with the specified value for order.\n *
Returns zero if this value is equal to the specified other value, a negative number if it's less than other,\n * or a
positive number if it's greater than other.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun
compareTo(other: UInt): Int = this.toUInt().compareTo(other)\n\n /**\n * Compares this value with the
specified value for order.\n * Returns zero if this value is equal to the specified other value, a negative number if
it's less than other,\n * or a positive number if it's greater than other.\n */\n @kotlin.internal.InlineOnly\n
public inline operator fun compareTo(other: ULong): Int = this.toULong().compareTo(other)\n\n /** Adds the
other value to this value. */\n @kotlin.internal.InlineOnly\n
public inline operator fun plus(other: UByte): UInt = this.toUInt().plus(other.toUInt())\n\n /** Adds the other
value to this value. */\n @kotlin.internal.InlineOnly\n public inline operator fun plus(other: UShort): UInt =
this.toUInt().plus(other.toUInt())\n\n /** Adds the other value to this value. */\n @kotlin.internal.InlineOnly\n
public inline operator fun plus(other: UInt): UInt = this.toUInt().plus(other)\n\n /** Adds the other value to this
value. */\n @kotlin.internal.InlineOnly\n public inline operator fun plus(other: ULong): ULong =
this.toULong().plus(other)\n\n /** Subtracts the other value from this value. */\n @kotlin.internal.InlineOnly\n
public inline operator fun minus(other: UByte): UInt = this.toUInt().minus(other.toUInt())\n\n /** Subtracts the
other value from this value. */\n @kotlin.internal.InlineOnly\n public inline operator fun minus(other: UShort):
UInt = this.toUInt().minus(other.toUInt())\n\n /** Subtracts the other value from this value. */\n @kotlin.internal.InlineOnly\n public inline operator fun
minus(other: UInt): UInt = this.toUInt().minus(other)\n\n /** Subtracts the other value from this value. */\n
@kotlin.internal.InlineOnly\n public inline operator fun minus(other: ULong): ULong =
this.toULong().minus(other)\n\n /** Multiplies this value by the other value. */\n @kotlin.internal.InlineOnly\n
public inline operator fun times(other: UByte): UInt = this.toUInt().times(other.toUInt())\n\n /** Multiplies this
value by the other value. */\n @kotlin.internal.InlineOnly\n public inline operator fun times(other: UShort): UInt
= this.toUInt().times(other.toUInt())\n\n /** Multiplies this value by the other value. */\n
@kotlin.internal.InlineOnly\n public inline operator fun times(other: UInt): UInt = this.toUInt().times(other)\n\n
/** Multiplies this value by the other value. */\n @kotlin.internal.InlineOnly\n public inline operator
fun times(other: ULong): ULong = this.toULong().times(other)\n\n /** Divides this value by the other value,
truncating the result to an integer that is closer to zero. */\n @kotlin.internal.InlineOnly\n public inline operator
fun div(other: UByte): UInt = this.toUInt().div(other.toUInt())\n\n /** Divides this value by the other value,
truncating the result to an integer that is closer to zero. */\n @kotlin.internal.InlineOnly\n public inline operator
fun div(other: UShort): UInt = this.toUInt().div(other.toUInt())\n\n /** Divides this value by the other value,
truncating the result to an integer that is closer to zero. */\n @kotlin.internal.InlineOnly\n public inline operator
fun div(other: UInt): UInt = this.toUInt().div(other)\n\n /** Divides this value by the other value, truncating the
result to an integer that is closer to zero. */\n @kotlin.internal.InlineOnly\n public inline operator fun div(other:
ULong): ULong = this.toULong().div(other)\n\n /**\n * Calculates the remainder of truncating division of this value by the other value.\n * \n * The result
is always less than the divisor.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun rem(other:
UByte): UInt = this.toUInt().rem(other.toUInt())\n\n /**\n * Calculates the remainder of truncating division of
this value by the other value.\n * \n * The result is always less than the divisor.\n */\n
@kotlin.internal.InlineOnly\n public inline operator fun rem(other: UShort): UInt =
this.toUInt().rem(other.toUInt())\n\n /**\n * Calculates the remainder of truncating division of this value by the
other value.\n * \n * The result is always less than the divisor.\n */\n @kotlin.internal.InlineOnly\n public
inline operator fun rem(other: UInt): UInt = this.toUInt().rem(other)\n\n /**\n * Calculates the remainder of
truncating division of this value by the other value.\n * \n * The result
is always less than the divisor.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun rem(other:
ULong): ULong = this.toULong().rem(other)\n\n /**\n * Divides this value by the other value, flooring the
result to an integer that is closer to negative infinity.\n * \n * For unsigned types, the results of flooring division

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and truncating division are the same.\n * \n @kotlin.internal.InlineOnly\n public inline fun floorDiv(other:
UByte): UInt = this.toUInt().floorDiv(other.toUInt())\n /**\n * Divides this value by the other value, flooring
the result to an integer that is closer to negative infinity.\n * \n * For unsigned types, the results of flooring
division and truncating division are the same.\n * \n @kotlin.internal.InlineOnly\n public inline fun
floorDiv(other: UShort): UInt = this.toUInt().floorDiv(other.toUInt())\n /**\n * Divides this value by the other
value, flooring the result to an integer that is
closer to negative infinity.\n * \n * For unsigned types, the results of flooring division and truncating division
are the same.\n * \n @kotlin.internal.InlineOnly\n public inline fun floorDiv(other: UInt): UInt =
this.toUInt().floorDiv(other)\n /**\n * Divides this value by the other value, flooring the result to an integer that
is closer to negative infinity.\n * \n * For unsigned types, the results of flooring division and truncating division
are the same.\n * \n @kotlin.internal.InlineOnly\n public inline fun floorDiv(other: ULong): ULong =
this.toULong().floorDiv(other)\n\n /**\n * Calculates the remainder of flooring division of this value by the
other value.\n * \n * The result is always less than the divisor.\n * \n * For unsigned types, the remainders
of flooring division and truncating division are the same.\n * \n @kotlin.internal.InlineOnly\n public inline
fun mod(other: UByte): UByte = this.toUInt().mod(other.toUInt()).toUByte()\n\n /**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is
always less than the divisor.\n * \n * For unsigned types, the remainders of flooring division and truncating
division are the same.\n * \n @kotlin.internal.InlineOnly\n public inline fun mod(other: UShort): UShort =
this.toUInt().mod(other.toUInt()).toUShort()\n\n /**\n * Calculates the remainder of flooring division of this
value by the other value.\n * \n * The result is always less than the divisor.\n * \n * For unsigned types, the
remainders of flooring division and truncating division are the same.\n * \n @kotlin.internal.InlineOnly\n
public inline fun mod(other: UInt): UInt = this.toUInt().mod(other)\n\n /**\n * Calculates the remainder of
flooring division of this value by the other value.\n * \n * The result is always less than the divisor.\n * \n
*\n *
For unsigned types, the remainders of flooring division and truncating division are the same.\n * \n
@kotlin.internal.InlineOnly\n public inline fun mod(other: ULong): ULong = this.toULong().mod(other)\n\n\n
/**\n * Returns this value incremented by one.\n * \n * @sample samples.misc.Builtins.inc\n * \n
@kotlin.internal.InlineOnly\n public inline operator fun inc(): UShort = UShort(data.inc())\n\n\n /**\n *
Returns this value decremented by one.\n * \n * @sample samples.misc.Builtins.dec\n * \n
@kotlin.internal.InlineOnly\n public inline operator fun dec(): UShort = UShort(data.dec())\n\n\n /**\n * Creates a
range from this value to the specified [other] value. *\n * \n @kotlin.internal.InlineOnly\n public inline operator fun
rangeTo(other: UShort): UIntRange = UIntRange(this.toUInt(), other.toUInt())\n\n\n /**\n * Performs a bitwise AND
operation between the two values. *\n * \n @kotlin.internal.InlineOnly\n public inline infix fun
and(other: UShort): UShort = UShort(this.data and other.data)\n\n\n /**\n * Performs a bitwise OR operation between the
two values. *\n * \n @kotlin.internal.InlineOnly\n public inline infix fun or(other: UShort): UShort =
UShort(this.data or other.data)\n\n\n /**\n * Performs a bitwise XOR operation between the two values. *\n * \n
@kotlin.internal.InlineOnly\n public inline infix fun xor(other: UShort): UShort = UShort(this.data xor
other.data)\n\n\n /**\n * Inverts the bits in this value. *\n * \n @kotlin.internal.InlineOnly\n public inline fun inv():
UShort = UShort(data.inv())\n\n\n /**\n * Converts this [UShort] value to [Byte].\n * \n * If this value is less
than or equals to [Byte.MAX_VALUE], the resulting `Byte` value represents\n * the same numerical value as this
`UShort`.\n * \n * The resulting `Byte` value is represented by the least significant 8 bits of this `UShort`
value.\n * \n * Note that the resulting `Byte` value may be negative.\n * \n @kotlin.internal.InlineOnly\n
public inline fun toByte(): Byte = data.toByte()\n\n\n /**\n * Converts this [UShort] value to [Short].\n * \n *
If this value is less than or equals to [Short.MAX_VALUE], the resulting `Short` value represents\n * the same
numerical value as this `UShort`. Otherwise the result is negative.\n * \n * The resulting `Short` value has the
same binary representation as this `UShort` value.\n * \n @kotlin.internal.InlineOnly\n public inline fun
toShort(): Short = data\n\n\n /**\n * Converts this [UShort] value to [Int].\n * \n * The resulting `Int` value
represents the same numerical value as this `UShort`.\n * \n * The least significant 16 bits of the resulting `Int`

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value are the same as the bits of this `UShort` value,\n * whereas the most significant 16 bits are filled with
zeros.\n */\n @kotlin.internal.InlineOnly\n public inline fun toInt(): Int = data.toInt() and 0xFFFF\n /**\n * Converts this
[UShort] value to [Long].\n *\n * The resulting `Long` value represents the same numerical value as this
`UShort`.\n *\n * The least significant 16 bits of the resulting `Long` value are the same as the bits of this
`UShort` value,\n * whereas the most significant 48 bits are filled with zeros.\n */\n
@kotlin.internal.InlineOnly\n public inline fun toLong(): Long = data.toLong() and 0xFFFF\n\n /**\n *
Converts this [UShort] value to [UByte].\n *\n * If this value is less than or equals to [UByte.MAX_VALUE],
the resulting `UByte` value represents\n * the same numerical value as this `UShort`.\n *\n * The resulting
`UByte` value is represented by the least significant 8 bits of this `UShort` value.\n */\n
@kotlin.internal.InlineOnly\n public inline fun toUByte(): UByte = data.toUByte()\n\n /** Returns this value. */\n
@kotlin.internal.InlineOnly\n public inline fun toUShort(): UShort = this\n\n /**\n * Converts
this [UShort] value to [UInt].\n *\n * The resulting `UInt` value represents the same numerical value as this
`UShort`.\n *\n * The least significant 16 bits of the resulting `UInt` value are the same as the bits of this
`UShort` value,\n * whereas the most significant 16 bits are filled with zeros.\n */\n
@kotlin.internal.InlineOnly\n public inline fun toUInt(): UInt = UInt(data.toInt() and 0xFFFF)\n\n /**\n *
Converts this [UShort] value to [ULong].\n *\n * The resulting `ULong` value represents the same numerical
value as this `UShort`.\n *\n * The least significant 16 bits of the resulting `ULong` value are the same as the
bits of this `UShort` value,\n * whereas the most significant 48 bits are filled with zeros.\n */\n
@kotlin.internal.InlineOnly\n public inline fun toULong(): ULong = ULong(data.toLong() and 0xFFFF)\n\n
/**\n * Converts this [UShort] value to [Float].\n *\n * The resulting `Float`
value represents the same numerical value as this `UShort`.\n */\n @kotlin.internal.InlineOnly\n public inline
fun toFloat(): Float = this.toInt().toFloat()\n\n /**\n * Converts this [UShort] value to [Double].\n *\n * The
resulting `Double` value represents the same numerical value as this `UShort`.\n */\n
@kotlin.internal.InlineOnly\n public inline fun toDouble(): Double = this.toInt().toDouble()\n\n public override
fun toString(): String = toInt().toString()\n\n}\n\n/**\n * Converts this [Byte] value to [UShort].\n *\n * If this value
is positive, the resulting `UShort` value represents the same numerical value as this `Byte`.\n *\n * The least
significant 8 bits of the resulting `UShort` value are the same as the bits of this `Byte` value,\n * whereas the most
significant 8 bits are filled with the sign bit of this value.\n
*/\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
public inline fun
Byte.toUShort(): UShort = UShort(this.toShort())\n\n/**\n * Converts this [Short] value to [UShort].\n *\n * If this
value is positive, the resulting `UShort` value represents the same numerical value as this `Short`.\n *\n * The
resulting `UShort` value has the same binary representation as this `Short` value.\n
*/\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
public inline fun Short.toUShort(): UShort = UShort(this)\n\n/**\n * Converts this [Int] value to [UShort].\n *\n * If
this value is positive and less than or equals to [UShort.MAX_VALUE], the resulting `UShort` value represents\n *
the same numerical value as this `Int`.\n *\n * The resulting `UShort` value is represented by the least significant 16
bits of this `Int` value.\n
*/\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
public inline fun Int.toUShort(): UShort = UShort(this.toShort())\n\n/**\n * Converts this
[Long] value to [UShort].\n *\n * If this value is positive and less than or equals to [UShort.MAX_VALUE], the
resulting `UShort` value represents\n * the same numerical value as this `Long`.\n *\n * The resulting `UShort`
value is represented by the least significant 16 bits of this `Long` value.\n
*/\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
public inline fun Long.toUShort(): UShort = UShort(this.toShort())\n", "*/\n * Copyright 2010-2022 JetBrains s.r.o.
and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license
that can be found in the license/LICENSE.txt file.\n */\n\n// Auto-generated file. DO NOT EDIT!\n\npackage

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kotlin.ranges\n\n/**\n * A range of values of type `Char`.\n */\npublic class CharRange(start: Char, endInclusive: Char) : CharProgression(start, endInclusive, 1), ClosedRange<Char> {\n override val start: Char get() = first\n override val endInclusive: Char get() = last\n\n override fun contains(value: Char): Boolean = first <= value && value <= last\n\n /**\n * Checks whether the range is empty.\n *\n * The range is empty if its start value is greater than the end value.\n */\n override fun isEmpty(): Boolean = first > last\n\n override fun equals(other: Any?): Boolean =\n other is CharRange && (isEmpty() && other.isEmpty() ||\n first == other.first && last == other.last)\n\n override fun hashCode(): Int =\n if (isEmpty()) -1 else (31 * first.code + last.code)\n\n override fun toString(): String = \"$first..$last\"\n\n companion object {\n /** An empty range of values of type Char. */\n public val EMPTY: CharRange = CharRange(1.toChar(), 0.toChar())\n }\n}\n\n/**\n * A range of values of type `Int`.\n */\npublic class IntRange(start: Int, endInclusive: Int) : IntProgression(start, endInclusive, 1), ClosedRange<Int> {\n override val start: Int get() = first\n\n override val endInclusive: Int get() = last\n\n override fun contains(value: Int): Boolean = first <= value &&\n value <= last\n\n /**\n * Checks whether the range is empty.\n *\n * The range is empty if its start value is greater than the end value.\n */\n override fun isEmpty(): Boolean = first > last\n\n override fun equals(other: Any?): Boolean =\n other is IntRange && (isEmpty() && other.isEmpty() ||\n first == other.first && last == other.last)\n\n override fun hashCode(): Int =\n if (isEmpty()) -1 else (31 * first + last)\n\n override fun toString(): String = \"$first..$last\"\n\n companion object {\n /** An empty range of values of type Int. */\n public val EMPTY: IntRange = IntRange(1, 0)\n }\n}\n\n/**\n * A range of values of type `Long`.\n */\npublic class LongRange(start: Long, endInclusive: Long) : LongProgression(start, endInclusive, 1), ClosedRange<Long> {\n override val start: Long get() = first\n\n override val endInclusive: Long get() = last\n\n override fun contains(value: Long): Boolean = first <= value &&\n value <= last\n\n /**\n * Checks whether the range is empty.\n *\n * The range is empty if its start value is greater than the end value.\n */\n override fun isEmpty(): Boolean = first > last\n\n override fun equals(other: Any?): Boolean =\n other is LongRange && (isEmpty() && other.isEmpty() ||\n first == other.first && last == other.last)\n\n override fun hashCode(): Int =\n if (isEmpty()) -1 else (31 * (first xor (first ushr 32)) +\n (last xor (last ushr 32))).toInt()\n\n override fun toString(): String = \"$first..$last\"\n\n companion object {\n /** An empty range of values of type Long. */\n public val EMPTY: LongRange = LongRange(1, 0)\n }\n}\n\n"/>\n\n/* Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("CollectionsKt")\n@file:OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n\npackage kotlin.collections\n\nimport kotlin.contracts.*\nimport kotlin.random.Random\n\ninternal object EmptyIterator : ListIterator<Nothing> {\n override fun hasNext(): Boolean = false\n override fun hasPrevious(): Boolean = false\n override fun nextIndex(): Int = 0\n override fun previousIndex(): Int = -1\n override fun next(): Nothing = throw NoSuchElementException()\n override fun previous(): Nothing = throw NoSuchElementException()\n}\n\ninternal object EmptyList : List<Nothing>, Serializable, RandomAccess {\n private const val serialVersionUID: Long = -7390468764508069838L\n\n override fun equals(other: Any?): Boolean = other is List<*> && other.isEmpty()\n override fun hashCode(): Int = 1\n override fun toString(): String = "[]"\n\n override val size: Int get() = 0\n override fun isEmpty(): Boolean = true\n override fun contains(element: Nothing): Boolean = false\n override fun containsAll(elements: Collection<Nothing>): Boolean = elements.isEmpty()\n\n override fun get(index: Int): Nothing = throw IndexOutOfBoundsException("Empty list doesn't contain element at index $index.")\n override fun indexOf(element: Nothing): Int = -1\n override fun lastIndexOf(element: Nothing): Int = -1\n override fun iterator(): Iterator<Nothing> = EmptyIterator\n override fun listIterator(): ListIterator<Nothing> = EmptyIterator\n override fun listIterator(index: Int): ListIterator<Nothing> {\n if (index != 0) throw IndexOutOfBoundsException("Index: $index")\n return EmptyIterator\n }\n\n override fun subList(fromIndex: Int, toIndex: Int): List<Nothing> {\n if (fromIndex

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== 0 && toIndex == 0) return this\n throw IndexOutOfBoundsException("\nfromIndex:
$fromIndex, toIndex: $toIndex")\n }\n\n private fun readResolve(): Any = EmptyList()\n\n internal fun <T>
Array<out T>.asCollection(): Collection<T> = ArrayAsCollection(this, isVarargs = false)\n\n private class
ArrayAsCollection<T>(val values: Array<out T>, val isVarargs: Boolean) : Collection<T> {\n override val size:
Int get() = values.size\n override fun isEmpty(): Boolean = values.isEmpty()\n override fun contains(element:
T): Boolean = values.contains(element)\n override fun containsAll(elements: Collection<T>): Boolean =
elements.all { contains(it) }\n override fun iterator(): Iterator<T> = values.iterator()\n // override hidden toArray
implementation to prevent copying of values array\n public fun toArray(): Array<out Any?> =
values.copyToArrayOfAny(isVarargs)\n}\n\n /**\n * Returns an empty read-only list. The returned list is
serializable (JVM).\n * @sample samples.collections.Collections.Lists.emptyReadOnlyList\n */\n\n public fun <T>
emptyList(): List<T>
= EmptyList()\n\n /**\n * Returns a new read-only list of given elements. The returned list is serializable (JVM).\n *
@sample samples.collections.Collections.Lists.readOnlyList\n */\n\n public fun <T> listOf(vararg elements: T):
List<T> = if (elements.size > 0) elements.asList() else emptyList()\n\n /**\n * Returns an empty read-only list. The
returned list is serializable (JVM).\n * @sample samples.collections.Collections.Lists.emptyReadOnlyList\n */\n\n @kotlin.internal.InlineOnly\n public inline fun <T> listOf(): List<T> = emptyList()\n\n /**\n * Returns an empty
new [MutableList].\n * @sample samples.collections.Collections.Lists.emptyMutableList\n */\n\n @SinceKotlin("1.1")\n @kotlin.internal.InlineOnly\n public inline fun <T> mutableListOf(): MutableList<T> =
ArrayList()\n\n /**\n * Returns an empty new [ArrayList].\n * @sample
samples.collections.Collections.Lists.emptyArrayList\n */\n\n @SinceKotlin("1.1")\n @kotlin.internal.InlineOnly\n public inline fun <T> arrayListOf(): ArrayList<T>
= ArrayList()\n\n /**\n * Returns a new [MutableList] with the given elements.\n * @sample
samples.collections.Collections.Lists.mutableList\n */\n\n public fun <T> mutableListOf(vararg elements: T):
MutableList<T> =\n if (elements.size == 0) ArrayList() else ArrayList(ArrayAsCollection(elements, isVarargs =
true))\n\n /**\n * Returns a new [ArrayList] with the given elements.\n * @sample
samples.collections.Collections.Lists.arrayList\n */\n\n public fun <T> arrayListOf(vararg elements: T): ArrayList<T>
=\n if (elements.size == 0) ArrayList() else ArrayList(ArrayAsCollection(elements, isVarargs = true))\n\n /**\n * Returns a new read-only list either of single given element, if it is not null, or empty list if the element is null. The
returned list is serializable (JVM).\n * @sample samples.collections.Collections.Lists.listOfNotNull\n */\n\n public fun
<T : Any> listOfNotNull(element: T?): List<T> = if (element != null) listOf(element) else emptyList()\n\n /**\n * Returns a new read-only list
only of those given elements, that are not null. The returned list is serializable (JVM).\n * @sample
samples.collections.Collections.Lists.listOfNotNull\n */\n\n public fun <T : Any> listOfNotNull(vararg elements: T?):
List<T> = elements.filterNotNull()\n\n /**\n * Creates a new read-only list with the specified [size], where each
element is calculated by calling the specified\n * [init] function.\n * The function [init] is called for each list
element sequentially starting from the first one.\n * It should return the value for a list element given its index.\n */\n * @sample samples.collections.Collections.Lists.readOnlyListFromInitializer\n */\n\n @SinceKotlin("1.1")\n @kotlin.internal.InlineOnly\n public inline fun <T> List(size: Int, init: (index: Int) -> T):
List<T> = MutableList(size, init)\n\n /**\n * Creates a new mutable list with the specified [size], where each element
is calculated by calling the specified\n * [init] function.\n * The function [init] is called for each
list element sequentially starting from the first one.\n * It should return the value for a list element given its index.\n */\n * @sample samples.collections.Collections.Lists.mutableListFromInitializer\n */\n\n @SinceKotlin("1.1")\n @kotlin.internal.InlineOnly\n public inline fun <T> MutableList(size: Int, init: (index:
Int) -> T): MutableList<T> {\n val list = ArrayList<T>(size)\n repeat(size) { index -> list.add(init(index)) }\n return list\n}\n\n /**\n * Builds a new read-only [List] by populating a [MutableList] using the given
[builderAction]\n * and returning a read-only list with the same elements.\n * The list passed as a receiver to the
[builderAction] is valid only inside that function.\n * Using it outside of the function produces an unspecified
behavior.\n * The returned list is serializable (JVM).\n */\n * @sample

```

```

samples.collections.Builders.Lists.buildListSample\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
c
inline fun <E> buildList(@BuilderInference builderAction: MutableList<E>().->Unit): List<E> {\n contract {
callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE) }\n return
buildListInternal(builderAction)\n}\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\ninternal expect inline fun <E> buildListInternal(builderAction: MutableList<E>().->Unit): List<E>\n\n/**\n * Builds a
new read-only [List] by populating a [MutableList] using the given [builderAction]\n * and returning a read-only list
with the same elements.\n * The list passed as a receiver to the [builderAction] is valid only inside that
function.\n * Using it outside of the function produces an unspecified behavior.\n * The returned list is
serializable (JVM).\n * [capacity] is used to hint the expected number of elements added in the
[builderAction].\n * @throws IllegalArgumentException if the given [capacity] is negative.\n * @sample
samples.collections.Builders.Lists.buildListSampleWithCapacity\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
c inline fun <E> buildList(capacity: Int, @BuilderInference builderAction: MutableList<E>().->Unit): List<E> {\n
 contract { callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE) }\n return buildListInternal(capacity,
builderAction)\n}\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\ninternal expect inline
fun <E> buildListInternal(capacity: Int, builderAction: MutableList<E>().->Unit): List<E>\n\n/**\n * Returns an
[IntRange] of the valid indices for this collection.\n * @sample
samples.collections.Collections.Collections.indicesOfCollection\n * \npublic val Collection<*>.indices: IntRange\n
get() = 0..size - 1\n\n/**\n * Returns the index of the last item in the list or -1 if the list is empty.\n * \n * @sample
samples.collections.Collections.Lists.lastIndexOfList\n * \npublic val <T> List<T>.lastIndex:
Int\n get() = this.size - 1\n\n/**\n * Returns `true` if the collection is not empty.\n * @sample
samples.collections.Collections.Collections.collectionIsNotEmpty\n * \n@kotlin.internal.InlineOnly\npublic inline
fun <T> Collection<T>.isNotEmpty(): Boolean = !isEmpty()\n\n/**\n * Returns `true` if this nullable collection is
either null or empty.\n * @sample samples.collections.Collections.Collections.collectionIsNullOrEmpty\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun <T> Collection<T>?.isNullOrEmpty():
Boolean {\n contract {\n returns(false) implies (this@isNullOrEmpty != null)\n }\n\n return this == null ||
this.isEmpty()\n}\n\n/**\n * Returns this Collection if it's not `null` and the empty list otherwise.\n * @sample
samples.collections.Collections.Collections.collectionOrElse\n * \n@kotlin.internal.InlineOnly\npublic inline fun
<T> Collection<T>?.orElse(): Collection<T> = this ?: emptyList()\n\n/**\n * Returns this List if it's
not `null` and the empty list otherwise.\n * @sample samples.collections.Collections.Lists.listOrElse\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <T> List<T>?.orElse(): List<T> = this ?: emptyList()\n\n/**\n * Returns this collection if it's not empty\n * or the result of calling [defaultValue] function if the collection is
empty.\n * @sample samples.collections.Collections.Collections.collectionIfEmpty\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun <C, R> C.ifEmpty(defaultValue: () ->
R): R where C : Collection<*>, C : R =\n if (isEmpty()) defaultValue() else this\n\n\n/**\n * Checks if all
elements in the specified collection are contained in this collection.\n * \n * Allows to overcome type-safety
restriction of `containsAll` that requires to pass a collection of type `Collection<E>`.\n * @sample
samples.collections.Collections.Collections.collectionContainsAll\n
*\n@Suppress("EXTENSION_SHADOWED_BY_MEMBER") // false warning, extension
takes precedence in some cases\n@kotlin.internal.InlineOnly\npublic inline fun <@kotlin.internal.OnlyInputTypes
T> Collection<T>.containsAll(elements: Collection<T>): Boolean = this.containsAll(elements)\n\n\n/**\n *
Returns a new list with the elements of this list randomly shuffled\n * using the specified [random] instance as the
source of randomness.\n * \n@SinceKotlin("1.3")\npublic fun <T> Iterable<T>.shuffled(random: Random):
List<T> = toMutableList().apply { shuffle(random) }\n\n\ninternal fun <T> List<T>.optimizeReadOnlyList() =
when (size) {\n 0 -> emptyList()\n 1 -> listOf(this[0])\n else -> this\n}\n\n\n/**\n * Searches this list or its range
for the provided [element] using the binary search algorithm.\n * The list is expected to be sorted into ascending

```



order according to the Comparable natural ordering of its elements,\n \* otherwise the result is undefined.\n \*\n \* If the list contains multiple elements equal to the specified [element], there is no guarantee which one will be found.\n \*\n \* `null` value is considered to be less than any non-null value.\n \*\n \* @return the index of the element, if it is contained in the list within the specified range;\n \* otherwise, the inverted insertion point `(-insertion point - 1)`.\n \* The insertion point is defined as the index at which the element should be inserted,\n \* so that the list (or the specified subrange of list) still remains sorted.\n \* @sample samples.collections.Collections.Lists.binarySearchOnComparable\n \* @sample samples.collections.Collections.Lists.binarySearchWithBoundaries\n \*/\npublic fun <T : Comparable<T>> List<T>.binarySearch(element: T?, fromIndex: Int = 0, toIndex: Int = size): Int {\n rangeCheck(size, fromIndex, toIndex)\n var low = fromIndex\n var high = toIndex - 1\n while (low <= high) {\n val mid = (low + high).ushr(1) // safe from overflows\n val midVal = get(mid)\n val cmp = compareValues(midVal, element)\n if (cmp < 0)\n low = mid + 1\n else if (cmp > 0)\n high = mid - 1\n else\n return mid // key found\n }\n return -(low + 1) // key not found\n}\n\n/\*\*\n \* Searches this list or its range for the provided [element] using the binary search algorithm.\n \* The list is expected to be sorted into ascending order according to the specified [comparator],\n \* otherwise the result is undefined.\n \*\n \* If the list contains multiple elements equal to the specified [element], there is no guarantee which one will be found.\n \*\n \* `null` value is considered to be less than any non-null value.\n \*\n \* @return the index of the element, if it is contained in the list within the specified range;\n \* otherwise, the inverted insertion point `(-insertion point - 1)`.\n \* The insertion point is defined as the index at which the element should be inserted,\n \* so that the list (or the specified subrange of list) still remains sorted according to the specified [comparator].\n \*\n \* @sample samples.collections.Collections.Lists.binarySearchWithComparator\n \*/\npublic fun <T> List<T>.binarySearch(element: T, comparator: Comparator<in T>, fromIndex: Int = 0, toIndex: Int = size): Int {\n rangeCheck(size, fromIndex, toIndex)\n var low = fromIndex\n var high = toIndex - 1\n while (low <= high) {\n val mid = (low + high).ushr(1) // safe from overflows\n val midVal = get(mid)\n val cmp = comparator.compare(midVal, element)\n if (cmp < 0)\n low = mid + 1\n else if (cmp > 0)\n high = mid - 1\n else\n return mid // key found\n }\n return -(low + 1) // key not found\n}\n\n/\*\*\n \* Searches this list or its range for an element having the key returned by the specified [selector] function\n \* equal to the provided [key] value using the binary search algorithm.\n \* The list is expected to be sorted into ascending order according to the Comparable natural ordering of keys of its elements.\n \* otherwise the result is undefined.\n \*\n \* If the list contains multiple elements with the specified [key], there is no guarantee which one will be found.\n \*\n \* `null` value is considered to be less than any non-null value.\n \*\n \* @return the index of the element with the specified [key], if it is contained in the list within the specified range;\n \* otherwise, the inverted insertion point `(-insertion point - 1)`.\n \* The insertion point is defined as the index at which the element should be inserted,\n \* so that the list (or the specified subrange of list) still remains sorted.\n \* @sample samples.collections.Collections.Lists.binarySearchByKey\n \*/\npublic inline fun <T, K : Comparable<K>> List<T>.binarySearchBy(\n key: K?,\n fromIndex: Int = 0,\n toIndex: Int = size,\n crossinline selector: (T) -> K?): Int =\n binarySearch(fromIndex, toIndex) { compareValues(selector(it), key) }\n}\n\n// do not introduce this overload --- too rare\npublic fun <T, K> List<T>.binarySearchBy(key: K, comparator: Comparator<K>, fromIndex: Int = 0, toIndex: Int = size(), selector: (T) -> K): Int =\n binarySearch(fromIndex, toIndex) { comparator.compare(selector(it), key) }\n}\n\n/\*\*\n \* Searches this list or its range for an element for which the given [comparison] function returns zero using the binary search algorithm.\n \*\n \* The list is expected to be sorted so that the signs of the [comparison] function's return values ascend on the list elements,\n \* i.e. negative values come before zero and zeroes come before positive values.\n \*\n \* Otherwise, the result is undefined.\n \*\n \* If the list contains multiple elements for which [comparison] returns zero, there is no guarantee which one will be found.\n \*\n \* @param comparison function that returns zero when called on the list element being searched.\n \* On the elements coming before the target element, the function must return negative values;\n \* on the elements coming after the target

element, the function must return positive values.\n \* @return the index of the found element, if it is contained in the list within the specified range;\n \* otherwise, the inverted insertion point `(-insertion point - 1)`.\n \* The insertion point is defined as the index at which the element should be inserted,\n \* so that the list (or the specified subrange of list) still remains sorted.\n \* @sample

```

samples.collections.Collections.Lists.binarySearchWithComparisonFunction\n * ^\npublic fun <T>
List<T>.binarySearch(fromIndex: Int = 0, toIndex: Int = size, comparison: (T) -> Int): Int {
 rangeCheck(size, fromIndex, toIndex)\n var low = fromIndex\n var high = toIndex - 1\n while (low <= high) {
 val mid = (low + high).ushr(1) // safe from overflows\n val midVal = get(mid)\n val cmp = comparison(midVal)\n if (cmp < 0) low = mid + 1\n else if (cmp > 0) high = mid - 1\n else return mid //
 key found\n }\n return -(low + 1) // key not found\n}\n\n/**\n * Checks that `from` and `to` are in the range of [0..size] and throws an appropriate exception, if they aren't.\n * ^\nprivate fun rangeCheck(size: Int, fromIndex: Int, toIndex: Int) {
 when {
 fromIndex > toIndex -> throw IllegalArgumentException("\nfromIndex ($fromIndex) is greater than toIndex ($toIndex).")
 fromIndex < 0 -> throw IndexOutOfBoundsException("\nfromIndex ($fromIndex) is less than zero.")
 toIndex > size -> throw IndexOutOfBoundsException("\ntoIndex ($toIndex) is greater than size ($size).")
 }\n}\n\n@PublishedApi\n@SinceKotlin("1.3")\ninternal expect fun checkIndexOverflow(index: Int): Int\n\n@PublishedApi\n@SinceKotlin("1.3")\ninternal expect fun checkCountOverflow(count: Int): Int\n\n@PublishedApi\n@SinceKotlin("1.3")\ninternal fun throwIndexOverflow() {
 throw ArithmeticException("Index overflow has happened.")
}\n\n@PublishedApi\n@SinceKotlin("1.3")\ninternal fun throwCountOverflow() {
 throw ArithmeticException("Count overflow has happened.")
}\n\n"/**\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n * ^\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("MapsKt")\n@file:OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n\npackage kotlin.collections\n\nimport kotlin.contracts.*\n\nprivate object EmptyMap : Map<Any?, Nothing>, Serializable {
 private const val serialVersionUID: Long = 8246714829545688274\n override fun equals(other: Any?): Boolean = other is Map<*, *> && other.isEmpty()\n override fun hashCode(): Int = 0\n override fun toString(): String = "{}"\n override val size: Int get() = 0\n override fun isEmpty(): Boolean = true\n override fun containsKey(key: Any?): Boolean = false\n override fun containsValue(value: Nothing): Boolean = false\n override fun get(key: Any?): Nothing? = null\n override val entries: Set<Map.Entry<Any?, Nothing>> get() = EmptySet\n override val keys: Set<Any?> get() = EmptySet\n override val values: Collection<Nothing> get() = EmptyList\n private fun readResolve(): Any = EmptyMap\n}\n\n/**\n * Returns an empty read-only map of specified type.\n * The returned map is serializable (JVM).\n * @sample samples.collections.Maps.Instantiation.emptyReadOnlyMap\n * ^\npublic fun <K, V> emptyMap(): Map<K, V> = @Suppress("UNCHECKED_CAST") (EmptyMap as Map<K, V>)\n\n/**\n * Returns a new read-only map with the specified contents, given as a list of pairs where the first value is the key and the second is the value.\n * If multiple pairs have the same key, the resulting map will contain the value from the last of those pairs.\n * Entries of the map are iterated in the order they were specified.\n * The returned map is serializable (JVM).\n * ^\n * @sample samples.collections.Maps.Instantiation.mapFromPairs\n * ^\npublic fun <K, V> mapOf(vararg pairs: Pair<K, V>): Map<K, V> =\n if (pairs.size > 0) pairs.toMap(LinkedHashMap(mapCapacity(pairs.size))) else emptyMap()\n\n/**\n * Returns an empty read-only map.\n * The returned map is serializable (JVM).\n * ^\n * @sample samples.collections.Maps.Instantiation.emptyReadOnlyMap\n * ^\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> mapOf(): Map<K, V> = emptyMap()\n\n/**\n * Returns an empty new [MutableMap].\n * The returned map preserves the entry iteration order.\n * @sample samples.collections.Maps.Instantiation.emptyMutableMap\n * ^\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> mutableMapOf():

```

`MutableMap<K, V> = LinkedHashMap()`  
Returns a new [MutableMap] with the specified contents, given as a list of pairs where the first component is the key and the second is the value. If multiple pairs have the same key, the resulting map will contain the value from the last of those pairs. Entries of the map are iterated in the order they were specified.

@sample samples.collections.Maps.Instantiation.mutableMapFromPairs  
@sample samples.collections.Maps.Instantiation.emptyMutableMap  
`public fun <K, V> mutableMapOf(vararg pairs: Pair<K, V>): MutableMap<K, V> = LinkedHashMap<K, V>(mapCapacity(pairs.size)).apply { putAll(pairs) }`  
Returns an empty new [HashMap].

@sample samples.collections.Maps.Instantiation.emptyHashMap  
`public inline fun <K, V> hashMapOf(): HashMap<K, V> = HashMap<K, V>()`  
Returns a new [HashMap] with the specified contents, given as a list of pairs where the first component is the key and the second is the value.

@sample samples.collections.Maps.Instantiation.hashMapFromPairs  
`public fun <K, V> hashMapOf(vararg pairs: Pair<K, V>): HashMap<K, V> = HashMap<K, V>(mapCapacity(pairs.size)).apply { putAll(pairs) }`  
Returns an empty new [LinkedHashMap].

@sample samples.collections.Maps.Instantiation.linkedMapFromPairs  
`public inline fun <K, V> linkedMapOf(): LinkedHashMap<K, V> = LinkedHashMap<K, V>()`  
Returns a new [LinkedHashMap] with the specified contents, given as a list of pairs where the first component is the key and the second is the value. If multiple pairs have the same key, the resulting map will contain the value from the last of those pairs. Entries of the map are iterated in the order they were specified.

@sample samples.collections.Maps.Instantiation.linkedMapFromPairs  
`public fun <K, V> linkedMapOf(vararg pairs: Pair<K, V>): LinkedHashMap<K, V> = pairs.toMap(LinkedHashMap(mapCapacity(pairs.size)))`  
Builds a new read-only [Map] by populating a [MutableMap] using the given [builderAction] and returning a read-only map with the same key-value pairs. The map passed as a receiver to the [builderAction] is valid only inside that function. Using it outside of the function produces an unspecified behavior. Entries of the map are iterated in the order they were added by the [builderAction]. The returned map is serializable (JVM).

@sample samples.collections.Builders.Maps.buildMapSample  
`public inline fun <K, V> buildMap(@BuilderInference builderAction: MutableMap<K, V>() -> Unit): Map<K, V> { contract { callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE) } return buildMapInternal(builderAction) }`  
Builds a new read-only [Map] by populating a [MutableMap] using the given [builderAction] and returning a read-only map with the same key-value pairs. The map passed as a receiver to the [builderAction] is valid only inside that function. Using it outside of the function produces an unspecified behavior. [capacity] is used to hint the expected number of pairs added in the [builderAction]. Entries of the map are iterated in the order they were added by the [builderAction]. The returned map is serializable (JVM). @throws IllegalArgumentException if the given [capacity] is negative.

@sample samples.collections.Builders.Maps.buildMapSample  
`public inline fun <K, V> buildMap(capacity: Int, @BuilderInference builderAction: MutableMap<K, V>() -> Unit): Map<K, V> { contract { callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE) } return buildMapInternal(capacity, builderAction) }`  
Builds a new read-only [Map] by populating a [MutableMap] using the given [builderAction] and returning a read-only map with the same key-value pairs. The map passed as a receiver to the [builderAction] is valid only inside that function. Using it outside of the function produces an unspecified behavior. [capacity] is used to hint the expected number of pairs added in the [builderAction]. Entries of the map are iterated in the order they were added by the [builderAction]. The returned map is serializable (JVM). @throws IllegalArgumentException if the given [capacity] is negative.

@sample samples.collections.Builders.Maps.buildMapSample  
`public inline fun <K, V> buildMapInternal(capacity: Int, builderAction: MutableMap<K, V>() -> Unit): Map<K, V>`  
Calculate the initial capacity of a map.

```

mapCapacity(expectedSize: Int): Int\n\n/**\n * Returns `true` if this map is not empty.\n * @sample
samples.collections.Maps.Usage.mapIsNotEmpty\n */\n@kotlin.internal.InlineOnly\npublic inline fun <K, V>
Map<out K, V>.isEmpty(): Boolean = !isEmpty()\n\n/**\n * Returns `true` if this nullable map is either null or
empty.\n * @sample samples.collections.Maps.Usage.mapIsNullOrEmpty\n
*/\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K,
V>?.isNullOrEmpty(): Boolean {\n contract {\n returns(false) implies (this@isNullOrEmpty != null)\n }\n\n return this == null || isEmpty()\n}\n\n/**\n * Returns the [Map] if its not `null`, or the empty [Map] otherwise.\n
*/\n * @sample samples.collections.Maps.Usage.mapOrElse\n */\n@kotlin.internal.InlineOnly\npublic
inline fun <K, V> Map<K, V>?.orElse(): Map<K, V> = this ?: emptyMap()\n\n/**\n * Returns this map if it's not
empty\n * or the result of calling [defaultValue] function if the map is empty.\n * @sample
samples.collections.Maps.Usage.mapIfEmpty\n */\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic
inline fun <M, R> M.ifEmpty(defaultValue: () -> R): R where M : Map<*, *>, M : R =\n if (isEmpty())
defaultValue() else this\n\n/**\n * Checks if the map contains the given key.\n * This method allows to use the
`x` in map` syntax for checking whether an object is contained in the map.\n * @sample
samples.collections.Maps.Usage.containsKey\n */\n@kotlin.internal.InlineOnly\npublic inline operator fun
<@kotlin.internal.OnlyInputTypes K, V> Map<out K, V>.contains(key: K): Boolean = containsKey(key)\n\n/**\n *
Returns the value corresponding to the given [key], or `null` if such a key is not present in the map.\n
*/\n@kotlin.internal.InlineOnly\npublic
inline operator fun <@kotlin.internal.OnlyInputTypes K, V> Map<out K, V>.get(key: K): V? =\n @Suppress("UNCHECKED_CAST") (this as Map<K, V>).get(key)\n\n/**\n * Allows to use the index operator
for storing values in a mutable map.\n */\n@kotlin.internal.InlineOnly\npublic inline operator fun <K, V>
MutableMap<K, V>.set(key: K, value: V): Unit {\n put(key, value)\n}\n\n/**\n * Returns `true` if the map
contains the specified [key].\n * @sample\n */\n * Allows to overcome type-safety restriction of `containsKey` that requires to
pass a key of type `K`.\n */\n@kotlin.internal.InlineOnly\npublic inline fun <@kotlin.internal.OnlyInputTypes K>
Map<out K, *>.containsKey(key: K): Boolean =\n @Suppress("UNCHECKED_CAST") (this as Map<K,
*>).containsKey(key)\n\n/**\n * Returns `true` if the map maps one or more keys to the specified [value].\n *
@sample\n */\n * Allows to overcome type-safety restriction of `containsValue` that requires to pass a value of type `V`.\n
*/\n@sample samples.collections.Maps.Usage.containsValue\n
*/\n@Suppress("EXTENSION_SHADOWED_BY_MEMBER") // false warning, extension takes precedence in
some cases\n@kotlin.internal.InlineOnly\npublic inline fun <K, @kotlin.internal.OnlyInputTypes V> Map<K,
V>.containsValue(value: V): Boolean = this.containsValue(value)\n\n/**\n * Removes the specified key and its
corresponding value from this map.\n * @return the previous value associated with the key, or `null` if the key
was not present in the map.\n * Allows to overcome type-safety restriction of `remove` that requires to pass a key
of type `K`.\n */\n@kotlin.internal.InlineOnly\npublic inline fun <@kotlin.internal.OnlyInputTypes K, V>
MutableMap<out K, V>.remove(key: K): V? =\n @Suppress("UNCHECKED_CAST") (this as MutableMap<K,
V>).remove(key)\n\n/**\n * Returns the key component of the map entry.\n * This method allows to use
destructuring declarations when working with maps, for example:\n * ```\n * for ((key, value) in map) {\n *
// do something with the key and the value\n * }\n * ```\n */\n@kotlin.internal.InlineOnly\npublic inline operator
fun <K, V> Map.Entry<K, V>.component1(): K = key\n\n/**\n * Returns the value component of the map entry.\n
*/\n * This method allows to use destructuring declarations when working with maps, for example:\n * ```\n *
for ((key, value) in map) {\n * // do something with the key and the value\n * }\n * ```\n
*/\n@kotlin.internal.InlineOnly\npublic inline operator fun <K, V> Map.Entry<K, V>.component2(): V =
value\n\n/**\n * Converts entry to [Pair] with key being first component and value being second.\n
*/\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map.Entry<K, V>.toPair(): Pair<K, V> = Pair(key,
value)\n\n/**\n * Returns the value for the given key, or the result of the [defaultValue] function if there was no
entry for the given key.\n * @sample samples.collections.Maps.Usage.getOrElse\n
*/\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<K,

```

```

V>.getOrElse(key: K, defaultValue: () -> V): V = get(key) ?: defaultValue()\n\n\ninternal inline fun <K, V>
Map<K, V>.getOrElseNullable(key: K, defaultValue: () -> V): V {\n val value = get(key)\n if (value == null
&& !containsKey(key)) {\n return defaultValue()\n } else {\n @Suppress("UNCHECKED_CAST")\n return value as V\n }\n}\n\n/**\n * Returns the value for the given [key] or throws an exception if there is no
such key in the map.\n * If the map was created by [withDefault], resorts to its `defaultValue` provider
function\n * instead of throwing an exception.\n * @throws NoSuchElementException when the map doesn't
contain a value for the specified key and\n * no implicit default value was provided for that map.\n
*/\n@SinceKotlin("1.1")\npublic fun <K, V> Map<K, V>.getValue(key: K): V =
getOrImplicitDefault(key)\n\n/**\n * Returns the value for the given key. If the key is not found in the map, calls
the [defaultValue] function,\n * puts
its result into the map under the given key and returns it.\n * Note that the operation is not guaranteed to be
atomic if the map is being modified concurrently.\n * @sample samples.collections.Maps.Usage.getOrPut\n
*/\npublic inline fun <K, V> MutableMap<K, V>.getOrPut(key: K, defaultValue: () -> V): V {\n val value =
get(key)\n return if (value == null) {\n val answer = defaultValue()\n put(key, answer)\n answer\n }
else {\n value\n }\n}\n\n/**\n * Returns an [Iterator] over the entries in the [Map].\n * @sample
samples.collections.Maps.Usage.forOverEntries\n */\n@kotlin.internal.InlineOnly\npublic inline operator fun <K,
V> Map<out K, V>.iterator(): Iterator<Map.Entry<K, V>> = entries.iterator()\n\n/**\n * Returns a
[MutableIterator] over the mutable entries in the [MutableMap].\n */\n
*/\n@kotlin.jvm.JvmName("mutableIterator")\n@kotlin.internal.InlineOnly\npublic inline operator fun <K, V>
MutableMap<K, V>.iterator(): MutableIterator<MutableMap.MutableEntry<K,
V>> = entries.iterator()\n\n/**\n * Populates the given [destination] map with entries having the keys of this map
and the values obtained\n * by applying the [transform] function to each entry in this [Map].\n */\npublic inline fun
<K, V, R, M : MutableMap<in K, in R>> Map<out K, V>.mapValuesTo(destination: M, transform: (Map.Entry<K,
V>) -> R): M {\n return entries.associateByTo(destination, { it.key }, transform)\n}\n\n/**\n * Populates the given
[destination] map with entries having the keys obtained\n * by applying the [transform] function to each entry in this
[Map] and the values of this map.\n * In case if any two entries are mapped to the equal keys, the value of the
latter one will overwrite\n * the value associated with the former one.\n */\npublic inline fun <K, V, R, M :
MutableMap<in R, in V>> Map<out K, V>.mapKeysTo(destination: M, transform: (Map.Entry<K, V>) -> R): M
{\n return entries.associateByTo(destination, transform, {
it.value })\n}\n\n/**\n * Puts all the given [pairs] into this [MutableMap] with the first component in the pair being
the key and the second the value.\n */\npublic fun <K, V> MutableMap<in K, in V>.putAll(pairs: Array<out
Pair<K, V>>): Unit {\n for ((key, value) in pairs) {\n put(key, value)\n }\n}\n\n/**\n * Puts all the elements
of the given collection into this [MutableMap] with the first component in the pair being the key and the second the
value.\n */\npublic fun <K, V> MutableMap<in K, in V>.putAll(pairs: Iterable<Pair<K, V>>): Unit {\n for ((key,
value) in pairs) {\n put(key, value)\n }\n}\n\n/**\n * Puts all the elements of the given sequence into this
[MutableMap] with the first component in the pair being the key and the second the value.\n */\npublic fun <K, V>
MutableMap<in K, in V>.putAll(pairs: Sequence<Pair<K, V>>): Unit {\n for ((key, value) in pairs) {\n
put(key, value)\n }\n}\n\n/**\n * Returns a new map with entries having the
keys of this map and the values obtained by applying the [transform]\n * function to each entry in this [Map].\n *
The returned map preserves the entry iteration order of the original map.\n * @sample
samples.collections.Maps.Transformations.mapValues\n */\npublic inline fun <K, V, R> Map<out K,
V>.mapValues(transform: (Map.Entry<K, V>) -> R): Map<K, R> {\n return mapValuesTo(LinkedHashMap<K,
R>(mapCapacity(size)), transform) // .optimizeReadOnlyMap()\n}\n\n/**\n * Returns a new Map with entries
having the keys obtained by applying the [transform] function to each entry in this\n * [Map] and the values of this
map.\n * In case if any two entries are mapped to the equal keys, the value of the latter one will overwrite\n * the
value associated with the former one.\n * The returned map preserves the entry iteration order of the original
map.\n * @sample samples.collections.Maps.Transformations.mapKeys\n */\npublic inline fun <K, V, R>
Map<out K, V>.mapKeys(transform:

```

```

(Map.Entry<K, V> -> R): Map<R, V> {\n return mapKeysTo(LinkedHashMap<R, V>(mapCapacity(size)),
transform) // .optimizeReadOnlyMap()\n}\n\n/**\n * Returns a map containing all key-value pairs with keys
matching the given [predicate].\n *\n * The returned map preserves the entry iteration order of the original map.\n *\n * @sample samples.collections.Maps.Filtering.filterKeys\n */\npublic inline fun <K, V> Map<out K,
V>.filterKeys(predicate: (K) -> Boolean): Map<K, V> {\n val result = LinkedHashMap<K, V>()\n for (entry in
this) {\n if (predicate(entry.key)) {\n result.put(entry.key, entry.value)\n }\n }\n return
result\n}\n\n/**\n * Returns a map containing all key-value pairs with values matching the given [predicate].\n *\n * The returned map preserves the entry iteration order of the original map.\n *\n * @sample
samples.collections.Maps.Filtering.filterValues\n */\npublic inline fun <K, V> Map<out K,
V>.filterValues(predicate: (V) -> Boolean): Map<K,
V> {\n val result = LinkedHashMap<K, V>()\n for (entry in this) {\n if (predicate(entry.value)) {\n
result.put(entry.key, entry.value)\n }\n }\n return result\n}\n\n/**\n * Appends all entries matching the
given [predicate] into the mutable map given as [destination] parameter.\n *\n * @return the destination map.\n *\n * @sample samples.collections.Maps.Filtering.filterTo\n */\npublic inline fun <K, V, M : MutableMap<in K, in V>>
Map<out K, V>.filterTo(destination: M, predicate: (Map.Entry<K, V>) -> Boolean): M {\n for (element in this)
{\n if (predicate(element)) {\n destination.put(element.key, element.value)\n }\n }\n return
destination\n}\n\n/**\n * Returns a new map containing all key-value pairs matching the given [predicate].\n *\n * The returned map preserves the entry iteration order of the original map.\n *\n * @sample
samples.collections.Maps.Filtering.filter\n */\npublic inline fun <K, V> Map<out K, V>.filter(predicate:
(Map.Entry<K, V>) -> Boolean): Map<K, V> {\n return filterTo(LinkedHashMap<K, V>(),
predicate)\n}\n\n/**\n * Appends all entries not matching the given [predicate] into the given [destination].\n *\n * @return the destination map.\n *\n * @sample samples.collections.Maps.Filtering.filterNotTo\n */\npublic inline fun
<K, V, M : MutableMap<in K, in V>> Map<out K, V>.filterNotTo(destination: M, predicate: (Map.Entry<K, V>) -
> Boolean): M {\n for (element in this) {\n if (!predicate(element)) {\n destination.put(element.key,
element.value)\n }\n }\n return destination\n}\n\n/**\n * Returns a new map containing all key-value pairs
not matching the given [predicate].\n *\n * The returned map preserves the entry iteration order of the original
map.\n *\n * @sample samples.collections.Maps.Filtering.filterNot\n */\npublic inline fun <K, V> Map<out K,
V>.filterNot(predicate: (Map.Entry<K, V>) -> Boolean): Map<K, V> {\n return filterNotTo(LinkedHashMap<K,
V>(), predicate)\n}\n\n/**\n * Returns a new map containing all key-value pairs from the given collection of
pairs.\n *\n * The returned map preserves the entry iteration order of the original collection.\n *\n * If any of two pairs
would have the same key the last one gets added to the map.\n *\n */\npublic fun <K, V> Iterable<Pair<K,
V>>.toMap(): Map<K, V> {\n if (this is Collection) {\n return when (size) {\n 0 -> emptyMap()\n
1 -> mapOf(if (this is List) this[0] else iterator().next())\n else -> toMap(LinkedHashMap<K,
V>(mapCapacity(size)))\n }\n }\n return toMap(LinkedHashMap<K,
V>().optimizeReadOnlyMap())\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value
pairs from the given collection of pairs.\n *\n */\npublic fun <K, V, M : MutableMap<in K, in V>> Iterable<Pair<K,
V>>.toMap(destination: M): M =\n destination.apply { putAll(this@toMap) }\n}\n\n/**\n * Returns a new map
containing all key-value
pairs from the given array of pairs.\n *\n * The returned map preserves the entry iteration order of the original
array.\n *\n * If any of two pairs would have the same key the last one gets added to the map.\n *\n */\npublic fun <K, V>
Array<out Pair<K, V>>.toMap(): Map<K, V> = when (size) {\n 0 -> emptyMap()\n 1 -> mapOf(this[0])\n else
-> toMap(LinkedHashMap<K, V>(mapCapacity(size)))\n}\n\n/**\n * Populates and returns the [destination]
mutable map with key-value pairs from the given array of pairs.\n *\n */\npublic fun <K, V, M : MutableMap<in K, in
V>> Array<out Pair<K, V>>.toMap(destination: M): M =\n destination.apply { putAll(this@toMap) }\n}\n\n/**\n * Returns a new map containing all key-value pairs from the given sequence of pairs.\n *\n * The returned map
preserves the entry iteration order of the original sequence.\n *\n * If any of two pairs would have the same key the last
one gets added to the map.\n *\n */\npublic fun <K, V> Sequence<Pair<K, V>>.toMap(): Map<K, V> =
toMap(LinkedHashMap<K,

```

`V>().optimizeReadOnlyMap()` Populates and returns the [destination] mutable map with key-value pairs from the given sequence of pairs.

```

 *^public fun <K, V, M : MutableMap<in K, in V>> Sequence<Pair<K, V>>.toMap(destination: M): M =
 destination.apply { putAll(this@toMap) }

```

Returns a new read-only map containing all key-value pairs from the original map. The returned map preserves the entry iteration order of the original map.

```

 *^@SinceKotlin("1.1")^public fun <K, V> Map<out K, V>.toMap(): Map<K, V> =
 when (size) {
 0 -> emptyMap()
 1 -> toSingletonMap()
 else -> toMutableMap()
 }

```

Returns a new mutable map containing all key-value pairs from the original map. The returned map preserves the entry iteration order of the original map.

```

 *^@SinceKotlin("1.1")^public fun <K, V> Map<out K, V>.toMutableMap(): MutableMap<K, V> =
 LinkedHashMap(this)

```

Populates and returns the [destination] mutable map with key-value pairs from the given map.
 

```

 *^@SinceKotlin("1.1")^public fun <K, V, M : MutableMap<in K, in V>> Map<out K, V>.toMap(destination: M): M =
 destination.apply { putAll(this@toMap) }

```

Creates a new read-only map by replacing or adding an entry to this map from a given key-value [pair]. The returned map preserves the entry iteration order of the original map. The [pair] is iterated in the end if it has a unique key.

```

 *^public operator fun <K, V> Map<out K, V>.plus(pair: Pair<K, V>): Map<K, V> =
 if (this.isEmpty()) mapOf(pair) else LinkedHashMap(this).apply { put(pair.first, pair.second) }

```

Creates a new read-only map by replacing or adding entries to this map from a given collection of key-value [pairs]. The returned map preserves the entry iteration order of the original map. Those [pairs] with unique keys are iterated in the end in the order of [pairs] collection.

```

 *^public operator fun <K, V> Map<out K, V>.plus(pairs: Iterable<Pair<K, V>>): Map<K, V> =
 if (this.isEmpty()) pairs.toMap() else LinkedHashMap(this).apply { putAll(pairs) }

```

Creates a new read-only map by replacing or adding entries to this map from a given array of key-value [pairs]. The returned map preserves the entry iteration order of the original map. Those [pairs] with unique keys are iterated in the end in the order of [pairs] array.

```

 *^public operator fun <K, V> Map<out K, V>.plus(pairs: Array<out Pair<K, V>>): Map<K, V> =
 if (this.isEmpty()) pairs.toMap() else LinkedHashMap(this).apply { putAll(pairs) }

```

Creates a new read-only map by replacing or adding entries to this map from a given sequence of key-value [pairs]. The returned map preserves the entry iteration order of the original map. Those [pairs] with unique keys are iterated in the end in the order of [pairs] sequence.

```

 *^public operator fun <K, V> Map<out K, V>.plus(pairs: Sequence<Pair<K, V>>): Map<K, V> =
 LinkedHashMap(this).apply { putAll(pairs) }.optimizeReadOnlyMap()

```

Creates a new read-only map by replacing or adding entries to this map from another [map]. The returned map preserves the entry iteration order of the original map. Those entries of another [map] that are missing in this map are iterated in the end in the order of that [map].

```

 *^public operator fun <K, V> Map<out K, V>.plus(map: Map<out K, V>): Map<K, V> =
 LinkedHashMap(this).apply { putAll(map) }

```

Appends or replaces the given [pair] in this mutable map.

```

 *^@kotlin.internal.InlineOnly^public inline operator fun <K, V> MutableMap<in K, in V>.plusAssign(pair: Pair<K, V>) {
 put(pair.first, pair.second)
 }

```

Appends or replaces all pairs from the given collection of [pairs] in this mutable map.

```

 *^@kotlin.internal.InlineOnly^public inline operator fun <K, V> MutableMap<in K, in V>.plusAssign(pairs: Iterable<Pair<K, V>>) {
 putAll(pairs)
 }

```

Appends or replaces all pairs from the given array of [pairs] in this mutable map.

```

 *^@kotlin.internal.InlineOnly^public inline operator fun <K, V> MutableMap<in K, in V>.plusAssign(pairs: Array<out Pair<K, V>>) {
 putAll(pairs)
 }

```

Appends or replaces all pairs from the given sequence of [pairs] in this mutable map.

```

 *^@kotlin.internal.InlineOnly^public inline operator fun <K, V> MutableMap<in K, in V>.plusAssign(pairs: Sequence<Pair<K, V>>) {
 putAll(pairs)
 }

```

Appends or replaces all entries from the given [map] in this mutable map.

```

 *^@kotlin.internal.InlineOnly^public inline operator fun <K, V> MutableMap<in K, in V>.plusAssign(map: Map<K, V>) {
 putAll(map)
 }

```

Returns a map containing all entries of the original map except the entry with the given [key]. The returned map preserves the entry iteration order of the original map.

```

 *^@SinceKotlin("1.1")^public operator fun <K, V> Map<out K, V>.minus(key: K):

```

```

Map<K, V> = \n this.toMutableMap().apply { minusAssign(key) }.optimizeReadOnlyMap()\n\n/**\n * Returns a
map containing all entries of the original map except those entries\n * the keys of which are contained in the given
[keys] collection.\n *\n * The returned map preserves the entry iteration order of the original map.\n
*\n @SinceKotlin("1.1")\n public operator fun <K, V> Map<out K, V>.minus(keys: Iterable<K>): Map<K, V> = \n
 this.toMutableMap().apply { minusAssign(keys) }.optimizeReadOnlyMap()\n\n/**\n * Returns a map containing
all entries of the original map except those entries\n * the keys of which are contained in the given [keys] array.\n
*\n * The returned map preserves the entry iteration order of the original map.\n *\n @SinceKotlin("1.1")\n public
operator fun <K, V> Map<out K, V>.minus(keys: Array<out K>): Map<K, V> = \n this.toMutableMap().apply {
minusAssign(keys) }.optimizeReadOnlyMap()\n\n/**\n * Returns a map containing all entries of the original map
except
those entries\n * the keys of which are contained in the given [keys] sequence.\n *\n * The returned map preserves
the entry iteration order of the original map.\n *\n @SinceKotlin("1.1")\n public operator fun <K, V> Map<out K,
V>.minus(keys: Sequence<K>): Map<K, V> = \n this.toMutableMap().apply { minusAssign(keys)
}.optimizeReadOnlyMap()\n\n/**\n * Removes the entry with the given [key] from this mutable map.\n
*\n @SinceKotlin("1.1")\n @kotlin.internal.InlineOnly\n public inline operator fun <K, V> MutableMap<K,
V>.minusAssign(key: K) {\n remove(key)\n}\n\n/**\n * Removes all entries the keys of which are contained in
the given [keys] collection from this mutable map.\n
*\n @SinceKotlin("1.1")\n @kotlin.internal.InlineOnly\n public inline operator fun <K, V> MutableMap<K,
V>.minusAssign(keys: Iterable<K>) {\n this.keys.removeAll(keys)\n}\n\n/**\n * Removes all entries the keys of
which are contained in the given [keys] array from this mutable map.\n
*\n @SinceKotlin("1.1")\n @kotlin.internal.InlineOnly\n public
inline operator fun <K, V> MutableMap<K, V>.minusAssign(keys: Array<out K>) {\n
this.keys.removeAll(keys)\n}\n\n/**\n * Removes all entries from the keys of which are contained in the given
[keys] sequence from this mutable map.\n *\n @SinceKotlin("1.1")\n @kotlin.internal.InlineOnly\n public inline
operator fun <K, V> MutableMap<K, V>.minusAssign(keys: Sequence<K>) {\n
this.keys.removeAll(keys)\n}\n\n// do not expose for now @PublishedApi\n internal fun <K, V> Map<K,
V>.optimizeReadOnlyMap() = when (size) {\n 0 -> emptyMap()\n 1 -> toSingletonMapOrSelf()\n else ->
this\n}\n\n"/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n @file:kotlin.jvm.JvmMultifileClass\n @file:kotlin.jvm.JvmName("SetsKt")\n @file:OptIn(kotlin.experimental.
ExperimentalTypeInference::class)\n\npackage
kotlin.collections\n\nimport kotlin.contracts.*\n\ninternal object EmptySet : Set<Nothing>, Serializable {\n
private const val serialVersionUID: Long = 3406603774387020532\n\n override fun equals(other: Any?): Boolean
= other is Set<*> && other.isEmpty()\n override fun hashCode(): Int = 0\n override fun toString(): String =
"\[\]\n\n override val size: Int get() = 0\n override fun isEmpty(): Boolean = true\n override fun
contains(element: Nothing): Boolean = false\n override fun containsAll(elements: Collection<Nothing>): Boolean
= elements.isEmpty()\n\n override fun iterator(): Iterator<Nothing> = EmptyIterator\n\n private fun
readResolve(): Any = EmptySet\n}\n\n/**\n * Returns an empty read-only set. The returned set is serializable
(JVM).\n * @sample samples.collections.Collections.Sets.emptyReadOnlySet\n *\n public fun <T> emptySet():
Set<T> = EmptySet\n\n/**\n * Returns a new read-only set with the given elements.\n * Elements of the set
are iterated in the order they were specified.\n * The returned set is serializable (JVM).\n * @sample
samples.collections.Collections.Sets.readOnlySet\n *\n public fun <T> setOf(vararg elements: T): Set<T> = if
(elements.size > 0) elements.toSet() else emptySet()\n\n/**\n * Returns an empty read-only set. The returned set is
serializable (JVM).\n * @sample samples.collections.Collections.Sets.emptyReadOnlySet\n
*\n @kotlin.internal.InlineOnly\n public inline fun <T> setOf(): Set<T> = emptySet()\n\n/**\n * Returns an empty
new [MutableSet].\n *\n * The returned set preserves the element iteration order.\n *\n @sample
samples.collections.Collections.Sets.emptyMutableSet\n
*\n @SinceKotlin("1.1")\n @kotlin.internal.InlineOnly\n public inline fun <T> mutableSetOf(): MutableSet<T> =

```



`LinkedHashSet()` Returns a new `[MutableSet]` with the given elements. Elements of the set are iterated in the order they were specified.

```

 @sample samples.collections.Collections.Sets.mutableSet
 public fun <T> mutableSetOf(vararg elements: T): MutableSet<T> =
 elements.toCollection(LinkedHashSet(mapCapacity(elements.size)))

```

`LinkedHashSet()` Returns an empty new `[HashSet]`.

```

 @SinceKotlin("1.1")
 @kotlin.internal.InlineOnly
 public inline fun <T> hashSetOf(): HashSet<T> =
 HashSet()

```

`HashSet()` Returns a new `[HashSet]` with the given elements.

```

 public fun <T> hashSetOf(vararg elements:
 T): HashSet<T> = elements.toCollection(HashSet(mapCapacity(elements.size)))

```

`HashSet()` Returns an empty new `[LinkedHashSet]`.

```

 @sample samples.collections.Collections.Sets.emptyLinkedHashSet
 @SinceKotlin("1.1")
 @kotlin.internal.InlineOnly
 public inline fun <T> linkedSetOf(): LinkedHashSet<T>
 = LinkedHashSet()

```

`LinkedHashSet()` Returns a new `[LinkedHashSet]` with the given elements. Elements of the set are iterated in the order they were specified.

```

 @sample samples.collections.Collections.Sets.linkedHashSet
 public fun <T> linkedSetOf(vararg elements: T): LinkedHashSet<T> =
 elements.toCollection(LinkedHashSet(mapCapacity(elements.size)))

```

Returns a new read-only set either with single given element, if it is not null, or empty set if the element is null.

The returned set is serializable (JVM).

```

 @sample samples.collections.Collections.Sets.setOfNotNull
 @SinceKotlin("1.4")
 public fun <T : Any> setOfNotNull(element: T?): Set<T> = if (element != null)
 setOf(element) else emptySet()

```

Returns a new read-only set only with those given elements, that are not null. Elements of the set are iterated in the order they were specified. The returned set is serializable (JVM).

```

 @sample samples.collections.Collections.Sets.setOfNotNull
 @SinceKotlin("1.4")
 public fun <T
 : Any> setOfNotNull(vararg elements: T?): Set<T> {
 return
 elements.filterNotNullTo(LinkedHashSet())
 }

```

Builds a new read-only `[Set]` by populating a `[MutableSet]` using the given `[builderAction]` and returning a read-only set with the same elements.

The set passed as a receiver to the `[builderAction]` is valid only inside that function. Using it outside of the function produces an unspecified behavior.

Elements of the set are iterated in the order they were added by the `[builderAction]`.

The returned set is serializable (JVM).

```

 @sample
 samples.collections.Builders.Sets.buildSetSample
 @SinceKotlin("1.6")
 @WasExperimental(ExperimentalStdlibApi::class)
 @kotlin.internal.InlineOnly
 public inline fun <E> buildSet(@BuilderInference builderAction: MutableSet<E>().->Unit): Set<E> {
 contract {
 callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE)
 }
 return
 buildSetInternal(builderAction)
 }

```

`buildSetInternal(builderAction)` Builds a new read-only `[Set]` by populating a `[MutableSet]` using the given `[builderAction]` and returning a read-only set with the same elements.

The set passed as a receiver to the `[builderAction]` is valid only inside that function. Using it outside of the function produces an unspecified behavior.

`[capacity]` is used to hint the expected number of elements added in the `[builderAction]`.

Elements of the set are iterated in the order they were added by the `[builderAction]`.

The returned set is serializable (JVM).

@throws `IllegalArgumentException` if the given `[capacity]` is negative.

```

 @sample
 samples.collections.Builders.Sets.buildSetSample
 @SinceKotlin("1.6")
 @WasExperimental(ExperimentalStdlibApi::class)
 @kotlin.internal.InlineOnly
 public inline fun <E> buildSet(capacity: Int, @BuilderInference builderAction: MutableSet<E>().->Unit): Set<E> {
 contract {
 callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE)
 }
 return buildSetInternal(capacity,
 builderAction)
 }

```

`buildSetInternal(capacity, builderAction)` Builds a new read-only `[Set]` by populating a `[MutableSet]` using the given `[builderAction]` and returning a read-only set with the same elements.

The set passed as a receiver to the `[builderAction]` is valid only inside that function. Using it outside of the function produces an unspecified behavior.

`[capacity]` is used to hint the expected number of elements added in the `[builderAction]`.

Elements of the set are iterated in the order they were added by the `[builderAction]`.

The returned set is serializable (JVM).

@throws `IllegalArgumentException` if the given `[capacity]` is negative.

```

 @sample
 samples.collections.Builders.Sets.buildSetSample
 @SinceKotlin("1.6")
 @WasExperimental(ExperimentalStdlibApi::class)
 @kotlin.internal.InlineOnly
 public inline fun <E> buildSet(capacity: Int, @BuilderInference builderAction: MutableSet<E>().->Unit): Set<E> {
 contract {
 callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE)
 }
 return buildSetInternal(capacity,
 builderAction)
 }

```

Returns this `Set` if it's not `null` and the empty set otherwise.

```

 @kotlin.internal.InlineOnly
 public inline fun <T>
 Set<T>?.orEmpty(): Set<T> = this ?: emptySet()

```

`optimizeReadOnlySet()` Returns a new read-only `[Set]` with the same elements as this `Set`.

```

 @kotlin.internal.InlineOnly
 public inline fun <T>
 Set<T>.optimizeReadOnlySet(): Set<T> = when (size) {
 0 -> emptySet()
 1 -> setOf(iterator().next())
 else -> this
 }

```

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```

*^@file:kotlin.jvm.JvmMultifileClass^@file:kotlin.jvm.JvmName("StringsKt")^@file:Suppress("PLATFORM_CLASS_MAPPED_TO_KOTLIN")^package kotlin.text^/**^ * Parses the string as a signed [Byte] number and returns the result^ * or `null` if the string is not a valid representation of a number.^
*^@SinceKotlin("1.1")^public fun String.toByteArrayOrNull(): Byte? = toByteOrNull(radix = 10)^/**^ * Parses the string as a signed [Byte] number and returns the result^ * or `null` if the string is not a valid representation of a number.^ * @throws IllegalArgumentException when [radix] is not a valid radix for string to number conversion.^
*^@SinceKotlin("1.1")^public fun String.toByteArrayOrNull(radix: Int): Byte? {^ val int = this.toIntOrNull(radix) ?: return null^ if (int < Byte.MIN_VALUE || int > Byte.MAX_VALUE) return null^ return int.toByteArray()^}^/**^ * Parses the string as a [Short] number and returns the result^ * or `null` if the string is not a valid representation of a number.^
*^@SinceKotlin("1.1")^public fun String.toShortOrNull(): Short? = toShortOrNull(radix = 10)^/**^ * Parses the string as a [Short] number and returns the result^ * or `null` if the string is not a valid representation of a number.^ * @throws IllegalArgumentException when [radix] is not a valid radix for string to number conversion.^
*^@SinceKotlin("1.1")^public fun String.toShortOrNull(radix: Int): Short? {^ val int = this.toIntOrNull(radix) ?: return null^ if (int < Short.MIN_VALUE || int > Short.MAX_VALUE) return null^ return int.toShort()^}^/**^ * Parses the string as an [Int] number and returns the result^ * or `null` if the string is not a valid representation of a number.^
*^@SinceKotlin("1.1")^public fun String.toIntOrNull(): Int? = toIntOrNull(radix = 10)^/**^ * Parses the string as an [Int] number and returns the result^ * or `null` if the string is not a valid representation of a number.^ * @throws IllegalArgumentException when [radix] is not a valid radix for string to number conversion.^
*^@SinceKotlin("1.1")^public fun String.toIntOrNull(radix: Int): Int? {^ checkRadix(radix)^ val length = this.length^ if (length == 0) return null^ val start: Int^ val isNegative: Boolean^ val limit: Int^ val firstChar = this[0]^ if (firstChar < '0') { // Possible leading sign^ if (length == 1) return null // non-digit (possible sign) only, no digits after^ start = 1^ if (firstChar == '-') {^ isNegative = true^ limit = Int.MIN_VALUE^ } else if (firstChar == '+') {^ isNegative = false^ limit = Int.MAX_VALUE^ } else {^ return null^ } else {^ start = 0^ isNegative = false^ limit = -Int.MAX_VALUE^ }^ val limitForMaxRadix = (-Int.MAX_VALUE) / 36^ var limitBeforeMul = limitForMaxRadix^ var result = 0^ for (i in start until length) {^ val digit = digitOf(this[i], radix)^ if (digit < 0) return null^ if (result < limitBeforeMul) {^ if (limitBeforeMul == limitForMaxRadix) {^ limitBeforeMul = limit / radix^ } else {^ return null^ }^ }^ result *= radix^ if (result < limit + digit) return null^ result -= digit^ }^ return if (isNegative) result else -result^ }^}^/**^ * Parses the string as a [Long] number and returns the result^ * or `null` if the string is not a valid representation of a number.^
*^@SinceKotlin("1.1")^public fun String.toLongOrNull(): Long? = toLongOrNull(radix = 10)^/**^ * Parses the string as a [Long] number and returns the result^ * or `null` if the string is not a valid representation of a number.^ * @throws IllegalArgumentException when [radix] is not a valid radix for string to number conversion.^
*^@SinceKotlin("1.1")^public fun String.toLongOrNull(radix: Int): Long? {^ checkRadix(radix)^ val length = this.length^ if (length == 0) return null^ val start: Int^ val isNegative: Boolean^ val limit: Long^ val firstChar = this[0]^ if (firstChar < '0') { // Possible leading sign^ if (length == 1) return null // non-digit (possible sign) only, no digits after^ start = 1^ if (firstChar == '-') {^ isNegative = true^ limit = Long.MIN_VALUE^ } else if (firstChar == '+') {^ isNegative = false^ limit = Long.MAX_VALUE^ } else {^ return null^ } else {^ start = 0^ isNegative = false^ limit = -Long.MAX_VALUE^ }^ val limitForMaxRadix = (-Long.MAX_VALUE) / 36^ var limitBeforeMul = limitForMaxRadix^ var result = 0L^ for (i in start until length) {^ val digit = digitOf(this[i], radix)^ if (digit < 0) return null^ if (result < limitBeforeMul) {^ if (limitBeforeMul == limitForMaxRadix) {^ limitBeforeMul = limit / radix^ } else {^ return null^ }^ }^ result *= radix^ if (result < limit + digit) return null^ result -= digit^ }^ return if (isNegative) result else -result^ }^}

```

```

 } else {
 return null
 }
 result *= radix
 if (result <
limit + digit) return null
 result -= digit
 return if (isNegative) result else -result
}

internal fun numberFormatError(input: String): Nothing = throw NumberFormatException("Invalid number format: '$input'")

/* Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors. Use
of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file. */
package kotlin.time
import kotlin.contracts.*
import kotlin.jvm.JvmInline
import kotlin.math.*

/* Represents the amount of time one instant of time is away from another instant. A negative duration is
possible in a situation when the second instant is earlier than the first one. The type can store duration values
up to 146 years with nanosecond precision,
* and up to 146 million years with millisecond precision. If a duration-returning operation provided in
`kotlin.time` produces a duration value that doesn't fit into the above range, the returned `Duration` is infinite.
* An infinite duration value [Duration.INFINITE] can be used to represent infinite timeouts. To
construct a duration use either the extension function [toDuration], or the extension properties [hours],
[minutes], [seconds], and so on, available on [Int], [Long], and [Double] numeric types. To get the value
of this duration expressed in a particular [duration units][DurationUnit] use the functions [toInt], [toLong], and
[toDouble] or the properties [inWholeHours], [inWholeMinutes], [inWholeSeconds], [inWholeNanoseconds],
and so on.
*/
@SinceKotlin("1.6")
@WasExperimental(ExperimentalTime::class)
@JvmInline
public value class Duration internal constructor(private val rawValue: Long) : Comparable<Duration> {
 private val value: Long get() = rawValue shr 1
 private inline val unitDiscriminator: Int get() =
rawValue.toInt() and 1
 private fun isInNanos() = unitDiscriminator == 0
 private fun isInMillis() =
unitDiscriminator == 1
 private val storageUnit get() = if (isInNanos()) DurationUnit.NANOSECONDS else
DurationUnit.MILLISECONDS
 init {
 if (durationAssertionsEnabled) {
 if (isInNanos()) {
 if (value !in -MAX_NANOS..MAX_NANOS) throw AssertionError("$value ns is out of nanoseconds
range")
 } else {
 if (value !in -MAX_MILLIS..MAX_MILLIS) throw AssertionError("$value
ms is out of milliseconds range")
 }
 if (value in -
MAX_NANOS_IN_MILLIS..MAX_NANOS_IN_MILLIS) throw AssertionError("$value ms is denormalized")
 }
 }
 companion object {
 /** The duration equal to exactly 0 seconds. */
 public val ZERO: Duration = Duration(0L)

 /** The duration whose value is positive infinity. It is useful for representing timeouts that should never expire.
*/
 public val INFINITE: Duration = durationOfMillis(MAX_MILLIS)
 internal val NEG_INFINITE:
Duration = durationOfMillis(-MAX_MILLIS)
 /** Converts the given time duration [value] expressed in the
specified [sourceUnit] into the specified [targetUnit]. */
 @ExperimentalTime
 public fun convert(value:
Double, sourceUnit: DurationUnit, targetUnit: DurationUnit): Double =
convertDurationUnit(value,
sourceUnit, targetUnit)
 // Duration construction extension properties in Duration companion scope
 /** Returns a [Duration] equal to this [Int] number of nanoseconds. */
 @kotlin.internal.InlineOnly
 public inline val Int.nanoseconds get() = toDuration(DurationUnit.NANOSECONDS)
 /** Returns a
[Duration] equal to this [Long] number of nanoseconds. */
 @kotlin.internal.InlineOnly
 public inline val Long.nanoseconds get() = toDuration(DurationUnit.NANOSECONDS)
 /**
Returns a [Duration] equal to this [Double] number of nanoseconds.
* Depending on its magnitude,
the value is rounded to an integer number of nanoseconds or milliseconds.
*/
 @throws
IllegalArgumentExcepion if this [Double] value is `NaN`.
 @kotlin.internal.InlineOnly
 public inline val Double.nanoseconds get() = toDuration(DurationUnit.NANOSECONDS)
 /** Returns a
[Duration] equal to this [Int] number of microseconds. */
 @kotlin.internal.InlineOnly
 public inline val
Int.microseconds get() = toDuration(DurationUnit.MICROSECONDS)
 /** Returns a [Duration] equal to
this [Long] number of microseconds. */
 @kotlin.internal.InlineOnly
 public inline val
Long.microseconds get() = toDuration(DurationUnit.MICROSECONDS)
 /**
Returns
a [Duration] equal to this [Double] number of microseconds.
* Depending on its magnitude, the
value is rounded to an integer number of nanoseconds or milliseconds.
*/
 @throws

```

```

IllegalArgumentException if this [Double] value is `NaN`.
 @kotlin.internal.InlineOnly
 public
 inline val Double.microseconds get() = toDuration(DurationUnit.MICROSECONDS)
 /** Returns a [Duration] equal to this [Int] number of milliseconds.
 @kotlin.internal.InlineOnly
 public inline val Int.milliseconds get() = toDuration(DurationUnit.MILLISECONDS)
 /** Returns a [Duration] equal to this [Long] number of milliseconds.
 @kotlin.internal.InlineOnly
 public inline val Long.milliseconds get() = toDuration(DurationUnit.MILLISECONDS)
 /**
 * Returns a [Duration] equal to this [Double] number of milliseconds.
 * Depending on its magnitude, the value is rounded to an integer number of nanoseconds or milliseconds.
 * @throws
 IllegalArgumentException if this [Double] value is `NaN`.
 @kotlin.internal.InlineOnly
 public
 inline val Double.milliseconds get() = toDuration(DurationUnit.MILLISECONDS)
 /** Returns a [Duration] equal to this [Int] number of seconds.
 @kotlin.internal.InlineOnly
 public inline val Int.seconds get() = toDuration(DurationUnit.SECONDS)
 /** Returns a [Duration] equal to this [Long] number of seconds.
 @kotlin.internal.InlineOnly
 public inline val Long.seconds get() = toDuration(DurationUnit.SECONDS)
 /**
 * Returns a [Duration] equal to this [Double] number of seconds.
 * Depending on its magnitude, the value is rounded to an integer number of nanoseconds or milliseconds.
 * @throws
 IllegalArgumentException if this [Double] value is `NaN`.
 @kotlin.internal.InlineOnly
 public inline val Double.seconds get() = toDuration(DurationUnit.SECONDS)
 /** Returns a [Duration] equal to this [Int] number of minutes.
 @kotlin.internal.InlineOnly
 public inline val Int.minutes get() = toDuration(DurationUnit.MINUTES)
 /** Returns a [Duration] equal to this [Long] number of minutes.
 @kotlin.internal.InlineOnly
 public inline val Long.minutes get() = toDuration(DurationUnit.MINUTES)
 /**
 * Returns a [Duration] equal to this [Double] number of minutes.
 * Depending on its magnitude, the value is rounded to an integer number of nanoseconds or milliseconds.
 * @throws
 IllegalArgumentException if this [Double] value is `NaN`.
 @kotlin.internal.InlineOnly
 public inline val Double.minutes get() = toDuration(DurationUnit.MINUTES)
 /** Returns a [Duration] equal to this [Int] number of hours.
 @kotlin.internal.InlineOnly
 public inline val Int.hours get() = toDuration(DurationUnit.HOURS)
 /** Returns a [Duration] equal to this [Long] number of hours.
 @kotlin.internal.InlineOnly
 public inline val Long.hours get() = toDuration(DurationUnit.HOURS)
 /**
 * Returns a [Duration] equal to this [Double] number of hours.
 * Depending on its magnitude, the value is rounded to an integer number of nanoseconds or milliseconds.
 * @throws
 IllegalArgumentException if this [Double] value is `NaN`.
 @kotlin.internal.InlineOnly
 public
 inline val Double.hours get() = toDuration(DurationUnit.HOURS)
 /** Returns a [Duration] equal to this [Int] number of days.
 @kotlin.internal.InlineOnly
 public inline val Int.days get() = toDuration(DurationUnit.DAYS)
 /** Returns a [Duration] equal to this [Long] number of days.
 @kotlin.internal.InlineOnly
 public inline val Long.days get() = toDuration(DurationUnit.DAYS)
 /**
 * Returns a [Duration] equal to this [Double] number of days.
 * Depending on its magnitude, the value is rounded to an integer number of nanoseconds or milliseconds.
 * @throws
 IllegalArgumentException if this [Double] value is `NaN`.
 @kotlin.internal.InlineOnly
 public inline val Double.days get() = toDuration(DurationUnit.DAYS)
 /** Returns a [Duration] representing the specified [value] number of nanoseconds.
 @SinceKotlin("1.5")
 @ExperimentalTime
 @Deprecated("Use 'Int.nanoseconds' extension property from Duration.Companion instead.", ReplaceWith("value.nanoseconds", "kotlin.time.Duration.Companion.nanoseconds"))
 @DeprecatedSinceKotlin(warningSince = "1.6")
 public fun nanoseconds(value: Int): Duration = value.toDuration(DurationUnit.NANOSECONDS)
 /** Returns a [Duration] representing the specified [value] number of nanoseconds.
 @SinceKotlin("1.5")
 @ExperimentalTime
 @Deprecated("Use 'Long.nanoseconds' extension property from Duration.Companion instead.", ReplaceWith("value.nanoseconds", "kotlin.time.Duration.Companion.nanoseconds"))

```

```

@DeprecatedSinceKotlin(warningSince = `1.6`)\n public fun nanoseconds(value: Long): Duration =
value.toDuration(DurationUnit.NANOSECONDS)\n /**\n * Returns a [Duration] representing the
specified [value] number of nanoseconds.\n *\n * @throws IllegalArgumentException if the provided
`Double` [value] is `NaN`.\n */\n @SinceKotlin(`1.5`)\n @ExperimentalTime\n
@Deprecated(`Use 'Double.nanoseconds' extension property from Duration.Companion
instead.`\n, ReplaceWith(`value.nanoseconds`, `kotlin.time.Duration.Companion.nanoseconds`))\n
@DeprecatedSinceKotlin(warningSince = `1.6`)\n public fun nanoseconds(value: Double): Duration =
value.toDuration(DurationUnit.NANOSECONDS)\n\n /** Returns a [Duration] representing the specified
[value] number of microseconds. *\n @SinceKotlin(`1.5`)\n @ExperimentalTime\n
@Deprecated(`Use 'Int.microseconds' extension property from Duration.Companion instead.`\n,
ReplaceWith(`value.microseconds`, `kotlin.time.Duration.Companion.microseconds`))\n
@DeprecatedSinceKotlin(warningSince = `1.6`)\n public fun microseconds(value: Int): Duration =
value.toDuration(DurationUnit.MICROSECONDS)\n\n /** Returns a [Duration] representing the specified
[value] number of microseconds. *\n @SinceKotlin(`1.5`)\n @ExperimentalTime\n
@Deprecated(`Use 'Long.microseconds' extension property from Duration.Companion
instead.`\n, ReplaceWith(`value.microseconds`, `kotlin.time.Duration.Companion.microseconds`))\n
@DeprecatedSinceKotlin(warningSince = `1.6`)\n public fun microseconds(value: Long): Duration =
value.toDuration(DurationUnit.MICROSECONDS)\n\n /**\n * Returns a [Duration] representing the
specified [value] number of microseconds.\n *\n * @throws IllegalArgumentException if the provided
`Double` [value] is `NaN`.\n */\n @SinceKotlin(`1.5`)\n @ExperimentalTime\n
@Deprecated(`Use 'Double.microseconds' extension property from Duration.Companion instead.`\n,
ReplaceWith(`value.microseconds`, `kotlin.time.Duration.Companion.microseconds`))\n
@DeprecatedSinceKotlin(warningSince = `1.6`)\n public fun microseconds(value: Double): Duration =
value.toDuration(DurationUnit.MICROSECONDS)\n\n\n /** Returns a [Duration] representing the specified
[value] number of milliseconds. *\n @SinceKotlin(`1.5`)\n
 @ExperimentalTime\n @Deprecated(`Use 'Int.milliseconds' extension property from
Duration.Companion instead.`\n, ReplaceWith(`value.milliseconds`,
`kotlin.time.Duration.Companion.milliseconds`))\n
@DeprecatedSinceKotlin(warningSince = `1.6`)\n public fun milliseconds(value: Int): Duration =
value.toDuration(DurationUnit.MILLISECONDS)\n\n /**
Returns a [Duration] representing the specified [value] number of milliseconds. *\n @SinceKotlin(`1.5`)\n
 @ExperimentalTime\n @Deprecated(`Use 'Long.milliseconds' extension property from Duration.Companion
instead.`\n, ReplaceWith(`value.milliseconds`, `kotlin.time.Duration.Companion.milliseconds`))\n
@DeprecatedSinceKotlin(warningSince = `1.6`)\n public fun milliseconds(value: Long): Duration =
value.toDuration(DurationUnit.MILLISECONDS)\n\n /**\n * Returns a [Duration] representing the
specified [value] number of milliseconds.\n *\n * @throws IllegalArgumentException if the provided
`Double` [value] is `NaN`.\n */\n @SinceKotlin(`1.5`)\n @ExperimentalTime\n @Deprecated(`Use 'Double.milliseconds' extension
property from Duration.Companion instead.`\n, ReplaceWith(`value.milliseconds`,
`kotlin.time.Duration.Companion.milliseconds`))\n
@DeprecatedSinceKotlin(warningSince = `1.6`)\n public fun milliseconds(value: Double): Duration =
value.toDuration(DurationUnit.MILLISECONDS)\n\n\n /** Returns a [Duration] representing the specified
[value] number of seconds. *\n @SinceKotlin(`1.5`)\n
 @ExperimentalTime\n @Deprecated(`Use 'Int.seconds' extension property from Duration.Companion
instead.`\n, ReplaceWith(`value.seconds`, `kotlin.time.Duration.Companion.seconds`))\n
@DeprecatedSinceKotlin(warningSince = `1.6`)\n public fun seconds(value: Int): Duration =
value.toDuration(DurationUnit.SECONDS)\n\n\n /** Returns a [Duration] representing the specified [value]
number of seconds. *\n @SinceKotlin(`1.5`)\n
 @ExperimentalTime\n @Deprecated(`Use 'Long.seconds' extension property from Duration.Companion
instead.`\n, ReplaceWith(`value.seconds`, `kotlin.time.Duration.Companion.seconds`))\n

```

```

@DeprecatedSinceKotlin(warningSince = `1.6`)\n public fun seconds(value: Long): Duration =
value.toDuration(DurationUnit.SECONDS)\n\n /**\n * Returns a [Duration] representing the specified
[value] number of seconds.\n *\n * @throws IllegalArgumentException if the provided `Double` [value] is
`NaN`.\n *\n * @SinceKotlin(`1.5`)\n * @ExperimentalTime\n * @Deprecated(`"Use
'Double.seconds' extension property from Duration.Companion instead.", ReplaceWith(`"value.seconds"`,
`"kotlin.time.Duration.Companion.seconds"`))\n * @DeprecatedSinceKotlin(warningSince = `1.6`)\n public
fun seconds(value:
Double): Duration = value.toDuration(DurationUnit.SECONDS)\n\n /** Returns a [Duration] representing
the specified [value] number of minutes. *\n * @SinceKotlin(`1.5`)\n * @ExperimentalTime\n *
@Deprecated(`"Use 'Int.minutes' extension property from Duration.Companion instead.",
ReplaceWith(`"value.minutes"`, `kotlin.time.Duration.Companion.minutes`))\n
@DeprecatedSinceKotlin(warningSince = `1.6`)\n public fun minutes(value: Int): Duration =
value.toDuration(DurationUnit.MINUTES)\n\n /** Returns a [Duration] representing the specified [value]
number of minutes. *\n * @SinceKotlin(`1.5`)\n * @ExperimentalTime\n * @Deprecated(`"Use
'Long.minutes' extension property from Duration.Companion instead.", ReplaceWith(`"value.minutes"`,
`kotlin.time.Duration.Companion.minutes`))\n * @DeprecatedSinceKotlin(warningSince = `1.6`)\n public
fun minutes(value: Long): Duration = value.toDuration(DurationUnit.MINUTES)\n\n /**\n * Returns a [Duration] representing the specified [value] number of minutes.\n *\n *
@throws IllegalArgumentException if the provided `Double` [value] is `NaN`.\n *\n * @SinceKotlin(`1.5`)\n * @ExperimentalTime\n * @Deprecated(`"Use 'Double.minutes' extension property
from Duration.Companion instead.", ReplaceWith(`"value.minutes"`,
`kotlin.time.Duration.Companion.minutes`))\n * @DeprecatedSinceKotlin(warningSince = `1.6`)\n public
fun minutes(value: Double): Duration = value.toDuration(DurationUnit.MINUTES)\n\n /** Returns a
[Duration] representing the specified [value] number of hours. *\n * @SinceKotlin(`1.5`)\n *
@ExperimentalTime\n * @Deprecated(`"Use 'Int.hours' extension property from Duration.Companion
instead.", ReplaceWith(`"value.hours"`, `kotlin.time.Duration.Companion.hours`))\n
@DeprecatedSinceKotlin(warningSince = `1.6`)\n public fun hours(value:
Int): Duration = value.toDuration(DurationUnit.HOURS)\n\n /** Returns a [Duration] representing the
specified [value] number of hours. *\n * @SinceKotlin(`1.5`)\n * @ExperimentalTime\n *
@Deprecated(`"Use 'Long.hours' extension property from Duration.Companion instead.",
ReplaceWith(`"value.hours"`, `kotlin.time.Duration.Companion.hours`))\n
@DeprecatedSinceKotlin(warningSince = `1.6`)\n public fun hours(value: Long): Duration =
value.toDuration(DurationUnit.HOURS)\n\n /**\n * Returns a [Duration] representing the specified
[value] number of hours.\n *\n * @throws IllegalArgumentException if the provided `Double` [value] is
`NaN`.\n *\n * @SinceKotlin(`1.5`)\n * @ExperimentalTime\n * @Deprecated(`"Use 'Double.hours'
extension property from Duration.Companion instead.", ReplaceWith(`"value.hours"`,
`kotlin.time.Duration.Companion.hours`))\n * @DeprecatedSinceKotlin(warningSince
= `1.6`)\n public fun hours(value: Double): Duration = value.toDuration(DurationUnit.HOURS)\n\n
/** Returns a [Duration] representing the specified [value] number of days. *\n * @SinceKotlin(`1.5`)\n
* @ExperimentalTime\n * @Deprecated(`"Use 'Int.days' extension property from Duration.Companion
instead.", ReplaceWith(`"value.days"`, `kotlin.time.Duration.Companion.days`))\n
@DeprecatedSinceKotlin(warningSince = `1.6`)\n public fun days(value: Int): Duration =
value.toDuration(DurationUnit.DAYS)\n\n /** Returns a [Duration] representing the specified [value]
number of days. *\n * @SinceKotlin(`1.5`)\n * @ExperimentalTime\n * @Deprecated(`"Use 'Long.days'
extension property from Duration.Companion instead.", ReplaceWith(`"value.days"`,
`kotlin.time.Duration.Companion.days`))\n * @DeprecatedSinceKotlin(warningSince = `1.6`)\n public
fun days(value: Long): Duration = value.toDuration(DurationUnit.DAYS)\n\n

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/**\n * Returns a [Duration] representing the specified [value] number of days.\n *\n * @throws
IllegalArgumentException if the provided `Double` [value] is `NaN`.\n *\n * @SinceKotlin("1.5")\n
@ExperimentalTime\n * @Deprecated("Use 'Double.days' extension property from Duration.Companion
instead.", ReplaceWith("value.days", "kotlin.time.Duration.Companion.days"))\n
@DeprecatedSinceKotlin(warningSince = `1.6`)\n * public fun days(value: Double): Duration =
value.toDuration(DurationUnit.DAYS)\n *\n /**\n * Parses a string that represents a duration and returns the
parsed [Duration] value.\n *\n * The following formats are accepted:\n *\n * - ISO-8601
Duration format, e.g. `P1DT2H3M4.058S`, see [toIsoString] and [parseIsoString].\n * - The format of string
returned by the default [Duration.toString] and `toString` in a specific unit,\n
 * e.g. `10s`, `1h 30m` or `-(1h 30m)`.\n *\n * @throws IllegalArgumentException if the string
doesn't represent a duration in any of the supported formats.\n * @sample samples.time.Durations.parse\n
*\n * public fun parse(value: String): Duration = try {\n * parseDuration(value, strictIso = false)\n * }
catch (e: IllegalArgumentException) {\n * throw IllegalArgumentException("Invalid duration string format:
'$value'.", e)\n * }\n *\n /**\n * Parses a string that represents a duration in ISO-8601 format and returns
the parsed [Duration] value.\n *\n * @throws IllegalArgumentException if the string doesn't represent a
duration in ISO-8601 format.\n * @sample samples.time.Durations.parseIsoString\n *\n * public fun
parseIsoString(value: String): Duration = try {\n * parseDuration(value, strictIso = true)\n * } catch (e:
IllegalArgumentException) {\n * throw IllegalArgumentException("Invalid ISO duration string format: '$value'.", e)\n * }\n *\n * Parses a string that represents a duration and returns the parsed [Duration] value,\n * or `null` if the string
doesn't represent a duration in any of the supported formats.\n *\n * The following formats are accepted:\n
 *\n * - ISO-8601 Duration format, e.g. `P1DT2H3M4.058S`, see [toIsoString] and [parseIsoString].\n * - The format of string returned by the default [Duration.toString] and `toString` in a specific unit,\n * e.g.
`10s`, `1h 30m` or `-(1h 30m)`.\n * @sample samples.time.Durations.parse\n *\n * public fun
parseOrNull(value: String): Duration? = try {\n * parseDuration(value, strictIso = false)\n * } catch (e:
IllegalArgumentException) {\n * null\n * }\n *\n /**\n * Parses a string that represents a duration in
ISO-8601
format and returns the parsed [Duration] value,\n * or `null` if the string doesn't represent a duration in ISO-
8601 format.\n * @sample samples.time.Durations.parseIsoString\n *\n * public fun
parseIsoStringOrNull(value: String): Duration? = try {\n * parseDuration(value, strictIso = true)\n * } catch
(e: IllegalArgumentException) {\n * null\n * }\n * }\n * // arithmetic operators\n * /** Returns the
negative of this value. *\n * public operator fun unaryMinus(): Duration = durationOf(-value,
unitDiscriminator)\n *\n /**\n * Returns a duration whose value is the sum of this and [other] duration values.\n
*\n * @throws IllegalArgumentException if the operation results in an undefined value for the given arguments,\n
 * e.g. when adding infinite durations of different sign.\n *\n * public operator fun plus(other: Duration):
Duration {\n * when {\n * this.isInfinite() -> {\n
 * if (other.isFinite() || (this.rawValue xor other.rawValue >= 0))\n * return this\n * else\n
 * throw IllegalArgumentException("Summing infinite durations of different signs yields an undefined result.")\n
 * }\n * other.isInfinite() -> return other\n * }\n * return when {\n * this.unitDiscriminator ==
other.unitDiscriminator -> {\n * val result = this.value + other.value // never overflows long, but can
overflow long63\n * when {\n * isInNanos() ->\n
 * durationOfNanosNormalized(result)\n * else ->\n * durationOfMillisNormalized(result)\n
 * }\n * }\n * this.isInMillis() ->\n * addValuesMixedRanges(this.value, other.value)\n
 * else ->\n * addValuesMixedRanges(other.value, this.value)\n * }\n * }\n * }\n * private fun
addValuesMixedRanges(thisMillis:
Long, otherNanos: Long): Duration {\n * val otherMillis = nanosToMillis(otherNanos)\n * val resultMillis =
thisMillis + otherMillis\n * return if (resultMillis in -MAX_NANOS_IN_MILLIS..MAX_NANOS_IN_MILLIS)\n * {\n * val otherNanoRemainder = otherNanos - millisToNanos(otherMillis)\n

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durationOfNanos(millisToNanos(resultMillis) + otherNanoRemainder)\n } else {\n
durationOfMillis(resultMillis.coerceIn(-MAX_MILLIS, MAX_MILLIS))\n }\n\n /**\n * Returns a
duration whose value is the difference between this and [other] duration values.\n * \n * @throws
IllegalArgumentException if the operation results in an undefined value for the given arguments,\n * e.g. when
subtracting infinite durations of the same sign.\n */\n public operator fun minus(other: Duration): Duration =
this + (-other)\n\n /**\n * Returns a duration whose value is this duration value multiplied by the given [scale]
number.\n * \n * @throws IllegalArgumentException if the operation results in an undefined value for the
given arguments,\n * e.g. when multiplying an infinite duration by zero.\n */\n public operator fun
times(scale: Int): Duration {\n if (isInfinite()) {\n return when {\n scale == 0 -> throw
IllegalArgumentException("Multiplying infinite duration by zero yields an undefined result.")\n scale > 0
-> this\n else -> -this\n }\n }\n if (scale == 0) return ZERO\n val value = value\n val result = value * scale\n return if (isInNanos()) {\n if (value in (MAX_NANOS /
Int.MIN_VALUE)..(-MAX_NANOS / Int.MIN_VALUE)) {\n // can't overflow nanos range for any
scale\n durationOfNanos(result)\n } else {\n if (result / scale == value) {\n
durationOfNanosNormalized(result)\n }\n }\n } else {\n val millis = nanosToMillis(value)\n val remNanos = value -
millisToNanos(millis)\n val resultMillis = millis * scale\n val totalMillis = resultMillis +
nanosToMillis(remNanos * scale)\n if (resultMillis / scale == millis && totalMillis xor resultMillis >=
0) {\n durationOfMillis(totalMillis.coerceIn(-MAX_MILLIS..MAX_MILLIS))\n } else
{\n if (value.sign * scale.sign > 0) INFINITE else NEG_INFINITE\n }\n }\n}\n\n } else {\n if (result / scale == value) {\n durationOfMillis(result.coerceIn(-
MAX_MILLIS..MAX_MILLIS))\n } else {\n if (value.sign * scale.sign > 0) INFINITE else
NEG_INFINITE\n }\n}\n\n\n /**\n * Returns a duration whose value is this duration value
multiplied by the given [scale]
number.\n * \n * The operation may involve rounding when the result cannot be represented exactly with a
[Double] number.\n * \n * @throws IllegalArgumentException if the operation results in an undefined value for
the given arguments,\n * e.g. when multiplying an infinite duration by zero.\n */\n public operator fun
times(scale: Double): Duration {\n val intScale = scale.roundToInt()\n if (intScale.toDouble() == scale) {\n
return times(intScale)\n }\n val unit = storageUnit\n val result = toDouble(unit) * scale\n return result.toDuration(unit)\n}\n\n /**\n * Returns a duration whose value is this duration value divided by
the given [scale] number.\n * \n * @throws IllegalArgumentException if the operation results in an undefined
value for the given arguments,\n * e.g. when dividing zero duration by zero.\n */\n public operator fun
div(scale: Int): Duration {\n if (scale
== 0) {\n return when {\n isPositive() -> INFINITE\n isNegative() -> NEG_INFINITE\n
else -> throw IllegalArgumentException("Dividing zero duration by zero yields an undefined result.")\n }\n }\n if (isInNanos()) {\n return durationOfNanos(value / scale)\n } else {\n if
(isInfinite())\n return this * scale.sign\n val result = value / scale\n if (result in -
MAX_NANOS_IN_MILLIS..MAX_NANOS_IN_MILLIS) {\n val rem = millisToNanos(value - (result *
scale)) / scale\n return durationOfNanos(millisToNanos(result) + rem)\n }\n return
durationOfMillis(result)\n }\n}\n\n\n /**\n * Returns a duration whose value is this duration value divided
by the given [scale] number.\n * \n * @throws IllegalArgumentException if the operation results in an
undefined value for the given
arguments,\n * e.g. when dividing an infinite duration by infinity or zero duration by zero.\n */\n public
operator fun div(scale: Double): Duration {\n val intScale = scale.roundToInt()\n if (intScale.toDouble() ==
scale && intScale != 0) {\n return div(intScale)\n }\n val unit = storageUnit\n val result =
toDouble(unit) / scale\n return result.toDuration(unit)\n}\n\n /**\n * Returns a number that is the ratio of this
and [other] duration values.\n */\n public operator fun div(other: Duration): Double {\n val coarserUnit =
maxOf(this.storageUnit, other.storageUnit)\n return this.toDouble(coarserUnit) / other.toDouble(coarserUnit)\n}

```



```

}

/** Returns true, if the duration value is less than zero. */
public fun isNegative(): Boolean = rawValue < 0

/** Returns true, if the duration value is greater than zero. */
public fun isPositive(): Boolean = rawValue > 0

/** Returns true, if the duration value is infinite. */
public fun isInfinite(): Boolean = rawValue == INFINITE.rawValue || rawValue == NEG_INFINITE.rawValue

/** Returns true, if the duration value is finite. */
public fun isFinite(): Boolean = !isInfinite()

/** Returns the absolute value of this value. The returned value is always non-negative. */
public val absoluteValue: Duration get() = if (isNegative()) -this else this

override fun compareTo(other: Duration): Int {
 val compareBits = this.rawValue xor other.rawValue
 if (compareBits < 0 || compareBits.toInt() and 1 == 0) // different signs or same sign/same range
 return this.rawValue.compareTo(other.rawValue)
 // same sign/different ranges
 val r = this.unitDiscriminator - other.unitDiscriminator // compare ranges
 return if (isNegative()) -r else r
}

// splitting to components

/**
 * Splits this duration into days, hours, minutes, seconds, and nanoseconds and executes the given [action] with these components.
 * The result of [action] is returned as the result of this function.
 * - `nanoseconds` represents the whole number of nanoseconds in this duration, and its absolute value is less than 1_000_000_000;
 * - `seconds` represents the whole number of seconds in this duration, and its absolute value is less than 60;
 * - `minutes` represents the whole number of minutes in this duration, and its absolute value is less than 60;
 * - `hours` represents the whole number of hours in this duration, and its absolute value is less than 24;
 * - `days` represents the whole number of days in this duration.
 * Infinite durations are represented as either [Long.MAX_VALUE] days, or [Long.MIN_VALUE] days (depending on the sign of infinity), and zeroes in the lower components.
 */
public inline fun <T> toComponents(action: (days: Long, hours: Int, minutes: Int, seconds: Int, nanoseconds: Int) -> T): T {
 contract { callsInPlace(action, InvocationKind.EXACTLY_ONCE) }
 return action(inWholeDays, hoursComponent, minutesComponent, secondsComponent, nanosecondsComponent)
}

/**
 * Splits this duration into hours, minutes, seconds, and nanoseconds and executes the given [action] with these components.
 * The result of [action] is returned as the result of this function.
 * - `nanoseconds` represents the whole number of nanoseconds in this duration, and its absolute value is less than 1_000_000_000;
 * - `seconds` represents the whole number of seconds in this duration, and its absolute value is less than 60;
 * - `minutes` represents the whole number of minutes in this duration, and its absolute value is less than 60;
 * - `hours` represents the whole number of hours in this duration.
 * Infinite durations are represented as either [Long.MAX_VALUE] hours, or [Long.MIN_VALUE] hours (depending on the sign of infinity), and zeroes in the lower components.
 */
public inline fun <T> toComponents(action: (hours: Long, minutes: Int, seconds: Int, nanoseconds: Int) -> T): T {
 contract { callsInPlace(action, InvocationKind.EXACTLY_ONCE) }
 return action(inWholeHours, minutesComponent, secondsComponent, nanosecondsComponent)
}

/**
 * Splits this duration into minutes, seconds, and nanoseconds and executes the given [action] with these components.
 * The result of [action] is returned as the result of this function.
 * - `nanoseconds` represents the whole number of nanoseconds in this duration, and its absolute value is less than 1_000_000_000;
 * - `seconds` represents the whole number of seconds in this duration, and its absolute value is less than 60;
 * - `minutes` represents the whole number of minutes in this duration.
 * Infinite durations are represented as either [Long.MAX_VALUE] minutes, or [Long.MIN_VALUE] minutes (depending on the sign of infinity), and zeroes in the lower components.
 */
public inline fun <T> toComponents(action: (minutes: Long, seconds: Int, nanoseconds: Int) -> T): T {
 contract { callsInPlace(action, InvocationKind.EXACTLY_ONCE) }
 return action(inWholeMinutes, secondsComponent, nanosecondsComponent)
}

/**
 * Splits this duration into seconds, and nanoseconds and executes the given [action] with these components.
 * The result of [action] is returned as the result of this function.
 * - `nanoseconds` represents the whole number of nanoseconds in this duration, and its absolute value is less than 1_000_000_000;
 * - `seconds` represents the whole number of seconds in this duration.
 * Infinite durations are represented as either

```

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[Long.MAX_VALUE] seconds, or [Long.MIN_VALUE] seconds (depending on the sign of infinity),\n
 * and zero nanoseconds.\n */\n public inline fun <T> toComponents(action: (seconds: Long, nanoseconds:
Int) -> T): T {\n contract { callsInPlace(action, InvocationKind.EXACTLY_ONCE) }\n return
action(inWholeSeconds, nanosecondsComponent)\n } \n\n @PublishedApi\n internal val hoursComponent:
Int\n get() = if (isInfinite()) 0 else (inWholeHours % 24).toInt()\n\n @PublishedApi\n internal val
minutesComponent: Int\n get() = if (isInfinite()) 0 else (inWholeMinutes % 60).toInt()\n\n @PublishedApi\n
internal val secondsComponent: Int\n get() = if (isInfinite()) 0 else (inWholeSeconds % 60).toInt()\n\n
@PublishedApi\n internal val nanosecondsComponent: Int\n get() = when {\n isInfinite() -> 0\n
isInMillis() -> millisToNanos(value % 1_000).toInt()\n else -> (value % 1_000_000_000).toInt()\n
}\n\n // conversion to units\n\n /**\n * Returns the value of this duration
expressed as a [Double] number of the specified [unit].\n *\n * The operation may involve rounding when the
result cannot be represented exactly with a [Double] number.\n *\n * An infinite duration value is converted
either to [Double.POSITIVE_INFINITY] or [Double.NEGATIVE_INFINITY] depending on its sign.\n */\n
public fun toDouble(unit: DurationUnit): Double {\n return when (rawValue) {\n INFINITE.rawValue ->
Double.POSITIVE_INFINITY\n NEG_INFINITE.rawValue -> Double.NEGATIVE_INFINITY\n
else -> {\n // TODO: whether it's ok to convert to Double before scaling\n
convertDurationUnit(value.toDouble(), storageUnit, unit)\n }\n }\n\n /**\n * Returns the value
of this duration expressed as a [Long] number of the specified [unit].\n *\n * If the result doesn't fit in the range
of [Long] type, it is coerced into that range:\n * - [Long.MIN_VALUE] is returned
if it's less than `Long.MIN_VALUE`,\n * - [Long.MAX_VALUE] is returned if it's greater than
`Long.MAX_VALUE`.\n *\n * An infinite duration value is converted either to [Long.MAX_VALUE] or
[Long.MIN_VALUE] depending on its sign.\n */\n public fun toLong(unit: DurationUnit): Long {\n return
when (rawValue) {\n INFINITE.rawValue -> Long.MAX_VALUE\n NEG_INFINITE.rawValue ->
Long.MIN_VALUE\n else -> convertDurationUnit(value, storageUnit, unit)\n }\n\n /**\n *
Returns the value of this duration expressed as an [Int] number of the specified [unit].\n *\n * If the result
doesn't fit in the range of [Int] type, it is coerced into that range:\n * - [Int.MIN_VALUE] is returned if it's less
than `Int.MIN_VALUE`,\n * - [Int.MAX_VALUE] is returned if it's greater than `Int.MAX_VALUE`.\n *\n * An infinite duration value is converted either to [Int.MAX_VALUE] or [Int.MIN_VALUE] depending on
its sign.\n */\n public fun toInt(unit: DurationUnit): Int =\n
toLong(unit).coerceIn(Int.MIN_VALUE.toInt(), Int.MAX_VALUE.toInt()).toInt()\n\n /** The value of this
duration expressed as a [Double] number of days. *\n @ExperimentalTime\n @Deprecated("Use inWholeDays
property instead or convert toDouble(DAYS) if a double value is required.",
ReplaceWith("toDouble(DurationUnit.DAYS)"))\n public val inDays: Double get() =
toDouble(DurationUnit.DAYS)\n\n /** The value of this duration expressed as a [Double] number of hours. *\n
@ExperimentalTime\n @Deprecated("Use inWholeHours property instead or convert toDouble(HOURS) if a
double value is required.", ReplaceWith("toDouble(DurationUnit.HOURS)"))\n public val inHours: Double
get() = toDouble(DurationUnit.HOURS)\n\n /** The value of this duration expressed as a [Double] number of
minutes. *\n @ExperimentalTime\n @Deprecated("Use inWholeMinutes property instead or convert
toDouble(MINUTES)
if a double value is required.", ReplaceWith("toDouble(DurationUnit.MINUTES)"))\n public val inMinutes:
Double get() = toDouble(DurationUnit.MINUTES)\n\n /** The value of this duration expressed as a [Double]
number of seconds. *\n @ExperimentalTime\n @Deprecated("Use inWholeSeconds property instead or
convert toDouble(SECONDS) if a double value is required.",
ReplaceWith("toDouble(DurationUnit.SECONDS)"))\n public val inSeconds: Double get() =
toDouble(DurationUnit.SECONDS)\n\n /** The value of this duration expressed as a [Double] number of
milliseconds. *\n @ExperimentalTime\n @Deprecated("Use inWholeMilliseconds property instead or convert
toDouble(MILLISECONDS) if a double value is required.",
ReplaceWith("toDouble(DurationUnit.MILLISECONDS)"))\n public val inMilliseconds: Double get() =

```

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toDouble(DurationUnit.MILLISECONDS)\n\n /** The value of this duration expressed as a [Double] number of
microseconds. */\n @ExperimentalTime\n
 @Deprecated("Use inWholeMicroseconds property instead or convert toDouble(MICROSECONDS) if a double
value is required.", ReplaceWith("toDouble(DurationUnit.MICROSECONDS)"))\n public val inMicroseconds:
Double get() = toDouble(DurationUnit.MICROSECONDS)\n\n /** The value of this duration expressed as a
[Double] number of nanoseconds. */\n @ExperimentalTime\n @Deprecated("Use inWholeNanoseconds
property instead or convert toDouble(NANOSECONDS) if a double value is required.",
ReplaceWith("toDouble(DurationUnit.NANOSECONDS)"))\n public val inNanoseconds: Double get() =
toDouble(DurationUnit.NANOSECONDS)\n\n\n /**\n * The value of this duration expressed as a [Long]
number of days.\n * \n * An infinite duration value is converted either to [Long.MAX_VALUE] or
[Long.MIN_VALUE] depending on its sign.\n * \n * public val inWholeDays: Long\n * get() =
toLong(DurationUnit.DAYS)\n\n /**\n * The value of this duration expressed as a [Long]
number of hours.\n * \n * An infinite duration value is converted either to [Long.MAX_VALUE] or
[Long.MIN_VALUE] depending on its sign.\n * \n * public val inWholeHours: Long\n * get() =
toLong(DurationUnit.HOURS)\n\n /**\n * The value of this duration expressed as a [Long] number of
minutes.\n * \n * An infinite duration value is converted either to [Long.MAX_VALUE] or
[Long.MIN_VALUE] depending on its sign.\n * \n * public val inWholeMinutes: Long\n * get() =
toLong(DurationUnit.MINUTES)\n\n /**\n * The value of this duration expressed as a [Long] number of
seconds.\n * \n * An infinite duration value is converted either to [Long.MAX_VALUE] or
[Long.MIN_VALUE] depending on its sign.\n * \n * public val inWholeSeconds: Long\n * get() =
toDouble(DurationUnit.SECONDS)\n\n /**\n * The value of this duration expressed as a [Long] number of
milliseconds.\n * \n * An infinite duration value is converted either
to [Long.MAX_VALUE] or [Long.MIN_VALUE] depending on its sign.\n * \n * public val
inWholeMilliseconds: Long\n * get() {\n return if (isInMillis() && isFinite()) value else
toDouble(DurationUnit.MILLISECONDS)\n }\n\n /**\n * The value of this duration expressed as a [Long]
number of microseconds.\n * \n * If the result doesn't fit in the range of [Long] type, it is coerced into that
range:\n * - [Long.MIN_VALUE] is returned if it's less than `Long.MIN_VALUE`,\n * -
[Long.MAX_VALUE] is returned if it's greater than `Long.MAX_VALUE`.\n * \n * An infinite duration value
is converted either to [Long.MAX_VALUE] or [Long.MIN_VALUE] depending on its sign.\n * \n * public val
inWholeMicroseconds: Long\n * get() = toLong(DurationUnit.MICROSECONDS)\n\n /**\n * The value of
this duration expressed as a [Long] number of nanoseconds.\n * \n * If the result doesn't fit in the range of
[Long] type, it is coerced into that
range:\n * - [Long.MIN_VALUE] is returned if it's less than `Long.MIN_VALUE`,\n * -
[Long.MAX_VALUE] is returned if it's greater than `Long.MAX_VALUE`.\n * \n * An infinite duration value
is converted either to [Long.MAX_VALUE] or [Long.MIN_VALUE] depending on its sign.\n * \n * public val
inWholeNanoseconds: Long\n * get() {\n val value = value\n return when {\n isInNanos()
-> value\n value > Long.MAX_VALUE / NANOS_IN_MILLIS -> Long.MAX_VALUE\n value
< Long.MIN_VALUE / NANOS_IN_MILLIS -> Long.MIN_VALUE\n else -> millisToNanos(value)\n }\n }\n\n // shortcuts\n /**\n * Returns the value of this duration expressed as a [Long] number of
nanoseconds.\n * \n * If the value doesn't fit in the range of [Long] type, it is coerced into that range, see the
conversion [Double.toLong] for details.\n * \n * The range of durations that can be expressed
as a `Long` number of nanoseconds is approximately \u00b1292 years.\n * \n * @ExperimentalTime\n
 @Deprecated("Use inWholeNanoseconds property instead.", ReplaceWith("this.inWholeNanoseconds"))\n
 public fun toLongNanoseconds(): Long = inWholeNanoseconds\n\n /**\n * Returns the value of this duration
expressed as a [Long] number of milliseconds.\n * \n * The value is coerced to the range of [Long] type, if it
doesn't fit in that range, see the conversion [Double.toLong] for details.\n * \n * The range of durations that can
be expressed as a `Long` number of milliseconds is approximately \u00b1292 million years.\n * \n *
 @ExperimentalTime\n @Deprecated("Use inWholeMilliseconds property instead.",

```



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`m`, `s` are the integer components of this duration (see [toComponents])\n * and `f` is a fractional part of second.
Depending on the roundness of the value the fractional part can be formatted with either\n * 0, 3, 6, or 9 decimal
digits.\n * The infinite duration is represented as `PT9999999999999999H` which is larger than any
possible finite duration in Kotlin.\n * Negative durations are indicated with the sign `-` in the beginning of
the returned string, for example, `-PT5M30S`.\n * @sample samples.time.Durations.toIsoString\n
*\n public fun toIsoString(): String = buildString {\n if (isNegative()) append('-')\n append("PT")\n
this@Duration.absoluteValue.toComponents {\n
hours, minutes, seconds, nanoseconds ->\n @Suppress("NAME_SHADOWING")\n var hours =
hours\n if (isInfinite()) {\n // use large enough value instead of Long.MAX_VALUE\n
hours = 9_999_999_999_999\n } \n val hasHours = hours != 0L\n val hasSeconds = seconds !=
0 || nanoseconds != 0\n val hasMinutes = minutes != 0 || (hasSeconds && hasHours)\n if (hasHours)
{\n append(hours).append('H')\n } \n if (hasMinutes) {\n
append(minutes).append('M')\n } \n if (hasSeconds || (!hasHours && !hasMinutes)) {\n
appendFractional(seconds, nanoseconds, 9, 'S', isoZeroes = true)\n } \n } \n } \n } \n // constructing
from number of units\n// extension functions\n\n/** Returns a [Duration] equal to this [Int] number of the specified
[unit]. *\n @SinceKotlin("1.6")\n @WasExperimental(ExperimentalTime::class)\n public
fun Int.toDuration(unit: DurationUnit): Duration {\n return if (unit <= DurationUnit.SECONDS) {\n
durationOfNanos(convertDurationUnitOverflow(this.toLong(), unit, DurationUnit.NANOSECONDS))\n } else{\n
toLong().toDuration(unit)\n } \n } \n /** Returns a [Duration] equal to this [Long] number of the specified [unit].
*\n @SinceKotlin("1.6")\n @WasExperimental(ExperimentalTime::class)\n public fun Long.toDuration(unit:
DurationUnit): Duration {\n val maxNsInUnit = convertDurationUnitOverflow(MAX_NANOS,
DurationUnit.NANOSECONDS, unit)\n if (this in -maxNsInUnit..maxNsInUnit) {\n return
durationOfNanos(convertDurationUnitOverflow(this, unit, DurationUnit.NANOSECONDS))\n } else {\n val
millis = convertDurationUnit(this, unit, DurationUnit.MILLISECONDS)\n return
durationOfMillis(millis.coerceIn(-MAX_MILLIS, MAX_MILLIS))\n } \n } \n } \n /**\n * Returns a [Duration] equal
to this [Double] number of the specified [unit].\n *\n * Depending on its magnitude, the value is rounded to an integer number of nanoseconds or milliseconds.\n *\n * @throws IllegalArgumentException if this `Double` value is `NaN`.\n
*\n @SinceKotlin("1.6")\n @WasExperimental(ExperimentalTime::class)\n public fun Double.toDuration(unit:
DurationUnit): Duration {\n val valueInNs = convertDurationUnit(this, unit, DurationUnit.NANOSECONDS)\n
require(!valueInNs.isNaN()) { "Duration value cannot be NaN." } \n val nanos = valueInNs.roundToLong()\n
return if (nanos in -MAX_NANOS..MAX_NANOS) {\n durationOfNanos(nanos)\n } else {\n val millis =
convertDurationUnit(this, unit, DurationUnit.MILLISECONDS).roundToLong()\n
durationOfMillisNormalized(millis)\n } \n } \n } \n // constructing from number of units\n// deprecated extension
properties\n\n/** Returns a [Duration] equal to this [Int] number of nanoseconds.
*\n @SinceKotlin("1.3")\n @ExperimentalTime\n @Deprecated("Use 'Int.nanoseconds' extension property from
Duration.Companion instead.", ReplaceWith("this.nanoseconds",
"kotlin.time.Duration.Companion.nanoseconds"))\n @DeprecatedSinceKotlin(warningSince = "1.5")\n public val
Int.nanoseconds get() = toDuration(DurationUnit.NANOSECONDS)\n\n/** Returns a [Duration] equal to this
[Long] number of nanoseconds. *\n @SinceKotlin("1.3")\n @ExperimentalTime\n @Deprecated("Use
'Long.nanoseconds' extension property from Duration.Companion instead.", ReplaceWith("this.nanoseconds",
"kotlin.time.Duration.Companion.nanoseconds"))\n @DeprecatedSinceKotlin(warningSince = "1.5")\n public val
Long.nanoseconds get() = toDuration(DurationUnit.NANOSECONDS)\n\n/**\n * Returns a [Duration] equal to this
[Double] number of nanoseconds.\n *\n * @throws IllegalArgumentException if this [Double] value is `NaN`.\n
*\n @SinceKotlin("1.3")\n @ExperimentalTime\n @Deprecated("Use 'Double.nanoseconds' extension property
from Duration.Companion instead.", ReplaceWith("this.nanoseconds",
"kotlin.time.Duration.Companion.nanoseconds"))\n @DeprecatedSinceKotlin(warningSince

```

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= `1.5`)
public val Double.nanoseconds get() = toDuration(DurationUnit.NANOSECONDS)
// Returns a [Duration] equal to this [Int] number of microseconds.
*`@SinceKotlin("1.3")`
`@ExperimentalTime`
`@Deprecated("Use 'Int.microseconds' extension property from Duration.Companion instead.", ReplaceWith("this.microseconds",
"kotlin.time.Duration.Companion.microseconds"))`
`@DeprecatedSinceKotlin(warningSince = `1.5`)`
public val Int.microseconds get() = toDuration(DurationUnit.MICROSECONDS)
// Returns a [Duration] equal to this [Long] number of microseconds.
*`@SinceKotlin("1.3")`
`@ExperimentalTime`
`@Deprecated("Use 'Long.microseconds' extension property from Duration.Companion instead.", ReplaceWith("this.microseconds",
"kotlin.time.Duration.Companion.microseconds"))`
`@DeprecatedSinceKotlin(warningSince = `1.5`)`
public val Long.microseconds get() = toDuration(DurationUnit.MICROSECONDS)
// Returns a [Duration] equal to this [Double] number of microseconds.
*`@throws IllegalArgumentException`
if this [Double] value is `NaN`.
*`@SinceKotlin("1.3")`
`@ExperimentalTime`
`@Deprecated("Use 'Double.microseconds' extension property from Duration.Companion instead.", ReplaceWith("this.microseconds",
"kotlin.time.Duration.Companion.microseconds"))`
`@DeprecatedSinceKotlin(warningSince = `1.5`)`
public val Double.microseconds get() = toDuration(DurationUnit.MICROSECONDS)
// Returns a [Duration] equal to this [Int] number of milliseconds.
*`@SinceKotlin("1.3")`
`@ExperimentalTime`
`@Deprecated("Use 'Int.milliseconds' extension property from Duration.Companion instead.", ReplaceWith("this.milliseconds",
"kotlin.time.Duration.Companion.milliseconds"))`
`@DeprecatedSinceKotlin(warningSince = `1.5`)`
public val Int.milliseconds get() = toDuration(DurationUnit.MILLISECONDS)
// Returns a [Duration] equal to this [Long] number of milliseconds.
*`@SinceKotlin("1.3")`
`@ExperimentalTime`
`@Deprecated("Use 'Long.milliseconds' extension property from Duration.Companion instead.", ReplaceWith("this.milliseconds",
"kotlin.time.Duration.Companion.milliseconds"))`
`@DeprecatedSinceKotlin(warningSince = `1.5`)`
public val Long.milliseconds get() = toDuration(DurationUnit.MILLISECONDS)
// Returns a [Duration] equal to this [Double] number of milliseconds.
*`@throws IllegalArgumentException`
if this [Double] value is `NaN`.
*`@SinceKotlin("1.3")`
`@ExperimentalTime`
`@Deprecated("Use 'Double.milliseconds' extension property from Duration.Companion instead.", ReplaceWith("this.milliseconds",
"kotlin.time.Duration.Companion.milliseconds"))`
`@DeprecatedSinceKotlin(warningSince = `1.5`)`
public val Double.milliseconds get() = toDuration(DurationUnit.MILLISECONDS)
// Returns a [Duration] equal to this [Int] number of seconds.
*`@SinceKotlin("1.3")`
`@ExperimentalTime`
`@Deprecated("Use 'Int.seconds' extension property from Duration.Companion instead.", ReplaceWith("this.seconds",
"kotlin.time.Duration.Companion.seconds"))`
`@DeprecatedSinceKotlin(warningSince = `1.5`)`
public val Int.seconds get() = toDuration(DurationUnit.SECONDS)
// Returns a [Duration] equal to this [Long] number of seconds.
*`@SinceKotlin("1.3")`
`@ExperimentalTime`
`@Deprecated("Use 'Long.seconds' extension property from Duration.Companion instead.", ReplaceWith("this.seconds",
"kotlin.time.Duration.Companion.seconds"))`
`@DeprecatedSinceKotlin(warningSince = `1.5`)`
public val Long.seconds get() = toDuration(DurationUnit.SECONDS)
// Returns a [Duration] equal to this [Double] number of seconds.
*`@throws IllegalArgumentException`
if this [Double] value is `NaN`.
*`@SinceKotlin("1.3")`
`@ExperimentalTime`
`@Deprecated("Use 'Double.seconds' extension property from Duration.Companion instead.", ReplaceWith("this.seconds",
"kotlin.time.Duration.Companion.seconds"))`
`@DeprecatedSinceKotlin(warningSince = `1.5`)`
public val Double.seconds get() = toDuration(DurationUnit.SECONDS)
// Returns a [Duration] equal to this [Int] number of minutes.
*`@SinceKotlin("1.3")`
`@ExperimentalTime`
`@Deprecated("Use 'Int.minutes' extension property from Duration.Companion instead.", ReplaceWith("this.minutes",
"kotlin.time.Duration.Companion.minutes"))`
`@DeprecatedSinceKotlin(warningSince = `1.5`)`
public val Int.minutes get() = toDuration(DurationUnit.MINUTES)
// Returns a [Duration] equal to this [Long] number of minutes.
*`@SinceKotlin("1.3")`
`@ExperimentalTime`
`@Deprecated("Use 'Long.minutes' extension property from Duration.Companion instead.", ReplaceWith("this.minutes",

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\"kotlin.time.Duration.Companion.minutes\")\n@DeprecatedSinceKotlin(warningSince = \"1.5\")\npublic val
Long.minutes get() = toDuration(DurationUnit.MINUTES)\n\n/**\n * Returns a [Duration] equal to this [Double]
number of minutes.\n * \n * @throws IllegalArgumentException
if this [Double] value is `NaN`.\n */\n@SinceKotlin(\"1.3\")\n@ExperimentalTime\n@Deprecated(\"Use
'Double.minutes' extension property from Duration.Companion instead.\", ReplaceWith(\"this.minutes\",
\"kotlin.time.Duration.Companion.minutes\")\n@DeprecatedSinceKotlin(warningSince = \"1.5\")\npublic val
Double.minutes get() = toDuration(DurationUnit.MINUTES)\n\n/**\n * Returns a [Duration] equal to this [Int]
number of hours. *\n@SinceKotlin(\"1.3\")\n@ExperimentalTime\n@Deprecated(\"Use 'Int.hours' extension
property from Duration.Companion instead.\", ReplaceWith(\"this.hours\",
\"kotlin.time.Duration.Companion.hours\")\n@DeprecatedSinceKotlin(warningSince = \"1.5\")\npublic val
Int.hours get() = toDuration(DurationUnit.HOURS)\n\n/**\n * Returns a [Duration] equal to this [Long] number of
hours. *\n@SinceKotlin(\"1.3\")\n@ExperimentalTime\n@Deprecated(\"Use 'Long.hours' extension property from
Duration.Companion instead.\", ReplaceWith(\"this.hours\",
\"kotlin.time.Duration.Companion.hours\")\n@DeprecatedSinceKotlin(warningSince
= \"1.5\")\npublic val Long.hours get() = toDuration(DurationUnit.HOURS)\n\n/**\n * Returns a [Duration] equal
to this [Double] number of hours.\n * \n * @throws IllegalArgumentException if this [Double] value is `NaN`.\n
*/\n@SinceKotlin(\"1.3\")\n@ExperimentalTime\n@Deprecated(\"Use 'Double.hours' extension property from
Duration.Companion instead.\", ReplaceWith(\"this.hours\",
\"kotlin.time.Duration.Companion.hours\")\n@DeprecatedSinceKotlin(warningSince = \"1.5\")\npublic val
Double.hours get() = toDuration(DurationUnit.HOURS)\n\n/**\n * Returns a [Duration] equal to this [Int] number of
days. *\n@SinceKotlin(\"1.3\")\n@ExperimentalTime\n@Deprecated(\"Use 'Int.days' extension property from
Duration.Companion instead.\", ReplaceWith(\"this.days\",
\"kotlin.time.Duration.Companion.days\")\n@DeprecatedSinceKotlin(warningSince = \"1.5\")\npublic val Int.days
get() = toDuration(DurationUnit.DAYS)\n\n/**\n * Returns a [Duration] equal to this
[Long] number of days. *\n@SinceKotlin(\"1.3\")\n@ExperimentalTime\n@Deprecated(\"Use 'Long.days'
extension property from Duration.Companion instead.\", ReplaceWith(\"this.days\",
\"kotlin.time.Duration.Companion.days\")\n@DeprecatedSinceKotlin(warningSince = \"1.5\")\npublic val
Long.days get() = toDuration(DurationUnit.DAYS)\n\n/**\n * Returns a [Duration] equal to this [Double] number
of days.\n * \n * @throws IllegalArgumentException if this [Double] value is `NaN`.\n
*/\n@SinceKotlin(\"1.3\")\n@ExperimentalTime\n@Deprecated(\"Use 'Double.days' extension property from
Duration.Companion instead.\", ReplaceWith(\"this.days\",
\"kotlin.time.Duration.Companion.days\")\n@DeprecatedSinceKotlin(warningSince = \"1.5\")\npublic val
Double.days get() = toDuration(DurationUnit.DAYS)\n\n/**\n * Returns a duration whose value is the specified
[duration] value multiplied by this number.
*\n@SinceKotlin(\"1.6\")\n@WasExperimental(ExperimentalTime::class)\n@kotlin.internal.InlineOnly\npublic
inline
operator fun Int.times(duration: Duration): Duration = duration * this\n\n/**\n * Returns a duration whose value is
the specified [duration] value multiplied by this number.\n * \n * The operation may involve rounding when the
result cannot be represented exactly with a [Double] number.\n * \n * @throws IllegalArgumentException if the
operation results in a `NaN` value.\n
*/\n@SinceKotlin(\"1.6\")\n@WasExperimental(ExperimentalTime::class)\n@kotlin.internal.InlineOnly\npublic
inline operator fun Double.times(duration: Duration): Duration = duration * this\n\n\nprivate fun
parseDuration(value: String, strictIso: Boolean): Duration {\n var length = value.length\n if (length == 0) throw
IllegalArgumentException(\"The string is empty\")\n var index = 0\n var result = Duration.ZERO\n val
infinityString = \"Infinity\"\n when (value[index]) {\n '+', '-' -> index++\n }\n val hasSign = index > 0\n val isNegative = hasSign && value.startsWith('-')\n when
{\n length <= index ->\n throw IllegalArgumentException(\"No components\")\n value[index] == 'P'
-> {\n if (++index == length) throw IllegalArgumentException()\n val nonDigitSymbols = \"+-.\n

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var isTimeComponent = false\n var prevUnit: DurationUnit? = null\n while (index < length) {\n
 if (value[index] == 'T') {\n if (isTimeComponent || ++index == length) throw\n
IllegalArgumentExcepion()\n isTimeComponent = true\n continue\n }\n
val component = value.substringWhile(index) { it in '0'..'9' || it in nonDigitSymbols }\n if\n
(component.isEmpty()) throw IllegalArgumentExcepion()\n index += component.length\n val\n
unitChar = value.getOrElse(index) { throw IllegalArgumentExcepion("Missing unit for value $component") }\n
 index++\n val unit\n
= durationUnitByIsoChar(unitChar, isTimeComponent)\n if (prevUnit != null && prevUnit <= unit)\n
throw IllegalArgumentExcepion("Unexpected order of duration components")\n prevUnit = unit\n
 val dotIndex = component.indexOf('.')\n if (unit == DurationUnit.SECONDS && dotIndex > 0) {\n
 val whole = component.substring(0, dotIndex)\n result +=\n
parseOverLongIsoComponent(whole).toDuration(unit)\n result +=\n
component.substring(dotIndex).toDouble().toDuration(unit)\n } else {\n result +=\n
parseOverLongIsoComponent(component).toDuration(unit)\n }\n }\n }\n strictIso ->\n
throw IllegalArgumentExcepion()\n value.regionMatches(index, infinityString, 0, length = maxOf(length -\n
index, infinityString.length), ignoreCase = true) -> {\n result = Duration.INFINITE\n }\n
else -> {\n // parse default string format\n var prevUnit: DurationUnit? = null\n var afterFirst =\n
false\n var allowSpaces = !hasSign\n if (hasSign && value[index] == '(' && value.last() == ')') {\n
 allowSpaces = true\n if (++index == --length) throw IllegalArgumentExcepion("No components")\n
 }\n while (index < length) {\n if (afterFirst && allowSpaces) {\n index =\n
value.skipWhile(index) { it == ' ' }\n }\n afterFirst = true\n val component =\n
value.substringWhile(index) { it in '0'..'9' || it == '.' }\n if (component.isEmpty()) throw\n
IllegalArgumentExcepion()\n index += component.length\n val unitName =\n
value.substringWhile(index) { it in 'a'..'z' }\n index += unitName.length\n val unit =\n
durationUnitByShortName(unitName)\n
 if (prevUnit != null && prevUnit <= unit) throw IllegalArgumentExcepion("Unexpected order of\n
duration components")\n prevUnit = unit\n val dotIndex = component.indexOf('.')\n if\n
(dotIndex > 0) {\n val whole = component.substring(0, dotIndex)\n result +=\n
whole.toLong().toDuration(unit)\n result +=\n
component.substring(dotIndex).toDouble().toDuration(unit)\n if (index < length) throw\n
IllegalArgumentExcepion("Fractional component must be last")\n } else {\n result +=\n
component.toLong().toDuration(unit)\n }\n }\n }\n }\n return if (isNegative) -result else\n
result\n
}\n\nprivate fun parseOverLongIsoComponent(value: String): Long {\n val length = value.length\n var\n
startIndex = 0\n if (length > 0 && value[0] in "+-") startIndex++\n if ((length - startIndex) > 16 &&\n
(startIndex..value.lastIndex).all\n
 { value[it] in '0'..'9' }) {\n // all chars are digits, but more than ceiling(log10(MAX_MILLIS / 1000)) of them\n
 return if (value[0] == '-') Long.MIN_VALUE else Long.MAX_VALUE\n } // TODO: replace with just\n
toLong after min JDK becomes 8\n return if (value.startsWith("+")) value.drop(1).toLong() else\n
value.toLong()\n
}\n\nprivate inline fun String.substringWhile(startIndex: Int, predicate: (Char) -> Boolean):\n
String =\n substring(startIndex, skipWhile(startIndex, predicate))\n\nprivate inline fun\n
String.skipWhile(startIndex: Int, predicate: (Char) -> Boolean): Int {\n var i = startIndex\n while (i < length &&\n
predicate(this[i])) i++\n return i\n
}\n\n// The ranges are chosen so that they are:\n// - symmetric relative to\n
zero: this greatly simplifies operations with sign, e.g. unaryMinus and minus.\n// - non-overlapping, but adjacent:\n
the first value that doesn't fit in nanos range, can be exactly represented\n
in millis.\n\ninternal const val NANOS_IN_MILLIS = 1_000_000\n// maximum number duration can store in\n
nanosecond range\n\ninternal const val MAX_NANOS = Long.MAX_VALUE / 2 / NANOS_IN_MILLIS *\n
NANOS_IN_MILLIS - 1 // ends in ...999_999\n// maximum number duration can store in millisecond range, also\n
encodes an infinite value\n\ninternal const val MAX_MILLIS = Long.MAX_VALUE / 2\n// MAX_NANOS

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expressed in milliseconds\nprivate const val MAX_NANOS_IN_MILLIS = MAX_NANOS /
NANOS_IN_MILLIS\n\nprivate fun nanosToMillis(nanos: Long): Long = nanos / NANOS_IN_MILLIS\nprivate
fun millisToNanos(millis: Long): Long = millis * NANOS_IN_MILLIS\n\nprivate fun
durationOfNanos(normalNanos: Long) = Duration(normalNanos shl 1)\nprivate fun durationOfMillis(normalMillis:
Long) = Duration((normalMillis shl 1) + 1)\nprivate fun durationOf(normalValue: Long, unitDiscriminator: Int) =
Duration((normalValue shl 1) + unitDiscriminator)\nprivate fun durationOfNanosNormalized(nanos: Long) =\n if
(nanos in -MAX_NANOS..MAX_NANOS)
 {\n durationOfNanos(nanos)\n } else {\n durationOfMillis(nanosToMillis(nanos))\n }\n\nprivate fun
durationOfMillisNormalized(millis: Long) =\n if (millis in -
MAX_NANOS_IN_MILLIS..MAX_NANOS_IN_MILLIS) {\n durationOfNanos(millisToNanos(millis))\n }
else {\n durationOfMillis(millis.coerceIn(-MAX_MILLIS, MAX_MILLIS))\n }\n\ninternal expect val
durationAssertionsEnabled: Boolean\n\ninternal expect fun formatToExactDecimals(value: Double, decimals: Int):
String\n\ninternal expect fun formatUpToDecimals(value: Double, decimals: Int): String", "/*\n * Copyright 2010-
2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmName("UnsignedKt")\n\npackage kotlin\n\n\n@PublishedApi\n\ninternal fun uintCompare(v1:
Int, v2: Int): Int = (v1 xor Int.MIN_VALUE).compareTo(v2 xor Int.MIN_VALUE)\n\n@PublishedApi\n\ninternal
fun ulongCompare(v1: Long, v2: Long): Int = (v1 xor Long.MIN_VALUE).compareTo(v2 xor
Long.MIN_VALUE)\n\n@PublishedApi\n\ninternal fun uintDivide(v1: UInt, v2: UInt): UInt = (v1.toLong() /
v2.toLong()).toUInt()\n\n@PublishedApi\n\ninternal fun uintRemainder(v1: UInt, v2: UInt): UInt = (v1.toLong() %
v2.toLong()).toUInt()\n\n// Division and remainder are based on Guava's UnsignedLongs implementation\n\n//
Copyright 2011 The Guava Authors\n\n@PublishedApi\n\ninternal fun ulongDivide(v1: ULong, v2: ULong): ULong
{\n val dividend = v1.toLong()\n val divisor = v2.toLong()\n if (divisor < 0) { // i.e., divisor >= 2^63:\n
return if (v1 < v2) ULong(0) else ULong(1)\n }\n\n // Optimization - use signed division if both dividend and
divisor < 2^63\n if (dividend >= 0) {\n return ULong(dividend / divisor)\n }\n\n // Otherwise, approximate
the quotient, check, and correct if necessary.\n val quotient = ((dividend ushr 1) / divisor) shl 1\n val rem
= dividend - quotient * divisor\n return ULong(quotient + if (ULong(rem) >= ULong(divisor)) 1 else
0)\n}\n\n@PublishedApi\n\ninternal fun ulongRemainder(v1: ULong, v2: ULong): ULong {\n val dividend =
v1.toLong()\n val divisor = v2.toLong()\n if (divisor < 0) { // i.e., divisor >= 2^63:\n return if (v1 < v2) {\n
v1 // dividend < divisor\n } else {\n v1 - v2 // dividend >= divisor\n }\n }\n\n // Optimization
- use signed modulus if both dividend and divisor < 2^63\n if (dividend >= 0) {\n return ULong(dividend %
divisor)\n }\n\n // Otherwise, approximate the quotient, check, and correct if necessary.\n val quotient =
((dividend ushr 1) / divisor) shl 1\n val rem = dividend - quotient * divisor\n return ULong(rem - if (ULong(rem)
>= ULong(divisor)) divisor else 0)\n}\n\n@PublishedApi\n\ninternal fun doubleToUInt(v: Double): UInt = when {\n
v.isNaN() -> 0u\n v <= UInt.MIN_VALUE.toDouble() -> UInt.MIN_VALUE\n
 v >= UInt.MAX_VALUE.toDouble() -> UInt.MAX_VALUE\n v <= Int.MAX_VALUE -> v.toInt().toUInt()\n
 else -> (v - Int.MAX_VALUE).toInt().toUInt() + Int.MAX_VALUE.toUInt() // Int.MAX_VALUE < v <
UInt.MAX_VALUE\n}\n\n@PublishedApi\n\ninternal fun doubleToULong(v: Double): ULong = when {\n
v.isNaN() -> 0u\n v <= ULong.MIN_VALUE.toDouble() -> ULong.MIN_VALUE\n v >=
ULong.MAX_VALUE.toDouble() -> ULong.MAX_VALUE\n v < Long.MAX_VALUE ->
v.toLong().toULong()\n\n // Real values from Long.MAX_VALUE to (Long.MAX_VALUE + 1) are not
representable in Double, so don't handle them.\n else -> (v - 9223372036854775808.0).toLong().toULong() +
9223372036854775808uL // Long.MAX_VALUE + 1 < v <
ULong.MAX_VALUE\n}\n\n\n@PublishedApi\n\ninternal fun uintToDouble(v: Int): Double = (v and
Int.MAX_VALUE).toDouble() + (v ushr 31 shl 30).toDouble() * 2\n\n@PublishedApi\n\ninternal fun
ulongToDouble(v: Long): Double = (v ushr 11).toDouble() * 2048 + (v and 2047)\n\n\ninternal fun
ulongToString(v: Long): String = ulongToString(v, 10)\n\n\ninternal fun ulongToString(v: Long, base: Int): String
{\n if (v >= 0) return v.toString(base)\n\n var quotient = ((v ushr 1) / base) shl 1\n var rem = v - quotient *

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base\n if (rem >= base) {\n rem -= base\n quotient += 1\n }\n return quotient.toString(base) +
rem.toString(base)\n}\n\n"/**\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*/\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("CollectionsKt")\n\npackage
kotlin.collections\n\n/**\n * Given an [iterator] function constructs an [Iterable] instance that returns values through
the [Iterator]\n * provided by that function.\n * @sample samples.collections.Iterables.Building.iterable\n
*/\n\n@kotlin.internal.InlineOnly\npublic inline fun <T> Iterable(crossinline iterator: ()
-> Iterator<T>): Iterable<T> = object : Iterable<T> {\n override fun iterator(): Iterator<T> = iterator()\n}\n\n/**\n * A wrapper over another [Iterable] (or any other object that can produce an [Iterator]) that returns\n * an indexing
iterator.\n */\n\ninternal class IndexingIterable<out T>(private val iteratorFactory: () -> Iterator<T>) :
Iterable<IndexedValue<T>> {\n override fun iterator(): Iterator<IndexedValue<T>> =
IndexingIterator(iteratorFactory())\n}\n\n\n/**\n * Returns the size of this iterable if it is known, or `null`
otherwise.\n */\n\n@PublishedApi\ninternal fun <T> Iterable<T>.collectionSizeOrNull(): Int? = if (this is
Collection<*>) this.size else null\n\n/**\n * Returns the size of this iterable if it is known, or the specified [default]
value otherwise.\n */\n\n@PublishedApi\ninternal fun <T> Iterable<T>.collectionSizeOrDefault(default: Int): Int = if
(this is Collection<*>) this.size else default\n\n\n/**\n * Returns a single list of all elements from all collections
in the given collection.\n * @sample samples.collections.Iterables.Operations.flattenIterable\n
*/\n\npublic fun <T>
Iterable<Iterable<T>>.flatten(): List<T> {\n val result = ArrayList<T>()\n for (element in this) {\n
result.addAll(element)\n }\n return result\n}\n\n\n/**\n * Returns a pair of lists, where\n * *first* list is built from
the first values of each pair from this collection,\n * *second* list is built from the second values of each pair from
this collection.\n * @sample samples.collections.Iterables.Operations.unzipIterable\n
*/\n\npublic fun <T, R>
Iterable<Pair<T, R>>.unzip(): Pair<List<T>, List<R>> {\n val expectedSize = collectionSizeOrDefault(10)\n
val listT = ArrayList<T>(expectedSize)\n val listR = ArrayList<R>(expectedSize)\n for (pair in this) {\n
listT.add(pair.first)\n listR.add(pair.second)\n }\n return listT to listR\n}\n\n"/**\n * Copyright 2010-2020
JetBrains s.r.o. and Kotlin Programming Language contributors.\n
* Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("SequencesKt")\n\npackage
kotlin.sequences\n\nimport kotlin.random.Random\n\n/**\n * Given an [iterator] function constructs a [Sequence]
that returns values through the [Iterator]\n * provided by that function.\n * The values are evaluated lazily, and the
sequence is potentially infinite.\n * @sample samples.collections.Sequences.Building.sequenceFromIterator\n
*/\n\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence(crossinline iterator: () -> Iterator<T>):
Sequence<T> = object : Sequence<T> {\n override fun iterator(): Iterator<T> = iterator()\n}\n\n\n/**\n * Creates a
sequence that returns all elements from this iterator. The sequence is constrained to be iterated only once.\n * @sample
samples.collections.Sequences.Building.sequenceFromIterator\n
*/\n\npublic fun <T>
Iterator<T>.asSequence():
Sequence<T> = Sequence { this }.constrainOnce()\n\n\n/**\n * Creates a sequence that returns the specified values.\n
*/\n * @sample samples.collections.Sequences.Building.sequenceOfValues\n
*/\n\npublic fun <T> sequenceOf(vararg
elements: T): Sequence<T> = if (elements.isEmpty()) emptySequence() else elements.asSequence()\n\n\n/**\n *
Returns an empty sequence.\n */\n\npublic fun <T> emptySequence(): Sequence<T> = EmptySequence\n\n\nprivate
object EmptySequence : Sequence<Nothing>, DropTakeSequence<Nothing> {\n override fun iterator():
Iterator<Nothing> = EmptyIterator\n override fun drop(n: Int) = EmptySequence\n override fun take(n: Int) =
EmptySequence\n}\n\n\n/**\n * Returns this sequence if it's not `null` and the empty sequence otherwise.\n *
*/\n * @sample samples.collections.Sequences.Usage.sequenceOrEmpty\n
*/\n\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>?.orEmpty():
Sequence<T> = this ?: emptySequence()\n\n\n/**\n * Returns a sequence
that iterates through the elements either of this sequence\n * or, if this sequence turns out to be empty, of the
sequence returned by [defaultValue] function.\n * @sample

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samples.collections.Sequences.Usage.sequenceIfEmpty\n *\n@SinceKotlin(\`1.3\`)\npublic fun <T>
Sequence<T>.ifEmpty(defaultValue: () -> Sequence<T>): Sequence<T> = sequence { \n val iterator =
this@ifEmpty.iterator()\n if (iterator.hasNext()) {\n yieldAll(iterator)\n } else {\n
yieldAll(defaultValue())\n }\n}\n\n/**\n * Returns a sequence of all elements from all sequences in this
sequence.\n *\n * The operation is _intermediate_ and _stateless_.\n *\n * @sample
samples.collections.Sequences.Transformations.flattenSequenceOfSequences\n *\npublic fun <T>
Sequence<Sequence<T>>.flatten(): Sequence<T> = flatten { it.iterator() }\n\n/**\n * Returns a sequence of all
elements from all iterables in this sequence.\n *\n * The operation is _intermediate_ and _stateless_.\n *\n *
@sample samples.collections.Sequences.Transformations.flattenSequenceOfLists\n
*\n@kotlin.jvm.JvmName(\`flattenSequenceOfIterable\`)\npublic fun <T> Sequence<Iterable<T>>.flatten():
Sequence<T> = flatten { it.iterator() }\n\nprivate fun <T, R> Sequence<T>.flatten(iterator: (T) ->
Iterator<R>): Sequence<R> {\n if (this is TransformingSequence<*, *>) {\n return (this as TransformingSequence<*,
T>).flatten(iterator)\n }\n return FlatteningSequence(this, { it }, iterator)\n}\n\n/**\n * Returns a pair of lists,
where\n * *first* list is built from the first values of each pair from this sequence,\n * *second* list is built from the
second values of each pair from this sequence.\n *\n * The operation is _terminal_.\n *\n * @sample
samples.collections.Sequences.Transformations.unzip\n *\npublic fun <T, R> Sequence<Pair<T, R>>.unzip():
Pair<List<T>, List<R>> {\n val listT = ArrayList<T>()\n val listR = ArrayList<R>()\n for (pair in this) {\n
listT.add(pair.first)\n listR.add(pair.second)\n
}\n return listT to listR\n}\n\n/**\n * Returns a sequence that yields elements of this sequence randomly
shuffled.\n *\n * Note that every iteration of the sequence returns elements in a different order.\n *\n * The operation
is _intermediate_ and _stateful_.\n *\n@SinceKotlin(\`1.4\`)\npublic fun <T> Sequence<T>.shuffled():
Sequence<T> = shuffled(Random)\n\n/**\n * Returns a sequence that yields elements of this sequence randomly
shuffled\n * using the specified [random] instance as the source of randomness.\n *\n * Note that every iteration of
the sequence returns elements in a different order.\n *\n * The operation is _intermediate_ and _stateful_.\n
*\n@SinceKotlin(\`1.4\`)\npublic fun <T> Sequence<T>.shuffled(random: Random): Sequence<T> =
sequence<T> {\n val buffer = toMutableList()\n while (buffer.isNotEmpty()) {\n val j =
random.nextInt(buffer.size)\n val last = buffer.removeLast()\n val value = if (j < buffer.size) buffer.set(j,
last) else last\n yield(value)\n }\n}\n\n/**\n * A sequence that returns the values from the underlying
[sequence] that either match or do not match\n * the specified [predicate].\n *\n * @param sendWhen If `true`,
values for which the predicate returns `true` are returned. Otherwise,\n * values for which the predicate returns
`false` are returned\n *\ninternal class FilteringSequence<T>(\n private val sequence: Sequence<T>,\n private
val sendWhen: Boolean = true,\n private val predicate: (T) -> Boolean\n) : Sequence<T> {\n\n override fun
iterator(): Iterator<T> = object : Iterator<T> {\n val iterator = sequence.iterator()\n var nextState: Int = -1 //
-1 for unknown, 0 for done, 1 for continue\n var nextItem: T? = null\n\n private fun calcNext() {\n
while (iterator.hasNext()) {\n val item = iterator.next()\n if (predicate(item) == sendWhen) {\n
nextItem = item\n nextState = 1\n return\n }\n }\n nextState = 0\n }\n\n override
fun next(): T {\n if (nextState == -1)\n calcNext()\n if (nextState == 0)\n throw
NoSuchElementException()\n val result = nextItem\n nextItem = null\n nextState = -1\n
@Suppress(\`"UNCHECKED_CAST"\`)\n return result as T\n }\n\n override fun hasNext(): Boolean
{\n if (nextState == -1)\n calcNext()\n return nextState == 1\n }\n}\n\n/**\n * A
sequence which returns the results of applying the given [transformer] function to the values\n * in the underlying
[sequence].\n *\ninternal class TransformingSequence<T, R>(\n constructor(private val sequence: Sequence<T>,\n
private val transformer: (T) -> R) : Sequence<R> {\n override fun iterator(): Iterator<R> = object : Iterator<R>
{\n val iterator = sequence.iterator()\n override fun next(): R {\n return transformer(iterator.next())\n
}\n\n override fun hasNext(): Boolean {\n return iterator.hasNext()\n }\n }\n\n internal fun
<E> flatten(iterator: (R) -> Iterator<E>): Sequence<E> {\n return FlatteningSequence<T, R, E>(sequence,
transformer, iterator)\n }\n}\n\n/**\n * A sequence which returns the results of applying the given [transformer]

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function to the values\n * in the underlying [sequence], where the transformer function takes the index of the value
in the underlying\n * sequence along with the value itself.\n *^\ninternal class TransformingIndexedSequence<T,
R>\nconstructor(private val sequence: Sequence<T>, private val transformer: (Int, T) -> R) : Sequence<R> {\n
override fun iterator(): Iterator<R> = object : Iterator<R> {\n val iterator = sequence.iterator()\n var index =
0\n override fun next(): R {\n
 return transformer(checkIndexOverflow(index++), iterator.next())\n }\n\n override fun hasNext():
Boolean {\n return iterator.hasNext()\n }\n}\n\n/**\n * A sequence which combines values from
the underlying [sequence] with their indices and returns them as\n * [IndexedValue] objects.\n *^\ninternal class
IndexingSequence<T>\nconstructor(private val sequence: Sequence<T>) : Sequence<IndexedValue<T>> {\n
override fun iterator(): Iterator<IndexedValue<T>> = object : Iterator<IndexedValue<T>> {\n val iterator =
sequence.iterator()\n var index = 0\n override fun next(): IndexedValue<T> {\n return
IndexedValue(checkIndexOverflow(index++), iterator.next())\n }\n\n override fun hasNext(): Boolean {\n
 return iterator.hasNext()\n }\n}\n\n/**\n * A sequence which takes the values from two parallel
underlying sequences, passes them to the given\n * [transform] function and returns
the values returned by that function. The sequence stops returning\n * values as soon as one of the underlying
sequences stops returning values.\n *^\ninternal class MergingSequence<T1, T2, V>\nconstructor(\n private val
sequence1: Sequence<T1>,\n private val sequence2: Sequence<T2>,\n private val transform: (T1, T2) -> V\n) :
Sequence<V> {\n override fun iterator(): Iterator<V> = object : Iterator<V> {\n val iterator1 =
sequence1.iterator()\n val iterator2 = sequence2.iterator()\n override fun next(): V {\n return
transform(iterator1.next(), iterator2.next())\n }\n\n override fun hasNext(): Boolean {\n return
iterator1.hasNext() && iterator2.hasNext()\n }\n}\n\ninternal class FlatteningSequence<T, R,
E>\nconstructor(\n private val sequence: Sequence<T>,\n private val transformer: (T) -> R,\n private val
iterator: (R) -> Iterator<E>\n) : Sequence<E> {\n override fun iterator(): Iterator<E>
= object : Iterator<E> {\n val iterator = sequence.iterator()\n var itemIterator: Iterator<E>? = null\n\n
override fun next(): E {\n if (!ensureItemIterator())\n throw NoSuchElementException()\n
return itemIterator!!.next()\n }\n\n override fun hasNext(): Boolean {\n return ensureItemIterator()\n
 }\n\n private fun ensureItemIterator(): Boolean {\n if (itemIterator?.hasNext() == false)\n
itemIterator = null\n while (itemIterator == null) {\n if (!iterator.hasNext())\n return
false\n } else {\n val element = iterator.next()\n val nextItemIterator =
iterator(transformer(element))\n if (nextItemIterator.hasNext())\n itemIterator =
nextItemIterator\n return true\n }\n }\n\n return true\n }\n}\n\ninternal fun <T, C, R> flatMapIndexed(source:
Sequence<T>, transform: (Int, T) -> C, iterator: (C) -> Iterator<R>): Sequence<R> =\n sequence {\n var
index = 0\n for (element in source) {\n val result = transform(checkIndexOverflow(index++), element)\n
yieldAll(iterator(result))\n }\n}\n\n/**\n * A sequence that supports drop(n) and take(n) operations\n
*^\ninternal interface DropTakeSequence<T> : Sequence<T> {\n fun drop(n: Int): Sequence<T>\n fun take(n:
Int): Sequence<T>\n}\n\n/**\n * A sequence that skips [startIndex] values from the underlying [sequence]\n * and
stops returning values right before [endIndex], i.e. stops at `endIndex - 1`\n *^\ninternal class SubSequence<T>(\n
private val sequence: Sequence<T>,\n private val startIndex: Int,\n private val endIndex: Int\n) : Sequence<T>,\nDropTakeSequence<T> {\n\n init {\n require(startIndex >=
0)\n } {\n require(endIndex >= 0) {\n require(endIndex >= startIndex) {\n require(endIndex should be not less than
startIndex, but was $endIndex < $startIndex)\n }\n }\n private val count: Int get() = endIndex - startIndex\n\n
override fun drop(n: Int): Sequence<T> = if (n >= count) emptySequence() else SubSequence(sequence, startIndex
+ n, endIndex)\n override fun take(n: Int): Sequence<T> = if (n >= count) this else SubSequence(sequence,
startIndex, startIndex + n)\n\n override fun iterator() = object : Iterator<T> {\n val iterator =
sequence.iterator()\n var position = 0\n // Shouldn't be called from constructor to avoid premature
iteration\n private fun drop() {\n while (position < startIndex && iterator.hasNext()) {\n

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iterator.next()\n position++\n }\n }\n\n override fun hasNext(): Boolean {\n drop()\n return (position < endIndex) &&
iterator.hasNext()\n }\n\n override fun next(): T {\n drop()\n if (position >= endIndex)\n throw NoSuchElementException()\n position++\n return iterator.next()\n }\n }\n}\n\n/**\n * A sequence that returns at most [count] values from the underlying [sequence], and stops returning values\n * as soon as that count is reached.\n */\ninternal class TakeSequence<T>(\n private val sequence: Sequence<T>,\n private val count: Int\n) : Sequence<T>, DropTakeSequence<T> {\n init {\n require(count >= 0) { \"count must be non-negative, but was $count.\" }\n }\n\n override fun drop(n: Int): Sequence<T> = if (n >= count) emptySequence() else SubSequence(sequence, n, count)\n override fun take(n: Int): Sequence<T> = if (n >= count) this else TakeSequence(sequence, n)\n\n override fun iterator(): Iterator<T> = object : Iterator<T> {\n var left = count\n val iterator = sequence.iterator()\n\n override fun next(): T {\n if (left == 0)\n throw NoSuchElementException()\n left--\n return iterator.next()\n }\n\n override fun hasNext(): Boolean {\n return left > 0 && iterator.hasNext()\n }\n }\n}\n\n/**\n * A sequence that returns values from the underlying [sequence] while the [predicate] function returns\n * `true`, and stops returning values once the function returns `false` for the next element.\n */\ninternal class TakeWhileSequence<T>\nconstructor(\n private val sequence: Sequence<T>,\n private val predicate: (T) -> Boolean\n) : Sequence<T> {\n override fun iterator(): Iterator<T> = object : Iterator<T> {\n val iterator = sequence.iterator()\n var nextState: Int = -1 // -1 for unknown, 0 for done, 1 for continue\n var nextItem: T? = null\n\n private fun calcNext() {\n if (iterator.hasNext()) {\n val item = iterator.next()\n if (predicate(item)) {\n nextState = 1\n nextItem = item\n return\n }\n nextState = 0\n }\n\n override fun next(): T {\n if (nextState == -1)\n calcNext() // will change nextState\n if (nextState == 0)\n throw NoSuchElementException()\n @Suppress(\"UNCHECKED_CAST\")\n val result = nextItem as T\n // Clean next to avoid keeping reference on yielded instance\n nextItem = null\n nextState = -1\n return result\n }\n\n override fun hasNext(): Boolean {\n if (nextState == -1)\n calcNext() // will change nextState\n return nextState == 1\n }\n }\n }\n}\n\n/**\n * A sequence that skips the specified number of values from the underlying [sequence] and returns\n * all values after that.\n */\ninternal class DropSequence<T>(\n private val sequence: Sequence<T>,\n private val count: Int\n) : Sequence<T>, DropTakeSequence<T> {\n init {\n require(count >= 0) { \"count must be non-negative, but was $count.\" }\n }\n\n override fun drop(n: Int): Sequence<T> = (count + n).let { n1 -> if (n1 < 0) DropSequence(this, n) else DropSequence(sequence, n1) }\n override fun take(n: Int): Sequence<T> = (count + n).let { n1 -> if (n1 < 0) TakeSequence(this, n) else SubSequence(sequence, count, n1) }\n\n override fun iterator(): Iterator<T> = object : Iterator<T> {\n val iterator = sequence.iterator()\n var left = count\n\n // Shouldn't be called from constructor to avoid premature iteration\n private fun drop() {\n while (left > 0 && iterator.hasNext()) {\n iterator.next()\n left--\n }\n }\n\n override fun next(): T {\n drop()\n return iterator.next()\n }\n\n override fun hasNext(): Boolean {\n drop()\n return iterator.hasNext()\n }\n }\n}\n\n/**\n * A sequence that skips the values from the underlying [sequence] while the given [predicate] returns `true` and returns\n * all values after that.\n */\ninternal class DropWhileSequence<T>\nconstructor(\n private val sequence: Sequence<T>,\n private val predicate: (T) -> Boolean\n) : Sequence<T> {\n override fun iterator(): Iterator<T> = object : Iterator<T> {\n val iterator = sequence.iterator()\n var dropState: Int = -1 // -1 for not dropping, 1 for nextItem, 0 for normal iteration\n var nextItem: T? = null\n private fun drop() {\n while (iterator.hasNext()) {\n val item = iterator.next()\n if (!predicate(item)) {\n nextItem = item\n dropState = 1\n return\n }\n dropState = 0\n }\n\n override fun next(): T {\n if (dropState == -1)\n drop()\n if (dropState == 1) {\n @Suppress(\"UNCHECKED_CAST\")\n val result = nextItem as T\n nextItem = null\n }\n }\n }\n }\n}\n
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dropState = 0\n return result\n }\n return iterator.next()\n }\n\n override fun
hasNext(): Boolean {\n if (dropState == -1)\n drop()\n return dropState == 1 ||
iterator.hasNext()\n }\n }\n\n internal class DistinctSequence<T, K>(private val source: Sequence<T>,
private val keySelector: (T) -> K) : Sequence<T> {\n override fun iterator(): Iterator<T> =
DistinctIterator(source.iterator(), keySelector)\n }\n\n private class DistinctIterator<T, K>(private val source:
Iterator<T>, private
val keySelector: (T) -> K) : AbstractIterator<T>() {\n private val observed = HashSet<K>()\n override fun
computeNext() {\n while (source.hasNext()) {\n val next = source.next()\n val key =
keySelector(next)\n\n if (observed.add(key)) {\n setNext(next)\n return\n }\n }\n done()\n }\n }\n\n private class GeneratorSequence<T : Any>(private val getInitialValue: () -> T?,
private val getNextValue: (T) -> T?) : Sequence<T> {\n override fun iterator(): Iterator<T> = object : Iterator<T>
{\n var nextItem: T? = null\n var nextState: Int = -2 // -2 for initial unknown, -1 for next unknown, 0 for
done, 1 for continue\n\n private fun calcNext() {\n nextItem = if (nextState == -2) getInitialValue() else
getNextValue(nextItem!!)\n nextState = if (nextItem == null) 0 else 1\n }\n\n override fun next(): T
{\n if (nextState
< 0)\n calcNext()\n\n if (nextState == 0)\n throw NoSuchElementException()\n\n val
result = nextItem as T\n // Do not clean nextItem (to avoid keeping reference on yielded instance) -- need to
keep state for getNextValue\n nextState = -1\n return result\n }\n\n override fun hasNext():
Boolean {\n if (nextState < 0)\n calcNext()\n return nextState == 1\n }\n }\n }\n\n /**\n * Returns a wrapper sequence that provides values of this sequence, but ensures it can be iterated only one time.\n
*\n * The operation is _intermediate_ and _stateless_.\n *\n * [IllegalStateException] is thrown on iterating the
returned sequence for the second time and the following times.\n *\n */\n public fun <T>
Sequence<T>.constrainOnce(): Sequence<T> {\n // as? does not work in js\n //return this as?
ConstrainedOnceSequence<T> ?: ConstrainedOnceSequence(this)\n\n return if (this is ConstrainedOnceSequence<T>) this else
ConstrainedOnceSequence(this)\n }\n\n /**\n * Returns
a sequence which invokes the function to calculate the next value on each iteration until the function returns `null`.\n
*\n * The returned sequence is constrained to be iterated only once.\n *\n * @see constrainOnce\n * @see
kotlin.sequences.sequence\n *\n * @sample samples.collections.Sequences.Building.generateSequence\n */\n public
fun <T : Any> generateSequence(nextFunction: () -> T?): Sequence<T> {\n return
GeneratorSequence(nextFunction, { nextFunction() }).constrainOnce()\n }\n\n /**\n * Returns a sequence defined by
the starting value [seed] and the function [nextFunction],\n * which is invoked to calculate the next value based on
the previous one on each iteration.\n *\n * The sequence produces values until it encounters first `null` value.\n
*\n * If [seed] is `null`, an empty sequence is produced.\n *\n * The sequence can be iterated multiple
times, each time
starting
with [seed].\n *\n * @see kotlin.sequences.sequence\n *\n * @sample
samples.collections.Sequences.Building.generateSequenceWithSeed\n
*\n * @kotl.in.internal.LowPriorityInOverloadResolution\n */\n public fun <T : Any> generateSequence(seed: T?,
nextFunction: (T) -> T?): Sequence<T> =\n if (seed == null)\n EmptySequence\n else\n
GeneratorSequence({ seed }, nextFunction)\n }\n\n /**\n * Returns a sequence defined by the function [seedFunction],
which is invoked to produce the starting value,\n * and the [nextFunction], which is invoked to calculate the next
value based on the previous one on each iteration.\n *\n * The sequence produces values until it encounters first
`null` value.\n *\n * If [seedFunction] returns `null`, an empty sequence is produced.\n *\n * The
sequence can be
iterated multiple times.\n *\n * @see kotlin.sequences.sequence\n *\n * @sample
samples.collections.Sequences.Building.generateSequenceWithLazySeed\n */\n public fun <T : Any>
generateSequence(seedFunction:
() -> T?, nextFunction: (T) -> T?): Sequence<T> =\n GeneratorSequence(seedFunction, nextFunction)\n }\n\n /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code
is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n

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out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n * \n\npublic
actual fun ByteArray.elementAt(index: Int): Byte {\n return elementAtOrElse(index) { throw
IndexOutOfBoundsException("index: $index, size: $size}") }\n}\n\n/**\n * Returns an element at the given
[index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n * \n\npublic actual fun ShortArray.elementAt(index: Int): Short
{\n return elementAtOrElse(index) { throw IndexOutOfBoundsException("index: $index, size: $size}")
}\n}\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is
out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n * \n\npublic
actual fun IntArray.elementAt(index: Int): Int {\n return elementAtOrElse(index) { throw
IndexOutOfBoundsException("index: $index, size: $size}") }\n}\n\n/**\n * Returns an element at the given
[index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n * \n\npublic actual fun LongArray.elementAt(index: Int): Long
{\n return elementAtOrElse(index) { throw IndexOutOfBoundsException("index: $index, size: $size")
}\n}\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is
out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n * \n\npublic
actual fun FloatArray.elementAt(index: Int): Float {\n return elementAtOrElse(index) { throw
IndexOutOfBoundsException("index: $index,
size: $size}") }\n}\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException]
if the [index] is out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n
*\n\npublic actual fun DoubleArray.elementAt(index: Int): Double {\n return elementAtOrElse(index) { throw
IndexOutOfBoundsException("index: $index, size: $size") }\n}\n\n/**\n * Returns an element at the given
[index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n * \n\npublic actual fun BooleanArray.elementAt(index: Int):
Boolean {\n return elementAtOrElse(index) { throw IndexOutOfBoundsException("index: $index, size: $size")
}\n}\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is
out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n * \n\npublic
actual fun CharArray.elementAt(index: Int): Char {\n return elementAtOrElse(index) { throw
IndexOutOfBoundsException("index: $index, size: $size") }\n}\n\n/**\n * Returns a [List] that wraps the original
array.\n * \n\npublic actual fun <T> Array<out T>.asList(): List<T> {\n return
ArrayList<T>(this.unsafeCast<Array<Any?>>())\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n\n@kotlin.internal.InlineOnly\n\npublic actual inline fun ByteArray.asList(): List<Byte> {\n return
this.unsafeCast<Array<Byte>>().asList()\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n\n@kotlin.internal.InlineOnly\n\npublic actual inline fun ShortArray.asList(): List<Short> {\n return
this.unsafeCast<Array<Short>>().asList()\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n\n@kotlin.internal.InlineOnly\n\npublic actual inline fun IntArray.asList(): List<Int> {\n return
this.unsafeCast<Array<Int>>().asList()\n}\n\n/**\n * Returns a [List] that
wraps the original array.\n * \n\n@kotlin.internal.InlineOnly\n\npublic actual inline fun LongArray.asList():
List<Long> {\n return this.unsafeCast<Array<Long>>().asList()\n}\n\n/**\n * Returns a [List] that wraps the
original array.\n * \n\n@kotlin.internal.InlineOnly\n\npublic actual inline fun FloatArray.asList(): List<Float> {\n
return this.unsafeCast<Array<Float>>().asList()\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n\n@kotlin.internal.InlineOnly\n\npublic actual inline fun DoubleArray.asList(): List<Double> {\n return
this.unsafeCast<Array<Double>>().asList()\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n\n@kotlin.internal.InlineOnly\n\npublic actual inline fun BooleanArray.asList(): List<Boolean> {\n return
this.unsafeCast<Array<Boolean>>().asList()\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n\npublic actual fun CharArray.asList(): List<Char> {\n return object : AbstractList<Char>(), RandomAccess {\n
override
val size: Int get() = this@asList.size\n override fun isEmpty(): Boolean = this@asList.isEmpty()\n override
fun contains(element: Char): Boolean = this@asList.contains(element)\n override fun get(index: Int): Char {\n

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AbstractList.checkElementIndex(index, size)\n return this@asList[index]\n }\n override fun
indexOf(element: Char): Int {\n @Suppress("USELESS_CAST")\n if ((element as Any?) !is Char)
return -1\n return this@asList.indexOf(element)\n }\n override fun lastIndexOf(element: Char): Int
{\n @Suppress("USELESS_CAST")\n if ((element as Any?) !is Char) return -1\n return
this@asList.lastIndexOf(element)\n }\n}\n\n/**\n * Returns `true` if the two specified arrays are *deeply*
equal to one another,\n * i.e. contain the same number of the same elements in the same order.\n * \n * If two
corresponding elements are nested arrays,
they are also compared deeply.\n * If any of arrays contains itself on any nesting level the behavior is undefined.\n
*\n * The elements of other types are compared for equality with the [equals][Any.equals] function.\n * For floating
point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.\n
*/\n\n@SinceKotlin("1.1")\n@kotlin.internal.LowPriorityInOverloadResolution\npublic actual infix fun <T>
Array<out T>.contentDeepEquals(other: Array<out T>): Boolean {\n return
this.contentDeepEquals(other)\n}\n\n/**\n * Returns `true` if the two specified arrays are *deeply* equal to one
another,\n * i.e. contain the same number of the same elements in the same order.\n * \n * The specified arrays are
also considered deeply equal if both are `null`.\n * \n * If two corresponding elements are nested arrays, they are
also compared deeply.\n * If any of arrays contains itself on any nesting level the behavior is undefined.\n * \n * The
elements of other types are
compared for equality with the [equals][Any.equals] function.\n * For floating point numbers it means that `NaN` is
equal to itself and `-0.0` is not equal to `0.0`.\n
*/\n\n@SinceKotlin("1.4")\n@library("arrayDeepEquals")\npublic
actual infix fun <T> Array<out T>?.contentDeepEquals(other: Array<out T>?): Boolean {\n
 definedExternally\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n * Nested
arrays are treated as lists too.\n * \n * If any of arrays contains itself on any nesting level the behavior is
undefined.\n
*/\n\n@SinceKotlin("1.1")\n@kotlin.internal.LowPriorityInOverloadResolution\npublic actual fun <T>
Array<out T>.contentDeepHashCode(): Int {\n return this.contentDeepHashCode()\n}\n\n/**\n * Returns a hash
code based on the contents of this array as if it is [List].\n * Nested arrays are treated as lists too.\n * \n * If any
of arrays contains itself on any nesting level the behavior is undefined.\n
*/\n\n@SinceKotlin("1.4")\n@library("arrayDeepHashCode")\npublic
actual fun <T> Array<out T>?.contentDeepHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a string
representation of the contents of this array as if it is a [List].\n * Nested arrays are treated as lists too.\n * \n *
If any of arrays contains itself on any nesting level that reference\n * is rendered as `[...]` to prevent recursion.\n
*\n * \n * @sample samples.collections.Arrays.ContentOperations.contentDeepToString\n
*/\n\n@SinceKotlin("1.1")\n@kotlin.internal.LowPriorityInOverloadResolution\npublic actual fun <T> Array<out
T>.contentDeepToString(): String {\n return this.contentDeepToString()\n}\n\n/**\n * Returns a string
representation of the contents of this array as if it is a [List].\n * Nested arrays are treated as lists too.\n * \n *
If any of arrays contains itself on any nesting level that reference\n * is rendered as `[...]` to prevent recursion.\n
*\n * \n * @sample samples.collections.Arrays.ContentOperations.contentDeepToString\n
*/\n\n@SinceKotlin("1.4")\n@library("arrayDeepToString")\npublic actual fun <T> Array<out
T>?.contentDeepToString(): String {\n definedExternally\n}\n\n/**\n * Returns `true` if the two specified arrays
are *structurally* equal to one another,\n * i.e. contain the same number of the same elements in the same order.\n
*\n * The elements are compared for equality with the [equals][Any.equals] function.\n * For floating point numbers
it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.\n
*/\n\n@Deprecated("Use Kotlin compiler 1.4 to
avoid deprecation warning.")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic
actual infix fun <T> Array<out T>.contentEquals(other: Array<out T>): Boolean {\n return
this.contentEquals(other)\n}\n\n/**\n * Returns `true` if the two specified arrays are *structurally* equal to one
another,\n * i.e. contain the same number of the same elements in the same order.\n * \n * The elements
are compared for equality with the [equals][Any.equals] function.\n * For floating point numbers it means that
`NaN` is equal to itself and `-0.0` is not equal to `0.0`.\n
*/\n\n@Deprecated("Use Kotlin compiler 1.4 to avoid
deprecation warning.")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual

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infix fun ByteArray.contentEquals(other: ByteArray): Boolean {
 return this.contentEquals(other)
}

Returns `true` if the two specified arrays are structurally equal to one another, i.e. contain the same number of the same elements in the same order. The elements are compared for equality with the [equals][Any.equals] function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")
@SinceKotlin("1.1")
@DeprecatedSinceKotlin(hiddenSince = "1.4")
public actual infix fun ShortArray.contentEquals(other: ShortArray): Boolean {
 return this.contentEquals(other)
}

Returns `true` if the two specified arrays are structurally equal to one another, i.e. contain the same number of the same elements in the same order. The elements are compared for equality with the [equals][Any.equals] function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")
@SinceKotlin("1.1")
@DeprecatedSinceKotlin(hiddenSince = "1.4")
public actual infix fun IntArray.contentEquals(other: IntArray): Boolean {
 return this.contentEquals(other)
}

Returns `true` if the two specified arrays are structurally equal to one another, i.e. contain the same number of the same elements in the same order. The elements are compared for equality with the [equals][Any.equals] function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")
@SinceKotlin("1.1")
@DeprecatedSinceKotlin(hiddenSince = "1.4")
public actual infix fun LongArray.contentEquals(other: LongArray): Boolean {
 return this.contentEquals(other)
}

Returns `true` if the two specified arrays are structurally equal to one another, i.e. contain the same number of the same elements in the same order. The elements are compared for equality with the [equals][Any.equals] function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")
@SinceKotlin("1.1")
@DeprecatedSinceKotlin(hiddenSince = "1.4")
public actual infix fun FloatArray.contentEquals(other: FloatArray): Boolean {
 return this.contentEquals(other)
}

Returns `true` if the two specified arrays are structurally equal to one another, i.e. contain the same number of the same elements in the same order. The elements are compared for equality with the [equals][Any.equals] function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")
@SinceKotlin("1.1")
@DeprecatedSinceKotlin(hiddenSince = "1.4")
public actual infix fun DoubleArray.contentEquals(other: DoubleArray): Boolean {
 return this.contentEquals(other)
}

Returns `true` if the two specified arrays are structurally equal to one another, i.e. contain the same number of the same elements in the same order. The elements are compared for equality with the [equals][Any.equals] function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")
@SinceKotlin("1.1")
@DeprecatedSinceKotlin(hiddenSince = "1.4")
public actual infix fun BooleanArray.contentEquals(other: BooleanArray): Boolean {
 return this.contentEquals(other)
}

Returns `true` if the two specified arrays are structurally equal to one another, i.e. contain the same number of the same elements in the same order. The elements are compared for equality with the [equals][Any.equals] function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")
@SinceKotlin("1.1")
@DeprecatedSinceKotlin(hiddenSince = "1.4")
public actual infix fun CharArray.contentEquals(other: CharArray): Boolean {
 return this.contentEquals(other)
}

Returns `true` if the two specified arrays are structurally equal to one another, i.e. contain the same number of the same elements in the same order. The elements are compared for equality with the [equals][Any.equals] function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

@SinceKotlin("1.4")
@library("arrayEquals")
public actual infix fun <T> Array<out

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1.4 to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince =
\"1.4\")\npublic actual fun ShortArray.contentHashCode(): Int {\n return this.contentHashCode()\n}\n\n/**\n *
Returns a hash code based on the contents of this array as if it is [List].\n */\n@Deprecated("Use Kotlin compiler
1.4 to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince =
\"1.4\")\npublic actual fun IntArray.contentHashCode(): Int {\n return this.contentHashCode()\n}\n\n/**\n *
Returns a hash code based on the contents of this array as if it is [List].\n */\n@Deprecated("Use Kotlin compiler
1.4 to avoid deprecation
warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = \"1.4\")\npublic actual fun
LongArray.contentHashCode(): Int {\n return this.contentHashCode()\n}\n\n/**\n * Returns a hash code based on
the contents of this array as if it is [List].\n */\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = \"1.4\")\npublic actual fun
FloatArray.contentHashCode(): Int {\n return this.contentHashCode()\n}\n\n/**\n * Returns a hash code based on
the contents of this array as if it is [List].\n */\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = \"1.4\")\npublic actual fun
DoubleArray.contentHashCode(): Int {\n return this.contentHashCode()\n}\n\n/**\n * Returns a hash code based
on the contents of this array as if it is [List].\n */\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince
= \"1.4\")\npublic actual fun BooleanArray.contentHashCode(): Int {\n return this.contentHashCode()\n}\n\n/**\n
* Returns a hash code based on the contents of this array as if it is [List].\n */\n@Deprecated("Use Kotlin compiler
1.4 to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince =
\"1.4\")\npublic actual fun CharArray.contentHashCode(): Int {\n return this.contentHashCode()\n}\n\n/**\n *
Returns a hash code based on the contents of this array as if it is [List].\n
*/\n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun <T> Array<out
T>?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based on the contents of this
array as if it is [List].\n */\n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun
ByteArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based on the contents
of this array as if it is [List].\n */\n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun
ShortArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based on the
contents of this array as if it is [List].\n */\n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun
IntArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based on the contents
of this array as if it is [List].\n */\n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun
LongArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based on the
contents of this array as if it is [List].\n */\n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun
FloatArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based on the
contents of this array as if it is [List].\n */\n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic
actual fun DoubleArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based
on the contents of this array as if it is [List].\n */\n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic
actual fun BooleanArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based
on the contents of this array as if it is [List].\n */\n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic
actual fun CharArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a string representation
of the contents of the specified array as if it is [List].\n */\n\n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4 to
avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = \"1.4\")\npublic
actual fun <T> Array<out T>.contentToString(): String {\n return this.contentToString()\n}\n\n/**\n * Returns a
string representation
of the contents of the specified array as if it is [List].\n */\n\n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4 to
avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = \"1.4\")\npublic

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actual fun ByteArray.contentToString(): String {\n return this.contentToString()\n}\n\n/**\n * Returns a string
representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4 to
avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic
actual fun ShortArray.contentToString(): String {\n return this.contentToString()\n}\n\n/**\n * Returns a string
representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use
Kotlin compiler 1.4 to avoid deprecation
warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun
IntArray.contentToString(): String {\n return this.contentToString()\n}\n\n/**\n * Returns a string representation
of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4 to
avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic
actual fun LongArray.contentToString(): String {\n return this.contentToString()\n}\n\n/**\n * Returns a string
representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4 to
avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic
actual fun FloatArray.contentToString():
String {\n return this.contentToString()\n}\n\n/**\n * Returns a string representation of the contents of the
specified array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*/\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun
DoubleArray.contentToString(): String {\n return this.contentToString()\n}\n\n/**\n * Returns a string
representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4 to
avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic
actual fun BooleanArray.contentToString(): String {\n return this.contentToString()\n}\n\n/**\n * Returns a string
representation of the contents of the specified array as
if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*/\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun
CharArray.contentToString(): String {\n return this.contentToString()\n}\n\n/**\n * Returns a string representation
of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n
*/\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun <T> Array<out T>?.contentToString():
String {\n definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array as
if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*/\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun ByteArray?.contentToString(): String
{\n definedExternally\n}\n\n/**\n * Returns
a string representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n
*/\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun ShortArray?.contentToString(): String
{\n definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is
[List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*/\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun IntArray?.contentToString(): String {\n
definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is
[List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*/\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun LongArray?.contentToString(): String

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{\n definedExternally\n}\n\n/**\n * Returns a string representation of the
contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n
*\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun FloatArray?.contentToString(): String
{\n definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is
[List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun DoubleArray?.contentToString(): String
{\n definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is
[List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun BooleanArray?.contentToString():
String {\n definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array
as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
*\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun CharArray?.contentToString(): String
{\n definedExternally\n}\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that
array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it
overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset
the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of
the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this
array by default.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex]
or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws
IndexOutOfBoundsException
when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when
that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT
_ARGUMENTS")\npublic actual inline fun <T> Array<out T>.copyInto(destination: Array<T>, destinationOffset:
Int = 0, startIndex: Int = 0, endIndex: Int = size): Array<T> {\n arrayCopy(this, destination, destinationOffset,
startIndex, endIndex)\n return destination\n}\n\n/**\n * Copies this array or its subrange into the [destination]
array and returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the
subrange so that it overlaps with the destination range.\n * \n * @param destination the array to copy to.\n *
@param destinationOffset the position in the [destination] array to copy to, 0 by default.\n
* @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end
(exclusive) of the subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or
[IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex
> endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array
starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n
*\n * @return the [destination] array.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT
_ARGUMENTS")\npublic actual inline fun ByteArray.copyInto(destination: ByteArray, destinationOffset: Int = 0,
startIndex: Int = 0, endIndex: Int = size): ByteArray {\n arrayCopy(this.unsafeCast<Array<Byte>>(),
destination.unsafeCast<Array<Byte>>(), destinationOffset, startIndex,
endIndex)\n return destination\n}\n\n/**\n * Copies this array or its subrange into the [destination] array and
returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so
that it overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param
destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the
beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the
subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or
[IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex
> endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array

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starting at the specified [destinationOffset],\n \* or when that index is out of the [destination] array indices range.\n \* \n \* @return the [destination] array.\n

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*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual inline fun ShortArray.copyInto(destination: ShortArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): ShortArray {\n arrayCopy(this.unsafeCast<Array<Short>>(), destination.unsafeCast<Array<Short>>(), destinationOffset, startIndex, endIndex)\n return destination\n}\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n
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*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual inline fun IntArray.copyInto(destination: IntArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): IntArray {\n arrayCopy(this.unsafeCast<Array<Int>>(), destination.unsafeCast<Array<Int>>(), destinationOffset, startIndex, endIndex)\n return destination\n}\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n
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*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual inline fun LongArray.copyInto(destination: LongArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): LongArray {\n arrayCopy(this.unsafeCast<Array<Long>>(), destination.unsafeCast<Array<Long>>(), destinationOffset, startIndex, endIndex)\n return destination\n}\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n
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*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual inline fun FloatArray.copyInto(destination: FloatArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): FloatArray {\n arrayCopy(this.unsafeCast<Array<Float>>(), destination.unsafeCast<Array<Float>>(), destinationOffset, startIndex, endIndex)\n return destination\n}\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n * It's allowed to pass the

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same array in the [destination] and even specify the subrange so that it overlaps with the destination range.

`@param destination`  
the array to copy to.

`@param destinationOffset` the position in the [destination] array to copy to, 0 by default.

`@param startIndex` the beginning (inclusive) of the subrange to copy, 0 by default.

`@param endIndex` the end (exclusive) of the subrange to copy, size of this array by default.

`@throws IndexOutOfBoundsException` or `[IllegalArgumentException]` when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex``.

`@throws IndexOutOfBoundsException` when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset], or when that index is out of the [destination] array indices range.

`@return` the [destination] array.

```

*\/n@SinceKotlin("1.3")n@kotlin.internal.InlineOnlyn@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")npublic actual inline fun DoubleArray.copyInto(destination: DoubleArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): DoubleArray
{
 arrayCopy(this.unsafeCast<Array<Double>>(), destination.unsafeCast<Array<Double>>(), destinationOffset, startIndex, endIndex)n
 return destinationn
}n/n/**n * Copies this array or its subrange into the [destination] array and returns that array.n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.n * @param destination the array to copy to.n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],n * or when that index is out of the [destination] array indices range.n * @return the [destination] array.n
*\/n@SinceKotlin("1.3")n@kotlin.internal.InlineOnlyn@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")npublic actual inline fun BooleanArray.copyInto(destination: BooleanArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): BooleanArray {
 arrayCopy(this.unsafeCast<Array<Boolean>>(), destination.unsafeCast<Array<Boolean>>(), destinationOffset, startIndex, endIndex)n
 return destinationn
}n/n/**n * Copies this array or its subrange into the [destination] array and returns that array.n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.n * @param destination the array to copy to.n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],n * or when that index is out of the [destination] array indices range.n * @return the [destination] array.n
*\/n@SinceKotlin("1.3")n@kotlin.internal.InlineOnlyn@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")npublic actual inline fun CharArray.copyInto(destination: CharArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): CharArray {
 arrayCopy(this.unsafeCast<Array<Char>>(), destination.unsafeCast<Array<Char>>(), destinationOffset, startIndex, endIndex)n
 return destinationn
}n/n/**n * Returns new array which is a copy of the original array.n * @sample samples.collections.Arrays.CopyOfOperations.copyOfn *\/n@Suppress("ACTUAL_WITHOUT_EXPECT", "NOTHING_TO_INLINE")npublic actual inline fun <T> Array<out T>.copyOf(): Array<T> {
 return this.asDynamic().slice()n
}n/n/**n * Returns new array which is a copy of the original array.n * @sample samples.collections.Arrays.CopyOfOperations.copyOfn *\/n@Suppress("NOTHING_TO_INLINE")npublic actual inline fun ByteArray.copyOfOf(): ByteArray {
 return this.asDynamic().slice()n
}n/n/**n * Returns new array which is a copy of the original array.n * @sample

```



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samples.collections.Arrays.CopyOfOperations.copyOfOf\n *\n@Suppress("NOTHING_TO_INLINE")\npublic
actual inline fun ShortArray.copyOfOf(): ShortArray {\n return this.asDynamic().slice()\n}\n\n/**\n * Returns new
array which is a copy of the original array.\n * \n * @sample
samples.collections.Arrays.CopyOfOperations.copyOfOf\n
*\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline fun IntArray.copyOfOf(): IntArray {\n return
this.asDynamic().slice()\n}\n\n/**\n * Returns new array which is a copy of the original array.\n * \n * @sample
samples.collections.Arrays.CopyOfOperations.copyOfOf\n *\npublic actual fun LongArray.copyOfOf(): LongArray {\n
return withType("LongArray", this.asDynamic().slice())\n}\n\n/**\n * Returns new array which is a copy of the
original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n
*\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline fun FloatArray.copyOfOf(): FloatArray {\n return
this.asDynamic().slice()\n}\n\n/**\n * Returns new array which is a copy of the original array.\n * \n * @sample
samples.collections.Arrays.CopyOfOperations.copyOfOf\n *\n@Suppress("NOTHING_TO_INLINE")\npublic
actual inline fun DoubleArray.copyOfOf(): DoubleArray {\n return this.asDynamic().slice()\n}\n\n/**\n * Returns
new array which
is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n
*\npublic actual fun BooleanArray.copyOfOf(): BooleanArray {\n return withType("BooleanArray",
this.asDynamic().slice())\n}\n\n/**\n * Returns new array which is a copy of the original array.\n * \n * @sample
samples.collections.Arrays.CopyOfOperations.copyOfOf\n *\npublic actual fun CharArray.copyOfOf(): CharArray {\n
return withType("CharArray", this.asDynamic().slice())\n}\n\n/**\n * Returns new array which is a copy of the
original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with zero values
if necessary.\n * \n * - If [newSize] is less than the size of the original array, the copy array is truncated to the
[newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the copy array are
filled with zero values.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n
*\npublic actual fun ByteArray.copyOfOf(newSize: Int): ByteArray {\n require(newSize >= 0) { "Invalid new
array size: $newSize." }\n return fillFrom(this, ByteArray(newSize))\n}\n\n/**\n * Returns new array which is a
copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with
zero values if necessary.\n * \n * - If [newSize] is less than the size of the original array, the copy array is truncated
to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the copy array
are filled with zero values.\n * \n * @sample
samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n *\npublic actual fun
ShortArray.copyOfOf(newSize: Int): ShortArray {\n require(newSize >= 0) { "Invalid new array size: $newSize."
}\n return fillFrom(this, ShortArray(newSize))\n}\n\n/**\n * Returns new array which is a copy of the original
array, resized to the given [newSize].\n
* The copy is either truncated or padded at the end with zero values if necessary.\n * \n * - If [newSize] is less than
the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size
of the original array, the extra elements in the copy array are filled with zero values.\n * \n * @sample
samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n *\npublic actual fun
IntArray.copyOfOf(newSize: Int): IntArray {\n require(newSize >= 0) { "Invalid new array size: $newSize." }\n
return fillFrom(this, IntArray(newSize))\n}\n\n/**\n * Returns new array which is a copy of the original array,
resized to the given [newSize].\n * The copy is either truncated or padded at the end with zero values if necessary.\n
* \n * - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If
[newSize] is greater than the size of the original array, the extra elements in the copy array
are filled with zero values.\n * \n * @sample
samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n *\npublic actual fun
LongArray.copyOfOf(newSize: Int): LongArray {\n require(newSize >= 0) { "Invalid new array size: $newSize."
}\n return withType("LongArray", arrayCopyResize(this, newSize, 0L))\n}\n\n/**\n * Returns new array which
is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end
with zero values if necessary.\n * \n * - If [newSize] is less than the size of the original array, the copy array is

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truncated to the [newSize].\n \* - If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.\n \* \n \* @sample

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samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n *\npublic actual fun
FloatArray.copyOf(newSize: Int): FloatArray {\n require(newSize >= 0) { \"Invalid new array size: $newSize.\"
}\n return fillFrom(this,
FloatArray(newSize))\n}\n\n/>\n * Returns new array which is a copy of the original array, resized to the given
[newSize].\n * The copy is either truncated or padded at the end with zero values if necessary.\n * \n * - If [newSize]
is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater
than the size of the original array, the extra elements in the copy array are filled with zero values.\n * \n * @sample
samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n *\npublic actual fun
DoubleArray.copyOf(newSize: Int): DoubleArray {\n require(newSize >= 0) { \"Invalid new array size:
$newSize.\" }\n return fillFrom(this, DoubleArray(newSize))\n}\n\n/>\n * Returns new array which is a copy of
the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with `false`
values if necessary.\n * \n * - If [newSize] is less than the size of the original array,
the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra
elements in the copy array are filled with `false` values.\n * \n * @sample
samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n *\npublic actual fun
BooleanArray.copyOf(newSize: Int): BooleanArray {\n require(newSize >= 0) { \"Invalid new array size:
$newSize.\" }\n return withType(\"BooleanArray\", arrayCopyResize(this, newSize, false))\n}\n\n/>\n * Returns
new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or
padded at the end with null char (`\u0000`) values if necessary.\n * \n * - If [newSize] is less than the size of the
original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original
array, the extra elements in the copy array are filled with null char (`\u0000`) values.\n * \n * @sample
samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n
*\npublic actual fun CharArray.copyOf(newSize: Int): CharArray {\n require(newSize >= 0) { \"Invalid new
array size: $newSize.\" }\n return withType(\"CharArray\", fillFrom(this, CharArray(newSize)))\n}\n\n/>\n *
Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either
truncated or padded at the end with `null` values if necessary.\n * \n * - If [newSize] is less than the size of the
original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original
array, the extra elements in the copy array are filled with `null` values.\n * \n * @sample
samples.collections.Arrays.CopyOfOperations.resizingCopyOf\n
*\n@Suppress(\"ACTUAL_WITHOUT_EXPECT\")\npublic actual fun <T> Array<out T>.copyOf(newSize: Int):
Array<T?> {\n require(newSize >= 0) { \"Invalid new array size: $newSize.\" }\n return arrayCopyResize(this,
newSize, null)\n}\n\n/>\n *
Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the
start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n *
@throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this
array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
*\n@Suppress(\"ACTUAL_WITHOUT_EXPECT\")\npublic actual fun <T> Array<out
T>.copyOfRange(fromIndex: Int, toIndex: Int): Array<T> {\n AbstractList.checkRangeIndexes(fromIndex,
toIndex, size)\n return this.asDynamic().slice(fromIndex, toIndex)\n}\n\n/>\n * Returns a new array which is a
copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to
copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException
if [fromIndex] is less than zero or [toIndex]
is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than
[toIndex].\n *\npublic actual fun ByteArray.copyOfRange(fromIndex: Int, toIndex: Int): ByteArray {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n return this.asDynamic().slice(fromIndex,
toIndex)\n}\n\n/>\n * Returns a new array which is a copy of the specified range of the original array.\n * \n *

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@param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n public actual fun ShortArray.copyOfRange(fromIndex: Int, toIndex: Int): ShortArray {\n

AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n return this.asDynamic().slice(fromIndex, toIndex)\n}\n\n/\*\*\n \* Returns a new array

which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n public actual fun IntArray.copyOfRange(fromIndex: Int, toIndex: Int): IntArray {\n

AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n return this.asDynamic().slice(fromIndex, toIndex)\n}\n\n/\*\*\n \* Returns a new array which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException

if [fromIndex] is greater than [toIndex].\n \* \n public actual fun LongArray.copyOfRange(fromIndex: Int, toIndex: Int): LongArray {\n

AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n return withType("<code>LongArray</code>", this.asDynamic().slice(fromIndex, toIndex))\n}\n\n/\*\*\n \* Returns a new array which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n public actual fun FloatArray.copyOfRange(fromIndex: Int, toIndex: Int): FloatArray {\n

AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n return this.asDynamic().slice(fromIndex, toIndex)\n}\n\n/\*\*\n \* Returns a new array which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n public actual fun DoubleArray.copyOfRange(fromIndex: Int, toIndex: Int): DoubleArray {\n

AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n return this.asDynamic().slice(fromIndex, toIndex)\n}\n\n/\*\*\n \* Returns a new array which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n public actual fun BooleanArray.copyOfRange(fromIndex: Int, toIndex: Int): BooleanArray {\n

AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n return withType("<code>BooleanArray</code>", this.asDynamic().slice(fromIndex, toIndex))\n}\n\n/\*\*\n \* Returns a new array which is a copy of the specified range of the original array.\n \* \n \* @param fromIndex the start of the range (inclusive) to copy.\n \* @param toIndex the end of the range (exclusive) to copy.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n \* \n public actual fun CharArray.copyOfRange(fromIndex: Int, toIndex: Int): CharArray {\n

AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n return withType("<code>CharArray</code>", this.asDynamic().slice(fromIndex, toIndex))\n}\n\n/\*\*\n \* Fills this array or its subrange with the specified [element] value.\n \* \n \* @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n \* @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n \* \n \* @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n \* @throws IllegalArgumentException if [fromIndex] is

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greater than [toIndex].\n
*\n@SinceKotlin("1.3")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun <T> Array<T>.fill(element: T, fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n nativeFill(element, fromIndex, toIndex);\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range
(inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by
default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex]
is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than
[toIndex].\n
*\n@SinceKotlin("1.3")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun ByteArray.fill(element: Byte, fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n nativeFill(element, fromIndex, toIndex);\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range
(inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by
default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than
the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
*\n@SinceKotlin("1.3")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun ShortArray.fill(element:
Short, fromIndex: Int = 0, toIndex: Int = size): Unit {\n AbstractList.checkRangeIndexes(fromIndex, toIndex,
size)\n nativeFill(element, fromIndex, toIndex);\n}\n\n/**\n * Fills this array or its subrange with the specified
[element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param
toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws
IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n *
@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
*\n@SinceKotlin("1.3")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun IntArray.fill(element: Int, fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n nativeFill(element, fromIndex, toIndex);\n}\n\n/**\n * Fills this array or its subrange with the specified [element]
value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end
of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
*\n@SinceKotlin("1.3")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun LongArray.fill(element: Long, fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n nativeFill(element, fromIndex, toIndex);\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range
(inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by
default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex]
is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if
[fromIndex] is greater than [toIndex].\n
*\n@SinceKotlin("1.3")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun FloatArray.fill(element: Float, fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n nativeFill(element, fromIndex, toIndex);\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range
(inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by
default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than
the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
*\n@SinceKotlin("1.3")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic

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actual operator fun ByteArray.plus(elements: Collection<Byte>): ByteArray {
 return fillFromCollection(this.copyOf(size + elements.size), this.size, elements)
}
// Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
// public actual operator fun ShortArray.plus(elements: Collection<Short>): ShortArray
// {
// return fillFromCollection(this.copyOf(size + elements.size), this.size, elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
// public actual operator fun IntArray.plus(elements: Collection<Int>): IntArray
// {
// return fillFromCollection(this.copyOf(size + elements.size), this.size, elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
// public actual operator fun LongArray.plus(elements: Collection<Long>): LongArray
// {
// return arrayPlusCollection(this, elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
// public actual operator fun FloatArray.plus(elements: Collection<Float>): FloatArray
// {
// return fillFromCollection(this.copyOf(size + elements.size), this.size, elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
// public actual operator fun DoubleArray.plus(elements: Collection<Double>): DoubleArray
// {
// return fillFromCollection(this.copyOf(size + elements.size), this.size, elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
// public actual operator fun BooleanArray.plus(elements: Collection<Boolean>): BooleanArray
// {
// return arrayPlusCollection(this, elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
// public actual operator fun CharArray.plus(elements: Collection<Char>): CharArray
// {
// return fillFromCollection(this.copyOf(size + elements.size), this.size, elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] array.
// @Suppress("ACTUAL_WITHOUT_EXPECT", "NOTHING_TO_INLINE")
// public actual inline operator fun <T> Array<out T>.plus(elements: Array<out T>): Array<T>
// {
// return this.asDynamic().concat(elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] array.
// @Suppress("NOTHING_TO_INLINE")
// public actual inline operator fun ByteArray.plus(elements: ByteArray): ByteArray
// {
// return primitiveArrayConcat(this, elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] array.
// @Suppress("NOTHING_TO_INLINE")
// public actual inline operator fun ShortArray.plus(elements: ShortArray): ShortArray
// {
// return primitiveArrayConcat(this, elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] array.
// @Suppress("NOTHING_TO_INLINE")
// public actual inline operator fun IntArray.plus(elements: IntArray): IntArray
// {
// return primitiveArrayConcat(this, elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] array.
// @Suppress("NOTHING_TO_INLINE")
// public actual inline operator fun LongArray.plus(elements: LongArray): LongArray
// {
// return primitiveArrayConcat(this, elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] array.
// @Suppress("NOTHING_TO_INLINE")
// public actual inline operator fun FloatArray.plus(elements: FloatArray): FloatArray
// {
// return primitiveArrayConcat(this, elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] array.
// @Suppress("NOTHING_TO_INLINE")
// public actual inline operator fun DoubleArray.plus(elements: DoubleArray): DoubleArray
// {
// return primitiveArrayConcat(this, elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] array.
// @Suppress("NOTHING_TO_INLINE")
// public actual inline operator fun BooleanArray.plus(elements: BooleanArray): BooleanArray
// {
// return primitiveArrayConcat(this, elements)
// }
// Returns an array containing all elements of the original array and then all elements of the given [elements] array.

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*\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline operator fun CharArray.plus(elements:
CharArray): CharArray {\n return primitiveArrayConcat(this, elements)\n}\n\n/**\n * Returns an array containing
all elements of the original array and then the given [element].\n
*\n@Suppress("ACTUAL_WITHOUT_EXPECT", "NOTHING_TO_INLINE")\npublic actual inline fun <T>
Array<out T>.plusElement(element: T): Array<T> {\n return
this.asDynamic().concat(arrayOf(element))\n}\n\n/**\n * Sorts the array
in-place.\n * \n * @sample samples.collections.Arrays.Sorting.sortArray\n
*\n@library("primitiveArraySort")\npublic actual fun IntArray.sort(): Unit {\n definedExternally\n}\n\n/**\n *
Sorts the array in-place.\n * \n * @sample samples.collections.Arrays.Sorting.sortArray\n *\npublic actual fun
LongArray.sort(): Unit {\n @Suppress("DEPRECATION")\n if (size > 1) sort { a: Long, b: Long ->
a.compareTo(b) }\n}\n\n/**\n * Sorts the array in-place.\n * \n * @sample
samples.collections.Arrays.Sorting.sortArray\n *\n@library("primitiveArraySort")\npublic actual fun
ByteArray.sort(): Unit {\n definedExternally\n}\n\n/**\n * Sorts the array in-place.\n * \n * @sample
samples.collections.Arrays.Sorting.sortArray\n *\n@library("primitiveArraySort")\npublic actual fun
ShortArray.sort(): Unit {\n definedExternally\n}\n\n/**\n * Sorts the array in-place.\n * \n * @sample
samples.collections.Arrays.Sorting.sortArray\n *\n@library("primitiveArraySort")\npublic actual fun
DoubleArray.sort(): Unit {\n definedExternally\n}\n\n/**\n * Sorts the array in-place.\n * \n * @sample
samples.collections.Arrays.Sorting.sortArray\n *\n@library("primitiveArraySort")\npublic actual fun
FloatArray.sort(): Unit {\n definedExternally\n}\n\n/**\n * Sorts the array in-place.\n * \n * @sample
samples.collections.Arrays.Sorting.sortArray\n *\n@library("primitiveArraySort")\npublic actual fun
CharArray.sort(): Unit {\n definedExternally\n}\n\n/**\n * Sorts the array in-place according to the natural order
of its elements.\n * \n * The sort is _stable_. It means that equal elements preserve their order relative to each other
after sorting.\n * \n * @sample samples.collections.Arrays.Sorting.sortArrayOfComparable\n *\npublic actual fun
<T : Comparable<T>> Array<out T>.sort(): Unit {\n if (size > 1) sortArray(this)\n}\n\n/**\n * Sorts the array in-
place according to the order specified by the given [comparison] function.\n * \n * The sort is _stable_. It means
that equal elements preserve their order relative to each other after sorting.\n *\n@Deprecated("Use sortWith
instead", ReplaceWith("this.sortWith(Comparator(comparison))"))\n@DeprecatedSinceKotlin(warningSince =
"1.6")\npublic fun <T> Array<out T>.sort(comparison: (a: T, b: T) -> Int): Unit {\n if (size > 1)
sortArrayWith(this, comparison)\n}\n\n/**\n * Sorts a range in the array in-place.\n * \n * The sort is _stable_. It
means that equal elements preserve their order relative to each other after sorting.\n * \n * @param fromIndex the
start of the range (inclusive) to sort, 0 by default.\n * @param toIndex the end of the range (exclusive) to sort, size
of this array by default.\n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex]
is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than
[toIndex].\n * \n * @sample samples.collections.Arrays.Sorting.sortRangeOfArrayOfComparable\n
*\n@SinceKotlin("1.4")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun <T : Comparable<T>> Array<out T>.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n sortArrayWith(this, fromIndex, toIndex,
naturalOrder())\n}\n\n/**\n * Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the range
(inclusive) to sort, 0 by default.\n * @param toIndex the end of the range (exclusive) to sort, size of this array by
default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than
the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n *
@sample samples.collections.Arrays.Sorting.sortRangeOfArray\n
*\n@SinceKotlin("1.4")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun ByteArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex,
toIndex, size)\n val subarray = this.asDynamic().subarray(fromIndex, toIndex).unsafeCast<ByteArray>()\n
subarray.sort()\n}\n\n/**\n * Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the range
(inclusive) to sort, 0 by default.\n * @param toIndex the end of the range (exclusive) to sort, size of this array by

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default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than
the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n *
@sample samples.collections.Arrays.Sorting.sortRangeOfArray\n
*\n@SinceKotlin("1.4")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun ShortArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n val subarray =
this.asDynamic().subarray(fromIndex, toIndex).unsafeCast<ShortArray>()\n subarray.sort()\n}\n\n/**\n *
Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the range (inclusive) to sort, 0 by
default.\n * @param toIndex the end of the range (exclusive) to sort, size of this array by default.\n * \n * @throws
IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n *
@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n * @sample
samples.collections.Arrays.Sorting.sortRangeOfArray\n
*\n@SinceKotlin("1.4")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun IntArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n val subarray =
this.asDynamic().subarray(fromIndex, toIndex).unsafeCast<IntArray>()\n subarray.sort()\n}\n\n/**\n *
Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the range (inclusive) to sort, 0 by default.\n *
@param toIndex the end of the
range (exclusive) to sort, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n * @sample
samples.collections.Arrays.Sorting.sortRangeOfArray\n
*\n@SinceKotlin("1.4")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun LongArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n sortArrayWith(this.unsafeCast<Array<Long>>(),
fromIndex, toIndex, naturalOrder())\n}\n\n/**\n *
Sorts a range in the array in-place.\n * \n * @param fromIndex
the start of the range (inclusive) to sort, 0 by default.\n * @param toIndex the end of the range (exclusive) to sort,
size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or
[toIndex] is greater than the size of this
array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n * @sample
samples.collections.Arrays.Sorting.sortRangeOfArray\n
*\n@SinceKotlin("1.4")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun FloatArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n val subarray =
this.asDynamic().subarray(fromIndex, toIndex).unsafeCast<FloatArray>()\n subarray.sort()\n}\n\n/**\n *
Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the range (inclusive) to sort, 0 by default.\n *
@param toIndex the end of the range (exclusive) to sort, size of this array by default.\n * \n * @throws
IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n *
@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n * @sample
samples.collections.Arrays.Sorting.sortRangeOfArray\n
*\n@SinceKotlin("1.4")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun DoubleArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n val subarray =
this.asDynamic().subarray(fromIndex, toIndex).unsafeCast<DoubleArray>()\n subarray.sort()\n}\n\n/**\n *
Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the range (inclusive) to sort, 0 by default.\n *
@param toIndex the end of the range (exclusive) to sort, size of this array by default.\n * \n * @throws
IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n *
@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n * @sample
samples.collections.Arrays.Sorting.sortRangeOfArray\n

```





```

object array containing all of the elements of this primitive array.\n */\npublic actual fun IntArray.toArray():
Array<Int> {\n return js("[\]").slice.call(this)\n}\n\n/**\n * Returns a *typed* object array containing all of the
elements of this primitive array.\n */\npublic actual fun LongArray.toArray(): Array<Long> {\n return
js("[\]").slice.call(this)\n}\n\n/**\n * Returns a *typed* object array containing all
of the elements of this primitive array.\n */\npublic actual fun FloatArray.toArray(): Array<Float> {\n
return js("[\]").slice.call(this)\n}\n\n/**\n * Returns a *typed* object array containing all of the elements of this
primitive array.\n */\npublic actual fun DoubleArray.toArray(): Array<Double> {\n return
js("[\]").slice.call(this)\n}\n\n/**\n * Returns a *typed* object array containing all of the elements of this primitive
array.\n */\npublic actual fun BooleanArray.toArray(): Array<Boolean> {\n return
js("[\]").slice.call(this)\n}\n\n/**\n * Returns a *typed* object array containing all of the elements of this primitive
array.\n */\npublic actual fun CharArray.toArray(): Array<Char> {\n return Array(size) { index ->
this[index] }\n}\n\n", "/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*/\n@file:kotlin.jvm.JvmName("\u0027ComparisonsKt\u0027")\n@file:kotlin.jvm.JvmMultifileClass\n\npackage
kotlin.comparisons\n\n/**\n * Compares two values using the specified functions [selectors] to calculate the result
of the comparison.\n * The functions are called sequentially, receive the given values [a] and [b] and return
[Comparable]\n * objects. As soon as the [Comparable] instances returned by a function for [a] and [b] values do
not\n * compare as equal, the result of that comparison is returned.\n * \n * @sample
samples.comparisons.Comparisons.compareValuesByWithSelectors\n */\npublic fun <T> compareValuesBy(a: T,
b: T, vararg selectors: (T) -> Comparable<*>?): Int {\n require(selectors.size > 0)\n return
compareValuesByImpl(a, b, selectors)\n}\n\nprivate fun <T> compareValuesByImpl(a: T, b: T, selectors:
Array<out (T) -> Comparable<*>?>): Int {\n for (fn in selectors) {\n val v1 = fn(a)\n val v2 = fn(b)\n val diff = compareValues(v1, v2)\n if (diff
!= 0) return diff\n }\n return 0\n}\n\n/**\n * Compares two values using the specified [selector] function to
calculate the result of the comparison.\n * The function is applied to the given values [a] and [b] and return
[Comparable] objects.\n * The result of comparison of these [Comparable] instances is returned.\n * \n * @sample
samples.comparisons.Comparisons.compareValuesByWithSingleSelector\n */\n@kotlin.internal.InlineOnly\npublic
inline fun <T> compareValuesBy(a: T, b: T, selector: (T) -> Comparable<*>?): Int {\n return
compareValues(selector(a), selector(b))\n}\n\n/**\n * Compares two values using the specified [selector] function to
calculate the result of the comparison.\n * The function is applied to the given values [a] and [b] and return objects
of type K which are then being\n * compared with the given [comparator].\n * \n * @sample
samples.comparisons.Comparisons.compareValuesByWithComparator\n */\n@kotlin.internal.InlineOnly\npublic
inline fun <T, K> compareValuesBy(a:
T, b: T, comparator: Comparator<in K>, selector: (T) -> K): Int {\n return comparator.compare(selector(a),
selector(b))\n}\n\n//// Not so useful without type inference for receiver of expression\n//// compareValuesWith(v1,
v2, compareBy { it.prop1 } thenByDescending { it.prop2 })\n\n/**\n * Compares two values using the specified
[comparator].\n * \n * @Suppress("\u0027NOTHING_TO_INLINE\u0027")\n */\npublic inline fun <T> compareValuesWith(a: T,
b: T, comparator: Comparator<T>): Int = comparator.compare(a, b)\n\n/**\n * Compares two nullable
[Comparable] values. Null is considered less than any value.\n * \n * @sample
samples.comparisons.Comparisons.compareValues\n */\npublic fun <T : Comparable<*>> compareValues(a: T?, b:
T?): Int {\n if (a === b) return 0\n if (a == null) return -1\n if (b == null) return 1\n}\n\n@Suppress("\u0027UNCHECKED_CAST\u0027")\n return (a as Comparable<Any>).compareTo(b)\n}\n\n/**\n * Creates a
comparator using the sequence of functions to calculate
a result of comparison.\n * The functions are called sequentially, receive the given values `a` and `b` and return
[Comparable]\n * objects. As soon as the [Comparable] instances returned by a function for `a` and `b` values do
not\n * compare as equal, the result of that comparison is returned from the [Comparator].\n * \n * @sample
samples.comparisons.Comparisons.compareByWithSelectors\n */\npublic fun <T> compareBy(vararg selectors: (T)

```

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-> Comparable<*>?): Comparator<T> {
 require(selectors.size > 0)
 return Comparator { a, b ->
 compareValuesByImpl(a, b, selectors) }
}

/**
 * Creates a comparator using the function to transform value
 * to a [Comparable] instance for comparison.
 *
 * @sample
 * samples.comparisons.Comparisons.compareByWithSingleSelector
 */
@kotlin.internal.InlineOnly
public inline fun <T> compareBy(crossinline selector: (T) -> Comparable<*>?): Comparator<T> =
 Comparator { a, b ->
 compareValuesBy(a, b, selector) }

/**
 * Creates a comparator
 * using the [selector] function to transform values being compared and then applying
 * the specified [comparator]
 * to compare transformed values.
 *
 * @sample samples.comparisons.Comparisons.compareByWithComparator
 */
@kotlin.internal.InlineOnly
public inline fun <T, K> compareBy(comparator: Comparator<in K>, crossinline
selector: (T) -> K): Comparator<T> =
 Comparator { a, b -> compareValuesBy(a, b, comparator, selector) }

/**
 * Creates a descending comparator using the function to transform value to a [Comparable] instance for
 * comparison.
 *
 * @sample samples.comparisons.Comparisons.compareByDescendingWithSingleSelector
 */
@kotlin.internal.InlineOnly
public inline fun <T> compareByDescending(crossinline selector: (T) ->
Comparable<*>?): Comparator<T> =
 Comparator { a, b -> compareValuesBy(b, a, selector) }

/**
 * Creates a descending comparator using the [selector] function to transform values being compared and then
 * applying
 * the specified [comparator]
 * to compare transformed values.
 *
 * Note that an order of [comparator] is reversed by this wrapper.
 *
 * @sample samples.comparisons.Comparisons.compareByDescendingWithComparator
 */
@kotlin.internal.InlineOnly
public inline fun <T, K> compareByDescending(comparator: Comparator<in K>,
crossinline selector: (T) -> K): Comparator<T> =
 Comparator { a, b -> compareValuesBy(b, a, comparator,
selector) }

/**
 * Creates a comparator comparing values after the primary comparator defined them equal. It
 * uses
 * the function to transform value to a [Comparable] instance for comparison.
 *
 * @sample
 * samples.comparisons.Comparisons.thenBy
 */
@kotlin.internal.InlineOnly
public inline fun <T>
Comparator<T>.thenBy(crossinline selector: (T) -> Comparable<*>?): Comparator<T> =
 Comparator { a, b ->
 val previousCompare = this@thenBy.compare(a, b)
 if (previousCompare != 0) previousCompare else
 compareValuesBy(a, b, selector) }

/**
 * Creates a
 * comparator comparing values after the primary comparator defined them equal. It uses
 * the [selector] function to
 * transform values and then compares them with the given [comparator].
 *
 * @sample
 * samples.comparisons.Comparisons.thenByWithComparator
 */
@kotlin.internal.InlineOnly
public inline fun <T,
K> Comparator<T>.thenBy(comparator: Comparator<in K>, crossinline selector: (T) -> K): Comparator<T> =
 Comparator { a, b ->
 val previousCompare = this@thenBy.compare(a, b)
 if (previousCompare != 0)
 previousCompare else compareValuesBy(a, b, comparator, selector) }

/**
 * Creates a descending
 * comparator using the primary comparator and
 * the function to transform value to a [Comparable] instance for
 * comparison.
 *
 * @sample samples.comparisons.Comparisons.thenByDescending
 */
@kotlin.internal.InlineOnly
public inline fun <T> Comparator<T>.thenByDescending(crossinline selector: (T)
-> Comparable<*>?): Comparator<T> =
 Comparator { a, b ->
 val previousCompare = this@thenByDescending.compare(a, b)
 if (previousCompare != 0)
 previousCompare else compareValuesBy(b, a, selector) }

/**
 * Creates a descending comparator
 * comparing values after the primary comparator defined them equal. It uses
 * the [selector] function to transform
 * values and then compares them with the given [comparator].
 *
 * @sample
 * samples.comparisons.Comparisons.thenByDescendingWithComparator
 */
@kotlin.internal.InlineOnly
public inline fun <T,
K> Comparator<T>.thenByDescending(comparator: Comparator<in K>, crossinline selector: (T) ->
K): Comparator<T> =
 Comparator { a, b ->
 val previousCompare = this@thenByDescending.compare(a,
b)
 if (previousCompare != 0) previousCompare else compareValuesBy(b, a, comparator, selector) }

/**
 * Creates a comparator using the primary comparator and function to calculate a result of comparison.
 *
 * @sample samples.comparisons.Comparisons.thenComparator
 */
@kotlin.internal.InlineOnly
public inline fun <T> Comparator<T>.thenComparator(crossinline comparison:
(a: T, b: T) -> Int): Comparator<T> =
 Comparator { a, b ->
 val previousCompare =

```

```

this@thenComparator.compare(a, b)\n if (previousCompare != 0) previousCompare else comparison(a, b)\n
}\n\n/**\n * Combines this comparator and the given [comparator] such that the latter is applied only\n * when the
former considered values equal.\n *\n * @sample samples.comparisons.Comparisons.then\n */\npublic infix fun
<T> Comparator<T>.then(comparator: Comparator<in T>): Comparator<T> =\n Comparator { a, b ->\n val
previousCompare = this@then.compare(a, b)\n if (previousCompare != 0) previousCompare else
comparator.compare(a, b)\n }\n\n/**\n * Combines this comparator and the given [comparator] such that the latter
is applied only\n * when the former considered values equal.\n *\n * @sample
samples.comparisons.Comparisons.thenDescending\n */\npublic
infix fun <T> Comparator<T>.thenDescending(comparator: Comparator<in T>): Comparator<T> =\n
Comparator<T> { a, b ->\n val previousCompare = this@thenDescending.compare(a, b)\n if
(previousCompare != 0) previousCompare else comparator.compare(b, a)\n }\n\n// Not so useful without type
inference for receiver of expression\n/**\n * Extends the given [comparator] of non-nullable values to a comparator
of nullable values\n * considering `null` value less than any other value.\n *\n * @sample
samples.comparisons.Comparisons.nullsFirstLastWithComparator\n */\npublic fun <T : Any>
nullsFirst(comparator: Comparator<in T>): Comparator<T?> =\n Comparator { a, b ->\n when {\n a
=== b -> 0\n a == null -> -1\n b == null -> 1\n else -> comparator.compare(a, b)\n }\n
}\n\n/**\n * Provides a comparator of nullable [Comparable] values\n * considering `null` value less than any other
value.\n *\n * @sample samples.comparisons.Comparisons.nullsFirstLastComparator\n
*/\n\n@kotlin.internal.InlineOnly\npublic inline fun <T : Comparable<T>> nullsFirst(): Comparator<T?> =
nullsFirst(naturalOrder())\n\n/**\n * Extends the given [comparator] of non-nullable values to a comparator of
nullable values\n * considering `null` value greater than any other value.\n *\n * @sample
samples.comparisons.Comparisons.nullsFirstLastWithComparator\n */\npublic fun <T : Any>
nullsLast(comparator: Comparator<in T>): Comparator<T?> =\n Comparator { a, b ->\n when {\n a
=== b -> 0\n a == null -> 1\n b == null -> -1\n else -> comparator.compare(a, b)\n }\n
}\n\n/**\n * Provides a comparator of nullable [Comparable] values\n * considering `null` value greater than any
other value.\n *\n * @sample samples.comparisons.Comparisons.nullsFirstLastComparator\n
*/\n\n@kotlin.internal.InlineOnly\npublic inline fun <T : Comparable<T>> nullsLast(): Comparator<T?> =
nullsLast(naturalOrder())\n\n/**\n * Returns a comparator that compares [Comparable] objects in natural order.\n *\n * @sample
samples.comparisons.Comparisons.naturalOrderComparator\n */\npublic fun <T : Comparable<T>> naturalOrder():
Comparator<T> = @Suppress("UNCHECKED_CAST") (NaturalOrderComparator as Comparator<T>)\n\n/**\n * Returns a comparator that compares [Comparable] objects in reversed natural order.\n *\n * @sample
samples.comparisons.Comparisons.nullsFirstLastWithComparator\n */\npublic fun <T : Comparable<T>>
reverseOrder(): Comparator<T> = @Suppress("UNCHECKED_CAST") (ReverseOrderComparator as
Comparator<T>)\n\n/**\n * Returns a comparator that imposes the reverse ordering of this comparator.\n *\n *
@sample samples.comparisons.Comparisons.reversed\n
*/\n\n@Suppress("EXTENSION_SHADOWED_BY_MEMBER")\npublic fun <T> Comparator<T>.reversed():
Comparator<T> = when (this) {\n is ReversedComparator -> this.comparator\n NaturalOrderComparator ->
@Suppress("UNCHECKED_CAST") (ReverseOrderComparator
as Comparator<T>)\n ReverseOrderComparator -> @Suppress("UNCHECKED_CAST")
(NaturalOrderComparator as Comparator<T>)\n else -> ReversedComparator(this)\n }\n\nprivate class
ReversedComparator<T>(public val comparator: Comparator<T>) : Comparator<T> {\n override fun compare(a:
T, b: T): Int = comparator.compare(b, a)\n @Suppress("VIRTUAL_MEMBER_HIDDEN")\n fun reversed():
Comparator<T> = comparator\n }\n\nprivate object NaturalOrderComparator : Comparator<Comparable<Any>> {\n
 override fun compare(a: Comparable<Any>, b: Comparable<Any>): Int = a.compareTo(b)\n
 @Suppress("VIRTUAL_MEMBER_HIDDEN")\n fun reversed(): Comparator<Comparable<Any>> =
ReverseOrderComparator\n }\n\nprivate object ReverseOrderComparator : Comparator<Comparable<Any>> {\n
 override fun compare(a: Comparable<Any>, b: Comparable<Any>): Int = b.compareTo(a)\n
}

```



```

Boolean): T? {\n contract {\n callsInPlace(predicate, InvocationKind.EXACTLY_ONCE)\n }\n return if
(!predicate(this)) this else null}\n\n/**\n * Executes the given function [action] specified number of [times].\n *\n * A zero-based index of current iteration is passed as a parameter to
[action].\n *\n * @sample samples.misc.ControlFlow.repeat\n */\n@kotlin.internal.InlineOnly\npublic inline fun
repeat(times: Int, action: (Int) -> Unit) {\n contract { callsInPlace(action) }\n\n for (index in 0 until times) {\n
action(index)\n }\n}\n\n"/**\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.comparisons\n\n/\n// NOTE: THIS FILE IS AUTO-
GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport kotlin.js.*\n\n/**\n * Returns the greater
of two values.\n *\n * If values are equal, returns the first one.\n */\n@SinceKotlin("1.1")\npublic actual fun <T :
Comparable<T>> maxOf(a: T, b: T): T {\n return if (a >= b) a else b}\n\n/**\n * Returns the greater of two
values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic
actual inline fun maxOf(a: Byte, b: Byte): Byte {\n return maxOf(a.toInt(),
b.toInt()).unsafeCast<Byte>()\n}\n\n/**\n * Returns the greater of two values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun maxOf(a: Short, b: Short): Short
{\n return maxOf(a.toInt(), b.toInt()).unsafeCast<Short>()\n}\n\n/**\n * Returns the greater of two values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun maxOf(a: Int, b: Int): Int {\n
return JsMath.max(a, b)\n}\n\n/**\n * Returns the greater of two values.\n */\n@SinceKotlin("1.1")\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline fun maxOf(a: Long, b:
Long): Long {\n return if (a >= b) a else b}\n\n/**\n * Returns the greater of two values.\n *\n * If either value
is `NaN`, returns `NaN`.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun
maxOf(a: Float, b: Float): Float {\n return JsMath.max(a, b)\n}\n\n/**\n * Returns the greater of two values.\n *\n * If either value is `NaN`, returns `NaN`.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun maxOf(a: Double, b: Double):
Double {\n return JsMath.max(a, b)\n}\n\n/**\n * Returns the greater of three values.\n *\n * If there are multiple
equal maximal values, returns the first of them.\n */\n@SinceKotlin("1.1")\npublic actual fun <T :
Comparable<T>> maxOf(a: T, b: T, c: T): T {\n return maxOf(a, maxOf(b, c))\n}\n\n/**\n * Returns the greater
of three values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun maxOf(a: Byte,
b: Byte, c: Byte): Byte {\n return JsMath.max(a.toInt(), b.toInt(), c.toInt()).unsafeCast<Byte>()\n}\n\n/**\n *
Returns the greater of three values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline
fun maxOf(a: Short, b: Short, c: Short): Short {\n return JsMath.max(a.toInt(), b.toInt(),
c.toInt()).unsafeCast<Short>()\n}\n\n/**\n * Returns the greater of three values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual
inline fun maxOf(a: Int, b: Int, c: Int): Int {\n return JsMath.max(a, b, c)\n}\n\n/**\n * Returns the greater of three
values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun maxOf(a: Long, b: Long,
c: Long): Long {\n return maxOf(a, maxOf(b, c))\n}\n\n/**\n * Returns the greater of three values.\n *\n * If any
value is `NaN`, returns `NaN`.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun
maxOf(a: Float, b: Float, c: Float): Float {\n return JsMath.max(a, b, c)\n}\n\n/**\n * Returns the greater of three
values.\n *\n * If any value is `NaN`, returns `NaN`.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun maxOf(a: Double, b: Double, c:
Double): Double {\n return JsMath.max(a, b, c)\n}\n\n/**\n * Returns the greater of the given values.\n *\n *
If there are multiple equal maximal values, returns the first of them.\n */\n@SinceKotlin("1.4")\npublic actual
fun <T : Comparable<T>> maxOf(a: T, vararg other: T): T {\n var max = a\n for (e in other) max = maxOf(max,
e)\n return max\n}\n\n/**\n * Returns the greater of the given values.\n */\n@SinceKotlin("1.4")\npublic actual
fun maxOf(a: Byte, vararg other: Byte): Byte {\n var max = a\n for (e in other) max = maxOf(max, e)\n return
max\n}\n\n/**\n * Returns the greater of the given values.\n */\n@SinceKotlin("1.4")\npublic actual fun maxOf(a:
Short, vararg other: Short): Short {\n var max = a\n for (e in other) max = maxOf(max, e)\n return

```

```

max\n}\n\n/**\n * Returns the greater of the given values.\n *\n@SinceKotlin("1.4")\npublic actual fun maxOf(a:
Int, vararg other: Int): Int {\n var max = a\n for (e in other) max = maxOf(max, e)\n return max\n}\n\n/**\n *
Returns the greater of the given values.\n *\n@SinceKotlin("1.4")\npublic
actual fun maxOf(a: Long, vararg other: Long): Long {\n var max = a\n for (e in other) max = maxOf(max, e)\n
return max\n}\n\n/**\n * Returns the greater of the given values.\n * \n * If any value is `NaN`, returns `NaN`.\n
*\n@SinceKotlin("1.4")\npublic actual fun maxOf(a: Float, vararg other: Float): Float {\n var max = a\n for (e
in other) max = maxOf(max, e)\n return max\n}\n\n/**\n * Returns the greater of the given values.\n * \n * If any
value is `NaN`, returns `NaN`.\n *\n@SinceKotlin("1.4")\npublic actual fun maxOf(a: Double, vararg other:
Double): Double {\n var max = a\n for (e in other) max = maxOf(max, e)\n return max\n}\n\n/**\n * Returns
the smaller of two values.\n * \n * If values are equal, returns the first one.\n *\n@SinceKotlin("1.1")\npublic
actual fun <T : Comparable<T>> minOf(a: T, b: T): T {\n return if (a <= b) a else b\n}\n\n/**\n * Returns the
smaller of two values.\n *\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic
actual inline fun minOf(a: Byte, b: Byte): Byte {\n return minOf(a.toInt(),
b.toInt()).unsafeCast<Byte>()\n}\n\n/**\n * Returns the smaller of two values.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Short, b: Short): Short
{\n return minOf(a.toInt(), b.toInt()).unsafeCast<Short>()\n}\n\n/**\n * Returns the smaller of two values.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Int, b: Int): Int {\n
return JsMath.min(a, b)\n}\n\n/**\n * Returns the smaller of two values.\n
*\n@SinceKotlin("1.1")\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline fun minOf(a: Long, b:
Long): Long {\n return if (a <= b) a else b\n}\n\n/**\n * Returns the smaller of two values.\n * \n * If either
value is `NaN`, returns `NaN`.\n *\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun
minOf(a: Float, b: Float): Float {\n return JsMath.min(a, b)\n}\n\n/**\n
* Returns the smaller of two values.\n * \n * If either value is `NaN`, returns `NaN`.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Double, b: Double):
Double {\n return JsMath.min(a, b)\n}\n\n/**\n * Returns the smaller of three values.\n * \n * If there are
multiple equal minimal values, returns the first of them.\n *\n@SinceKotlin("1.1")\npublic actual fun <T :
Comparable<T>> minOf(a: T, b: T, c: T): T {\n return minOf(a, minOf(b, c))\n}\n\n/**\n * Returns the smaller
of three values.\n *\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Byte, b:
Byte, c: Byte): Byte {\n return JsMath.min(a.toInt(), b.toInt(), c.toInt()).unsafeCast<Byte>()\n}\n\n/**\n *
Returns the smaller of three values.\n *\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun
minOf(a: Short, b: Short, c: Short): Short {\n return JsMath.min(a.toInt(), b.toInt(),
c.toInt()).unsafeCast<Short>()\n}\n\n/**\n * Returns the smaller of three values.\n *\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual
inline fun minOf(a: Int, b: Int, c: Int): Int {\n return JsMath.min(a, b, c)\n}\n\n/**\n * Returns the smaller
of three values.\n *\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Long, b: Long,
c: Long): Long {\n return minOf(a, minOf(b, c))\n}\n\n/**\n * Returns the smaller of three values.\n * \n * If
any value is `NaN`, returns `NaN`.\n *\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun
minOf(a: Float, b: Float, c: Float): Float {\n return JsMath.min(a, b, c)\n}\n\n/**\n * Returns the smaller
of three values.\n * \n * If any value is `NaN`, returns `NaN`.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Double, b: Double, c:
Double): Double {\n return JsMath.min(a, b, c)\n}\n\n/**\n * Returns the smaller of the given values.\n * \n *
If there are multiple equal minimal values, returns the first of them.\n *\n@SinceKotlin("1.4")\npublic actual fun
<T : Comparable<T>> minOf(a: T, vararg other: T): T {\n var min = a\n for (e in other) min = minOf(min, e)\n
return min\n}\n\n/**\n * Returns the smaller of the given values.\n *\n@SinceKotlin("1.4")\npublic actual fun
minOf(a: Byte, vararg other: Byte): Byte {\n var min = a\n for (e in other) min = minOf(min, e)\n return
min\n}\n\n/**\n * Returns the smaller of the given values.\n *\n@SinceKotlin("1.4")\npublic actual fun minOf(a:
Short, vararg other: Short): Short {\n var min = a\n for (e in other) min = minOf(min, e)\n return
min\n}\n\n/**\n * Returns the smaller of the given values.\n *\n@SinceKotlin("1.4")\npublic actual fun minOf(a:

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Int, vararg other: Int): Int {\n var min = a\n for (e in other) min = minOf(min, e)\n return min\n}\n\n/**\n * Returns the smaller of the given values.\n */\n@SinceKotlin("1.4")\npublic actual\n fun minOf(a: Long, vararg other: Long): Long {\n var min = a\n for (e in other) min = minOf(min, e)\n return min\n}\n\n/**\n * Returns the smaller of the given values.\n * If any value is `NaN`, returns `NaN`.\n */\n@SinceKotlin("1.4")\npublic actual\n fun minOf(a: Float, vararg other: Float): Float {\n var min = a\n for (e in other) min = minOf(min, e)\n return min\n}\n\n/**\n * Returns the smaller of the given values.\n * If any value is `NaN`, returns `NaN`.\n */\n@SinceKotlin("1.4")\npublic actual\n fun minOf(a: Double, vararg other: Double): Double {\n var min = a\n for (e in other) min = minOf(min, e)\n return min\n}\n\n"/*\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n// Auto-generated file. DO NOT EDIT!\n\npackage kotlin\n\nimport kotlin.experimental.*\nimport kotlin.jvm.*\n\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@JvmInline\npublic\n value class ULong @PublishedApi internal constructor(@PublishedApi internal val data: Long) : Comparable<ULong> {\n\n companion object {\n\n /**\n * A constant holding the minimum value an instance of ULong can have.\n */\n public const val MIN_VALUE: ULong = ULong(0)\n\n /**\n * A constant holding the maximum value an instance of ULong can have.\n */\n public const val MAX_VALUE: ULong = ULong(-1)\n\n /**\n * The number of bytes used to represent an instance of ULong in a binary form.\n */\n public const val SIZE_BYTES: Int = 8\n\n /**\n * The number of bits used to represent an instance of ULong in a binary form.\n */\n public const val SIZE_BITS: Int = 64\n }\n\n /**\n * Compares this value with the specified value for order.\n * Returns zero if this value is equal to the specified other value, a negative number if it's less than other,\n * or a positive number if it's greater than other.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun compareTo(other: UByte): Int = this.compareTo(other.toULong())\n\n /**\n * Compares this value with the specified value for order.\n * Returns zero if this value is equal to the specified other value, a negative number if it's less than other,\n * or a positive number if it's greater than other.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun compareTo(other: UShort): Int = this.compareTo(other.toULong())\n\n /**\n * Compares this value with the specified value for order.\n * Returns zero if this value is equal to the specified other value, a negative number if it's less than other,\n * or a positive number if it's greater than other.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun compareTo(other: UInt): Int = this.compareTo(other.toULong())\n\n /**\n * Compares this value with the specified value for order.\n * Returns zero if this value is equal to the specified other value, a negative number if it's less than other,\n * or a positive number if it's greater than other.\n */\n @kotlin.internal.InlineOnly\n public override inline operator fun compareTo(other: ULong): Int = uLongCompare(this.data, other.data)\n\n /**\n * Adds the other value to this value.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun plus(other: UByte): ULong = this.plus(other.toULong())\n\n /**\n * Adds the other value to this value.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun plus(other: UShort): ULong = this.plus(other.toULong())\n\n /**\n * Adds the other value to this value.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun plus(other: UInt): ULong = this.plus(other.toULong())\n\n /**\n * Adds the other value to this value.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun plus(other: ULong): ULong = ULong(this.data.plus(other.data))\n\n /**\n * Subtracts the other value from this value.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun minus(other: UByte): ULong = this.minus(other.toULong())\n\n /**\n * Subtracts the other value from this value.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun minus(other: UShort): ULong = this.minus(other.toULong())\n\n /**\n * Subtracts the other value from this value.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun minus(other: UInt): ULong = this.minus(other.toULong())\n\n /**\n * Subtracts the other value from this value.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun minus(other: ULong): ULong = ULong(this.data.minus(other.data))\n\n /**\n * Multiplies this value by the other value.\n */\n @kotlin.internal.InlineOnly\n public inline operator

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fun times(other: UByte): ULong = this.times(other.toULong())\n /** Multiplies this value by the other value. *\n
 @kotlin.internal.InlineOnly\n public inline operator fun times(other: UShort): ULong =
this.times(other.toULong())\n /** Multiplies this value by the other value. *\n @kotlin.internal.InlineOnly\n
public inline operator fun times(other: UInt): ULong = this.times(other.toULong())\n /** Multiplies this value by
the other value. *\n @kotlin.internal.InlineOnly\n public inline operator fun times(other: ULong): ULong =
ULong(this.data.times(other.data))\n\n /** Divides this value by the other value, truncating the result to an integer
that is closer to zero. *\n @kotlin.internal.InlineOnly\n public inline operator fun div(other: UByte): ULong =
this.div(other.toULong())\n /** Divides this value by the other value, truncating the result to an integer that is
closer to zero. *\n @kotlin.internal.InlineOnly\n public inline operator
fun div(other: UShort): ULong = this.div(other.toULong())\n /** Divides this value by the other value, truncating
the result to an integer that is closer to zero. *\n @kotlin.internal.InlineOnly\n public inline operator fun
div(other: UInt): ULong = this.div(other.toULong())\n /** Divides this value by the other value, truncating the
result to an integer that is closer to zero. *\n @kotlin.internal.InlineOnly\n public inline operator fun div(other:
ULong): ULong = ulongDivide(this, other)\n\n /**\n * Calculates the remainder of truncating division of this
value by the other value.\n * \n * The result is always less than the divisor.\n *\n @kotlin.internal.InlineOnly\n
public inline operator fun rem(other: UByte): ULong = this.rem(other.toULong())\n
/**\n * Calculates the remainder of truncating division of this value by the other value.\n * \n * The result is
always less than the divisor.\n *\n @kotlin.internal.InlineOnly\n
public inline operator fun rem(other: UShort): ULong = this.rem(other.toULong())\n /**\n * Calculates the
remainder of truncating division of this value by the other value.\n * \n * The result is always less than the
divisor.\n *\n @kotlin.internal.InlineOnly\n public inline operator fun rem(other: UInt): ULong =
this.rem(other.toULong())\n /**\n * Calculates the remainder of truncating division of this value by the other
value.\n * \n * The result is always less than the divisor.\n *\n @kotlin.internal.InlineOnly\n public
inline operator fun rem(other: ULong): ULong = ulongRemainder(this, other)\n\n /**\n * Divides this value by
the other value, flooring the result to an integer that is closer to negative infinity.\n * \n * For unsigned types,
the results of flooring division and truncating division are the same.\n *\n @kotlin.internal.InlineOnly\n
public inline fun floorDiv(other: UByte): ULong
= this.floorDiv(other.toULong())\n /**\n * Divides this value by the other value, flooring the result to an
integer that is closer to negative infinity.\n * \n * For unsigned types, the results of flooring division and
truncating division are the same.\n *\n @kotlin.internal.InlineOnly\n public inline fun floorDiv(other:
UShort): ULong = this.floorDiv(other.toULong())\n /**\n * Divides this value by the other value, flooring the
result to an integer that is closer to negative infinity.\n * \n * For unsigned types, the results of flooring
division and truncating division are the same.\n *\n @kotlin.internal.InlineOnly\n public inline fun floorDiv(other:
UInt): ULong = this.floorDiv(other.toULong())\n /**\n * Divides this value by the other value, flooring the
result to an integer that is closer to negative infinity.\n * \n * For unsigned types, the results of flooring
division and truncating division are the same.\n
*\n @kotlin.internal.InlineOnly\n public inline fun floorDiv(other: ULong): ULong = div(other)\n\n /**\n
* Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is always
less than the divisor.\n * \n * For unsigned types, the remainders of flooring division and truncating division are
the same.\n *\n @kotlin.internal.InlineOnly\n public inline fun mod(other: UByte): UByte =
this.mod(other.toULong()).toUByte()\n /**\n * Calculates the remainder of flooring division of this value by the
other value.\n * \n * The result is always less than the divisor.\n * \n * For unsigned types, the remainders
of flooring division and truncating division are the same.\n *\n @kotlin.internal.InlineOnly\n public inline
fun mod(other: UShort): UShort = this.mod(other.toULong()).toUShort()\n /**\n * Calculates the remainder of
flooring division of this value by the other value.\n
* \n * The result is always less than the divisor.\n * \n * For unsigned types, the remainders of flooring
division and truncating division are the same.\n *\n @kotlin.internal.InlineOnly\n public inline fun
mod(other: UInt): UInt = this.mod(other.toULong()).toUInt()\n /**\n * Calculates the remainder of flooring

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division of this value by the other value.\n * \n * The result is always less than the divisor.\n * \n * For
unsigned types, the remainders of flooring division and truncating division are the same.\n */
@kotlin.internal.InlineOnly\n public inline fun mod(other: ULong): ULong = rem(other)\n\n /**\n * Returns
this value incremented by one.\n * \n * @sample samples.misc.Builtins.inc\n */
@kotlin.internal.InlineOnly\n public inline operator fun inc(): ULong = ULong(data.inc())\n\n /**\n * Returns
this value decremented by one.\n * \n * @sample samples.misc.Builtins.dec\n */
@kotlin.internal.InlineOnly\n public inline operator fun dec(): ULong = ULong(data.dec())\n\n /** Creates a
range from this value to the specified [other] value. */\n @kotlin.internal.InlineOnly\n public inline operator fun
rangeTo(other: ULong): ULongRange = ULongRange(this, other)\n\n /**\n * Shifts this value left by the
[bitCount] number of bits.\n * \n * Note that only the six lowest-order bits of the [bitCount] are used as the shift
distance.\n * The shift distance actually used is therefore always in the range `0..63`.\n */
@kotlin.internal.InlineOnly\n public inline infix fun shl(bitCount: Int): ULong = ULong(data shl bitCount)\n\n
/**\n * Shifts this value right by the [bitCount] number of bits, filling the leftmost bits with zeros.\n * \n *
Note that only the six lowest-order bits of the [bitCount] are used as the shift distance.\n * The shift distance
actually used is therefore always in the range `0..63`.\n
*/\n @kotlin.internal.InlineOnly\n public inline infix fun shr(bitCount: Int): ULong = ULong(data ushr
bitCount)\n\n /** Performs a bitwise AND operation between the two values. */\n @kotlin.internal.InlineOnly\n
public inline infix fun and(other: ULong): ULong = ULong(this.data and other.data)\n\n /** Performs a bitwise OR
operation between the two values. */\n @kotlin.internal.InlineOnly\n public inline infix fun or(other: ULong):
ULong = ULong(this.data or other.data)\n\n /** Performs a bitwise XOR operation between the two values. */\n
@kotlin.internal.InlineOnly\n public inline infix fun xor(other: ULong): ULong = ULong(this.data xor
other.data)\n\n /** Inverts the bits in this value. */\n @kotlin.internal.InlineOnly\n public inline fun inv():
ULong = ULong(data.inv())\n\n /**\n * Converts this [ULong] value to [Byte].\n * \n * If this value is less
than or equals to [Byte.MAX_VALUE], the resulting `Byte` value represents\n
* the same numerical value as this `ULong`.\n * \n * The resulting `Byte` value is represented by the least
significant 8 bits of this `ULong` value.\n * Note that the resulting `Byte` value may be negative.\n */
@kotlin.internal.InlineOnly\n public inline fun toByte(): Byte = data.toByte()\n\n /**\n * Converts this [ULong]
value to [Short].\n * \n * If this value is less than or equals to [Short.MAX_VALUE], the resulting `Short` value
represents\n
* the same numerical value as this `ULong`.\n * \n * The resulting `Short` value is represented
by the least significant 16 bits of this `ULong` value.\n * Note that the resulting `Short` value may be negative.\n
*/\n @kotlin.internal.InlineOnly\n public inline fun toShort(): Short = data.toShort()\n\n /**\n * Converts this
[ULong] value to [Int].\n * \n * If this value is less than or equals to [Int.MAX_VALUE], the resulting `Int`
value represents\n
* the same numerical
value as this `ULong`.\n * \n * The resulting `Int` value is represented by the least significant 32 bits of this
`ULong` value.\n * Note that the resulting `Int` value may be negative.\n */\n @kotlin.internal.InlineOnly\n
public inline fun toInt(): Int = data.toInt()\n\n /**\n * Converts this [ULong] value to [Long].\n * \n * If this
value is less than or equals to [Long.MAX_VALUE], the resulting `Long` value represents\n
* the same
numerical value as this `ULong`. Otherwise the result is negative.\n * \n * The resulting `Long` value has the
same binary representation as this `ULong` value.\n */\n @kotlin.internal.InlineOnly\n public inline fun
toLong(): Long = data\n\n /**\n * Converts this [ULong] value to [UByte].\n * \n * If this value is less than
or equals to [UByte.MAX_VALUE], the resulting `UByte` value represents\n
* the same numerical value as this
`ULong`.\n * \n * The resulting `UByte` value
is represented by the least significant 8 bits of this `ULong` value.\n */\n @kotlin.internal.InlineOnly\n public
inline fun toUByte(): UByte = data.toUByte()\n\n /**\n * Converts this [ULong] value to [UShort].\n * \n * If
this value is less than or equals to [UShort.MAX_VALUE], the resulting `UShort` value represents\n
* the same
numerical value as this `ULong`.\n * \n * The resulting `UShort` value is represented by the least significant 16
bits of this `ULong` value.\n */\n @kotlin.internal.InlineOnly\n public inline fun toUShort(): UShort =
data.toUShort()\n\n /**\n * Converts this [ULong] value to [UInt].\n * \n * If this value is less than or equals

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to [UInt.MAX_VALUE], the resulting `UInt` value represents
 * the same numerical value as this `ULong`.
 * The resulting `UInt` value is represented by the least significant 32 bits of this `ULong` value.
@kotlin.internal.InlineOnly
 public inline
 fun toUInt(): UInt = data.toUInt()
 /** Returns this value.
 @kotlin.internal.InlineOnly
 public inline
 fun toULong(): ULong = this
 /**
 * Converts this [ULong] value to [Float].
 * The resulting
 value is the closest `Float` to this `ULong` value.
 * In case when this `ULong` value is exactly between two
 `Float`s,
 * the one with zero at least significant bit of mantissa is selected.
 @kotlin.internal.InlineOnly
 public inline fun toFloat(): Float = this.toDouble().toFloat()
 /**
 * Converts
 this [ULong] value to [Double].
 * The resulting value is the closest `Double` to this `ULong` value.
 *
 In case when this `ULong` value is exactly between two `Double`s,
 * the one with zero at least significant bit of
 mantissa is selected.
 @kotlin.internal.InlineOnly
 public inline fun toDouble(): Double =
 ulongToDouble(data)
 public override fun toString(): String = ulongToString(data)
}
/**
 * Converts this [Byte] value to [ULong].
 * If this value is positive, the resulting `ULong` value represents the
 same numerical value as this `Byte`.
 * The least significant 8 bits of the resulting `ULong` value are the same
 as the bits of this `Byte` value,
 * whereas the most significant 56 bits are filled with the sign bit of this value.
 @SinceKotlin("1.5")
 @WasExperimental(ExperimentalUnsignedTypes::class)
 @kotlin.internal.InlineOnly
 public inline fun Byte.toULong(): ULong = ULong(this.toLong())
 /**
 * Converts this [Short] value to
 [ULong].
 * If this value is positive, the resulting `ULong` value represents the same numerical value as this
 `Short`.
 * The least significant 16 bits of the resulting `ULong` value are the same as the bits of this `Short`
 value,
 * whereas the most significant 48 bits are filled with the sign bit of this value.
 @kotlin.internal.InlineOnly
 @WasExperimental(ExperimentalUnsignedTypes::class)
 @kotlin.internal.InlineOnly
 public
 inline fun Short.toULong(): ULong = ULong(this.toLong())
 /**
 * Converts this [Int] value to [ULong].
 * If this value is positive, the resulting `ULong` value represents the same numerical value as this `Int`.
 * The
 least significant 32 bits of the resulting `ULong` value are the same as the bits of this `Int` value,
 * whereas the
 most significant 32 bits are filled with the sign bit of this value.
 @kotlin.internal.InlineOnly
 @WasExperimental(ExperimentalUnsignedTypes::class)
 @kotlin.internal.InlineOnly
 public inline fun Int.toULong(): ULong = ULong(this.toLong())
 /**
 * Converts this [Long] value to [ULong].
 * If this value is positive, the resulting `ULong` value represents the same numerical value as this `Long`.
 * The
 resulting `ULong` value has the same binary representation as this `Long` value.
 @kotlin.internal.InlineOnly
 @WasExperimental(ExperimentalUnsignedTypes::class)
 @kotlin.internal.InlineOnly
 public
 inline fun Long.toULong(): ULong = ULong(this)
 /**
 * Converts this [Float] value to [ULong].
 * The
 fractional part, if any, is rounded down towards zero.
 * Returns zero if this `Float` value is negative or `NaN`,
 [ULong.MAX_VALUE] if it's bigger than `ULong.MAX_VALUE`.
 @kotlin.internal.InlineOnly
 @WasExperimental(ExperimentalUnsignedTypes::class)
 @kotlin.internal.InlineOnly
 public inline fun Float.toULong(): ULong = doubleToULong(this.toDouble())
 /**
 * Converts this [Double]
 value to [ULong].
 * The fractional part, if any, is rounded down towards zero.
 * Returns zero if this
 `Double` value is negative or `NaN`, [ULong.MAX_VALUE] if it's bigger than `ULong.MAX_VALUE`.
 @kotlin.internal.InlineOnly
 @WasExperimental(ExperimentalUnsignedTypes::class)
 @kotlin.internal.InlineOnly
 public inline fun Double.toULong(): ULong = doubleToULong(this)
", "
 * Copyright 2010-2022 JetBrains
 s.r.o. and Kotlin Programming Language contributors.
 * Use of this source
 code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 @file:kotlin.jvm.JvmMultifileClass
 @file:kotlin.jvm.JvmName("CollectionsKt")
 npackage
 kotlin.collections
 n/n/n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt
 n// See:
 https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib
 n/n/nimport kotlin.random.
 *nimport
 kotlin.ranges.contains
 nimport kotlin.ranges.reversed
 n/n/n/**
 * Returns 1st *element* from the list.
 *
 * Throws an [IndexOutOfBoundsException] if the size of this list is less than 1.

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*\n@kotlin.internal.InlineOnly\npublic inline operator fun <T> List<T>.component1(): T {\n return
get(0)\n}\n\n**\n * Returns 2nd *element* from the list.\n * \n * Throws an [IndexOutOfBoundsException] if the
size of this list is less than 2.\n *\n@kotlin.internal.InlineOnly\npublic inline operator fun <T>
List<T>.component2(): T {\n return get(1)\n}\n\n**\n * Returns 3rd *element* from the list.\n
* \n * Throws an [IndexOutOfBoundsException] if the size of this list is less than 3.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun <T> List<T>.component3(): T {\n return
get(2)\n}\n\n**\n * Returns 4th *element* from the list.\n * \n * Throws an [IndexOutOfBoundsException] if the
size of this list is less than 4.\n *\n@kotlin.internal.InlineOnly\npublic inline operator fun <T>
List<T>.component4(): T {\n return get(3)\n}\n\n**\n * Returns 5th *element* from the list.\n * \n * Throws an
[IndexOutOfBoundsException] if the size of this list is less than 5.\n *\n@kotlin.internal.InlineOnly\npublic inline
operator fun <T> List<T>.component5(): T {\n return get(4)\n}\n\n**\n * Returns `true` if [element] is found in
the collection.\n *\npublic operator fun <@kotlin.internal.OnlyInputTypes T> Iterable<T>.contains(element: T):
Boolean {\n if (this is Collection)\n return contains(element)\n return indexOf(element) >= 0\n}\n\n**\n *
Returns an element
at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this collection.\n
* \n * @sample samples.collections.Collections.Elements.elementAt\n *\npublic fun <T>
Iterable<T>.elementAt(index: Int): T {\n if (this is List)\n return get(index)\n return
elementAtOrElse(index) { throw IndexOutOfBoundsException("\Collection doesn't contain element at index
$index.\n") }\n}\n\n**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if
the [index] is out of bounds of this list.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <T> List<T>.elementAt(index: Int): T {\n return
get(index)\n}\n\n**\n * Returns an element at the given [index] or the result of calling the [defaultValue] function
if the [index] is out of bounds of this collection.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n *\npublic fun
<T> Iterable<T>.elementAtOrElse(index: Int, defaultValue: (Int) -> T): T {\n if (this is List)\n return
this.getOrElse(index, defaultValue)\n if (index < 0)\n return defaultValue(index)\n val iterator = iterator()\n
var count = 0\n while (iterator.hasNext()) {\n val element = iterator.next()\n if (index == count++)\n return element\n }\n return defaultValue(index)\n}\n\n**\n * Returns an element at the given [index] or the
result of calling the [defaultValue] function if the [index] is out of bounds of this list.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n *\n@kotlin.internal.InlineOnly\npublic inline fun
<T> List<T>.elementAtOrElse(index: Int, defaultValue: (Int) -> T): T {\n return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n**\n * Returns an element at the given [index] or `null` if the
[index] is out of bounds of this collection.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n
*\npublic fun <T> Iterable<T>.elementAtOrNull(index: Int): T? {\n if (this is List)\n return
this.getOrElse(index)\n if (index < 0)\n return null\n val iterator = iterator()\n var count = 0\n while
(iterator.hasNext()) {\n val element = iterator.next()\n if (index == count++)\n return element\n }\n
return null\n}\n\n**\n * Returns an element at the given [index] or `null` if the [index] is out of bounds of this
list.\n * \n * @sample samples.collections.Collections.Elements.elementAtOrNull\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <T> List<T>.elementAtOrNull(index: Int): T? {\n return
this.getOrElse(index)\n}\n\n**\n * Returns the first element matching the given [predicate], or `null` if no such
element was found.\n * \n * @sample samples.collections.Collections.Elements.find\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <T> Iterable<T>.find(predicate:
(T) -> Boolean): T? {\n return firstOrNull(predicate)\n}\n\n**\n * Returns the last element matching the given
[predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n *\n@kotlin.internal.InlineOnly\npublic inline fun <T>
Iterable<T>.findLast(predicate: (T) -> Boolean): T? {\n return lastOrNull(predicate)\n}\n\n**\n * Returns the last
element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample

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samples.collections.Collections.Elements.find\n *\n@kotlin.internal.InlineOnly\npublic inline fun <T>
List<T>.findLast(predicate: (T) -> Boolean): T? {\n return lastOrNull(predicate)\n}\n\n/**\n * Returns the first
element.\n * \n * @throws NoSuchElementException if the collection is empty.\n */\npublic fun <T>
Iterable<T>.first(): T {\n when (this) {\n is List -> return this.first()\n else -> {\n val iterator =
iterator()\n if (!iterator.hasNext())\n throw NoSuchElementException("Collection is empty.")\n return iterator.next()\n }\n }\n}\n\n/**\n * Returns the first element.\n * \n * @throws NoSuchElementException if the list is empty.\n */\npublic fun <T> List<T>.first(): T {\n if (isEmpty())\n throw NoSuchElementException("List is empty.")\n return this[0]\n}\n\n/**\n * Returns the first element matching the given [predicate].\n * \n * @throws
[NoSuchElementException] if no such element is found.\n */\npublic inline fun <T> Iterable<T>.first(predicate: (T)
-> Boolean): T {\n for (element in this) if (predicate(element)) return element\n throw
NoSuchElementException("Collection contains no element matching the predicate.")\n}\n\n/**\n * Returns the
first non-null value produced by [transform] function being applied to elements of this collection in iteration order,\n
* or throws [NoSuchElementException] if no non-null value was produced.\n * \n * @sample
samples.collections.Collections.Transformations.firstNotNullOf\n
*/\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Any>
Iterable<T>.firstNotNullOf(transform: (T) -> R?): R {\n return firstNotNullOrNull(transform) ?: throw
NoSuchElementException("No element of the collection was transformed to a non-null value.")\n}\n\n/**\n *
Returns the first non-null value produced by [transform] function being applied to elements of this collection in
iteration order,\n * or `null` if no non-null value was produced.\n * \n * @sample
samples.collections.Collections.Transformations.firstNotNullOf\n
*/\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Any>
Iterable<T>.firstNotNullOrNull(transform: (T) -> R?): R? {\n for (element in this) {\n val result =
transform(element)\n if (result != null) {\n return result\n }\n }\n return null\n}\n\n/**\n *
Returns the first element, or `null` if the collection is
empty.\n */\npublic fun <T> Iterable<T>.firstOrNull(): T? {\n when (this) {\n is List -> {\n if
(isEmpty())\n return null\n else\n return this[0]\n }\n else -> {\n val iterator
= iterator()\n if (!iterator.hasNext())\n return null\n return iterator.next()\n }\n }\n}\n\n/**\n * Returns the first element, or `null` if the list is empty.\n */\npublic fun <T> List<T>.firstOrNull():
T? {\n return if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first element matching the given [predicate],
or `null` if element was not found.\n */\npublic inline fun <T> Iterable<T>.firstOrNull(predicate: (T) -> Boolean):
T? {\n for (element in this) if (predicate(element)) return element\n return null\n}\n\n/**\n * Returns an element
at the given [index] or the result of calling the [defaultValue] function if the [index] is out of bounds of this list.\n
*/\n@kotlin.internal.InlineOnly\npublic
inline fun <T> List<T>.getOrNull(index: Int, defaultValue: (Int) -> T): T {\n return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or `null` if the
[index] is out of bounds of this list.\n * \n * @sample samples.collections.Collections.Elements.getOrNull\n
*/\npublic fun <T> List<T>.getOrNull(index: Int): T? {\n return if (index >= 0 && index <= lastIndex) get(index)
else null\n}\n\n/**\n * Returns first index of [element], or -1 if the collection does not contain element.\n */\npublic
fun <@kotlin.internal.OnlyInputTypes T> Iterable<T>.indexOf(element: T): Int {\n if (this is List) return
this.indexOf(element)\n var index = 0\n for (item in this) {\n checkIndexOverflow(index)\n if (element
== item)\n return index\n index++\n }\n return -1\n}\n\n/**\n * Returns first index of [element], or -1
if the list does not contain
element.\n */\n@Suppress("EXTENSION_SHADOWED_BY_MEMBER") // false warning, extension takes
precedence in some cases\npublic fun <@kotlin.internal.OnlyInputTypes T> List<T>.indexOf(element: T): Int {\n return
indexOf(element)\n}\n\n/**\n * Returns index of the first element matching the given [predicate], or -1 if the
collection does not contain such element.\n */\npublic inline fun <T> Iterable<T>.indexOfFirst(predicate: (T) ->
Boolean): Int {\n var index = 0\n for (item in this) {\n checkIndexOverflow(index)\n if

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(predicate(item))\n return index\n index++\n }\n return -1\n}\n\n/**\n * Returns index of the first
element matching the given [predicate], or -1 if the list does not contain such element.\n */\npublic inline fun <T>
List<T>.indexOfFirst(predicate: (T) -> Boolean): Int {\n var index = 0\n for (item in this) {\n if
(predicate(item))\n return index\n index++\n }\n return -1\n}\n\n/**\n * Returns index of the last element matching the given [predicate], or -1 if the collection does not contain such
element.\n */\npublic inline fun <T> Iterable<T>.indexOfLast(predicate: (T) -> Boolean): Int {\n var lastIndex = -
1\n var index = 0\n for (item in this) {\n checkIndexOverflow(index)\n if (predicate(item))\n lastIndex = index\n index++\n }\n return lastIndex\n}\n\n/**\n * Returns index of the last element matching
the given [predicate], or -1 if the list does not contain such element.\n */\npublic inline fun <T>
List<T>.indexOfLast(predicate: (T) -> Boolean): Int {\n val iterator = this.listIterator(size)\n while
(iterator.hasPrevious()) {\n if (predicate(iterator.previous())) {\n return iterator.nextIndex()\n }\n }\n return -1\n}\n\n/**\n * Returns the last element.\n * \n * @throws NoSuchElementException if the collection
is empty.\n * \n * @sample samples.collections.Collections.Elements.last\n */\npublic fun <T> Iterable<T>.last(): T {\n when (this) {\n is List -> return this.last()\n else -> {\n val iterator = iterator()\n if (!iterator.hasNext())\n throw NoSuchElementException("Collection is
empty.")\n var last = iterator.next()\n while (iterator.hasNext())\n last = iterator.next()\n return last\n }\n }\n}\n\n/**\n * Returns the last element.\n * \n * @throws NoSuchElementException if the
list is empty.\n * \n * @sample samples.collections.Collections.Elements.last\n */\npublic fun <T> List<T>.last(): T {\n if (isEmpty())\n throw NoSuchElementException("List is empty.")\n return this[lastIndex]\n}\n\n/**\n * Returns the last element matching the given [predicate].\n * \n * @throws NoSuchElementException if no such
element is found.\n * \n * @sample samples.collections.Collections.Elements.last\n */\npublic inline fun <T>
Iterable<T>.last(predicate:
(T) -> Boolean): T {\n var last: T? = null\n var found = false\n for (element in this) {\n if
(predicate(element)) {\n last = element\n found = true\n }\n }\n if (!found) throw
NoSuchElementException("Collection contains no element matching the predicate.")\n @Suppress("UNCHECKED_CAST")\n return last as T\n}\n\n/**\n * Returns the last element matching the
given [predicate].\n * \n * @throws NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun <T> List<T>.last(predicate: (T) -> Boolean): T {\n val iterator = this.listIterator(size)\n while (iterator.hasPrevious()) {\n val element = iterator.previous()\n if (predicate(element)) return element\n }\n throw NoSuchElementException("List contains no element
matching the predicate.")\n}\n\n/**\n * Returns last index of [element], or -1 if the collection does not
contain element.\n */\npublic fun <@kotlin.internal.OnlyInputTypes T> Iterable<T>.lastIndexOf(element: T): Int {\n if (this is List) return this.lastIndexOf(element)\n var lastIndex = -1\n var index = 0\n for (item in this) {\n checkIndexOverflow(index)\n if (element == item)\n lastIndex = index\n index++\n }\n return lastIndex\n}\n\n/**\n * Returns last index of [element], or -1 if the list does not contain element.\n */\n@Suppress("EXTENSION_SHADOWED_BY_MEMBER") // false warning, extension takes precedence in
some cases\npublic fun <@kotlin.internal.OnlyInputTypes T> List<T>.lastIndexOf(element: T): Int {\n return
lastIndexOf(element)\n}\n\n/**\n * Returns the last element, or `null` if the collection is empty.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic fun <T> Iterable<T>.lastOrNull(): T? {\n when (this) {\n is List -> return if (isEmpty()) null else this[size - 1]\n else -> {\n val iterator = iterator()\n if (!iterator.hasNext())\n return null\n var last =
iterator.next()\n while (iterator.hasNext())\n last = iterator.next()\n return last\n }\n }\n}\n\n/**\n * Returns the last element, or `null` if the list is empty.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic fun <T> List<T>.lastOrNull(): T? {\n return if
(isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element matching the given [predicate], or `null` if
no such element was found.\n * \n * @sample samples.collections.Collections.Elements.last\n */\npublic inline fun
<T> Iterable<T>.lastOrNull(predicate: (T) -> Boolean): T? {\n var last: T? = null\n for (element in this) {\n if (predicate(element)) {\n last = element\n }\n }\n return last\n}\n\n/**\n * Returns the last element

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matching the given [predicate], or `null` if no such
element was found.\n * \n * @sample samples.collections.Collections.Elements.last\n * \npublic inline fun <T>
List<T>.lastOrNull(predicate: (T) -> Boolean): T? {\n val iterator = this.listIterator(size)\n while
(iterator.hasPrevious()) {\n val element = iterator.previous()\n if (predicate(element)) return element\n }\n return null\n}\n\n/**\n * Returns a random element from this collection.\n * \n * @throws
NoSuchElementException if this collection is empty.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun <T> Collection<T>.random(): T {\n
return random(Random)\n}\n\n/**\n * Returns a random element from this collection using the specified source of
randomness.\n * \n * @throws NoSuchElementException if this collection is empty.\n
*\n@SinceKotlin("1.3")\npublic fun <T> Collection<T>.random(random: Random): T {\n if (isEmpty())\n throw NoSuchElementException("Collection is empty.")\n return elementAt(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this collection, or `null` if this collection is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
inline fun <T> Collection<T>.randomOrNull(): T? {\n return randomOrNull(Random)\n}\n\n/**\n * Returns a
random element from this collection using the specified source of randomness, or `null` if this collection is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T>
Collection<T>.randomOrNull(random: Random): T? {\n if (isEmpty())\n return null\n return
elementAt(random.nextInt(size))\n}\n\n/**\n * Returns the single element, or throws an exception if the collection is
empty or has more than one element.\n * \npublic fun <T> Iterable<T>.single(): T {\n when (this) {\n is List -
> return this.single()\n else -> {\n val iterator = iterator()\n if (!iterator.hasNext())\n throw NoSuchElementException("Collection is empty.")\n val single = iterator.next()\n if
(iterator.hasNext())\n throw IllegalArgumentException("Collection has more than one element.")\n return single\n }\n }\n}\n\n/**\n * Returns the single element, or throws an exception if the list is empty or
has more than one element.\n * \npublic fun <T> List<T>.single(): T {\n return when (size) {\n 0 -> throw
NoSuchElementException("List is empty.")\n 1 -> this[0]\n else -> throw
IllegalArgumentException("List has more than one element.")\n }\n}\n\n/**\n * Returns the single element
matching the given [predicate], or throws exception if there is no or more than one matching element.\n * \npublic
inline fun <T> Iterable<T>.single(predicate: (T) -> Boolean): T {\n var single: T? = null\n var found = false\n
for (element in this) {\n if (predicate(element)) {\n if
(found) throw IllegalArgumentException("Collection contains more than one matching element.")\n single
= element\n found = true\n }\n }\n if (!found) throw NoSuchElementException("Collection contains
no element matching the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as T\n}\n\n/**\n * Returns single element, or `null` if the collection is empty or has more than one element.\n * \npublic fun <T>
Iterable<T>.singleOrNull(): T? {\n when (this) {\n is List -> return if (size == 1) this[0] else null\n else ->
{\n val iterator = iterator()\n if (!iterator.hasNext())\n return null\n val single =
iterator.next()\n if (iterator.hasNext())\n return null\n return single\n }\n }\n}\n\n/**\n * Returns single element, or `null` if the list is empty or has more than one element.\n * \npublic fun <T>
List<T>.singleOrNull(): T?
{\n return if (size == 1) this[0] else null\n}\n\n/**\n * Returns the single element matching the given [predicate],
or `null` if element was not found or more than one element was found.\n * \npublic inline fun <T>
Iterable<T>.singleOrNull(predicate: (T) -> Boolean): T? {\n var single: T? = null\n var found = false\n
for (element in this) {\n if (predicate(element)) {\n if (found) return null\n single = element\n
found = true\n }\n }\n if (!found) return null\n return single\n}\n\n/**\n * Returns a list containing all
elements except first [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n * \npublic fun <T> Iterable<T>.drop(n: Int): List<T> {\n
require(n >= 0) {\n "Requested element count $n is less than zero." }\n if (n == 0) return toList()\n val list:
ArrayList<T>\n if (this is Collection<*>) {\n val

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resultSize = size - n\n if (resultSize <= 0)\n return emptyList()\n if (resultSize == 1)\n return listOf(last())\n list = ArrayList<T>(resultSize)\n if (this is List<T>) {\n if (this is RandomAccess)\n for (index in n until size)\n list.add(this[index])\n } else {\n for (item in listIterator(n))\n list.add(item)\n }\n return list\n}\n}\n else {\n list = ArrayList<T>()\n var count = 0\n for (item in this) {\n if (count >= n) list.add(item) else ++count\n }\n return list.optimizeReadOnlyList()\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample\n samples.collections.Collections.Transformations.drop\n */\npublic fun <T> List<T>.dropLast(n: Int): List<T> {\n require(n >= 0) {\n \"Requested element count $n is less than zero.\"\n }\n return take((size - n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last elements that satisfy the given [predicate].\n * \n * @sample\n samples.collections.Collections.Transformations.drop\n */\npublic inline fun <T> List<T>.dropLastWhile(predicate: (T) -> Boolean): List<T> {\n if (!isEmpty()) {\n val iterator = listIterator(size)\n while (iterator.hasPrevious()) {\n if (!predicate(iterator.previous())) {\n return take(iterator.nextIndex() + 1)\n }\n }\n }\n return emptyList()\n}\n\n/**\n * Returns a list containing all elements except first elements that satisfy the given [predicate].\n * \n * @sample\n samples.collections.Collections.Transformations.drop\n */\npublic inline fun <T> Iterable<T>.dropWhile(predicate: (T) -> Boolean): List<T> {\n var yielding = false\n val list = ArrayList<T>()\n for (item in this)\n if (yielding)\n list.add(item)\n else if (!predicate(item)) {\n list.add(item)\n yielding = true\n }\n return list\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @sample\n samples.collections.Collections.Filtering.filter\n */\npublic inline fun <T> Iterable<T>.filter(predicate: (T) -> Boolean): List<T> {\n return filterTo(ArrayList<T>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @param [predicate] function that takes the index of an element and the element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample\n samples.collections.Collections.Filtering.filterIndexed\n */\npublic inline fun <T> Iterable<T>.filterIndexed(predicate: (index: Int, T) -> Boolean): List<T> {\n return filterIndexedTo(ArrayList<T>(), predicate)\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n * \n * @param [predicate] function that takes the index of an element and the element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample\n samples.collections.Collections.Filtering.filterIndexedTo\n */\npublic inline fun <T, C : MutableCollection<in T>> Iterable<T>.filterIndexedTo(destination: C, predicate: (index: Int, T) -> Boolean): C {\n forEachIndexed { index, element ->\n if (predicate(index, element)) destination.add(element)\n }\n return destination\n}\n\n/**\n * Returns a list containing all elements that are instances of specified type parameter R.\n * \n * @sample\n samples.collections.Collections.Filtering.filterIsInstance\n */\npublic inline fun <reified R> Iterable<*>.filterIsInstance(): List<@kotlin.internal.NoInfer R> {\n return filterIsInstanceTo(ArrayList<R>())\n}\n\n/**\n * Appends all elements that are instances of specified type parameter R to the given [destination].\n * \n * @sample\n samples.collections.Collections.Filtering.filterIsInstanceTo\n */\npublic inline fun <reified R, C : MutableCollection<in R>> Iterable<*>.filterIsInstanceTo(destination: C): C {\n for (element in this) if (element is R) destination.add(element)\n return destination\n}\n\n/**\n * Returns a list containing all elements not matching the given [predicate].\n * \n * @sample\n samples.collections.Collections.Filtering.filter\n */\npublic inline fun <T> Iterable<T>.filterNot(predicate: (T) -> Boolean): List<T> {\n return filterNotTo(ArrayList<T>(), predicate)\n}\n\n/**\n * Returns a list containing all elements that are not `null`.\n * \n * @sample\n samples.collections.Collections.Filtering.filterNotNull\n */\npublic fun <T : Any> Iterable<T?>.filterNotNull(): List<T> {\n return filterNotNullTo(ArrayList<T>())\n}\n\n/**\n * Appends all elements that are not `null` to the given [destination].\n * \n * @sample\n samples.collections.Collections.Filtering.filterNotNullTo\n */\npublic fun <C : MutableCollection<in

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T>, T : Any> Iterable<T?>.filterNotNullTo(destination: C): C { \n for (element in this) if (element != null)
destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements not matching the given
[predicate] to the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n
*/\n\npublic inline fun <T, C : MutableCollection<in T>> Iterable<T>.filterNotNullTo(destination: C, predicate: (T) ->
Boolean): C { \n for (element in this) if (!predicate(element)) destination.add(element)\n return
destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n * \n *
@sample samples.collections.Collections.Filtering.filterTo\n */\n\npublic inline fun <T, C : MutableCollection<in
T>> Iterable<T>.filterTo(destination: C, predicate: (T) -> Boolean): C { \n for (element in this) if
(predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Returns a list containing elements
at indices in the specified [indices] range.\n */\n\npublic fun <T> List<T>.slice(indices: IntRange): List<T> { \n if
(indices.isEmpty()) return listOf()\n return this.subList(indices.start, indices.endInclusive + 1).toList()\n}\n\n/**\n
* Returns a list containing elements at specified [indices].\n */\n\npublic fun <T> List<T>.slice(indices:
Iterable<Int>): List<T> { \n val size = indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n
val list = ArrayList<T>(size)\n for (index in indices) { \n list.add(get(index))\n }\n return list\n}\n\n/**\n
* Returns a list containing first [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n *
@sample samples.collections.Collections.Transformations.take\n */\n\npublic fun <T> Iterable<T>.take(n: Int):
List<T> { \n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return
emptyList()\n if (this is Collection<T>) { \n if (n >=
size) return toList()\n if (n == 1) return listOf(first())\n }\n var count = 0\n val list = ArrayList<T>(n)\n
for (item in this) { \n list.add(item)\n if (++count == n)\n break\n }\n return
list.optimizeReadOnlyList()\n}\n\n/**\n * Returns a list containing last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n */\n\npublic fun <T> List<T>.takeLast(n: Int): List<T> { \n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val size =
size\n if (n >= size) return toList()\n if (n == 1) return listOf(last())\n val list = ArrayList<T>(n)\n if (this is
RandomAccess) { \n for (index in size - n until size)\n list.add(this[index])\n } else { \n for (item in
listIterator(size - n))\n list.add(item)\n }\n return list\n}\n\n/**\n * Returns
a list containing last elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n */\n\npublic inline fun <T> List<T>.takeLastWhile(predicate:
(T) -> Boolean): List<T> { \n if (isEmpty())\n return emptyList()\n val iterator = listIterator(size)\n while
(iterator.hasPrevious()) { \n if (!predicate(iterator.previous())) { \n iterator.next()\n val
expectedSize = size - iterator.nextIndex()\n if (expectedSize == 0) return emptyList()\n return
ArrayList<T>(expectedSize).apply { \n while (iterator.hasNext())\n add(iterator.next())\n }\n }\n }\n return toList()\n}\n\n/**\n * Returns a list containing first elements satisfying the given
[predicate].\n * \n * @sample samples.collections.Collections.Transformations.take\n */\n\npublic inline fun <T>
Iterable<T>.takeWhile(predicate: (T) -> Boolean): List<T> { \n val list = ArrayList<T>()\n for (item in this) { \n if (!predicate(item))\n break\n list.add(item)\n }\n return list\n}\n\n/**\n * Reverses elements in the list in-place.\n */\n\npublic expect fun <T> MutableList<T>.reverse(): Unit\n\n/**\n * Returns a list with elements in reversed order.\n */\n\npublic fun <T> Iterable<T>.reversed(): List<T> { \n if (this is
Collection && size <= 1) return toList()\n val list = toMutableList()\n list.reverse()\n return list\n}\n\n/**\n * Randomly shuffles elements in this list in-place using the specified [random] instance as the source of
randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm\n
*/\n\n@SinceKotlin("1.3")\n\npublic fun <T> MutableList<T>.shuffle(random: Random): Unit { \n for (i in lastIndex
downTo 1) { \n val j = random.nextInt(i + 1)\n this[j] = this.set(i, this[j])\n }\n}\n\n/**\n * Sorts elements
in the list in-place according to natural
sort order of the value returned by specified [selector] function.\n * \n * The sort is _stable_. It means that equal
elements preserve their order relative to each other after sorting.\n */\n\npublic inline fun <T, R : Comparable<R>>

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LongArray {
 val result = LongArray(size)
 var index = 0
 for (element in this)
 result[index++] = element
 return result
}

/**
 * Returns an array of Short containing all of the elements of this collection.
 */
public fun Collection<Short>.toShortArray(): ShortArray {
 val result = ShortArray(size)
 var index = 0
 for (element in this)
 result[index++] = element
 return result
}

/**
 * Returns a [Map] containing key-value pairs provided by [transform] function applied to elements of the given collection.
 * If any of two pairs would have the same key the last one gets added to the map.
 * The returned map preserves the entry iteration order of the original collection.
 */
@sample samples.collections.Collections.Transformations.associate
public inline fun <T, K, V> Iterable<T>.associate(transform: (T) -> Pair<K, V>): Map<K, V> {
 val capacity = mapCapacity(collectionSizeOrDefault(10)).coerceAtLeast(16)
 return associateTo(LinkedHashMap<K, V>(capacity), transform)
}

/**
 * Returns a [Map] containing the elements from the given collection indexed by the key returned from [keySelector] function applied to each element.
 * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.
 * The returned map preserves the entry iteration order of the original collection.
 */
@sample samples.collections.Collections.Transformations.associateBy
public inline fun <T, K> Iterable<T>.associateBy(keySelector: (T) -> K): Map<K, T> {
 val capacity = mapCapacity(collectionSizeOrDefault(10)).coerceAtLeast(16)
 return associateByTo(LinkedHashMap<K, T>(capacity), keySelector)
}

/**
 * Returns a [Map] containing the values provided by [valueTransform] and indexed by [keySelector] functions applied to elements of the given collection.
 * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.
 * The returned map preserves the entry iteration order of the original collection.
 */
@sample samples.collections.Collections.Transformations.associateByWithValueTransform
public inline fun <T, K, V> Iterable<T>.associateBy(keySelector: (T) -> K, valueTransform: (T) -> V): Map<K, V> {
 val capacity = mapCapacity(collectionSizeOrDefault(10)).coerceAtLeast(16)
 return associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)
}

/**
 * Populates and returns the [destination] mutable map with key-value pairs, where key is provided by the [keySelector] function applied to each element of the given collection and value is the element itself.
 * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.
 */
@sample samples.collections.Collections.Transformations.associateByTo
public inline fun <T, K, M : MutableMap<in K, in T>> Iterable<T>.associateByTo(destination: M, keySelector: (T) -> K): M {
 for (element in this) {
 destination.put(keySelector(element), element)
 }
 return destination
}

/**
 * Populates and returns the [destination] mutable map with key-value pairs, where key is provided by the [keySelector] function and value is provided by the [valueTransform] function applied to elements of the given collection.
 * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.
 */
@sample samples.collections.Collections.Transformations.associateByToWithValueTransform
public inline fun <T, K, V, M : MutableMap<in K, in V>> Iterable<T>.associateByTo(destination: M, keySelector: (T) -> K, valueTransform: (T) -> V): M {
 for (element in this) {
 destination.put(keySelector(element), valueTransform(element))
 }
 return destination
}

/**
 * Populates and returns the [destination] mutable map with key-value pairs provided by [transform] function applied to each element of the given collection.
 * If any of two pairs would have the same key the last one gets added to the map.
 */
@sample samples.collections.Collections.Transformations.associateTo
public inline fun <T, K, V, M : MutableMap<in K, in V>> Iterable<T>.associateTo(destination: M, transform: (T) -> Pair<K, V>): M {
 for (element in this) {
 destination += transform(element)
 }
 return destination
}

/**
 * Returns a [Map] where keys are elements from the given collection and values are produced by the [valueSelector] function applied to each element.
 * If any two elements are equal, the last one gets added to the map.
 * The returned map preserves the entry iteration order of the original collection.
 */
@sample samples.collections.Collections.Transformations.associateWith
public inline fun <K, V> Iterable<K>.associateWith(valueSelector: (K) -> V): Map<K, V> {
 val capacity = mapCapacity(collectionSizeOrDefault(10)).coerceAtLeast(16)
 return associateWithTo(LinkedHashMap<K, V>(capacity), valueSelector)
}

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V> Iterable<K>.associateWith(valueSelector: (K) -> V): Map<K, V> {\n val result = LinkedHashMap<K,
V>(mapCapacity(collectionSizeOrDefault(10)).coerceAtLeast(16))\n return associateWithTo(result,
valueSelector)\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs for each
element of the given collection,\n * where key is the element itself and value is provided by the [valueSelector]
function applied to that key.\n * \n * If any two elements are equal, the last one overwrites the former value in the
map.\n * \n * @sample samples.collections.Collections.Transformations.associateWithTo\n
*/\n\n@SinceKotlin("1.3")\npublic inline
fun <K, V, M : MutableMap<in K, in V>> Iterable<K>.associateWithTo(destination: M, valueSelector: (K) -> V):
M {\n for (element in this) {\n destination.put(element, valueSelector(element))\n }\n return
destination\n}\n\n/**\n * Appends all elements to the given [destination] collection.\n */\n\npublic fun <T, C :
MutableCollection<in T>> Iterable<T>.toCollection(destination: C): C {\n for (item in this) {\n
destination.add(item)\n }\n return destination\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\n\npublic fun <T> Iterable<T>.toHashSet(): HashSet<T> {\n return
toCollection(HashSet<T>(mapCapacity(collectionSizeOrDefault(12))))\n}\n\n/**\n * Returns a [List] containing all
elements.\n */\n\npublic fun <T> Iterable<T>.toList(): List<T> {\n if (this is Collection) {\n return when (size)
{\n 0 -> emptyList()\n 1 -> listOf(if (this is List) get(0) else iterator().next())\n else ->
this.toMutableList()\n }\n }\n return this.toMutableList().optimizeReadOnlyList()\n}\n\n/**\n * Returns a new [MutableList]
filled with all elements of this collection.\n */\n\npublic fun <T> Iterable<T>.toMutableList(): MutableList<T> {\n
if (this is Collection<T>)\n return this.toMutableList()\n return toCollection(ArrayList<T>())\n}\n\n/**\n *
Returns a new [MutableList] filled with all elements of this collection.\n */\n\npublic fun <T>
Collection<T>.toMutableList(): MutableList<T> {\n return ArrayList(this)\n}\n\n/**\n * Returns a [Set] of all
elements.\n * \n * The returned set preserves the element iteration order of the original collection.\n */\n\npublic fun
<T> Iterable<T>.toSet(): Set<T> {\n if (this is Collection) {\n return when (size) {\n 0 -> emptySet()\n
 1 -> setOf(if (this is List) this[0] else iterator().next())\n else ->
toCollection(LinkedHashSet<T>(mapCapacity(size)))\n }\n }\n return
toCollection(LinkedHashSet<T>()).optimizeReadOnlySet()\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being invoked on each element of
original collection.\n * \n * @sample samples.collections.Collections.Transformations.flatMap\n */\n\npublic inline
fun <T, R> Iterable<T>.flatMap(transform: (T) -> Iterable<R>): List<R> {\n return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element of original collection.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapSequence")\npublic inline fun <T, R>
Iterable<T>.flatMap(transform: (T) -> Sequence<R>): List<R> {\n return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results
of [transform] function being invoked on each element\n * and its index in the original collection.\n * \n * @sample
samples.collections.Collections.Transformations.flatMapIndexed\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <T, R> Iterable<T>.flatMapIndexed(transform: (index: Int, T) -> Iterable<R>): List<R> {\n return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original collection.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedSequence")\n@kotlin.internal.InlineOnly\npubli
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inline fun <T, R> Iterable<T>.flatMapIndexed(transform: (index: Int, T) -> Sequence<R>): List<R> {
 return flatMapIndexedTo(ArrayList<R>(), transform)
}

/** Appends all elements yielded from results of [transform] function being invoked on each element and its index in the original collection, to the given [destination]. */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.jvm.JvmName("flatMapIndexedIterableTo")
@kotlin.internal.InlineOnly
public inline fun <T, R, C : MutableCollection<in R>> Iterable<T>.flatMapIndexedTo(destination: C, transform: (index: Int, T) -> Iterable<R>): C {
 var index = 0
 for (element in this) {
 val list = transform(checkIndexOverflow(index++), element)
 destination.addAll(list)
 }
 return destination
}

/** Appends all elements yielded from results of [transform] function being invoked on each element and its index in the original collection, to the given [destination]. */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.jvm.JvmName("flatMapIndexedSequenceTo")
@kotlin.internal.InlineOnly
public inline fun <T, R, C : MutableCollection<in R>> Iterable<T>.flatMapIndexedTo(destination: C, transform: (index: Int, T) -> Sequence<R>): C {
 var index = 0
 for (element in this) {
 val list = transform(checkIndexOverflow(index++), element)
 destination.addAll(list)
 }
 return destination
}

/** Appends all elements yielded from results of [transform] function being invoked on each element of original collection, to the given [destination]. */
public inline fun <T, R, C : MutableCollection<in R>> Iterable<T>.flatMapTo(destination: C, transform: (T) -> Iterable<R>): C {
 for (element in this) {
 val list = transform(element)
 destination.addAll(list)
 }
 return destination
}

/** Appends all elements yielded from results of [transform] function being invoked on each element of original collection, to the given [destination]. */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.jvm.JvmName("flatMapSequenceTo")
public inline fun <T, R, C : MutableCollection<in R>> Iterable<T>.flatMapTo(destination: C, transform: (T) -> Sequence<R>): C {
 for (element in this) {
 val list = transform(element)
 destination.addAll(list)
 }
 return destination
}

/** Groups elements of the original collection by the key returned by the given [keySelector] function applied to each element and returns a map where each group key is associated with a list of corresponding elements. The returned map preserves the entry iteration order of the keys produced from the original collection. */
@sample samples.collections.Collections.Transformations.groupBy
public inline fun <T, K> Iterable<T>.groupBy(keySelector: (T) -> K): Map<K, List<T>> {
 return groupByTo(LinkedHashMap<K, MutableList<T>>(), keySelector)
}

/** Groups values returned by the [valueTransform] function applied to each element of the original collection by the key returned by the given [keySelector] function applied to the element and returns a map where each group key is associated with a list of corresponding values. The returned map preserves the entry iteration order of the keys produced from the original collection. */
@sample samples.collections.Collections.Transformations.groupByKeysAndValues
public inline fun <T, K, V> Iterable<T>.groupBy(keySelector: (T) -> K, valueTransform: (T) -> V): Map<K, List<V>> {
 return groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)
}

/** Groups elements of the original collection by the key returned by the given [keySelector] function applied to each element and puts to the [destination] map each group key associated with a list of corresponding elements. */
@return The [destination] map.
@sample samples.collections.Collections.Transformations.groupBy
public inline fun <T, K, M : MutableMap<in K, MutableList<T>>> Iterable<T>.groupByTo(destination: M, keySelector: (T) -> K): M {
 for (element in this) {
 val key = keySelector(element)
 val list = destination.getOrPut(key) { ArrayList<T>() }
 list.add(element)
 }
 return destination
}

/** Groups values returned by the [valueTransform] function applied to each element of the original collection by the key returned by the given [keySelector] function applied to the element and puts to the [destination] map each group key associated with a list of

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corresponding values.\n \* \n \* @return The [destination] map.\n \* \n \* @sample samples.collections.Collections.Transformations.groupByKeyAndValues\n

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*\npublic inline fun <T, K, V, M : MutableMap<in K, MutableList<V>>> Iterable<T>.groupByTo(destination: M,
keySelector: (T) -> K, valueTransform: (T) -> V): M {\n for (element in this) {\n val key =
keySelector(element)\n val list = destination.getOrPut(key) { ArrayList<V>() }\n
list.add(valueTransform(element))\n }\n return destination\n}\n\n/**\n * Creates a [Grouping] source from a
collection to be used later with one of group-and-fold operations\n * using the specified [keySelector] function to
extract a key from each element.\n * \n * @sample samples.collections.Grouping.groupingByEachCount\n
*/\n@SinceKotlin("1.1")\npublic inline fun <T, K> Iterable<T>.groupingBy(crossinline keySelector: (T) -> K):
Grouping<T, K> {\n return object : Grouping<T, K> {\n override fun sourceIterator(): Iterator<T> =
this@groupingBy.iterator()\n override fun keyOf(element: T): K = keySelector(element)\n
 }\n}\n\n/**\n * Returns a list containing the results of applying the given [transform] function\n * to each element
in the original collection.\n * \n * @sample samples.collections.Collections.Transformations.map\n */\npublic inline
fun <T, R> Iterable<T>.map(transform: (T) -> R): List<R> {\n return
mapTo(ArrayList<R>(collectionSizeOrDefault(10)), transform)\n}\n\n/**\n * Returns a list containing the results of
applying the given [transform] function\n * to each element and its index in the original collection.\n * @param
[transform] function that takes the index of an element and the element itself\n * and returns the result of the
transform applied to the element.\n */\npublic inline fun <T, R> Iterable<T>.mapIndexed(transform: (index: Int, T)
-> R): List<R> {\n return mapIndexedTo(ArrayList<R>(collectionSizeOrDefault(10)), transform)\n}\n\n/**\n *
Returns a list containing only the non-null results of applying the given [transform] function\n * to each element and
its index
in the original collection.\n * @param [transform] function that takes the index of an element and the element
itself\n * and returns the result of the transform applied to the element.\n */\npublic inline fun <T, R : Any>
Iterable<T>.mapIndexedNotNull(transform: (index: Int, T) -> R?): List<R> {\n return
mapIndexedNotNullTo(ArrayList<R>(), transform)\n}\n\n/**\n * Applies the given [transform] function to each
element and its index in the original collection\n * and appends only the non-null results to the given [destination].\n
*/\n * @param [transform] function that takes the index of an element and the element itself\n * and returns the result of
the transform applied to the element.\n */\npublic inline fun <T, R : Any, C : MutableCollection<in R>>
Iterable<T>.mapIndexedNotNullTo(destination: C, transform: (index: Int, T) -> R?): C {\n forEachIndexed {
index, element -> transform(index, element)?.let { destination.add(it) } }\n return destination\n}\n\n/**\n *
Applies the given
[transform] function to each element and its index in the original collection\n * and appends the results to the given
[destination].\n * @param [transform] function that takes the index of an element and the element itself\n * and
returns the result of the transform applied to the element.\n */\npublic inline fun <T, R, C : MutableCollection<in
R>> Iterable<T>.mapIndexedTo(destination: C, transform: (index: Int, T) -> R): C {\n var index = 0\n for (item
in this)\n destination.add(transform(checkIndexOverflow(index++), item))\n return destination\n}\n\n/**\n *
Returns a list containing only the non-null results of applying the given [transform] function\n * to each element in
the original collection.\n * \n * @sample samples.collections.Collections.Transformations.mapNotNull\n */\npublic
inline fun <T, R : Any> Iterable<T>.mapNotNull(transform: (T) -> R?): List<R> {\n return
mapNotNullTo(ArrayList<R>(), transform)\n}\n\n/**\n * Applies the given [transform] function
to each element in the original collection\n * and appends only the non-null results to the given [destination].\n
*/\npublic inline fun <T, R : Any, C : MutableCollection<in R>> Iterable<T>.mapNotNullTo(destination: C,
transform: (T) -> R?): C {\n forEach { element -> transform(element)?.let { destination.add(it) } }\n return
destination\n}\n\n/**\n * Applies the given [transform] function to each element of the original collection\n * and
appends the results to the given [destination].\n */\npublic inline fun <T, R, C : MutableCollection<in R>>
Iterable<T>.mapTo(destination: C, transform: (T) -> R): C {\n for (item in this)\n
destination.add(transform(item))\n return destination\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each
element of the original collection\n * into an [IndexedValue] containing the index of that element and the element

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itself.\n * \n\npublic fun <T> Iterable<T>.withIndex(): Iterable<IndexedValue<T>> {\n return IndexingIterable {
iterator()
}\n}\n\n/**\n * Returns a list containing only distinct elements from the given collection.\n * \n * Among equal
elements of the given collection, only the first one will be present in the resulting list.\n * The elements in the
resulting list are in the same order as they were in the source collection.\n * \n * @sample
samples.collections.Collections.Transformations.distinctAndDistinctBy\n * \n\npublic fun <T> Iterable<T>.distinct():
List<T> {\n return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list containing only elements from the
given collection\n * having distinct keys returned by the given [selector] function.\n * \n * Among elements of the
given collection with equal keys, only the first one will be present in the resulting list.\n * The elements in the
resulting list are in the same order as they were in the source collection.\n * \n * @sample
samples.collections.Collections.Transformations.distinctAndDistinctBy\n * \n\npublic inline fun <T, K>
Iterable<T>.distinctBy(selector:
(T) -> K): List<T> {\n val set = HashSet<K>()\n val list = ArrayList<T>()\n for (e in this) {\n val key =
selector(e)\n if (set.add(key))\n list.add(e)\n }\n return list\n}\n\n/**\n * Returns a set containing all
elements that are contained by both this collection and the specified collection.\n * \n * The returned set preserves
the element iteration order of the original collection.\n * \n * To get a set containing all elements that are contained
at least in one of these collections use [union].\n * \n\npublic infix fun <T> Iterable<T>.intersect(other: Iterable<T>):
Set<T> {\n val set = this.toMutableSet()\n set.retainAll(other)\n return set\n}\n\n/**\n * Returns a set
containing all elements that are contained by this collection and not contained by the specified collection.\n * \n *
The returned set preserves the element iteration order of the original collection.\n * \n\npublic infix fun <T>
Iterable<T>.subtract(other: Iterable<T>):
Set<T> {\n val set = this.toMutableSet()\n set.removeAll(other)\n return set\n}\n\n/**\n * Returns a new
[MutableSet] containing all distinct elements from the given collection.\n * \n * The returned set preserves the
element iteration order of the original collection.\n * \n\npublic fun <T> Iterable<T>.toMutableSet(): MutableSet<T>
{\n return when (this) {\n is Collection<T> -> LinkedHashSet(this)\n else ->
toCollection(LinkedHashSet<T>())\n }\n}\n\n/**\n * Returns a set containing all distinct elements from both
collections.\n * \n * The returned set preserves the element iteration order of the original collection.\n * Those
elements of the [other] collection that are unique are iterated in the end\n * in the order of the [other] collection.\n *
\n * To get a set containing all elements that are contained in both collections use [intersect].\n * \n\npublic infix fun
<T> Iterable<T>.union(other: Iterable<T>): Set<T> {\n val set = this.toMutableSet()\n
set.addAll(other)\n return set\n}\n\n/**\n * Returns `true` if all elements match the given [predicate].\n * \n *
\n * @sample samples.collections.Collections.Aggregates.all\n * \n\npublic inline fun <T> Iterable<T>.all(predicate: (T) -
> Boolean): Boolean {\n if (this is Collection && isEmpty()) return true\n for (element in this) if
(!predicate(element)) return false\n return true\n}\n\n/**\n * Returns `true` if collection has at least one element.\n *
\n * \n * @sample samples.collections.Collections.Aggregates.any\n * \n\npublic fun <T> Iterable<T>.any(): Boolean
{\n if (this is Collection) return !isEmpty()\n return iterator().hasNext()\n}\n\n/**\n * Returns `true` if at least
one element matches the given [predicate].\n * \n * \n * @sample
samples.collections.Collections.Aggregates.anyWithPredicate\n * \n\npublic inline fun <T>
Iterable<T>.any(predicate: (T) -> Boolean): Boolean {\n if (this is Collection && isEmpty()) return false\n for
(element in this) if (predicate(element))
return true\n return false\n}\n\n/**\n * Returns the number of elements in this collection.\n * \n\npublic fun <T>
Iterable<T>.count(): Int {\n if (this is Collection) return size\n var count = 0\n for (element in this)
checkCountOverflow(++count)\n return count\n}\n\n/**\n * Returns the number of elements in this collection.\n *
\n * \n * @kotlin.internal.InlineOnly\n * \n\npublic inline fun <T> Collection<T>.count(): Int {\n return size\n}\n\n/**\n *
Returns the number of elements matching the given [predicate].\n * \n\npublic inline fun <T>
Iterable<T>.count(predicate: (T) -> Boolean): Int {\n if (this is Collection && isEmpty()) return 0\n var count =
0\n for (element in this) if (predicate(element)) checkCountOverflow(++count)\n return count\n}\n\n/**\n *
Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator

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value and each element.  
`\n * \n * Returns the specified [initial] value if the collection is empty.`  
`\n * \n * @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.`  
`\n */\npublic inline fun <T, R> Iterable<T>.fold(initial: R, operation: (acc: R, T) -> R): R {`  
`\n var accumulator = initial`  
`\n for (element in this) accumulator = operation(accumulator, element)`  
`\n return accumulator`  
`\n}`  
`\n/**`  
`\n * Accumulates value starting with [initial] value and applying [operation] from left to right`  
`\n * to current accumulator value and each element with its index in the original collection.`  
`\n * \n * Returns the specified [initial] value if the collection is empty.`  
`\n * \n * @param [operation] function that takes the index of an element, current accumulator value`  
`\n * and the element itself, and calculates the next accumulator value.`  
`\n */\npublic inline fun <T, R> Iterable<T>.foldIndexed(initial: R, operation: (index: Int, acc: R, T) -> R): R {`  
`\n var index = 0`  
`\n var accumulator = initial`  
`\n for (element in this)`  
`\n accumulator = operation(checkIndexOverflow(index++), accumulator, element)`  
`\n return accumulator`  
`\n}`  
`\n/**`  
`\n * Accumulates value starting with [initial] value and applying [operation] from right to left`  
`\n * to each element and current accumulator value.`  
`\n * \n * Returns the specified [initial] value if the list is empty.`  
`\n * \n * @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.`  
`\n */\npublic inline fun <T, R> List<T>.foldRight(initial: R, operation: (T, acc: R) -> R): R {`  
`\n var accumulator = initial`  
`\n if (!isEmpty()) {`  
`\n val iterator = listIterator(size)`  
`\n while (iterator.hasPrevious())`  
`\n accumulator = operation(iterator.previous(), accumulator)`  
`\n }`  
`\n return accumulator`  
`\n}`  
`\n/**`  
`\n * Accumulates value starting with [initial] value and applying [operation] from right to left`  
`\n * to each element with its index in the original list and current accumulator value.`  
`\n * \n * Returns the specified [initial] value if the list is empty.`  
`\n * \n * @param [operation] function that takes the index of an element, the element itself`  
`\n * and current accumulator value, and calculates the next accumulator value.`  
`\n */\npublic inline fun <T, R> List<T>.foldRightIndexed(initial: R, operation: (index: Int, T, acc: R) -> R): R {`  
`\n var accumulator = initial`  
`\n if (!isEmpty()) {`  
`\n val iterator = listIterator(size)`  
`\n while (iterator.hasPrevious()) {`  
`\n val index = iterator.previousIndex()`  
`\n accumulator = operation(index, iterator.previous(), accumulator)`  
`\n }`  
`\n }`  
`\n return accumulator`  
`\n}`  
`\n/**`  
`\n * Performs the given [action] on each element.`  
`\n */\n@kotlin.internal.HidesMembers\npublic inline fun <T> Iterable<T>.forEach(action: (T) -> Unit): Unit {`  
`\n for (element in this) action(element)`  
`\n}`  
`\n/**`  
`\n * Performs the given [action] on each element, providing sequential index with the element.`  
`\n * @param [action] function that takes the index of an element and the element itself`  
`\n * and performs the action on the element.`  
`\n */\npublic inline fun <T> Iterable<T>.forEachIndexed(action: (index: Int, T) -> Unit): Unit {`  
`\n var index = 0`  
`\n for (item in this) action(checkIndexOverflow(index++), item)`  
`\n}`  
`\n/**`  
`\n * Returns the largest element.`  
`\n * \n * If any of elements is `NaN` returns `NaN`.`  
`\n * \n * @throws NoSuchElementException if the collection is empty.`  
`\n */\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun Iterable<Double>.max(): Double {`  
`\n val iterator = iterator()`  
`\n if (!iterator.hasNext()) throw NoSuchElementException()`  
`\n var max = iterator.next()`  
`\n while (iterator.hasNext()) {`  
`\n val e = iterator.next()`  
`\n max = maxOf(max, e)`  
`\n }`  
`\n return max`  
`\n}`  
`\n/**`  
`\n * Returns the largest element.`  
`\n * \n * If any of elements is `NaN` returns `NaN`.`  
`\n * \n * @throws NoSuchElementException if the collection is empty.`  
`\n */\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun Iterable<Float>.max(): Float {`  
`\n val iterator = iterator()`  
`\n if (!iterator.hasNext()) throw NoSuchElementException()`  
`\n var max = iterator.next()`  
`\n while (iterator.hasNext()) {`  
`\n val e = iterator.next()`  
`\n max = maxOf(max, e)`  
`\n }`  
`\n return max`  
`\n}`  
`\n/**`  
`\n * Returns the largest element.`  
`\n * \n * @throws NoSuchElementException if the collection is empty.`  
`\n */\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun <T : Comparable<T>> Iterable<T>.max(): T {`  
`\n val iterator = iterator()`  
`\n if (!iterator.hasNext()) throw NoSuchElementException()`  
`\n var max = iterator.next()`  
`\n while (iterator.hasNext()) {`  
`\n val e = iterator.next()`  
`\n if (max < e) max = e`  
`\n }`  
`\n return max`  
`\n}`  
`\n/**`  
`\n * Returns the first element yielding the largest value of the given function.`  
`\n * \n`



```

* @throws NoSuchElementException if the collection is empty.\n * \n * @sample
samples.collections.Collections.Aggregates.maxBy\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxByOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic inline fun <T, R : Comparable<R>> Iterable<T>.maxBy(selector: (T) -> R): T {\n val iterator = iterator()\n if (!iterator.hasNext()) throw NoSuchElementException()\n var maxElem = iterator.next()\n if (!iterator.hasNext()) return maxElem\n var maxValue = selector(maxElem)\n do {\n val e = iterator.next()\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n } while (iterator.hasNext())\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n
*\n@SinceKotlin("1.4")\npublic inline fun <T, R : Comparable<R>> Iterable<T>.maxByOrNull(selector: (T) -> R): T? {\n val iterator = iterator()\n if (!iterator.hasNext()) return null\n var maxElem = iterator.next()\n if (!iterator.hasNext()) return maxElem\n var maxValue = selector(maxElem)\n do {\n val e = iterator.next()\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n } while (iterator.hasNext())\n return maxElem\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the collection.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the collection is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Iterable<T>.maxOf(selector: (T) -> Double): Double {\n val iterator = iterator()\n if (!iterator.hasNext()) throw NoSuchElementException()\n var maxValue = selector(iterator.next())\n while (iterator.hasNext()) {\n val v = selector(iterator.next())\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the collection.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the collection is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Iterable<T>.maxOf(selector: (T) -> Float): Float {\n val iterator = iterator()\n if (!iterator.hasNext()) throw NoSuchElementException()\n var maxValue = selector(iterator.next())\n while (iterator.hasNext()) {\n val v = selector(iterator.next())\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the collection.\n * \n * @throws NoSuchElementException if the collection is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>> Iterable<T>.maxOf(selector: (T) -> R): R {\n val iterator = iterator()\n if (!iterator.hasNext()) throw NoSuchElementException()\n var maxValue = selector(iterator.next())\n while (iterator.hasNext()) {\n val v = selector(iterator.next())\n if (maxValue < v) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the collection or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Iterable<T>.maxOfOrNull(selector: (T) -> Double): Double? {\n val iterator = iterator()\n if (!iterator.hasNext()) return null\n var maxValue = selector(iterator.next())\n while (iterator.hasNext()) {\n val v = selector(iterator.next())\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced

```

by [selector] function\n \* applied to each element in the collection or `null` if there are no elements.\n \* \n \* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

```

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <T> Iterable<T>.maxOrNull(selector: (T) -> Float): Float? {\n val iterator = iterator()\n if
(!iterator.hasNext()) return null\n var max = selector(iterator.next())\n while (iterator.hasNext()) {\n
val v = selector(iterator.next())\n max = maxOf(max, v)\n }\n return max\n}\n\n/**\n *
Returns the largest value among all values produced by [selector] function\n * applied to each element in the
collection or `null` if there are no elements.\n

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*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>>
Iterable<T>.maxOrNull(selector: (T) -> R): R? {\n val iterator = iterator()\n if (!iterator.hasNext()) return
null\n var max = selector(iterator.next())\n while (iterator.hasNext()) {\n val v =
selector(iterator.next())\n if (max < v) {\n max = v\n }\n }\n return max\n}\n\n/**\n * Returns the largest
value according to the provided [comparator]\n * among all values produced by [selector] function applied to each
element in the collection.\n * \n * @throws NoSuchElementException if the collection is empty.\n

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```

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R>
Iterable<T>.maxWith(comparator: Comparator<in R>, selector: (T) -> R): R {\n val iterator = iterator()\n if
(!iterator.hasNext()) throw NoSuchElementException()\n var max = selector(iterator.next())\n while
(iterator.hasNext()) {\n val v = selector(iterator.next())\n if (comparator.compare(max, v) < 0) {\n
max = v\n }\n }\n return max\n}\n\n/**\n * Returns the largest value according
to the provided [comparator]\n * among all values produced by [selector] function applied to each element in the
collection or `null` if there are no elements.\n

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*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R>
Iterable<T>.maxWithOrNull(comparator: Comparator<in R>, selector: (T) -> R): R? {\n val iterator =
iterator()\n if (!iterator.hasNext()) return null\n var max = selector(iterator.next())\n while
(iterator.hasNext()) {\n val v = selector(iterator.next())\n if (comparator.compare(max, v) < 0) {\n
max = v\n }\n }\n return max\n}\n\n/**\n * Returns the largest element or `null` if there are no
elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n * \n *\n@SinceKotlin("1.4")\npublic fun
Iterable<Double>.maxOrNull(): Double? {\n val iterator = iterator()\n if (!iterator.hasNext())
return null\n var max = iterator.next()\n while (iterator.hasNext()) {\n val e = iterator.next()\n
max = maxOf(max, e)\n }\n return max\n}\n\n/**\n * Returns the largest element or `null` if there are no
elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n * \n *\n@SinceKotlin("1.4")\npublic fun
Iterable<Float>.maxOrNull(): Float? {\n val iterator = iterator()\n if (!iterator.hasNext()) return null\n
var max = iterator.next()\n while (iterator.hasNext()) {\n val e = iterator.next()\n max =
maxOf(max, e)\n }\n return max\n}\n\n/**\n * Returns the largest element or `null` if there are no
elements.\n

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*\n@SinceKotlin("1.4")\npublic fun <T : Comparable<T>> Iterable<T>.maxOrNull(): T? {\n val iterator =
iterator()\n if (!iterator.hasNext()) return null\n var max = iterator.next()\n while (iterator.hasNext()) {\n
val e = iterator.next()\n if (max < e) max = e\n }\n return max\n}\n\n/**\n * Returns the first
element having the largest value according to the provided [comparator].\n * \n * @throws
NoSuchElementException if the collection is empty.\n

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*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxWithOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun <T>
Iterable<T>.maxWith(comparator: Comparator<in T>): T {\n val iterator = iterator()\n if (!iterator.hasNext())
throw NoSuchElementException()\n var max = iterator.next()\n while (iterator.hasNext()) {\n val
e = iterator.next()\n if (comparator.compare(max, e) < 0) max = e\n }\n

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return max\n}\n\n/**\n * Returns the first element having the largest value according to the provided [comparator]
or `null` if there are no elements.\n * \n@SinceKotlin("1.4")\npublic fun <T>
Iterable<T>.maxWithOrNull(comparator: Comparator<in T>): T? {\n val iterator = iterator()\n if
(!iterator.hasNext()) return null\n var max = iterator.next()\n while (iterator.hasNext()) {\n
 val e = iterator.next()\n if (comparator.compare(max, e) < 0) max = e\n }\n return max\n}\n\n/**\n * Returns the smallest element.\n * \n * If any of elements is `NaN` returns `NaN`.\n * \n * @throws
NoSuchElementException if the collection is empty.\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow")\n@Suppress("CONFLICTING_OVERLOA
DS")\npublic fun Iterable<Double>.min(): Double {\n val iterator = iterator()\n if (!iterator.hasNext()) throw
NoSuchElementException()\n var min = iterator.next()\n while (iterator.hasNext()) {\n val e =
iterator.next()\n min = minOf(min, e)\n }\n return min\n}\n\n/**\n * Returns the smallest element.\n * \n * If
any of elements is `NaN` returns `NaN`.\n * \n * @throws NoSuchElementException if the collection is empty.\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow")\n@Suppress("CONFLICTING_OVERLOA
DS")\npublic fun Iterable<Float>.min(): Float {\n val iterator = iterator()\n
 if (!iterator.hasNext()) throw NoSuchElementException()\n var min = iterator.next()\n while
(iterator.hasNext()) {\n val e = iterator.next()\n min = minOf(min, e)\n }\n return min\n}\n\n/**\n * Returns the smallest element.\n * \n * @throws NoSuchElementException if the collection is empty.\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow")\n@Suppress("CONFLICTING_OVERLOA
DS")\npublic fun <T : Comparable<T>> Iterable<T>.min(): T {\n val iterator = iterator()\n if
(!iterator.hasNext()) throw NoSuchElementException()\n var min = iterator.next()\n while (iterator.hasNext())
{\n val e = iterator.next()\n if (min > e) min = e\n }\n return min\n}\n\n/**\n * Returns the first element
yielding the smallest value of the given function.\n * \n * @throws NoSuchElementException if the collection is
empty.\n * \n * @sample samples.collections.Collections.Aggregates.minBy\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow")\n@Suppress("CONFLICTING_OVERLO
ADS")\npublic
inline fun <T, R : Comparable<R>> Iterable<T>.minBy(selector: (T) -> R): T {\n val iterator = iterator()\n if
(!iterator.hasNext()) throw NoSuchElementException()\n var minElem = iterator.next()\n if (!iterator.hasNext())
return minElem\n var minValue = selector(minElem)\n do {\n val e = iterator.next()\n val v =
selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n }\n } while
(iterator.hasNext())\n return minElem\n}\n\n/**\n * Returns the first element yielding the smallest value of the
given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n
*\n@SinceKotlin("1.4")\npublic inline fun <T, R :
Comparable<R>> Iterable<T>.minByOrNull(selector: (T) -> R): T? {\n val iterator = iterator()\n if
(!iterator.hasNext()) return null\n var minElem = iterator.next()\n
 if (!iterator.hasNext()) return minElem\n var minValue = selector(minElem)\n do {\n val e =
iterator.next()\n val v = selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n
 }\n } while (iterator.hasNext())\n return minElem\n}\n\n/**\n * Returns the smallest value among all values
produced by [selector] function\n * applied to each element in the collection.\n * \n * If any of values produced by
[selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the
collection is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Iterable<T>.minOf(selector: (T) ->
Double): Double {\n val iterator = iterator()\n if (!iterator.hasNext()) throw NoSuchElementException()\n var
minValue = selector(iterator.next())\n while (iterator.hasNext())
{\n val v = selector(iterator.next())\n minValue = minOf(minValue, v)\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the collection.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result
is `NaN`.\n * \n * @throws NoSuchElementException if the collection is empty.\n

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*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Iterable<T>.minOf(selector: (T) ->
Float): Float {\n val iterator = iterator()\n if (!iterator.hasNext()) throw NoSuchElementException()\n var
minValue = selector(iterator.next())\n while (iterator.hasNext()) {\n val v = selector(iterator.next())\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all
values produced by
```

```
[selector] function\n * applied to each element in the collection.\n * \n * @throws NoSuchElementException if the
collection is empty.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>>
Iterable<T>.minOf(selector: (T) -> R): R {\n val iterator = iterator()\n if (!iterator.hasNext()) throw
NoSuchElementException()\n var minValue = selector(iterator.next())\n while (iterator.hasNext()) {\n val v
= selector(iterator.next())\n if (minValue > v) {\n minValue = v\n }\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the collection or `null` if there are no elements.\n * \n * If any of values produced by [selector]
function is `NaN`, the returned result is `NaN`.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <T> Iterable<T>.minOrNull(selector: (T) -> Double): Double? {\n val iterator = iterator()\n if
(!iterator.hasNext()) return null\n var minValue = selector(iterator.next())\n while (iterator.hasNext()) {\n val v = selector(iterator.next())\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the
collection or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the
returned result is `NaN`.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Iterable<T>.minOrNull(selector: (T)
-> Float): Float? {\n val iterator = iterator()\n if
(!iterator.hasNext()) return null\n var minValue = selector(iterator.next())\n while (iterator.hasNext()) {\n val v = selector(iterator.next())\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the
collection or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>>
Iterable<T>.minOrNull(selector: (T) -> R): R? {\n val iterator = iterator()\n if (!iterator.hasNext()) return
null\n var minValue = selector(iterator.next())\n while (iterator.hasNext()) {\n val v =
selector(iterator.next())\n if (minValue > v) {\n minValue = v\n }\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value according to
the provided [comparator]\n * among all values produced by [selector] function applied to each element in the
collection.\n * \n * @throws NoSuchElementException if the collection is empty.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R> Iterable<T>.minOfWith(comparator:
Comparator<in R>, selector: (T) -> R): R {\n val iterator = iterator()\n if (!iterator.hasNext()) throw
NoSuchElementException()\n var minValue = selector(iterator.next())\n while (iterator.hasNext()) {\n val v
= selector(iterator.next())\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all
values produced by [selector] function applied to each element in the collection or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
```

```

inline fun <T, R> Iterable<T>.minOfWithOrNull(comparator: Comparator<in R>, selector: (T) -> R): R? {
 val iterator = iterator()
 if (!iterator.hasNext()) return null
 var minValue = selector(iterator.next())
 while (iterator.hasNext()) {
 val v = selector(iterator.next())
 if (comparator.compare(minValue, v) > 0) {
 minValue = v
 }
 }
 return minValue
}

/**
 * Returns the smallest element or `null` if there are no elements.
 * If any of elements is `NaN` returns `NaN`.
 */
@SinceKotlin("1.4")
public fun Iterable<Double>.minOrNull(): Double? {
 val iterator = iterator()
 if (!iterator.hasNext()) return null
 var min = iterator.next()
 while (iterator.hasNext()) {
 val e = iterator.next()
 min = minOf(min, e)
 }
 return min
}

/**
 * Returns the smallest element or `null` if there are no elements.
 * If any of elements is `NaN` returns `NaN`.
 */
@SinceKotlin("1.4")
public fun Iterable<Float>.minOrNull(): Float? {
 val iterator = iterator()
 if (!iterator.hasNext()) return null
 var min = iterator.next()
 while (iterator.hasNext()) {
 val e = iterator.next()
 min = minOf(min, e)
 }
 return min
}

/**
 * Returns the smallest element or `null` if there are no elements.
 */
@SinceKotlin("1.4")
public fun <T : Comparable<T>> Iterable<T>.minOrNull(): T? {
 val iterator = iterator()
 if (!iterator.hasNext()) return null
 var min = iterator.next()
 while (iterator.hasNext()) {
 val e = iterator.next()
 if (min > e) min = e
 }
 return min
}

/**
 * Returns the first element having the smallest value according to the provided [comparator].
 * @throws NoSuchElementException if the collection is empty.
 */
@SinceKotlin("1.7")
@kotlin.jvm.JvmName("minWithOrThrow")
@Suppress("CONFLICTING_OVERLOADS")
public fun <T> Iterable<T>.minWith(comparator: Comparator<in T>): T {
 val iterator = iterator()
 if (!iterator.hasNext()) throw NoSuchElementException()
 var min = iterator.next()
 while (iterator.hasNext()) {
 val e = iterator.next()
 if (comparator.compare(min, e) > 0) min = e
 }
 return min
}

/**
 * Returns the first element having the smallest value according to the provided [comparator] or `null` if there are no elements.
 */
@SinceKotlin("1.4")
public fun <T> Iterable<T>.minWithOrNull(comparator: Comparator<in T>): T? {
 val iterator = iterator()
 if (!iterator.hasNext()) return null
 var min = iterator.next()
 while (iterator.hasNext()) {
 val e = iterator.next()
 if (comparator.compare(min, e) > 0) min = e
 }
 return min
}

/**
 * Returns `true` if the collection has no elements.
 * @sample samples.collections.Collections.Aggregates.none
 */
@SinceKotlin("1.4")
public fun <T> Iterable<T>.none(): Boolean {
 if (this is Collection) return isEmpty()
 return !iterator().hasNext()
}

/**
 * Returns `true` if no elements match the given [predicate].
 * @sample samples.collections.Collections.Aggregates.noneWithPredicate
 */
@SinceKotlin("1.4")
public inline fun <T> Iterable<T>.none(predicate: (T) -> Boolean): Boolean {
 if (this is Collection && isEmpty()) return true
 for (element in this) {
 if (predicate(element)) return false
 }
 return true
}

/**
 * Performs the given [action] on each element and returns the collection itself afterwards.
 */
@SinceKotlin("1.1")
public inline fun <T, C : Iterable<T>> C.onEach(action: (T) -> Unit): C {
 return apply { for (element in this) action(element) }
}

/**
 * Performs the given [action] on each element, providing sequential index with the element, and returns the collection itself afterwards.
 * @param [action] function that takes the index of an element and the element itself and performs the action on the element.
 */
@SinceKotlin("1.4")
public inline fun <T, C : Iterable<T>> C.onEachIndexed(action: (Int, T) -> Unit): C {
 return apply { forEachIndexed(action) }
}

/**
 * Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element.
 * Throws an exception if this collection is empty. If the collection can be empty in an expected way, please use [reduceOrNull] instead.
 * It returns `null` when its receiver is empty.
 * @param [operation] function that takes current accumulator value and an element and calculates the next accumulator value.
 * @sample samples.collections.Collections.Aggregates.reduce
 */
@SinceKotlin("1.4")
public inline fun <S, T : S> Iterable<T>.reduce(operation: (acc: S, T) -> S): S {
 val iterator = this.iterator()
 if (!iterator.hasNext())

```



```

S = iterator.previous()\n while (iterator.hasPrevious()) {\n val index = iterator.previousIndex()\n accumulator = operation(index, iterator.previous(), accumulator)\n } \n return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to left\n * to each element with its index in the original list and current accumulator value.\n * \n * Returns `null` if the list is empty.\n * \n * @param [operation] function that takes the index of an element, the element itself and current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample\n samples.collections.Collections.Aggregates.reduceRightOrNull\n *\n@SinceKotlin("1.4")\npublic inline fun <S, T : S> List<T>.reduceRightIndexedOrNull(operation: (index: Int, T, acc: S) -> S): S? {\n val iterator = listIterator(size)\n if (!iterator.hasPrevious())\n return null\n var accumulator: S = iterator.previous()\n while\n (iterator.hasPrevious()) {\n val index = iterator.previousIndex()\n accumulator = operation(index, iterator.previous(), accumulator)\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns `null` if the list is empty.\n * \n * @param [operation] function that takes an element and current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample\n samples.collections.Collections.Aggregates.reduceRightOrNull\n *\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <S, T : S> List<T>.reduceRightOrNull(operation: (T, acc: S) -> S): S? {\n val iterator = listIterator(size)\n if (!iterator.hasPrevious())\n return null\n var accumulator: S = iterator.previous()\n while (iterator.hasPrevious()) {\n accumulator = operation(iterator.previous(), accumulator)\n }\n return accumulator\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample\n samples.collections.Collections.Aggregates.runningFold\n *\n@SinceKotlin("1.4")\npublic inline fun <T, R> Iterable<T>.runningFold(initial: R, operation: (acc: R, T) -> R): List<R> {\n val estimatedSize = collectionSizeOrDefault(9)\n if (estimatedSize == 0) return listOf(initial)\n val result = ArrayList<R>(estimatedSize + 1).apply { add(initial) }\n var accumulator = initial\n for (element in this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original collection and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample\n samples.collections.Collections.Aggregates.runningFold\n *\n@SinceKotlin("1.4")\npublic inline fun <T, R> Iterable<T>.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, T) -> R): List<R> {\n val estimatedSize = collectionSizeOrDefault(9)\n if (estimatedSize == 0) return listOf(initial)\n val result = ArrayList<R>(estimatedSize + 1).apply { add(initial) }\n var index = 0\n var accumulator = initial\n for (element in this) {\n accumulator = operation(index++, accumulator, element)\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element and current accumulator value that starts with the first element of this collection.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value and the element, and calculates the next accumulator value.\n * \n * @sample\n samples.collections.Collections.Aggregates.runningReduce\n
```

```

*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <S, T : S>
Iterable<T>.runningReduce(operation: (acc: S, T)
-> S): List<S> {\n val iterator = this.iterator()\n if (!iterator.hasNext()) return emptyList()\n var accumulator:
S = iterator.next()\n val result = ArrayList<S>(collectionSizeOrDefault(10)).apply { add(accumulator) }\n while
(iterator.hasNext()) {\n accumulator = operation(accumulator, iterator.next())\n result.add(accumulator)\n
 }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying
[operation] from left to right\n * to each element, its index in the original collection and current accumulator value
that starts with the first element of this collection.\n * \n * Note that `acc` value passed to [operation] function
should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation]
function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\npublic inline fun <S, T : S> Iterable<T>.runningReduceIndexed(operation: (index: Int,
acc: S, T) -> S): List<S> {\n val iterator = this.iterator()\n if (!iterator.hasNext()) return emptyList()\n var
accumulator: S = iterator.next()\n val result = ArrayList<S>(collectionSizeOrDefault(10)).apply {
add(accumulator) }\n var index = 1\n while (iterator.hasNext()) {\n accumulator = operation(index++,
accumulator, iterator.next())\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list
containing successive accumulation values generated by applying [operation] from left to right\n * to each element
and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation]
function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param
[operation] function that takes
current accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <T, R>
Iterable<T>.scan(initial: R, operation: (acc: R, T) -> R): List<R> {\n return runningFold(initial,
operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation]
from left to right\n * to each element, its index in the original collection and current accumulator value that starts
with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n *
otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the
index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator
value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <T, R>
Iterable<T>.scanIndexed(initial: R, operation: (index: Int, acc: R, T) -> R): List<R> {\n return
runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the collection.\n */\n@Deprecated("Use sumOf instead.")\nReplaceWith("this.sumOf(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun <T>
Iterable<T>.sumBy(selector: (T) -> Int): Int {\n var sum: Int = 0\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the collection.\n */\n@Deprecated("Use sumOf instead.")\nReplaceWith("this.sumOf(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun <T>
Iterable<T>.sumByDouble(selector: (T) -> Double): Double {\n
 var sum: Double = 0.0\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the collection.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfDouble")\n@kotlin.internal.InlineOnly\npublic inline fun
<T> Iterable<T>.sumOf(selector: (T) -> Double): Double {\n var sum: Double = 0.toDouble()\n for (element in
this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the collection.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution

```



```

ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfInt")\n@kotlin.internal.InlineOnly\npublic inline fun <T>
Iterable<T>.sumOf(selector: (T) -> Int):
Int {\n var sum: Int = 0.toInt()\n for (element in this) {\n sum += selector(element)\n }\n return
sum}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the
collection.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfLong")\n@kotlin.internal.InlineOnly\npublic inline fun
<T> Iterable<T>.sumOf(selector: (T) -> Long): Long {\n var sum: Long = 0.toLong()\n for (element in this) {\n
 sum += selector(element)\n }\n return sum}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each element in the collection.\n
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType
s::class)\n@kotlin.internal.InlineOnly\npublic inline
fun <T> Iterable<T>.sumOf(selector: (T) -> UInt): UInt {\n var sum: UInt = 0.toUInt()\n for (element in this)
{\n sum += selector(element)\n }\n return sum}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the collection.\n
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfULong")\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@kotlin.internal.InlineOnly\npublic inline fun <T> Iterable<T>.sumOf(selector: (T) -> ULong): ULong
{\n var sum: ULong = 0.toULong()\n for (element in this) {\n sum += selector(element)\n }\n return
sum}\n\n/**\n * Returns an original collection containing all the non-`null` elements, throwing an
[IllegalArgumentException] if there are any `null` elements.\n
*\npublic fun <T : Any>
Iterable<T?>.requireNoNulls(): Iterable<T> {\n for (element in this) {\n
 if (element == null) {\n throw IllegalArgumentException("\null element found in $this.")\n }\n
 }\n @Suppress("\UNCHECKED_CAST")\n return this as Iterable<T>}\n\n/**\n * Returns an original
collection containing all the non-`null` elements, throwing an [IllegalArgumentException] if there are any `null`
elements.\n
*\npublic fun <T : Any> List<T?>.requireNoNulls(): List<T> {\n for (element in this) {\n if
(element == null) {\n throw IllegalArgumentException("\null element found in $this.")\n }\n }\n
 @Suppress("\UNCHECKED_CAST")\n return this as List<T>}\n\n/**\n * Splits this collection into a list of
lists each not exceeding the given [size].\n
*\n * The last list in the resulting list may have fewer elements than the
given [size].\n
*\n * @param size the number of elements to take in each list, must be positive and can be greater
than the number of elements in this collection.\n
*\n * @sample
samples.collections.Collections.Transformations.chunked\n
*\n@SinceKotlin("1.2")\npublic fun <T> Iterable<T>.chunked(size: Int): List<List<T>> {\n return
windowed(size, size, partialWindows = true)\n}\n\n/**\n * Splits this collection into several lists each not exceeding
the given [size]\n
* and applies the given [transform] function to an each.\n
*\n * @return list of results of the
[transform] applied to an each list.\n
*\n * Note that the list passed to the [transform] function is ephemeral and is
valid only inside that function.\n
* You should not store it or allow it to escape in some way, unless you made a
snapshot of it.\n
* The last list may have fewer elements than the given [size].\n
*\n * @param size the number of
elements to take in each list, must be positive and can be greater than the number of elements in this collection.\n
*\n * @sample
samples.text.Strings.chunkedTransform\n
*\n@SinceKotlin("1.2")\npublic fun <T, R>
Iterable<T>.chunked(size: Int, transform: (List<T>
-> R): List<R> {\n return windowed(size, size, partialWindows = true, transform = transform)\n}\n\n/**\n *
Returns a list containing all elements of the original collection without the first occurrence of the given [element].\n
*\npublic operator fun <T> Iterable<T>.minus(element: T): List<T> {\n val result =
ArrayList<T>(collectionSizeOrDefault(10))\n var removed = false\n return this.filterTo(result) { if (!removed
&& it == element) { removed = true; false } else true }\n}\n\n/**\n * Returns a list containing all elements of the
original collection except the elements contained in the given [elements] array.\n
*\n * Before Kotlin 1.6, the

```

[elements] array may have been converted to a [HashSet] to speed up the operation, thus the elements were required to have

- a correct and stable implementation of `hashCode()` that didn't change between successive invocations.
- On JVM, you can enable this behavior back with the system property `kotlin.collections.convert_arg_to_set_in_removeAll``

```

set to `true`.
*/
public operator fun <T> Iterable<T>.minus(elements: Array<out T>): List<T> {
 if (elements.isEmpty()) return this.toList()
 val other = elements.convertToSetForSetOperation()
 return this.filterNot { it in other }
}
*/
*/
Returns a list containing all elements of the original collection except the elements contained in the given [elements] collection.
*/
*/
Before Kotlin 1.6, the [elements] collection may have been converted to a [HashSet] to speed up the operation, thus the elements were required to have
*/
• a correct and stable implementation of hashCode() that didn't change between successive invocations.
*/
• On JVM, you can enable this behavior back with the system property kotlin.collections.convert_arg_to_set_in_removeAll` set to true`.
*/
public operator fun <T> Iterable<T>.minus(elements: Iterable<T>): List<T> {
 val other = elements.convertToSetForSetOperationWith(this)
 if (other.isEmpty())
 return this.toList()
 return this.filterNot { it in other }
}
*/
*/
Returns a list containing all elements of the original collection except the elements contained in the given [elements] sequence.
*/
*/
Before Kotlin 1.6, the [elements] sequence may have been converted to a [HashSet] to speed up the operation, thus the elements were required to have
*/
• a correct and stable implementation of hashCode() that didn't change between successive invocations.
*/
• On JVM, you can enable this behavior back with the system property kotlin.collections.convert_arg_to_set_in_removeAll` set to true`.
*/
public operator fun <T> Iterable<T>.minus(elements: Sequence<T>): List<T> {
 val other = elements.convertToSetForSetOperation()
 if (other.isEmpty())
 return this.toList()
 return this.filterNot { it in other }
}
*/
*/
Returns a list containing all elements of the original collection without the first occurrence of the given [element].
*/
*/
@kotlin.internal.InlineOnly
public inline fun <T> Iterable<T>.minusElement(element: T): List<T> {
 return minus(element)
}
*/
*/
Splits the original collection into pair of lists,
*/
• where first list contains elements for which [predicate] yielded true`,
*/
• while second list contains elements for which [predicate] yielded false`.
*/
*/
@sample
samples.collections.Iterables.Operations.partition
*/
public inline fun <T> Iterable<T>.partition(predicate: (T) -> Boolean): Pair<List<T>, List<T>> {
 val first = ArrayList<T>()
 val second = ArrayList<T>()
 for (element in this) {
 if (predicate(element))
 first.add(element)
 else
 second.add(element)
 }
 return Pair(first, second)
}
*/
*/
Returns a list containing all elements of the original collection and then the given [element].
*/
public operator fun <T> Iterable<T>.plus(element: T): List<T> {
 if (this is Collection) return this.plus(element)
 val result = ArrayList<T>()
 result.addAll(this)
 result.add(element)
 return result
}
*/
*/
Returns a list containing all elements of the original collection and then the given [element].
*/
public operator fun <T> Collection<T>.plus(element: T): List<T> {
 val result = ArrayList<T>(size + 1)
 result.addAll(this)
 result.add(element)
 return result
}
*/
*/
Returns a list containing all elements of the original collection and then all elements of the given [elements] array.
*/
public operator fun <T> Iterable<T>.plus(elements: Array<out T>): List<T> {
 if (this is Collection) return this.plus(elements)
 val result = ArrayList<T>()
 result.addAll(this)
 result.addAll(elements)
 return result
}
*/
*/
Returns a list containing all elements of the original collection and then all elements of the given [elements] array.
*/
public operator fun <T> Collection<T>.plus(elements: Array<out T>): List<T> {
 val result = ArrayList<T>(this.size + elements.size)
 result.addAll(this)
 result.addAll(elements)
 return result
}
*/
*/
Returns a list containing all elements of the original collection and then all elements of the given [elements] collection.
*/
public operator fun <T> Iterable<T>.plus(elements: Iterable<T>): List<T> {
 if (this is Collection) return this.plus(elements)
 val result = ArrayList<T>()
 result.addAll(this)
 result.addAll(elements)
 return result
}
*/
*/
Returns a list containing all elements of the original collection and then all elements of the given [elements] collection.
*/
public operator fun <T> Collection<T>.plus(elements: Iterable<T>): List<T> {
 if (elements is Collection) {
 val result =

```

```

ArrayList<T>(this.size + elements.size)\n result.addAll(this)\n result.addAll(elements)\n return result\n } else {\n val result = ArrayList<T>(this)\n result.addAll(elements)\n return result\n }\n}\n\n/**\n * Returns a list containing all elements of the original collection and then all\n elements of the given [elements] sequence.\n */\npublic operator fun <T> Iterable<T>.plus(elements:\n Sequence<T>): List<T> {\n val result = ArrayList<T>()\n result.addAll(this)\n result.addAll(elements)\n return result\n}\n\n/**\n * Returns a list containing all elements of the original collection and then all elements of\n the given [elements] sequence.\n */\npublic operator fun <T> Collection<T>.plus(elements: Sequence<T>): List<T>\n {\n val result = ArrayList<T>(this.size + 10)\n result.addAll(this)\n result.addAll(elements)\n return\n result\n}\n\n/**\n * Returns a list containing all elements of the original collection and then the given [element].\n */\n@kotlin.internal.InlineOnly\npublic inline fun <T> Iterable<T>.plusElement(element: T): List<T> {\n return\n plus(element)\n}\n\n/**\n * Returns a list containing all elements of the original\n collection and then the given [element].\n */\n@kotlin.internal.InlineOnly\npublic inline fun <T>\n Collection<T>.plusElement(element: T): List<T> {\n return plus(element)\n}\n\n/**\n * Returns a list of\n snapshots of the window of the given [size]\n * sliding along this collection with the given [step], where each\n * snapshot is a list.\n * \n * Several last lists may have fewer elements than the given [size].\n * \n * Both [size] and\n [step] must be positive and can be greater than the number of elements in this collection.\n * \n * @param size the\n number of elements to take in each window\n * @param step the number of elements to move the window forward\n by on an each step, by default 1\n * @param partialWindows controls whether or not to keep partial windows in the\n end if any,\n * by default `false` which means partial windows won't be preserved\n * \n * @sample\n samples.collections.Sequences.Transformations.takeWindows\n */\n@SinceKotlin("1.2")\npublic fun <T>\n Iterable<T>.windowed(size:\n Int, step: Int = 1, partialWindows: Boolean = false): List<List<T>> {\n checkWindowSizeStep(size, step)\n if\n (this is RandomAccess && this is List) {\n val thisSize = this.size\n val resultCapacity = thisSize / step + if\n (thisSize % step == 0) 0 else 1\n val result = ArrayList<List<T>>(resultCapacity)\n var index = 0\n while (index in 0 until thisSize) {\n val windowSize = size.coerceAtMost(thisSize - index)\n if\n (windowSize < size && !partialWindows) break\n result.add(List(windowSize) { this[it + index] })\n index += step\n }\n return result\n }\n val result = ArrayList<List<T>>()\n windowedIterator(iterator(), size, step, partialWindows, reuseBuffer = false).forEach {\n result.add(it)\n }\n return result\n}\n\n/**\n * Returns a list of results of applying the given [transform] function to\n * an each list\n representing a view over the window of the given [size]\n * \n * sliding along this collection with the given [step].\n * \n * Note that the list passed to the [transform] function is\n ephemeral and is valid only inside that function.\n * \n * You should not store it or allow it to escape in some way,\n unless you made a snapshot of it.\n * \n * Several last lists may have fewer elements than the given [size].\n * \n * Both\n [size] and [step] must be positive and can be greater than the number of elements in this collection.\n * \n * @param size\n the number of elements to take in each window\n * @param step the number of elements to move the window\n forward by on an each step, by default 1\n * @param partialWindows controls whether or not to keep partial\n windows in the end if any,\n * by default `false` which means partial windows won't be preserved\n * \n * @sample\n samples.collections.Sequences.Transformations.averageWindows\n */\n@SinceKotlin("1.2")\npublic fun <T, R>\n Iterable<T>.windowed(size: Int, step: Int = 1, partialWindows: Boolean = false, transform: (List<T>)\n -> R): List<R> {\n checkWindowSizeStep(size, step)\n if (this is RandomAccess && this is List) {\n val\n thisSize = this.size\n val resultCapacity = thisSize / step + if (thisSize % step == 0) 0 else 1\n val result =\n ArrayList<R>(resultCapacity)\n val window = MovingSubList(this)\n var index = 0\n while (index in 0\n until thisSize) {\n val windowSize = size.coerceAtMost(thisSize - index)\n if (!partialWindows &&\n windowSize < size) break\n window.move(index, index + windowSize)\n result.add(transform(window))\n index += step\n }\n return result\n }\n val result =\n ArrayList<R>()\n windowedIterator(iterator(), size, step, partialWindows, reuseBuffer = true).forEach {\n result.add(transform(it))\n }\n return result\n}\n\n/**\n * Returns a list of pairs built from the elements of `this`\n collection and the [other] array with the same index.\n * \n * The returned

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```

= null): String {\n return joinTo(StringBuilder(), separator, prefix, postfix, limit, truncated,
transform).toString()\n}\n\n/**\n * Returns this collection as an [Iterable].\n */\n@kotlin.internal.InlineOnly\npublic
inline fun <T> Iterable<T>.asIterable(): Iterable<T> {\n return this\n}\n\n/**\n * Creates a [Sequence] instance
that wraps the original collection returning its elements when being iterated.\n */\n * @sample
samples.collections.Sequences.Building.sequenceFromCollection\n */\npublic fun <T> Iterable<T>.asSequence():
Sequence<T> {\n return Sequence { this.iterator() }\n}\n\n/**\n * Returns an average value of elements in the
collection.\n */\n@kotlin.jvm.JvmName("averageOfByte")\npublic fun Iterable<Byte>.average(): Double {\n var
sum: Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n
checkCountOverflow(++count)\n }\n return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns
an average value
of elements in the collection.\n */\n@kotlin.jvm.JvmName("averageOfShort")\npublic fun
Iterable<Short>.average(): Double {\n var sum: Double = 0.0\n var count: Int = 0\n for (element in this) {\n
sum += element\n checkCountOverflow(++count)\n }\n return if (count == 0) Double.NaN else sum /
count\n}\n\n/**\n * Returns an average value of elements in the collection.\n */\n@kotlin.jvm.JvmName("averageOfInt")\npublic fun Iterable<Int>.average(): Double {\n var sum: Double =
0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n checkCountOverflow(++count)\n
}\n return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns an average value of elements in the
collection.\n */\n@kotlin.jvm.JvmName("averageOfLong")\npublic fun Iterable<Long>.average(): Double {\n var
sum: Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n
checkCountOverflow(++count)\n }\n return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns an average value of elements in
the collection.\n */\n@kotlin.jvm.JvmName("averageOfFloat")\npublic fun Iterable<Float>.average(): Double {\n var
sum: Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n
checkCountOverflow(++count)\n }\n return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns
an average value of elements in the collection.\n */\n@kotlin.jvm.JvmName("averageOfDouble")\npublic fun
Iterable<Double>.average(): Double {\n var sum: Double = 0.0\n var count: Int = 0\n for (element in this) {\n
sum += element\n checkCountOverflow(++count)\n }\n return if (count == 0) Double.NaN else sum /
count\n}\n\n/**\n * Returns the sum of all elements in the collection.\n */\n@kotlin.jvm.JvmName("sumOfByte")\npublic fun Iterable<Byte>.sum(): Int {\n var sum: Int = 0\n for
(element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the collection.\n */\n@kotlin.jvm.JvmName("sumOfShort")\npublic fun Iterable<Short>.sum(): Int {\n var sum: Int = 0\n for
(element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the
collection.\n */\n@kotlin.jvm.JvmName("sumOfInt")\npublic fun Iterable<Int>.sum(): Int {\n var sum: Int = 0\n for
(element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in
the collection.\n */\n@kotlin.jvm.JvmName("sumOfLong")\npublic fun Iterable<Long>.sum(): Long {\n var
sum: Long = 0L\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the
sum of all elements in the collection.\n */\n@kotlin.jvm.JvmName("sumOfFloat")\npublic fun
Iterable<Float>.sum(): Float {\n var sum: Float = 0.0f\n for (element in this) {\n sum +=
element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the collection.\n */\n@kotlin.jvm.JvmName("sumOfDouble")\npublic fun Iterable<Double>.sum(): Double {\n var sum: Double
= 0.0\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n"/*\n * Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\nimport
kotlin.comparisons.naturalOrder\nimport kotlin.random.Random\nimport kotlin.js.arrayBufferIsView\n\n/**\n *
Returns the array if it's not `null`, or an empty array otherwise.\n */\n * @sample
samples.collections.Arrays.Usage.arrayOrEmpty\n */\n@kotlin.internal.InlineOnly\npublic actual inline fun <T>
Array<out T>?.orEmpty(): Array<out T> = this ?: emptyArray<T>()\n\n/**\n * Returns a *typed* array containing

```

```

all of the elements of this collection.\n *\n
* Allocates an array of runtime type `T` having its size equal to the size of this collection\n * and populates the
array with the elements of this collection.\n * @sample
samples.collections.Collections.Collections.collectionToTypedArray\n */\n@kotlin.internal.InlineOnly\npublic
actual inline fun <T> Collection<T>.toArray(): Array<T> =
copyToArray(this)\n\n@JsName("copyToArray")\n@PublishedApi\ninternal fun <T> copyToArray(collection:
Collection<T>): Array<T> {\n return if (collection.asDynamic().toArray !== undefined)\n collection.asDynamic().toArray().unsafeCast<Array<T>>()\n else\n copyToArrayImpl(collection).unsafeCast<Array<T>>()\n}\n\n@JsName("copyToArrayImpl")\ninternal actual fun
copyToArrayImpl(collection: Collection<*>): Array<Any?> {\n val array = emptyArray<Any?>()\n val iterator
= collection.iterator()\n while (iterator.hasNext())\n array.asDynamic().push(iterator.next())\n return
array\n}\n\n@JsName("copyToExistingArrayImpl")\ninternal
actual fun <T> copyToArrayImpl(collection: Collection<*>, array: Array<T>): Array<T> {\n if (array.size <
collection.size)\n return copyToArrayImpl(collection).unsafeCast<Array<T>>()\n val iterator =
collection.iterator()\n var index = 0\n while (iterator.hasNext()) {\n array[index++] =
iterator.next().unsafeCast<T>()\n }\n if (index < array.size) {\n array[index] = null.unsafeCast<T>()\n }\n return array\n}\n\n/**\n * Returns an immutable list containing only the specified object [element].\n */\npublic
fun <T> listOf(element: T): List<T> =
arrayListOf(element)\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\ninternal actual
inline fun <E> buildListInternal(builderAction: MutableList<E>().->Unit): List<E> {\n return
ArrayList<E>().apply(builderAction).build()\n}\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.Inlin
eOnly\ninternal actual inline fun <E> buildListInternal(capacity: Int,
builderAction: MutableList<E>().->Unit): List<E> {\n checkBuilderCapacity(capacity)\n return
ArrayList<E>(capacity).apply(builderAction).build()\n}\n\n/**\n * Returns an immutable set containing only the
specified object [element].\n */\npublic fun <T> setOf(element: T): Set<T> =
hashSetOf(element)\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\ninternal actual inline
fun <E> buildSetInternal(builderAction: MutableSet<E>().->Unit): Set<E> {\n return
LinkedHashSet<E>().apply(builderAction).build()\n}\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.
InlineOnly\ninternal actual inline fun <E> buildSetInternal(capacity: Int, builderAction: MutableSet<E>().->Unit):
Set<E> {\n return LinkedHashSet<E>(capacity).apply(builderAction).build()\n}\n\n/**\n * Returns an
immutable map, mapping only the specified key to the\n * specified value.\n */\npublic fun <K, V> mapOf(pair:
Pair<K, V>): Map<K, V> =
hashMapOf(pair)\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\ninternal
actual inline fun <K, V> buildMapInternal(builderAction: MutableMap<K, V>().->Unit): Map<K, V> {\n return
LinkedHashMap<K,
V>().apply(builderAction).build()\n}\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\ninte
rnal actual inline fun <K, V> buildMapInternal(capacity: Int, builderAction: MutableMap<K, V>().->Unit):
Map<K, V> {\n return LinkedHashMap<K, V>(capacity).apply(builderAction).build()\n}\n\n/**\n * Fills the
list with the provided [value].\n */\n *\n * Each element in the list gets replaced with the [value].\n
*/\n\n@SinceKotlin("1.2")\npublic actual fun <T> MutableList<T>.fill(value: T): Unit {\n for (index in
0..lastIndex) {\n this[index] = value\n }\n}\n\n/**\n * Randomly shuffles elements in this list.\n */\n *\n * See:
https://en.wikipedia.org/wiki/Fisher%2080%93Yates_shuffle#The_modern_algorithm\n
*/\n\n@SinceKotlin("1.2")\npublic actual fun <T> MutableList<T>.shuffle(): Unit = shuffle(Random)\n\n/**\n
 * Returns a new list with the elements of this list randomly shuffled.\n */\n\n@SinceKotlin("1.2")\npublic actual fun
<T> Iterable<T>.shuffled(): List<T> = toMutableList().apply { shuffle() }\n\n/**\n * Sorts elements in the list in-
place according to their natural sort order.\n */\n *\n * The sort is _stable_. It means that equal elements preserve their
order relative to each other after sorting.\n */\n *\n * @sample samples.collections.Collections.Sorting.sortMutableList\n
*/\n\npublic actual fun <T : Comparable<T>> MutableList<T>.sort(): Unit {\n collectionsSort(this,

```

```

naturalOrder())\n}\n\n/**\n * Sorts elements in the list in-place according to the order specified with [comparator].\n *\n * The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.\n *\n * @sample samples.collections.Collections.Sorting.sortMutableListWith\n */\npublic actual fun <T>\nMutableList<T>.sortWith(comparator: Comparator<in T>): Unit {\n collectionsSort(this,\n comparator)\n}\n\nprivate fun <T> collectionsSort(list: MutableList<T>, comparator: Comparator<in T>) {\n if\n (list.size <= 1) return\n\n val array = copyToArray(list)\n sortArrayWith(array, comparator)\n\n for (i in 0 until\n array.size) {\n list[i] = array[i]\n }\n}\n\ninternal actual fun <T> arrayOfNulls(reference: Array<T>, size: Int):\n Array<T> {\n return\n arrayOfNulls<Any>(size).unsafeCast<Array<T>>()\n}\n\n@SinceKotlin("1.3")\n@PublishedApi\n@JsName("arrayCopy")\ninternal fun <T> arrayCopy(source: Array<out T>, destination: Array<in T>, destinationOffset: Int,\n startIndex: Int, endIndex: Int) {\n AbstractList.checkRangeIndexes(startIndex, endIndex, source.size)\n val\n rangeSize = endIndex - startIndex\n AbstractList.checkRangeIndexes(destinationOffset, destinationOffset +\n rangeSize, destination.size)\n if (arrayBufferIsView(destination) && arrayBufferIsView(source)) {\n val\n subrange = source.asDynamic().subarray(startIndex,\n endIndex)\n destination.asDynamic().set(subrange, destinationOffset)\n } else {\n if (source !==\n destination || destinationOffset <= startIndex) {\n for (index in 0 until rangeSize) {\n destination[destinationOffset + index] = source[startIndex + index]\n }\n } else {\n for (index in\n rangeSize - 1 downTo 0) {\n destination[destinationOffset + index] = source[startIndex + index]\n }\n }\n }\n}\n\n// no singleton map implementation in js, return map as\n is\n\n@Suppress("NOTHING_TO_INLINE")\ninternal actual inline fun <K, V> Map<K,\n V>.toSingletonMapOrSelf(): Map<K, V> = this\n\n@Suppress("NOTHING_TO_INLINE")\ninternal actual inline\n fun <K, V> Map<out K, V>.toSingletonMap(): Map<K, V> =\n this.toMutableMap()\n\n\n@Suppress("NOTHING_TO_INLINE")\ninternal actual inline fun <T> Array<out\n T>.copyToArrayOfAny(isVarargs: Boolean): Array<out Any?> =\n if (isVarargs)\n // no need\n to copy vararg array in JS\n this\n else\n this.copyOfOf()\n\n\n@PublishedApi\ninternal actual fun\n checkIndexOverflow(index: Int): Int {\n if (index < 0) {\n throwIndexOverflow()\n }\n return\n index\n}\n\n\n@PublishedApi\ninternal actual fun checkCountOverflow(count: Int): Int {\n if (count < 0) {\n throwCountOverflow()\n }\n return count\n}\n\n\n/**\n * JS map and set implementations do not make use of\n * capacities or load factors.\n *\n * @PublishedApi\ninternal actual fun mapCapacity(expectedSize: Int) =\n expectedSize\n\n\n/**\n * Checks a collection builder function capacity argument.\n * In JS no validation is made in\n * Map/Set constructor yet.\n *\n * @SinceKotlin("1.3")\n@PublishedApi\ninternal fun\n checkBuilderCapacity(capacity: Int) {\n require(capacity >= 0) { "capacity must be non-negative." }\n}\n\n\ninternal actual fun brittleContainsOptimizationEnabled(): Boolean = false", /*\n * Copyright 2010-2018\n * JetBrains s.r.o. and Kotlin Programming\n * Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the\n * license/LICENSE.txt file.\n *\n * @file:kotlin.jvm.JvmMultifileClass\n * @file:kotlin.jvm.JvmName("CollectionsKt")\npackage\n kotlin.collections\n\n\n/**\n * Returns the given iterator itself. This allows to use an instance of iterator in a `for`\n * loop.\n * @sample samples.collections.Iterators.iterator\n *\n * @kotlin.internal.InlineOnly\npublic inline operator\n fun <T> Iterator<T>.iterator(): Iterator<T> = this\n\n\n/**\n * Returns an [Iterator] that wraps each element produced\n * by the original iterator\n * into an [IndexedValue] containing the index of that element and the element itself.\n *\n * @sample samples.collections.Iterators.withIndexIterator\n *\n * @public fun <T> Iterator<T>.withIndex():\n Iterator<IndexedValue<T>> = IndexingIterator(this)\n\n\n/**\n * Performs the given [operation] on each element of\n * this [Iterator].\n * @sample samples.collections.Iterators.forEachIterator\n\n *\n * @public inline fun <T> Iterator<T>.forEach(operation: (T) -> Unit): Unit {\n for (element in this)\n operation(element)\n}\n\n\n/**\n * Iterator transforming original `iterator` into iterator of [IndexedValue], counting\n * index from zero.\n *\n * @internal class IndexingIterator<out T>(private val iterator: Iterator<T>):\n Iterator<IndexedValue<T>> {\n private var index = 0\n final override fun hasNext(): Boolean =

```

```

iterator.hasNext()\n final override fun next(): IndexedValue<T> = IndexedValue(checkIndexOverflow(index++),
iterator.next())\n}\n"/>\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("ComparisonsKt")\n\npackage
kotlin.comparisons\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport
kotlin.random.*\n\n/**\n * Returns the greater of two values.\n * \n * If values are equal, returns the first one.\n
*\n@SinceKotlin("1.1")\npublic expect fun <T : Comparable<T>> maxOf(a: T, b: T): T\n\n/**\n * Returns the
greater of two values.\n *\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a:
Byte, b: Byte): Byte\n\n/**\n * Returns the greater of two values.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Short, b: Short):
Short\n\n/**\n * Returns the greater of two values.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Int, b: Int): Int\n\n/**\n
 * Returns the greater of two values.\n *\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline
fun maxOf(a: Long, b: Long): Long\n\n/**\n * Returns the greater of two values.\n * \n * If either value is `NaN`,
returns `NaN`.\n *\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic
expect inline fun maxOf(a: Float, b: Float): Float\n\n/**\n * Returns the greater of two values.\n * \n * If either
value is `NaN`, returns `NaN`.\n *\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun
maxOf(a: Double, b: Double): Double\n\n/**\n * Returns the greater of three values.\n * \n * If there are multiple
equal maximal values, returns the first of them.\n *\n@SinceKotlin("1.1")\npublic expect fun <T :
Comparable<T>> maxOf(a: T, b: T, c: T): T\n\n/**\n * Returns the greater of three values.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Byte, b: Byte, c: Byte):
Byte\n\n/**\n * Returns the greater of three values.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Short, b: Short, c:
Short): Short\n\n/**\n * Returns the greater of three values.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic
expect inline fun maxOf(a: Int, b: Int, c: Int): Int\n\n/**\n * Returns the greater of three values.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Long, b: Long, c:
Long): Long\n\n/**\n * Returns the greater of three values.\n * \n * If any value is `NaN`, returns `NaN`.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Float, b: Float, c:
Float): Float\n\n/**\n * Returns the greater of three values.\n * \n * If any value is `NaN`, returns `NaN`.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Double, b: Double, c:
Double): Double\n\n/**\n * Returns the greater of three values according to the order specified by the given
[comparator].\n * \n * If there are multiple equal maximal values, returns the first of them.\n
*\n@SinceKotlin("1.1")\npublic fun <T> maxOf(a: T, b: T, c: T, comparator: Comparator<in T>): T {\n return
maxOf(a, maxOf(b, c, comparator),
comparator)\n}\n\n/**\n * Returns the greater of two values according to the order specified by the given
[comparator].\n * \n * If values are equal, returns the first one.\n *\n@SinceKotlin("1.1")\npublic fun <T>
maxOf(a: T, b: T, comparator: Comparator<in T>): T {\n return if (comparator.compare(a, b) >= 0) a else
b\n}\n\n/**\n * Returns the greater of the given values.\n * \n * If there are multiple equal maximal values, returns
the first of them.\n *\n@SinceKotlin("1.4")\npublic expect fun <T : Comparable<T>> maxOf(a: T, vararg other:
T): T\n\n/**\n * Returns the greater of the given values.\n *\n@SinceKotlin("1.4")\npublic expect fun maxOf(a:
Byte, vararg other: Byte): Byte\n\n/**\n * Returns the greater of the given values.\n
*\n@SinceKotlin("1.4")\npublic expect fun maxOf(a: Short, vararg other: Short): Short\n\n/**\n * Returns the
greater of the given values.\n *\n@SinceKotlin("1.4")\npublic expect fun maxOf(a: Int, vararg other: Int):
Int\n\n/**\n * Returns

```



the greater of the given values.

```

@SinceKotlin("1.4")
public expect fun maxOf(a: Long, vararg other: Long): Long

```

Returns the greater of the given values. If any value is NaN, returns NaN.

```

@SinceKotlin("1.4")
public expect fun maxOf(a: Float, vararg other: Float): Float

```

Returns the greater of the given values. If any value is NaN, returns NaN.

```

@SinceKotlin("1.4")
public expect fun maxOf(a: Double, vararg other: Double): Double

```

Returns the greater of the given values according to the order specified by the given [comparator]. If there are multiple equal maximal values, returns the first of them.

```

@SinceKotlin("1.4")
public fun <T> maxOf(a: T, vararg other: T, comparator: Comparator<in T>): T {
 var max = a
 for (e in other) if (comparator.compare(max, e) < 0) max = e
 return max
}

```

Returns the smaller of two values. If values are equal, returns the first one.

```

@SinceKotlin("1.1")
public expect fun <T : Comparable<T>> minOf(a: T, b: T): T

```

Returns the smaller of two values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Byte, b: Byte): Byte

```

Returns the smaller of two values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Short, b: Short): Short

```

Returns the smaller of two values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Int, b: Int): Int

```

Returns the smaller of two values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Long, b: Long): Long

```

Returns the smaller of two values. If either value is NaN, returns NaN.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Float, b: Float): Float

```

Returns the smaller of two values. If either value is NaN, returns NaN.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Double, b: Double): Double

```

Returns the smaller of three values. If there are multiple equal minimal values, returns the first of them.

```

@SinceKotlin("1.1")
public expect fun <T : Comparable<T>> minOf(a: T, b: T, c: T): T

```

Returns the smaller of three values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Byte, b: Byte, c: Byte): Byte

```

Returns the smaller of three values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Short, b: Short, c: Short): Short

```

Returns the smaller of three values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Int, b: Int, c: Int): Int

```

Returns the smaller of three values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Long, b: Long, c: Long): Long

```

Returns the smaller of three values. If any value is NaN, returns NaN.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Float, b: Float, c: Float): Float

```

Returns the smaller of three values. If any value is NaN, returns NaN.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Double, b: Double, c: Double): Double

```

Returns the smaller of three values according to the order specified by the given [comparator]. If there are multiple equal minimal values, returns the first of them.

```

@SinceKotlin("1.1")
public fun <T> minOf(a: T, b: T, c: T, comparator: Comparator<in T>): T {
 return minOf(a, minOf(b, c, comparator), comparator)
}

```

Returns the smaller of two values according to the order specified by the given [comparator]. If values are equal, returns the first one.

```

@SinceKotlin("1.1")
public fun <T> minOf(a: T, b: T, comparator: Comparator<in T>): T {
 return if (comparator.compare(a, b) <= 0) a else b
}

```

Returns the smaller of the given values. If there are multiple equal minimal values, returns the first of them.

```

@SinceKotlin("1.4")
public expect fun <T : Comparable<T>> minOf(a: T, vararg other: T): T

```

Returns the smaller of the given values.

```

@SinceKotlin("1.4")
public expect fun minOf(a: Byte, vararg other: Byte): Byte

```

Returns the smaller of the given values.

```

@SinceKotlin("1.4")
public expect fun minOf(a: Short, vararg other: Short): Short

```

Returns the smaller of the given values.

```

@SinceKotlin("1.4")
public expect fun minOf(a: Int, vararg other: Int): Int

```

Returns the smaller of the given values.

```

@SinceKotlin("1.4")
public expect fun minOf(a: Long, vararg other: Long): Long

```

Returns the smaller of the

```

given values.
 * If any value is `NaN`, returns `NaN`.
@SinceKotlin("1.4")
public expect fun
minOf(a: Float, vararg other: Float): Float
 * Returns the smaller of the given values.
 * If any value is
`NaN`, returns `NaN`.
@SinceKotlin("1.4")
public expect fun minOf(a: Double, vararg other: Double):
Double
 * Returns the smaller of the given values according to the order specified by the given
[comparator].
 * If there are multiple equal minimal values, returns the first of them.
@SinceKotlin("1.4")
public fun <T> minOf(a: T, vararg other: T, comparator: Comparator<in T>): T {
var min = a
 for (e in other) if (comparator.compare(min, e) > 0) min = e
 return min
}
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by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
@file:kotlin.jvm.JvmMultifileClass
@file:kotlin.jvm.JvmName("MapsKt")
package
kotlin.collections
// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt
// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib
import kotlin.random.*
import kotlin.ranges.contains
import kotlin.ranges.reversed
 * Returns the first non-null value produced by
[transform] function being applied to entries of this map in iteration order,
 * or throws
[NoSuchElementException] if no non-null value was produced.
 * @sample
samples.collections.Collections.Transformations.firstNotNullOf
@SinceKotlin("1.5")
@kotlin.internal.InlineOnly
public inline fun <K, V, R : Any> Map<out K,
V>.firstNotNullOf(transform: (Map.Entry<K, V>) -> R?): R {
return firstNotNullOfOrNull(transform) ?: throw
NoSuchElementException("No element of the map was transformed to a non-null value.")
}
 * Returns
the first non-null value produced by [transform] function being applied to entries
of this map in iteration order,
 * or `null` if no non-null value was produced.
 * @sample
samples.collections.Collections.Transformations.firstNotNullOf
@SinceKotlin("1.5")
@kotlin.internal.InlineOnly
public inline fun <K, V, R : Any> Map<out K,
V>.firstNotNullOfOrNull(transform: (Map.Entry<K, V>) -> R?): R? {
for (element in this) {
val result =
transform(element)
if (result != null) {
return result
}
}
return null
}
 * Returns a [List] containing all key-value pairs.
@public fun <K, V> Map<out K, V>.toList(): List<Pair<K, V>>
{
if (size == 0)
return emptyList()
val iterator = entries.iterator()
if (!iterator.hasNext())
return emptyList()
val first = iterator.next()
if (!iterator.hasNext())
return listOf(first.toPair())
val
result = ArrayList<Pair<K, V>>(size)
result.add(first.toPair())
do {
result.add(iterator.next().toPair())
} while (iterator.hasNext())
return result
}
 * Returns a single list of all elements yielded from results
of [transform] function being invoked on each entry of original map.
 * @sample
samples.collections.Maps.Transformations.flatMap
@public inline fun <K, V, R> Map<out K,
V>.flatMap(transform: (Map.Entry<K, V>) -> Iterable<R>): List<R> {
return flatMapTo(ArrayList<R>(),
transform)
}
 * Returns a single list of all elements yielded from results of [transform] function being
invoked on each entry of original map.
 * @sample samples.collections.Collections.Transformations.flatMap
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@kotlin.jvm.JvmName("flatMapSequence")
public inline fun <K, V, R> Map<out K,
V>.flatMap(transform: (Map.Entry<K, V>) -> Sequence<R>): List<R> {
return flatMapTo(ArrayList<R>(),
transform)
}
 * Appends all
elements yielded from results of [transform] function being invoked on each entry of original map, to the given
[destination].
@public inline fun <K, V, R, C : MutableCollection<in R>> Map<out K,
V>.flatMapTo(destination: C, transform: (Map.Entry<K, V>) -> Iterable<R>): C {
for (element in this) {
val list = transform(element)
destination.addAll(list)
}
return destination
}
 * Appends all
elements yielded from results of [transform] function being invoked on each entry of original map, to the given
[destination].
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@kotlin.jvm.JvmName("flatMapSequenceTo")
public inline fun <K, V, R, C :

```

```

MutableCollection<in R>> Map<out K, V>.flatMapTo(destination: C, transform: (Map.Entry<K, V>) ->
Sequence<R>): C {\n for (element in this) {\n val list = transform(element)\n destination.addAll(list)\n }\n}
return destination\n\n/n/**\n * Returns a list containing the results of applying the given [transform] function\n * to each entry in the original map.\n * \n * @sample samples.collections.Maps.Transformations.mapToList\n */\npublic inline fun <K, V, R> Map<out K, V>.map(transform: (Map.Entry<K, V>) -> R): List<R> {\n return
mapTo(ArrayList<R>(size), transform)\n}\n/n/**\n * Returns a list containing only the non-null results of applying
the given [transform] function\n * to each entry in the original map.\n * \n * @sample
samples.collections.Maps.Transformations.mapNotNull\n */\npublic inline fun <K, V, R : Any> Map<out K,
V>.mapNotNull(transform: (Map.Entry<K, V>) -> R?): List<R> {\n return mapNotNullTo(ArrayList<R>(),
transform)\n}\n/n/**\n * Applies the given [transform] function to each entry in the original map\n * and appends
only the non-null results to the given [destination].\n */\npublic inline fun <K, V, R : Any, C : MutableCollection<in
R>> Map<out K, V>.mapNotNullTo(destination:
C, transform: (Map.Entry<K, V>) -> R?): C {\n forEach { element -> transform(element)?.let {
destination.add(it) } }\n return destination\n}\n/n/**\n * Applies the given [transform] function to each entry of
the original map\n * and appends the results to the given [destination].\n */\npublic inline fun <K, V, R, C :
MutableCollection<in R>> Map<out K, V>.mapTo(destination: C, transform: (Map.Entry<K, V>) -> R): C {\n for
(item in this)\n destination.add(transform(item))\n return destination\n}\n/n/**\n * Returns `true` if all entries
match the given [predicate].\n * \n * @sample samples.collections.Collections.Aggregates.all\n */\npublic inline fun
<K, V> Map<out K, V>.all(predicate: (Map.Entry<K, V>) -> Boolean): Boolean {\n if (isEmpty()) return true\n
for (element in this) if (!predicate(element)) return false\n return true\n}\n/n/**\n * Returns `true` if map has at
least one entry.\n * \n * @sample samples.collections.Collections.Aggregates.any\n */\npublic fun <K, V> Map<out K, V>.any(): Boolean {\n return !isEmpty()\n}\n/n/**\n * Returns `true` if at
least one entry matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.anyWithPredicate\n */\npublic inline fun <K, V> Map<out K,
V>.any(predicate: (Map.Entry<K, V>) -> Boolean): Boolean {\n if (isEmpty()) return false\n for (element in
this) if (predicate(element)) return true\n return false\n}\n/n/**\n * Returns the number of entries in this map.\n */\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K, V>.count(): Int {\n return size\n}\n/n/**\n * Returns the number of entries matching the given [predicate].\n */\npublic inline fun <K, V> Map<out K,
V>.count(predicate: (Map.Entry<K, V>) -> Boolean): Int {\n if (isEmpty()) return 0\n var count = 0\n for
(element in this) if (predicate(element)) ++count\n return count\n}\n/n/**\n * Performs the given [action] on each
entry.\n */\n@kotlin.internal.HidesMembers\npublic
inline fun <K, V> Map<out K, V>.forEach(action: (Map.Entry<K, V>) -> Unit): Unit {\n for (element in this)
action(element)\n}\n/n/**\n * Returns the first entry yielding the largest value of the given function.\n * \n *
@throws NoSuchElementException if the map is empty.\n * \n * @sample
samples.collections.Collections.Aggregates.maxBy\n */\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxByOrThrow")\n@kotlin.internal.InlineOnly\n@Suppress
("CONFLICTING_OVERLOADS")\npublic inline fun <K, V, R : Comparable<R>> Map<out K,
V>.maxBy(selector: (Map.Entry<K, V>) -> R): Map.Entry<K, V> {\n return entries.maxBy(selector)\n}\n/n/**\n * Returns the first entry yielding the largest value of the given function or `null` if there are no entries.\n * \n *
@sample samples.collections.Collections.Aggregates.maxByOrNull\n */\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R : Comparable<R>> Map<out
K, V>.maxByOrNull(selector: (Map.Entry<K, V>)
-> R): Map.Entry<K, V>? {\n return entries.maxByOrNull(selector)\n}\n/n/**\n * Returns the largest value
among all values produced by [selector] function\n * applied to each entry in the map.\n * \n * If any of values
produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException
if the map is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution

```

```

ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K, V>.maxOf(selector:
(Map.Entry<K, V>) -> Double): Double {\n return entries.maxOf(selector)\n}\n\n/**\n * Returns the largest value
among all values produced by [selector] function\n * applied to each entry in the map.\n * \n * If any of values
produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException
if the map is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <K, V> Map<out K, V>.maxOf(selector: (Map.Entry<K, V>) -> Float): Float {\n return
entries.maxOf(selector)\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n *
applied to each entry in the map.\n * \n * @throws NoSuchElementException if the map is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R : Comparable<R>> Map<out K,
V>.maxOf(selector: (Map.Entry<K, V>) -> R): R {\n return entries.maxOf(selector)\n}\n\n/**\n * Returns the
largest value among all values produced by [selector] function\n * applied to each entry in the map or `null` if there
are no entries.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <K, V> Map<out K, V>.maxOfOrNull(selector: (Map.Entry<K, V>) -> Double): Double? {\n return
entries.maxOfOrNull(selector)\n}\n\n/**\n * Returns the largest value among all values produced by [selector]
function\n * applied to each entry in the map or `null` if there are no entries.\n * \n * If any of values produced by
[selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K,
V>.maxOfOrNull(selector: (Map.Entry<K, V>) -> Float): Float? {\n return
entries.maxOfOrNull(selector)\n}\n\n/**\n * Returns the largest value among all values produced by [selector]
function\n * applied to each entry in the map or `null` if there are no entries.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <K, V, R : Comparable<R>> Map<out K, V>.maxOfOrNull(selector: (Map.Entry<K, V>) -> R): R? {\n
return entries.maxOfOrNull(selector)\n}\n\n/**\n * Returns the largest value according to the provided
[comparator]\n * among all values produced by [selector] function applied to each entry in the map.\n * \n *
@throws NoSuchElementException if the map is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R> Map<out K,
V>.maxOfWith(comparator: Comparator<in R>, selector: (Map.Entry<K, V>) -> R): R {\n return
entries.maxOfWith(comparator, selector)\n}\n\n/**\n * Returns the largest value according to the provided
[comparator]\n * among all values produced by [selector] function applied to each
entry in the map or `null` if there are no entries.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R> Map<out K,
V>.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Map.Entry<K, V>) -> R): R? {\n return
entries.maxOfWithOrNull(comparator, selector)\n}\n\n/**\n * Returns the first entry having the largest value
according to the provided [comparator].\n * \n * @throws NoSuchElementException if the map is empty.\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxWithOrThrow")\n@kotlin.internal.InlineOnly\n@Suppress("CONFLICTING_OVERLOADS")\npublic inline fun <K, V> Map<out K, V>.maxWith(comparator:
Comparator<in Map.Entry<K, V>>): Map.Entry<K, V> {\n return entries.maxWith(comparator)\n}\n\n/**\n *
Returns the first entry having the largest value according to the provided [comparator] or `null` if there are no
entries.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic

```

```

inline fun <K, V> Map<out K, V>.maxWithOrNull(comparator: Comparator<in Map.Entry<K, V>>):
Map.Entry<K, V>? {
 return entries.maxWithOrNull(comparator)
}
/**
 * Returns the first entry yielding
the smallest value of the given function.
 * @throws NoSuchElementException if the map is empty.
 * @sample samples.collections.Collections.Aggregates.minBy
 *
 * Since Kotlin 1.7
 * @kotlin.jvm.JvmName("minByOrThrow")
 * @kotlin.internal.InlineOnly
 * @Suppress("CONFLICTING_OVERLOADS")
 * public inline fun <K, V, R : Comparable<R>> Map<out K,
V>.minBy(selector: (Map.Entry<K, V>) -> R): Map.Entry<K, V> {
 return entries.minBy(selector)
}
/**
 * Returns the first entry yielding the smallest value of the given function or `null` if there are no entries.
 * @sample samples.collections.Collections.Aggregates.minByOrNull
 *
 * Since Kotlin 1.4
 * @kotlin.internal.InlineOnly
 * public inline fun <K, V, R : Comparable<R>>
Map<out K, V>.minByOrNull(selector: (Map.Entry<K, V>) -> R): Map.Entry<K, V>? {
 return
entries.minByOrNull(selector)
}
/**
 * Returns the smallest value among all values produced by [selector]
function
 * applied to each entry in the map.
 * If any of values produced by [selector] function is `NaN`, the
returned result is `NaN`.
 * @throws NoSuchElementException if the map is empty.
 *
 * Since Kotlin 1.4
 * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)
 * @OverloadResolution
ByLambdaReturnType
 * @kotlin.internal.InlineOnly
 * public inline fun <K, V> Map<out K, V>.minOf(selector:
(Map.Entry<K, V>) -> Double): Double {
 return entries.minOf(selector)
}
/**
 * Returns the smallest
value among all values produced by [selector] function
 * applied to each entry in the map.
 * If any of values
produced by [selector] function is `NaN`, the returned result is `NaN`.
 * @throws NoSuchElementException
if the map is empty.
 *
 * Since Kotlin 1.4
 * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)
 * @OverloadResolution
ByLambdaReturnType
 * @kotlin.internal.InlineOnly
 * public
inline fun <K, V> Map<out K, V>.minOf(selector: (Map.Entry<K, V>) -> Float): Float {
 return
entries.minOf(selector)
}
/**
 * Returns the smallest value among all values produced by [selector] function
 * applied to each entry in the map.
 * @throws NoSuchElementException if the map is empty.
 *
 * Since Kotlin 1.4
 * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)
 * @OverloadResolution
ByLambdaReturnType
 * @kotlin.internal.InlineOnly
 * public inline fun <K, V, R : Comparable<R>> Map<out K,
V>.minOf(selector: (Map.Entry<K, V>) -> R): R {
 return entries.minOf(selector)
}
/**
 * Returns the
smallest value among all values produced by [selector] function
 * applied to each entry in the map or `null` if
there are no entries.
 * If any of values produced by [selector] function is `NaN`,
the returned result is `NaN`.
 *
 * Since Kotlin 1.4
 * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)
 * @OverloadResolution
ByLambdaReturnType
 * @kotlin.internal.InlineOnly
 * public inline fun <K, V> Map<out K,
V>.minOrNull(selector: (Map.Entry<K, V>) -> Double): Double? {
 return
entries.minOrNull(selector)
}
/**
 * Returns the smallest value among all values produced by [selector]
function
 * applied to each entry in the map or `null` if there are no entries.
 * If any of values produced by
[selector] function is `NaN`, the returned result is `NaN`.
 *
 * Since Kotlin 1.4
 * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)
 * @OverloadResolution
ByLambdaReturnType
 * @kotlin.internal.InlineOnly
 * public inline fun <K, V> Map<out K,
V>.minOrNull(selector: (Map.Entry<K, V>) -> Float): Float? {
 return
entries.minOrNull(selector)
}
/**
 * Returns the smallest value among all values produced by [selector]
function
 * applied to each
entry in the map or `null` if there are no entries.
 *
 * Since Kotlin 1.4
 * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)
 * @OverloadResolution
ByLambdaReturnType
 * @kotlin.internal.InlineOnly
 * public inline fun <K, V, R : Comparable<R>> Map<out K,
V>.minOrNull(selector: (Map.Entry<K, V>) -> R): R? {
 return entries.minOrNull(selector)
}
/**
 * Returns the smallest value according to the provided [comparator]
 * among all values produced by [selector]
function applied to each entry in the map.
 * @throws NoSuchElementException if the map is empty.

```

```

*^@SinceKotlin("1.4")^@OptIn(kotlin.experimental.ExperimentalTypeInference::class)^@OverloadResolution
ByLambdaReturnType^@kotlin.internal.InlineOnly^public inline fun <K, V, R> Map<out K,
V>.minOfWith(comparator: Comparator<in R>, selector: (Map.Entry<K, V>) -> R): R {\n return
entries.minOfWith(comparator, selector)\n}\n\n/**\n * Returns the smallest value according to the provided
[comparator]\n
 * among all values produced by [selector] function applied to each entry in the map or `null` if there are no
entries.\n
*^@SinceKotlin("1.4")^@OptIn(kotlin.experimental.ExperimentalTypeInference::class)^@OverloadResolution
ByLambdaReturnType^@kotlin.internal.InlineOnly^public inline fun <K, V, R> Map<out K,
V>.minOfWithOrNull(comparator: Comparator<in R>, selector: (Map.Entry<K, V>) -> R): R? {\n return
entries.minOfWithOrNull(comparator, selector)\n}\n\n/**\n * Returns the first entry having the smallest value
according to the provided [comparator].\n
 * @throws NoSuchElementException if the map is empty.\n
*^@SinceKotlin("1.7")^@kotlin.jvm.JvmName("minWithOrThrow")^@kotlin.internal.InlineOnly^@Suppre
ss("CONFLICTING_OVERLOADS")^public inline fun <K, V> Map<out K, V>.minWith(comparator:
Comparator<in Map.Entry<K, V>>): Map.Entry<K, V> {\n return entries.minWith(comparator)\n}\n\n/**\n *
Returns the first entry having the smallest value according to
the provided [comparator] or `null` if there are no entries.\n
*^@SinceKotlin("1.4")^@kotlin.internal.InlineOnly^public inline fun <K, V> Map<out K,
V>.minWithOrNull(comparator: Comparator<in Map.Entry<K, V>>): Map.Entry<K, V>? {\n return
entries.minWithOrNull(comparator)\n}\n\n/**\n * Returns `true` if the map has no entries.\n
 * @sample
samples.collections.Collections.Aggregates.none\n
 *^public fun <K, V> Map<out K, V>.none(): Boolean {\n return
isEmpty()\n}\n\n/**\n * Returns `true` if no entries match the given [predicate].\n
 * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n
 *^public inline fun <K, V> Map<out K,
V>.none(predicate: (Map.Entry<K, V>) -> Boolean): Boolean {\n if (isEmpty()) return true\n for (element in
this) if (predicate(element)) return false\n return true\n}\n\n/**\n * Performs the given [action] on each entry and
returns the map itself afterwards.\n
 *^@SinceKotlin("1.1")^public inline fun <K, V, M : Map<out
K, V>> M.onEach(action: (Map.Entry<K, V>) -> Unit): M {\n return apply { for (element in this)
action(element) }\n}\n\n/**\n * Performs the given [action] on each entry, providing sequential index with the
entry,\n
 * and returns the map itself afterwards.\n
 * @param [action] function that takes the index of an entry and
the entry itself\n
 * and performs the action on the entry.\n
 *^@SinceKotlin("1.4")^public inline fun <K, V, M :
Map<out K, V>> M.onEachIndexed(action: (index: Int, Map.Entry<K, V>) -> Unit): M {\n return apply {
entries.forEachIndexed(action) }\n}\n\n/**\n * Creates an [Iterable] instance that wraps the original map returning
its entries when being iterated.\n
 *^@kotlin.internal.InlineOnly^public inline fun <K, V> Map<out K,
V>.asIterable(): Iterable<Map.Entry<K, V>> {\n return entries\n}\n\n/**\n * Creates a [Sequence] instance that
wraps the original map returning its entries when being iterated.\n
 *^public fun <K, V> Map<out K,
V>.asSequence():
Sequence<Map.Entry<K, V>> {\n return entries.asSequence()\n}\n\n", "/*\n * Copyright 2010-2021 JetBrains
s.r.o. and Kotlin Programming Language contributors.\n
 * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.\n
 */\n\npackage kotlin.text\n\n// NOTE: THIS FILE IS
AUTO-GENERATED by the GenerateUnicodeData.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n// 10 mappings totally\n\ninternal fun
Char.titlecaseImpl(): String {\n val uppercase = uppercase()\n if (uppercase.length > 1) {\n return if (this ==
"\u0149") uppercase else uppercase[0] + uppercase.substring(1).lowercase()\n }\n return
titlecaseChar().toString()\n}\n\n", "/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n
 * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
 */\n\npackage kotlin.text\n\n/**\n
 * Converts this character to lower case using Unicode mapping rules of the invariant locale.\n
*^@Deprecated("Use lowercaseChar() instead.",

```

```

ReplaceWith("lowercaseChar()")\n@DeprecatedSinceKotlin(warningSince =
"1.5")\n@kotlin.internal.InlineOnly\npublic actual inline fun Char.toLowerCase(): Char =
lowercaseChar()\n\n/**\n * Converts this character to lower case using Unicode mapping rules of the invariant
locale.\n * This function performs one-to-one character mapping.\n * To support one-to-many character
mapping use the [toLowerCase] function.\n * If this character has no mapping equivalent, the character itself is
returned.\n * @sample samples.text.Chars.toLowerCase\n
*/\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c actual inline fun Char.toLowerCaseChar(): Char = lowercase()[0]\n\n/**\n * Converts this character to lower case
using Unicode mapping rules of the invariant locale.\n * This function supports one-to-many
character mapping, thus the length of the returned string can be greater than one.\n * For example,
`"\u0130".toLowerCase()` returns `"\u0069\u0307"`,\n * where `"\u0130` is the LATIN CAPITAL LETTER I WITH
DOT ABOVE character (`\u0130`).\n * If this character has no lower case mapping, the result of `toString()` of this
char is returned.\n * @sample samples.text.Chars.toLowerCase\n
*/\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c actual inline fun Char.toLowerCase(): String = toString().asDynamic().toLowerCase().unsafeCast<String>()\n\n/**\n
 * Converts this character to upper case using Unicode mapping rules of the invariant locale.\n
*/\n@Deprecated("Use uppercaseChar() instead.",
ReplaceWith("uppercaseChar()")\n@DeprecatedSinceKotlin(warningSince =
"1.5")\n@kotlin.internal.InlineOnly\npublic actual inline fun Char.toUpperCase(): Char =
uppercaseChar()\n\n/**\n * Converts this character to upper case using
Unicode mapping rules of the invariant locale.\n * This function performs one-to-one character mapping.\n * To
support one-to-many character mapping use the [toUpperCase] function.\n * If this character has no mapping
equivalent, the character itself is returned.\n * @sample samples.text.Chars.toUpperCase\n
*/\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Char.toUpperCaseChar(): Char {\n val uppercase = uppercase()\n return if (uppercase.length > 1) this else
uppercase[0]\n}\n\n/**\n * Converts this character to upper case using Unicode mapping rules of the invariant
locale.\n * This function supports one-to-many character mapping, thus the length of the returned string can be
greater than one.\n * For example, `"\uFB00".uppercase()` returns `"\u0046\u0046"`,\n * where `"\uFB00` is the
LATIN SMALL LIGATURE FF character (`\ufb00`).\n * If this character has no upper case mapping, the result of
`toString()` of this char
is returned.\n * @sample samples.text.Chars.toUpperCase\n
*/\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c actual inline fun Char.toUpperCase(): String = toString().asDynamic().toUpperCase().unsafeCast<String>()\n\n/**\n
 * Converts this character to title case using Unicode mapping rules of the invariant locale.\n * This function
performs one-to-one character mapping.\n * To support one-to-many character mapping use the [titlecase]
function.\n * If this character has no mapping equivalent, the result of calling [uppercaseChar] is returned.\n *
@sample samples.text.Chars.titlecase\n
*/\n@SinceKotlin("1.5")\npublic actual fun Char.titlecaseChar(): Char =
titlecaseCharImpl()\n\n/**\n * Returns `true` if this character is a Unicode high-surrogate code unit (also known as
leading-surrogate code unit).\n */\npublic actual fun Char.isHighSurrogate(): Boolean = this in
Char.MIN_HIGH_SURROGATE..Char.MAX_HIGH_SURROGATE\n\n/**\n
 * Returns `true` if this character is a Unicode low-surrogate code unit (also known as trailing-surrogate code unit).\n
*/\npublic actual fun Char.isLowSurrogate(): Boolean = this in
Char.MIN_LOW_SURROGATE..Char.MAX_LOW_SURROGATE\n\n/**\n * Returns the Unicode general
category of this character.\n */\n@SinceKotlin("1.5")\npublic actual val Char.category: CharCategory\n get() =
CharCategory.valueOf(getCategoryValue())\n\n/**\n * Returns `true` if this character (Unicode code point) is
defined in Unicode.\n * A character is considered to be defined in Unicode if its [category] is not
[CharCategory.UNASSIGNED].\n */\n@SinceKotlin("1.5")\npublic actual fun Char.isDefined(): Boolean {\n if
(this < "\u0080") {\n return true\n }\n return getCategoryValue() !=

```

CharCategory.UNASSIGNED.value\n}\n\n\*\*\n \* Returns `true` if this character is a letter.\n \*\n \* A character is considered to be a letter if its [category] is [CharCategory.UPPERCASE\_LETTER],\n \*\n [CharCategory.LOWERCASE\_LETTER], [CharCategory.TITLECASE\_LETTER], [CharCategory.MODIFIER\_LETTER], or [CharCategory.OTHER\_LETTER].\n \*\n \* @sample samples.text.Chars.isLetter\n \*\n \*\n @SinceKotlin("1.5")\npublic actual fun Char.isLetter(): Boolean {\n if (this in 'a..'z' || this in 'A..'Z') {\n return true\n }\n if (this < "\u0080") {\n return false\n }\n return isLetterImpl()\n}\n\n\*\*\n \* Returns `true` if this character is a letter or digit.\n \*\n \* @see isLetter\n \* @see isDigit\n \*\n \* @sample samples.text.Chars.isLetterOrDigit\n \*\n \*\n @SinceKotlin("1.5")\npublic actual fun Char.isLetterOrDigit(): Boolean {\n if (this in 'a..'z' || this in 'A..'Z' || this in '0..'9') {\n return true\n }\n if (this < "\u0080") {\n return false\n }\n return isDigitImpl() || isLetterImpl()\n}\n\n\*\*\n \* Returns `true` if this character is a digit.\n \*\n \* A character is considered to be a digit if its [category] is [CharCategory.DECIMAL\_DIGIT\_NUMBER].\n \*\n \* @sample samples.text.Chars.isDigit\n \*\n \*\n @SinceKotlin("1.5")\npublic actual fun Char.isDigit(): Boolean {\n if (this in '0..'9') {\n return true\n }\n if (this < "\u0080") {\n return false\n }\n return isDigitImpl()\n}\n\n\*\*\n \* Returns `true` if this character is upper case.\n \*\n \* A character is considered to be an upper case character if its [category] is [CharCategory.UPPERCASE\_LETTER],\n \* or it has contributory property `Other\_Uppercase` as defined by the Unicode Standard.\n \*\n \* @sample samples.text.Chars.isUpperCase\n \*\n \*\n @SinceKotlin("1.5")\npublic actual fun Char.isUpperCase(): Boolean {\n if (this in 'A..'Z') {\n return true\n }\n if (this < "\u0080") {\n return false\n }\n return isUpperCaseImpl()\n}\n\n\*\*\n \* Returns `true` if this character is lower case.\n \*\n \* A character is considered to be a lower case character if its [category] is [CharCategory.LOWERCASE\_LETTER],\n \* or it has contributory property `Other\_Lowercase` as defined by the Unicode Standard.\n \*\n \* @sample samples.text.Chars.isLowerCase\n \*\n \*\n @SinceKotlin("1.5")\npublic actual fun Char.isLowerCase(): Boolean {\n if (this in 'a..'z') {\n return true\n }\n if (this < "\u0080") {\n return false\n }\n return isLowerCaseImpl()\n}\n\n\*\*\n \* Returns `true` if this character is a title case letter.\n \*\n \* A character is considered to be a title case letter if its [category] is [CharCategory.TITLECASE\_LETTER].\n \*\n \* @sample samples.text.Chars.isTitleCase\n \*\n \*\n @SinceKotlin("1.5")\npublic actual fun Char.isTitleCase(): Boolean {\n if (this < "\u0080") {\n return false\n }\n return getCategoryValue() == CharCategory.TITLECASE\_LETTER.value\n}\n\n\*\*\n \* Returns `true` if this character is an ISO control character.\n \*\n \* A character is considered to be an ISO control character if its [category] is [CharCategory.CONTROL],\n \* meaning the Char is in the range "\u0000".." \u001F" or in the range "\u007F".." \u009F".\n \*\n \* @sample samples.text.Chars.isISOControl\n \*\n \*\n @SinceKotlin("1.5")\npublic actual fun Char.isISOControl(): Boolean {\n return this <= "\u001F" || this in "\u007F".." \u009F"\n}\n\n\*\*\n \* Determines whether a character is whitespace according to the Unicode standard.\n \* Returns `true` if the character is whitespace.\n \*\n \* @sample samples.text.Chars.isWhitespace\n \*\n \*\n public actual fun Char.isWhitespace(): Boolean = isWhitespaceImpl()", /\*\n \* Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n \* Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n \*\n \*\n package kotlin.text\nimport kotlin.js.RegExp\n\*\*\n \* Converts the characters in the specified array to a string.\n \*\n \*\n @SinceKotlin("1.2")\n@Deprecated("Use CharArray.concatToString() instead", ReplaceWith("chars.concatToString()"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5")\npublic actual fun String(chars: CharArray): String {\n var result = ""\n for (char in chars) {\n result += char\n }\n return result\n}\n\n\*\*\n \* Converts the characters from a portion of the specified array to a string.\n \*\n \* @throws IndexOutOfBoundsException if either [offset] or [length] are less than zero\n \* or `offset + length` is out of [chars] array bounds.\n \*\n \*\n @SinceKotlin("1.2")\n@Deprecated("Use CharArray.concatToString(startIndex, endIndex) instead", ReplaceWith("chars.concatToString(offset, offset + length)"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5")\npublic actual fun String(chars: CharArray, offset: Int, length: Int): String {\n if (offset < 0 || length < 0 || chars.size - offset < length)\n throw



```

IndexOutOfBoundsException("size: ${chars.size}; offset: $offset; length: $length")\n var result = ""\n for
(index in offset until offset + length)
 {\n result += chars[index]\n }\n return result\n}\n\n/**\n * Concatenates characters in this [CharArray] into
a String.\n *\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
CharArray.concatToString(): String {\n var result = ""\n for (char in this) {\n result += char\n }\n
return result\n}\n\n/**\n * Concatenates characters in this [CharArray] or its subrange into a String.\n *\n * @param
startIndex the beginning (inclusive) of the subrange of characters, 0 by default.\n * @param endIndex the end
(exclusive) of the subrange of characters, size of this array by default.\n *\n * @throws
IndexOutOfBoundsException if [startIndex] is less than zero or [endIndex] is greater than the size of this array.\n *
@throws IllegalArgumentException if [startIndex] is greater than [endIndex].\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun CharArray.concatToString(startIndex: Int = 0, endIndex: Int = this.size): String {\n
AbstractList.checkBoundsIndexes(startIndex, endIndex, this.size)\n var result = ""\n for (index in startIndex
until endIndex) {\n result += this[index]\n }\n return result\n}\n\n/**\n * Returns a [CharArray] containing
characters of this string.\n *\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic
actual fun String.toCharArray(): CharArray {\n return CharArray(length) { get(it) }\n}\n\n/**\n * Returns a
[CharArray] containing characters of this string or its substring.\n *\n * @param startIndex the beginning (inclusive)
of the substring, 0 by default.\n * @param endIndex the end (exclusive) of the substring, length of this string by
default.\n *\n * @throws IndexOutOfBoundsException if [startIndex] is less than zero or [endIndex] is greater than
the length of this string.\n * @throws IllegalArgumentException if [startIndex] is greater
than [endIndex].\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual fun String.toCharArray(startIndex: Int = 0, endIndex: Int
= this.length): CharArray {\n AbstractList.checkBoundsIndexes(startIndex, endIndex, length)\n return
CharArray(endIndex - startIndex) { get(startIndex + it) }\n}\n\n/**\n * Decodes a string from the bytes in UTF-8
encoding in this array.\n *\n * Malformed byte sequences are replaced by the replacement char `\\uFFFD`.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
ByteArray.decodeToString(): String {\n return decodeUtf8(this, 0, size, false)\n}\n\n/**\n * Decodes a string from
the bytes in UTF-8 encoding in this array or its subrange.\n *\n * @param startIndex the beginning (inclusive) of the
subrange to decode, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to decode, size of this
array
by default.\n * @param throwOnInvalidSequence specifies whether to throw an exception on malformed byte
sequence or replace it by the replacement char `\\uFFFD`.\n *\n * @throws IndexOutOfBoundsException if
[startIndex] is less than zero or [endIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [startIndex] is greater than [endIndex].\n * @throws CharacterCodingException if the
byte array contains malformed UTF-8 byte sequence and [throwOnInvalidSequence] is true.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual fun ByteArray.decodeToString(\n startIndex: Int = 0,\n
endIndex: Int = this.size,\n throwOnInvalidSequence: Boolean = false\n): String {\n
AbstractList.checkBoundsIndexes(startIndex, endIndex, this.size)\n return decodeUtf8(this, startIndex, endIndex,
throwOnInvalidSequence)\n}\n\n/**\n * Encodes this string to an array of bytes in
UTF-8 encoding.\n *\n * Any malformed char sequence is replaced by the replacement byte sequence.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
String.encodeToArray(): ByteArray {\n return encodeUtf8(this, 0, length, false)\n}\n\n/**\n * Encodes this
string or its substring to an array of bytes in UTF-8 encoding.\n *\n * @param startIndex the beginning (inclusive)
of the substring to encode, 0 by default.\n * @param endIndex the end (exclusive) of the substring to encode, length
of this string by default.\n * @param throwOnInvalidSequence specifies whether to throw an exception on

```



invoke matches() on String dynamically:

```
this.asDynamic().match(regex)`)\n@DeprecatedSinceKotlin(warningSince =
`1.6`)\n@kotlin.internal.InlineOnly\npublic inline fun String.match(regex: String): Array<String>? =
asDynamic().match(regex)\n\n//native public fun String.trim(): String\n\n//TODO: String.replace to implement
effective trimLeading and trimTrailing\n\n@kotlin.internal.InlineOnly\ninternal inline fun
String.nativeReplace(pattern: RegExp, replacement: String): String = asDynamic().replace(pattern,
replacement)\n\n/**\n * Compares two strings lexicographically, optionally ignoring case differences.\n * If [ignoreCase] is true, the result of `Char.toUpperCaseChar().toLowerCaseChar()`
on each character is compared.\n */\n@SinceKotlin(`1.2`)\n@Suppress(`ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS`)\npublic
actual fun String.compareTo(other: String, ignoreCase: Boolean = false): Int {\n if (ignoreCase) {\n val n1 =
this.length\n val n2 = other.length\n val min = minOf(n1, n2)\n if (min == 0) return n1 - n2\n for
(index in 0 until min) {\n var thisChar = this[index]\n var otherChar = other[index]\n if
(thisChar != otherChar) {\n thisChar = thisChar.toUpperCaseChar()\n otherChar =
otherChar.toUpperCaseChar()\n if (thisChar != otherChar) {\n thisChar =
thisChar.toLowerCaseChar()\n otherChar = otherChar.toLowerCaseChar()\n if (thisChar !=
otherChar) {\n return thisChar.compareTo(otherChar)\n }\n }\n }\n }\n return n1 - n2\n } else {\n return compareTo(other)\n }\n}\n\n/**\n * Returns `true` if the contents of
this char sequence are equal to the contents of the specified [other],\n * i.e. both char sequences contain the same
number of the same characters in the same order.\n */\n@sample samples.text.Strings.contentEquals\n\n/**\n * Returns `true` if the contents of this char sequence are equal to the contents of
the specified [other], optionally ignoring case difference.\n * @param ignoreCase `true` to ignore character case
when comparing contents.\n * @sample samples.text.Strings.contentEquals\n */\n@SinceKotlin(`1.5`)\npublic
actual fun CharSequence?.contentEquals(other: CharSequence?): Boolean =
contentEqualsImpl(other)\n\n/**\n * Returns `true` if the contents of this char sequence are equal to the contents of
the specified [other], optionally ignoring case difference.\n * @param ignoreCase `true` to ignore character case
when comparing contents.\n * @sample samples.text.Strings.contentEquals\n */\n@SinceKotlin(`1.5`)\npublic
actual fun CharSequence?.contentEquals(other: CharSequence?, ignoreCase: Boolean): Boolean {\n return if
(ignoreCase)\n this.contentEqualsIgnoreCaseImpl(other)\n else\n this.contentEqualsImpl(other)\n}\n\nprivate
val STRING_CASE_INSENSITIVE_ORDER = Comparator<String> { a, b -> a.compareTo(b, ignoreCase = true)
}\n\n@SinceKotlin(`1.2`)\npublic actual val String.Companion.CASE_INSENSITIVE_ORDER:
Comparator<String>\n get() = STRING_CASE_INSENSITIVE_ORDER\n\n/*\n * Copyright 2010-2021
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName(`CharsKt`)\n\npackage kotlin.text\n\n/**\n * Returns the numeric value of the decimal digit that this Char represents.\n * Throws an exception if this Char is
not a valid decimal digit.\n * A Char is considered to represent a decimal digit if [isDigit] is true for the Char.\n * In this case, the Unicode decimal digit value of the character is returned.\n * @sample
samples.text.Chars.digitToInt\n */\n\n@SinceKotlin(`1.5`)\n@WasExperimental(ExperimentalStdlibApi::class)\npublic
fun Char.digitToInt(): Int {\n return digitOf(this, 10).also {\n if (it < 0) throw
IllegalArgumentException(`Char $this is not a decimal digit`)\n }\n}\n\n/**\n * Returns the numeric value of the
digit that this Char represents in the specified [radix].\n * Throws an exception if the [radix] is not in the range
`2..36` or if this Char is not a valid digit in the specified [radix].\n * A Char is considered to represent a digit in
the specified [radix] if at least one of the following is true:\n * - [isDigit] is `true` for the Char and the Unicode
decimal digit value of the character is less than the specified [radix]. In this case the decimal digit value is
returned.\n * - The Char is one of the uppercase Latin letters 'A' through 'Z' and its [code] is less than `radix +
'A'.code - 10`. In this case, `this.code - 'A'.code + 10` is returned.\n * - The Char is one of the lowercase Latin
letters 'a' through 'z' and
```

its [code] is less than ``radix + 'a'.code - 10``. In this case, ``this.code - 'a'.code + 10`` is returned.  
\* - The Char is one of the fullwidth Latin capital letters `'\uFF21'` through `'\uFF3A'` and its [code] is less than ``radix + 0xFF21 - 10``. In this case, ``this.code - 0xFF21 + 10`` is returned.  
\* - The Char is one of the fullwidth Latin small letters `'\uFF41'` through `'\uFF5A'` and its [code] is less than ``radix + 0xFF41 - 10``. In this case, ``this.code - 0xFF41 + 10`` is returned.

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun Char.digitToInt(radix: Int): Int {\n return digitToIntOrNull(radix) ?: throw IllegalArgumentException("\Char $this is not a digit in the given radix=$radix")\n}\n\n/**\n * Returns the numeric value of the decimal digit that this Char represents, or `null` if this Char is not a valid decimal digit.\n * A Char is considered to represent a decimal digit if [isDigit] is true for the Char.\n * In this case, the Unicode decimal digit value of the character is returned.\n * @sample samples.text.Chars.digitToIntOrNull\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun Char.digitToIntOrNull(): Int? {\n return digitOf(this, 10).takeIf { it >= 0 }\n}\n\n/**\n * Returns the numeric value of the digit that this Char represents in the specified [radix], or `null` if this Char is not a valid digit in the specified [radix].\n * Throws an exception if the [radix] is not in the range `2..36`.\n * A Char is considered to represent a digit in the specified [radix] if at least one of the following is true:\n * - [isDigit] is `true` for the Char and the Unicode decimal digit value of the character is less than the specified [radix]. In this case the decimal digit value is returned.\n * - The Char is one of the uppercase Latin letters 'A' through 'Z' and its [code] is less than `radix + 'A'.code - 10`. In this case,
```

```
`this.code - 'A'.code + 10` is returned.\n * - The Char is one of the lowercase Latin letters 'a' through 'z' and its [code] is less than `radix + 'a'.code - 10`. In this case, `this.code - 'a'.code + 10` is returned.\n * - The Char is one of the fullwidth Latin capital letters '\uFF21' through '\uFF3A' and its [code] is less than `radix + 0xFF21 - 10`. In this case, `this.code - 0xFF21 + 10` is returned.\n * - The Char is one of the fullwidth Latin small letters '\uFF41' through '\uFF5A' and its [code] is less than `radix + 0xFF41 - 10`. In this case, `this.code - 0xFF41 + 10` is returned.\n * @sample samples.text.Chars.digitToIntOrNull\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun Char.digitToIntOrNull(radix: Int): Int? {\n checkRadix(radix)\n return digitOf(this, radix).takeIf { it >= 0 }\n}\n\n/**\n * Returns the Char that represents this decimal digit.\n * Throws an exception if this value is not in the range `0..9`.\n
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*\n * If this value is in `0..9`, the decimal digit Char with code `0'.code + this` is returned.\n * @sample samples.text.Chars.digitToChar\n
```

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*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun Int.digitToChar(): Char {\n if (this in 0..9) {\n return '0' + this\n }\n throw IllegalArgumentException("\Int $this is not a decimal digit")\n}\n\n/**\n * Returns the Char that represents this numeric digit value in the specified [radix].\n * Throws an exception if the [radix] is not in the range `2..36` or if this value is not in the range `0` until radix`.
* If this value is less than 10`, the decimal digit Char with code 0'.code + this` is returned.
* Otherwise, the uppercase Latin letter with code 'A'.code + this - 10` is returned.\n * @sample samples.text.Chars.digitToChar\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun Int.digitToChar(radix: Int): Char {\n if (radix !in 2..36) {\n throw IllegalArgumentException("Invalid radix: $radix. Valid radix values are in range 2..36")\n }\n if (this < 0 || this >= radix) {\n throw IllegalArgumentException("Digit $this does not represent a valid digit in radix $radix")\n }\n return if (this < 10) {\n '0' + this\n } else {\n 'A' + this - 10\n }\n}\n\n/**\n * Converts this character to lower case using Unicode mapping rules of the invariant locale.\n * @Deprecated("Use lowercaseChar() instead.", ReplaceWith("lowercaseChar()"))\n * @DeprecatedSinceKotlin(warningSince = "1.5")\n * public expect fun Char.toLowerCase(): Char\n * Converts this character to lower case using Unicode mapping rules of the invariant locale.\n * This function performs one-to-one character mapping.\n * To support one-to-many character mapping use the [lowercase] function.\n * If this character has no mapping equivalent, the character itself is returned.\n * @sample samples.text.Chars.lowercase\n
```

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*^@SinceKotlin("1.5")@WasExperimental(ExperimentalStdlibApi::class)public expect fun
Char.lowercaseChar(): Char\n\n/**\n * Converts this character to lower case using Unicode mapping rules of the
invariant locale.\n *\n * This function supports one-to-many character mapping, thus the length of the returned
string can be greater than one.\n * For example, `'\u0130'.lowercase()` returns `'\u0069\u0307'`,\n * where
`'\u0130` is the LATIN CAPITAL LETTER I WITH DOT ABOVE character (`\u0130`).\n * If this character has
no lower case mapping, the result of `toString()` of this char is returned.\n *\n * @sample
samples.text.Chars.lowercase\n
*^@SinceKotlin("1.5")@WasExperimental(ExperimentalStdlibApi::class)public expect fun
Char.lowercase(): String\n\n/**\n * Converts this character to upper case using Unicode mapping rules of the
invariant locale.\n *\n * @Deprecated("Use uppercaseChar() instead.")
ReplaceWith("uppercaseChar()")@DeprecatedSinceKotlin(warningSince
= "1.5")public expect fun Char.toUpperCase(): Char\n\n/**\n * Converts this character to upper case using
Unicode mapping rules of the invariant locale.\n *\n * This function performs one-to-one character mapping.\n * To
support one-to-many character mapping use the [uppercase] function.\n * If this character has no mapping
equivalent, the character itself is returned.\n *\n * @sample samples.text.Chars.uppercase\n
*^@SinceKotlin("1.5")@WasExperimental(ExperimentalStdlibApi::class)public expect fun
Char.uppercaseChar(): Char\n\n/**\n * Converts this character to upper case using Unicode mapping rules of the
invariant locale.\n *\n * This function supports one-to-many character mapping, thus the length of the returned
string can be greater than one.\n * For example, `'\uFB00'.uppercase()` returns `'\u0046\u0046'`,\n * where
`'\uFB00` is the LATIN SMALL LIGATURE FF character (`\ufb00`).\n * If this character has no upper case
mapping, the result of `toString()`
of this char is returned.\n *\n * @sample samples.text.Chars.uppercase\n
*^@SinceKotlin("1.5")@WasExperimental(ExperimentalStdlibApi::class)public expect fun
Char.uppercase(): String\n\n/**\n * Converts this character to title case using Unicode mapping rules of the
invariant locale.\n *\n * This function performs one-to-one character mapping.\n * To support one-to-many
character mapping use the [titlecase] function.\n * If this character has no mapping equivalent, the result of calling
[uppercaseChar] is returned.\n *\n * @sample samples.text.Chars.titlecase\n
*^@SinceKotlin("1.5")public
expect fun Char.titlecaseChar(): Char\n\n/**\n * Converts this character to title case using Unicode mapping rules of
the invariant locale.\n *\n * This function supports one-to-many character mapping, thus the length of the returned
string can be greater than one.\n * For example, `'\uFB00'.titlecase()` returns `'\u0046\u0066'`,\n * where
`'\uFB00` is the LATIN SMALL LIGATURE
FF character (`\ufb00`).\n * If this character has no title case mapping, the result of [uppercase] is returned
instead.\n *\n * @sample samples.text.Chars.titlecase\n
*^@SinceKotlin("1.5")public fun Char.titlecase():
String = titlecaseImpl()\n\n/**\n * Concatenates this Char and a String.\n *\n * @sample samples.text.Chars.plus\n
*^@kotlin.internal.InlineOnly\npublic inline operator fun Char.plus(other: String): String = this.toString() +
other\n\n/**\n * Returns `true` if this character is equal to the [other] character, optionally ignoring character case.\n
*\n * Two characters are considered equal ignoring case if `Char.uppercaseChar().lowercaseChar()` on each
character produces the same result.\n *\n * @param ignoreCase `true` to ignore character case when comparing
characters. By default `false`.\n *\n * @sample samples.text.Chars.equals\n
*^@public fun Char.equals(other: Char,
ignoreCase: Boolean = false): Boolean {\n if (this == other) return true\n if (!ignoreCase)
return false\n\n val thisUpper = this.uppercaseChar()\n val otherUpper = other.uppercaseChar()\n\n return
thisUpper == otherUpper || thisUpper.lowercaseChar() == otherUpper.lowercaseChar()\n}\n\n/**\n * Returns `true`
if this character is a Unicode surrogate code unit.\n
*^@public fun Char.isSurrogate(): Boolean = this in
Char.MIN_SURROGATE..Char.MAX_SURROGATE\n\n/**\n * Returns the Unicode general category of this
character.\n
*^@SinceKotlin("1.5")public expect val Char.category: CharCategory\n\n/**\n * Returns `true` if
this character (Unicode code point) is defined in Unicode.\n *\n * A character is considered to be defined in Unicode
if its [category] is not [CharCategory.UNASSIGNED].\n
*^@SinceKotlin("1.5")public expect fun
Char.isDefined(): Boolean\n\n/**\n * Returns `true` if this character is a letter.\n *\n * A character is considered to

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be a letter if its [category] is [CharCategory.UPPERCASE_LETTER],\n *
[CharCategory.LOWERCASE_LETTER], [CharCategory.TITLECASE_LETTER],
[CharCategory.MODIFIER_LETTER], or [CharCategory.OTHER_LETTER].\n *\n * @sample
samples.text.Chars.isLetter\n *\n @SinceKotlin("1.5")\npublic expect fun Char.isLetter(): Boolean\n\n/**\n *
Returns `true` if this character is a letter or digit.\n *\n * @see isLetter\n * @see isDigit\n *\n * @sample
samples.text.Chars.isLetterOrDigit\n *\n @SinceKotlin("1.5")\npublic expect fun Char.isLetterOrDigit():
Boolean\n\n/**\n * Returns `true` if this character is a digit.\n *\n * A character is considered to be a digit if its
[category] is [CharCategory.DECIMAL_DIGIT_NUMBER].\n *\n * @sample samples.text.Chars.isDigit\n
*\n @SinceKotlin("1.5")\npublic expect fun Char.isDigit(): Boolean\n\n/**\n * Returns `true` if this character is
upper case.\n *\n * A character is considered to be an upper case character if its [category] is
[CharCategory.UPPERCASE_LETTER],\n * or it has contributory property `Other_Uppercase` as defined by the
Unicode Standard.\n *\n * @sample samples.text.Chars.isUpperCase\n
*\n @SinceKotlin("1.5")\npublic expect fun Char.isUpperCase(): Boolean\n\n/**\n * Returns `true` if this
character is lower case.\n *\n * A character is considered to be a lower case character if its [category] is
[CharCategory.LOWERCASE_LETTER],\n * or it has contributory property `Other_Lowercase` as defined by the
Unicode Standard.\n *\n * @sample samples.text.Chars.isLowerCase\n *\n @SinceKotlin("1.5")\npublic expect
fun Char.isLowerCase(): Boolean\n\n/**\n * Returns `true` if this character is a title case letter.\n *\n * A character
is considered to be a title case letter if its [category] is [CharCategory.TITLECASE_LETTER].\n *\n * @sample
samples.text.Chars.isTitleCase\n *\n @SinceKotlin("1.5")\npublic expect fun Char.isTitleCase(): Boolean\n\n/**\n
* Returns `true` if this character is an ISO control character.\n *\n * A character is considered to be an ISO control
character if its [category] is [CharCategory.CONTROL],\n * meaning the Char is in
the range `\\u0000..'\\u001F` or in the range `\\u007F..'\\u009F'.\n *\n * @sample
samples.text.Chars.isISOControl\n *\n @SinceKotlin("1.5")\npublic expect fun Char.isISOControl():
Boolean\n\n/**\n * Determines whether a character is whitespace according to the Unicode standard.\n * Returns
`true` if the character is whitespace.\n *\n * @sample samples.text.Chars.isWhitespace\n *\npublic expect fun
Char.isWhitespace(): Boolean\n", "/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin\n\n/**\n * Creates a Char with the specified [code], or throws an
exception if the [code] is out of `Char.MIN_VALUE.code`..`Char.MAX_VALUE.code`. \n *\n * If the program that
calls this function is written in a way that only valid [code] is passed as the argument,\n * using the overload that
takes a [UShort] argument is preferable
(`Char(intValue.toUShort())`).\n * That overload doesn't check validity of the argument, and may improve program
performance when the function is called routinely inside a loop.\n *\n * @sample
samples.text.Chars.charFromCode\n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalStdlibApi::class)\n @kotlin.internal.InlineOnly\n publi
c inline fun Char(code: Int): Char {\n if (code < Char.MIN_VALUE.code || code > Char.MAX_VALUE.code) {\n
 throw IllegalArgumentException("Invalid Char code: $code")\n }\n return code.toChar()\n }\n\n/**\n *
Creates a Char with the specified [code].\n *\n * @sample samples.text.Chars.charFromCode\n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalStdlibApi::class)\n @Suppress("NO_ACTUAL_FOR
_EXPECT")\npublic expect fun Char(code: UShort): Char\n\n/**\n * Returns the code of this Char.\n *\n * Code of
a Char is the value it was constructed with, and the UTF-16 code unit corresponding to this Char.\n *\n * @sample
samples.text.Chars.code\n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalStdlibApi::class)\n @kotlin.internal.InlineOnly\n @Su
ppress("DEPRECATION")\npublic inline val Char.code: Int get() = this.toInt()\n", "/*\n * Copyright 2010-2022
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n @file:kotlin.jvm.JvmMultifileClass\n @file:kotlin.jvm.JvmName("SequencesKt")\n\npackage
kotlin.sequences\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:

```



```

*public fun <T> Sequence<T>.firstOrNull(): T? {
 val iterator = iterator()
 if (!iterator.hasNext())
 return null
 return iterator.next()
}
* Returns the first element matching the given [predicate], or `null` if element was not found.
* The operation is _terminal_.

public inline fun <T> Sequence<T>.firstOrNull(predicate: (T) -> Boolean): T? {
 for (element in this)
 if (predicate(element))
 return element
 return null
}
* Returns first index of [element], or -1 if the sequence does not contain element.
* The operation is _terminal_.

@kotlin.internal.OnlyInputTypes T> Sequence<T>.indexOf(element: T): Int {
 var index = 0
 for (item in this) {
 checkIndexOverflow(index)
 if (element == item)
 return index
 index++
 }
 return -1
}
* Returns index of the first element matching the given [predicate], or -1 if the sequence does not contain such element.
* The operation is _terminal_.

public inline fun <T> Sequence<T>.indexOfFirst(predicate: (T) -> Boolean): Int {
 var index = 0
 for (item in this) {
 checkIndexOverflow(index)
 if (predicate(item))
 return index
 index++
 }
 return -1
}
* Returns index of the last element matching the given [predicate], or -1 if the sequence does not contain such element.
* The operation is _terminal_.

public inline fun <T> Sequence<T>.indexOfLast(predicate: (T) -> Boolean): Int {
 var lastIndex = -1
 var index = 0
 for (item in this) {
 checkIndexOverflow(index)
 if (predicate(item))
 lastIndex = index
 index++
 }
 return lastIndex
}
* Returns the last element.
* The operation is _terminal_.
* @throws NoSuchElementException if the sequence is empty.
* @sample samples.collections.Collections.Elements.last

public fun <T> Sequence<T>.last(): T {
 val iterator = iterator()
 if (!iterator.hasNext())
 throw NoSuchElementException("Sequence is empty.")
 var last = iterator.next()
 while (iterator.hasNext())
 last = iterator.next()
 return last
}
* Returns the last element matching the given [predicate].
* The operation is _terminal_.
* @throws NoSuchElementException if no such element is found.
* @sample samples.collections.Collections.Elements.last

public inline fun <T> Sequence<T>.last(predicate: (T) -> Boolean): T {
 var last: T? = null
 var found = false
 for (element in this) {
 if (predicate(element)) {
 last = element
 found = true
 }
 }
 if (!found)
 throw NoSuchElementException("Sequence contains no element matching the predicate.")
 @Suppress("UNCHECKED_CAST")
 return last as T
}
* Returns last index of [element], or -1 if the sequence does not contain element.
* The operation is _terminal_.

@kotlin.internal.OnlyInputTypes T> Sequence<T>.lastIndexOf(element: T): Int {
 var lastIndex = -1
 var index = 0
 for (item in this) {
 checkIndexOverflow(index)
 if (element == item)
 lastIndex = index
 index++
 }
 return lastIndex
}
* Returns the last element, or `null` if the sequence is empty.
* The operation is _terminal_.
* @sample samples.collections.Collections.Elements.last

public fun <T> Sequence<T>.lastOrNull(): T? {
 val iterator = iterator()
 if (!iterator.hasNext())
 return null
 var last = iterator.next()
 while (iterator.hasNext())
 last = iterator.next()
 return last
}
* Returns the last element matching the given [predicate], or `null` if no such element was found.
* The operation is _terminal_.
* @sample samples.collections.Collections.Elements.last

public inline fun <T> Sequence<T>.lastOrNull(predicate: (T) -> Boolean): T? {
 var last: T? = null
 for (element in this) {
 if (predicate(element)) {
 last = element
 }
 }
 return last
}
* Returns the single element, or throws an exception if the sequence is empty or has more than one element.
* The operation is _terminal_.

public fun <T> Sequence<T>.single(): T {
 val iterator = iterator()
 if (!iterator.hasNext())
 throw NoSuchElementException("Sequence is empty.")
 val single = iterator.next()
 if (iterator.hasNext())
 throw IllegalArgumentException("Sequence has more than one element.")
 return single
}
* Returns the single element matching the given [predicate], or throws exception if there is no or more than one matching element.
* The operation is _terminal_.

public inline fun <T> Sequence<T>.single(predicate: (T) -> Boolean): T {
 var single: T? = null
 var found = false
 for (element in this) {
 if (predicate(element)) {
 if (found)
 throw IllegalArgumentException("Sequence contains more than one

```



```

matching element.\n single = element\n found = true\n }\n }\n if (!found) throw
NoSuchElementException("Sequence contains no element matching the predicate.\n")\n
@Suppress("UNCHECKED_CAST")\n return single as T\n}\n\n/**\n * Returns single element, or `null` if the
sequence is empty or has more than one element.\n *\n * The operation is _terminal_.\n *\n */\npublic fun <T>
Sequence<T>.singleOrNull():
 T? {\n val iterator = iterator()\n if (!iterator.hasNext())\n return null\n val single = iterator.next()\n if
(iterator.hasNext())\n return null\n return single\n}\n\n/**\n * Returns the single element matching the given
[predicate], or `null` if element was not found or more than one element was found.\n *\n * The operation is
intermediate.\n *\n */\npublic inline fun <T> Sequence<T>.singleOrNull(predicate: (T) -> Boolean): T? {\n var single:
T? = null\n var found = false\n for (element in this) {\n if (predicate(element)) {\n if (found) return
null\n single = element\n found = true\n }\n }\n if (!found) return null\n return
single\n}\n\n/**\n * Returns a sequence containing all elements except first [n] elements.\n *\n * The operation is
intermediate and _stateless_.\n *\n * @throws IllegalArgumentException if [n] is negative.\n *\n * @sample
samples.collections.Collections.Transformations.drop\n
*/\npublic fun <T> Sequence<T>.drop(n: Int): Sequence<T> {\n require(n >= 0) { "Requested element count $n
is less than zero." }\n return when {\n n == 0 -> this\n this is DropTakeSequence -> this.drop(n)\n
 } else -> DropSequence(this, n)\n }\n\n/**\n * Returns a sequence containing all elements except first elements
that satisfy the given [predicate].\n *\n * The operation is _intermediate_ and _stateless_.\n *\n * @sample
samples.collections.Collections.Transformations.drop\n
*/\npublic fun <T> Sequence<T>.dropWhile(predicate: (T)
-> Boolean): Sequence<T> {\n return DropWhileSequence(this, predicate)\n}\n\n/**\n * Returns a sequence
containing only elements matching the given [predicate].\n *\n * The operation is _intermediate_ and _stateless_.\n
*\n * @sample samples.collections.Collections.Filtering.filter\n
*/\npublic fun <T> Sequence<T>.filter(predicate:
(T) -> Boolean): Sequence<T> {\n return FilteringSequence(this, true, predicate)\n}\n\n/**\n * Returns a sequence
containing only elements matching the given [predicate].\n *\n * @param [predicate] function
that takes the index of an element and the element itself\n * and returns the result of predicate evaluation on the
element.\n *\n * The operation is _intermediate_ and _stateless_.\n *\n * @sample
samples.collections.Collections.Filtering.filterIndexed\n
*/\npublic fun <T> Sequence<T>.filterIndexed(predicate:
(index: Int, T) -> Boolean): Sequence<T> {\n // TODO: Rewrite with generalized MapFilterIndexingSequence\n
return TransformingSequence(FilteringSequence(IndexingSequence(this), true, { predicate(it.index, it.value) }), {
it.value })\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n *\n * @param
[predicate] function that takes the index of an element and the element itself\n * and returns the result of predicate
evaluation on the element.\n *\n * The operation is _terminal_.\n *\n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n
*/\npublic inline fun <T, C : MutableCollection<in T>> Sequence<T>.filterIndexedTo(destination: C, predicate:
(index: Int, T) -> Boolean): C {\n forEachIndexed { index, element ->\n if (predicate(index, element))
destination.add(element)\n }\n return destination\n}\n\n/**\n * Returns a sequence containing all elements that
are instances of specified type parameter R.\n *\n * The operation is _intermediate_ and _stateless_.\n *\n *
@sample samples.collections.Collections.Filtering.filterIsInstance\n
*/\npublic inline fun <reified R>
Sequence<*>.filterIsInstance(): Sequence<@kotlin.internal.NoInfer R> {\n
@Suppress("UNCHECKED_CAST")\n return filter { it is R } as Sequence<R>\n}\n\n/**\n * Appends all
elements that are instances of specified type parameter R to the given [destination].\n *\n * The operation is
intermediate.\n *\n * @sample samples.collections.Collections.Filtering.filterIsInstanceTo\n
*/\npublic inline
fun <reified R, C : MutableCollection<in R>> Sequence<*>.filterIsInstanceTo(destination: C): C {\n for (element
in this) if (element is R) destination.add(element)\n return destination\n}\n\n/**\n * Returns a sequence containing
all elements not matching the given [predicate].\n *\n * The operation is _intermediate_ and _stateless_.\n *\n *
@sample samples.collections.Collections.Filtering.filter\n
*/\npublic fun <T> Sequence<T>.filterNot(predicate: (T)
-> Boolean): Sequence<T> {\n return FilteringSequence(this, false, predicate)\n}\n\n/**\n * Returns a sequence
containing all elements that are not `null`. \n *\n * The operation is _intermediate_ and _stateless_.\n *\n * @sample

```

```

samples.collections.Collections.Filtering.filterNotNull\n *\npublic fun <T : Any> Sequence<T?.>.filterNotNull():
Sequence<T> {\n @Suppress(\"UNCHECKED_CAST\")\n return filterNot { it == null } as
Sequence<T>}\n\n/**\n * Appends all elements that are not `null` to the given [destination].\n *\n * The operation is _terminal_.\n *\n * @sample samples.collections.Collections.Filtering.filterNotNullTo\n *\npublic fun <C : MutableCollection<in T>, T : Any> Sequence<T?.>.filterNotNullTo(destination: C): C {\n for
(element in this) if (element != null) destination.add(element)\n return destination}\n\n/**\n * Appends all
elements not matching the given [predicate] to the given [destination].\n *\n * The operation is _terminal_.\n *\n * @sample samples.collections.Collections.Filtering.filterTo\n *\npublic inline fun <T, C : MutableCollection<in
T>> Sequence<T>.filterNotTo(destination: C, predicate: (T) -> Boolean): C {\n for (element in this) if
(!predicate(element)) destination.add(element)\n return destination}\n\n/**\n * Appends all elements matching
the given [predicate] to the given [destination].\n *\n * The operation is _terminal_.\n *\n * @sample
samples.collections.Collections.Filtering.filterTo\n *\npublic inline fun <T, C : MutableCollection<in T>>
Sequence<T>.filterTo(destination: C, predicate: (T) -> Boolean): C {\n for (element in this) if
(predicate(element)) destination.add(element)\n return destination}\n\n/**\n * Returns a sequence containing
first [n] elements.\n *\n * The operation is _intermediate_ and _stateless_.\n *\n * @throws
IllegalArgumentException if [n] is negative.\n *\n * @sample
samples.collections.Collections.Transformations.take\n *\npublic fun <T> Sequence<T>.take(n: Int): Sequence<T>
{\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n return when {\n n == 0 ->
emptySequence()\n this is DropTakeSequence -> this.take(n)\n else -> TakeSequence(this, n)\n
}\n}\n\n/**\n * Returns a sequence containing first elements satisfying the given [predicate].\n *\n * The operation
is _intermediate_ and _stateless_.\n *\n * @sample samples.collections.Collections.Transformations.take\n
*\npublic fun <T> Sequence<T>.takeWhile(predicate: (T) -> Boolean): Sequence<T>
{\n return TakeWhileSequence(this, predicate)\n}\n\n/**\n * Returns a sequence that yields elements of this
sequence sorted according to their natural sort order.\n *\n * The sort is _stable_. It means that equal elements
preserve their order relative to each other after sorting.\n *\n * The operation is _intermediate_ and _stateful_.\n
*\npublic fun <T : Comparable<T>> Sequence<T>.sorted(): Sequence<T> {\n return object : Sequence<T> {\n
override fun iterator(): Iterator<T> {\n val sortedList = this@sorted.toMutableList()\n
sortedList.sort()\n return sortedList.iterator()\n }\n }\n}\n\n/**\n * Returns a sequence that yields
elements of this sequence sorted according to natural sort order of the value returned by specified [selector]
function.\n *\n * The sort is _stable_. It means that equal elements preserve their order relative to each other
after sorting.\n *\n * The operation is _intermediate_ and _stateful_.\n
*\n * @sample samples.collections.Collections.Sorting.sortedBy\n *\npublic inline fun <T, R : Comparable<R>>
Sequence<T>.sortedBy(crossinline selector: (T) -> R?): Sequence<T> {\n return
sortedWith(compareBy(selector))}\n\n/**\n * Returns a sequence that yields elements of this sequence sorted
descending according to natural sort order of the value returned by specified [selector] function.\n *\n * The sort is
stable. It means that equal elements preserve their order relative to each other after sorting.\n *\n * The operation
is _intermediate_ and _stateful_.\n *\npublic inline fun <T, R : Comparable<R>>
Sequence<T>.sortedByDescending(crossinline selector: (T) -> R?): Sequence<T> {\n return
sortedWith(compareByDescending(selector))}\n\n/**\n * Returns a sequence that yields elements of this sequence
sorted descending according to their natural sort order.\n *\n * The sort is _stable_. It means that equal elements
preserve their order relative to each other after sorting.\n
*\n * The operation is _intermediate_ and _stateful_.\n *\npublic fun <T : Comparable<T>>
Sequence<T>.sortedDescending(): Sequence<T> {\n return sortedWith(reverseOrder())}\n\n/**\n * Returns a
sequence that yields elements of this sequence sorted according to the specified [comparator].\n *\n * The sort is
stable. It means that equal elements preserve their order relative to each other after sorting.\n *\n * The operation
is _intermediate_ and _stateful_.\n *\npublic fun <T> Sequence<T>.sortedWith(comparator: Comparator<in T>):
Sequence<T> {\n return object : Sequence<T> {\n override fun iterator(): Iterator<T> {\n val
sortedList = this@sortedWith.toMutableList()\n sortedList.sortWith(comparator)\n return

```







```

MutableMap<in K, MutableList<V>>> Sequence<T>.groupByTo(destination:
M, keySelector: (T) -> K, valueTransform: (T) -> V): M {
 for (element in this) {
 val key = keySelector(element)
 val list = destination.getOrPut(key) { ArrayList<V>() }
 list.add(valueTransform(element))
 }
 return destination
}

Creates a [Grouping] source from a sequence to be used later with one of group-and-fold operations using the specified [keySelector] function to extract a key from each element. The operation is _intermediate_ and _stateless_.

@sample
samples.collections.Grouping.groupingByEachCount

Since Kotlin("1.1")
public inline fun <T, K> Sequence<T>.groupingBy(crossinline keySelector: (T) -> K): Grouping<T, K> {
 return object : Grouping<T, K> {
 override fun sourceIterator(): Iterator<T> = this@groupingBy.iterator()
 override fun keyOf(element: T): K = keySelector(element)
 }
}

Returns a sequence containing the results of applying the given [transform] function to each element in the original sequence. The operation is _intermediate_ and _stateless_.

@sample
samples.collections.Collections.Transformations.map

public fun <T, R> Sequence<T>.map(transform: (T) -> R): Sequence<R> {
 return TransformingSequence(this, transform)
}

Returns a sequence containing the results of applying the given [transform] function to each element and its index in the original sequence.

@param [transform] function that takes the index of an element and the element itself and returns the result of the transform applied to the element.

The operation is _intermediate_ and _stateless_.

public fun <T, R> Sequence<T>.mapIndexed(transform: (index: Int, T) -> R): Sequence<R> {
 return TransformingIndexedSequence(this, transform)
}

Returns a sequence containing only the non-null results of applying the given [transform] function to each element and its index in the original sequence.

@param [transform] function that takes the index of an element and the element itself and returns the result of the transform applied to the element.

The operation is _terminal_.

public inline fun <T, R : Any, C : MutableCollection<in R>> Sequence<T>.mapIndexedNotNullTo(destination: C, transform: (index: Int, T) -> R?): C {
 forEachIndexed { index, element -> transform(index, element) }.let { destination.add(it) }
 return destination
}

Applies the given [transform] function to each element and its index in the original sequence and appends the results to the given [destination].

@param [transform] function that takes the index of an element and the element itself and returns the result of the transform applied to the element.

The operation is _terminal_.

public inline fun <T, R, C : MutableCollection<in R>> Sequence<T>.mapIndexedNotNullTo(destination: C, transform: (index: Int, T) -> R?): C {
 var index = 0
 for (item in this) {
 destination.add(transform(checkIndexOverflow(index++), item))
 }
 return destination
}

Returns a sequence containing only the non-null results of applying the given [transform] function to each element in the original sequence.

The operation is _intermediate_ and _stateless_.

@sample
samples.collections.Collections.Transformations.mapNotNull

public fun <T, R : Any> Sequence<T>.mapNotNull(transform: (T) -> R?): Sequence<R> {
 return TransformingSequence(this, transform).filterNotNull()
}

Applies the given [transform] function to each element in the original sequence and appends only the non-null results to the given [destination].

The operation is _terminal_.

public inline fun <T, R : Any, C : MutableCollection<in R>> Sequence<T>.mapNotNullTo(destination: C, transform: (T) -> R?): C {
 forEach { element -> transform(element) }.let { destination.add(it) }
 return destination
}

Applies the given [transform] function to each element of the original sequence and appends the results to the given [destination].

The operation is _terminal_.

public inline fun <T, R, C : MutableCollection<in R>>

```

```

Sequence<T>.mapTo(destination: C, transform: (T) -> R): C {
 for (item in this)
 destination.add(transform(item))
}
return destination
}

* Returns a sequence that wraps each element of the original sequence into an [IndexedValue] containing the index of that element and the element itself.
The operation is _intermediate_ and _stateless_.

public fun <T> Sequence<T>.withIndex(): Sequence<IndexedValue<T>> {
 return IndexingSequence(this)
}

* Returns a sequence containing only distinct elements from the given sequence.
Among equal elements of the given sequence, only the first one will be present in the resulting sequence.
The elements in the resulting sequence are in the same order as they were in the source sequence.
The operation is _intermediate_ and _stateful_.

@sample samples.collections.Collections.Transformations.distinctAndDistinctBy

public fun <T> Sequence<T>.distinct(): Sequence<T> {
 return this.distinctBy { it }
}

* Returns a sequence containing only elements from the given sequence having distinct keys returned by the given [selector] function.
Among elements of the given sequence with equal keys, only the first one will be present in the resulting sequence.
The elements in the resulting sequence are in the same order as they were in the source sequence.
The operation is _intermediate_ and _stateful_.

@sample samples.collections.Collections.Transformations.distinctAndDistinctBy

public fun <T, K> Sequence<T>.distinctBy(selector: (T) -> K): Sequence<T> {
 return DistinctSequence(this, selector)
}

* Returns a new [MutableSet] containing all distinct elements from the given sequence.
The returned set preserves the element iteration order of the original sequence.
The operation is _terminal_.

public fun <T> Sequence<T>.toMutableSet(): MutableSet<T> {
 val set = LinkedHashSet<T>()
 for (item in this)
 set.add(item)
 return set
}

* Returns `true` if all elements match the given [predicate].
The operation is _terminal_.

@sample samples.collections.Collections.Aggregates.all

public inline fun <T> Sequence<T>.all(predicate: (T) -> Boolean): Boolean {
 for (element in this)
 if (!predicate(element))
 return false
 return true
}

* Returns `true` if sequence has at least one element.
The operation is _terminal_.

@sample samples.collections.Collections.Aggregates.any

public fun <T> Sequence<T>.any(): Boolean {
 return iterator().hasNext()
}

* Returns `true` if at least one element matches the given [predicate].
The operation is _terminal_.

@sample samples.collections.Collections.Aggregates.anyWithPredicate

public inline fun <T> Sequence<T>.any(predicate: (T) -> Boolean): Boolean {
 for (element in this)
 if (predicate(element))
 return true
 return false
}

* Returns the number of elements in this sequence.
The operation is _terminal_.

public fun <T> Sequence<T>.count(): Int {
 var count = 0
 for (element in this)
 checkCountOverflow(++count)
 return count
}

* Returns the number of elements matching the given [predicate].
The operation is _terminal_.

public inline fun <T> Sequence<T>.count(predicate: (T) -> Boolean): Int {
 var count = 0
 for (element in this)
 if (predicate(element))
 checkCountOverflow(++count)
 return count
}

* Accumulates value starting with [initial] value and applying [operation] from left to right to current accumulator value and each element.
Returns the specified [initial] value if the sequence is empty.
@param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.
The operation is _terminal_.

public inline fun <T, R> Sequence<T>.fold(initial: R, operation: (acc: R, T) -> R): R {
 var accumulator = initial
 for (element in this)
 accumulator = operation(accumulator, element)
 return accumulator
}

* Accumulates value starting with [initial] value and applying [operation] from left to right to current accumulator value and each element with its index in the original sequence.
Returns the specified [initial] value if the sequence is empty.
@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.
The operation is _terminal_.

public inline fun <T, R> Sequence<T>.foldIndexed(initial: R, operation: (index: Int, acc: R, T) -> R): R {
 var index = 0
 var accumulator = initial
 for (element in this)
 accumulator = operation(checkIndexOverflow(index++), accumulator, element)
 return accumulator
}

* Performs the given [action] on each element.
The operation is _terminal_.

public inline fun <T>

```

```

Sequence<T>.forEach(action: (T) -> Unit): Unit {
 for (element in this) action(element)
}

* Performs the given [action] on each element, providing sequential index with the element.
* @param [action] function that takes the index of an element and the element itself
* and performs the action on the element.
* The operation is _terminal_.

public inline fun <T> Sequence<T>.forEachIndexed(action: (index: Int, T) -> Unit): Unit {
 var index = 0
 for (item in this) action(checkIndexOverflow(index++), item)
}

Returns the largest element.
* If any of elements is `NaN` returns `NaN`.
* The operation is _terminal_.
* @throws NoSuchElementException if the sequence is empty.

@SinceKotlin("1.7")@kotlin.jvm.JvmName("maxOrThrow")@Suppress("CONFLICTING_OVERLOADS")
public fun Sequence<Double>.max(): Double {
 val iterator = iterator()
 if (!iterator.hasNext()) throw NoSuchElementException()
 var max = iterator.next()
 while (iterator.hasNext()) {
 val e = iterator.next()
 max = maxOf(max, e)
 }
 return max
}

Returns the largest element.
* If any of elements is `NaN` returns `NaN`.
* The operation is _terminal_.
* @throws NoSuchElementException if the sequence is empty.

@SinceKotlin("1.7")@kotlin.jvm.JvmName("maxOrThrow")@Suppress("CONFLICTING_OVERLOADS")
public fun Sequence<Float>.max(): Float {
 val iterator = iterator()
 if (!iterator.hasNext()) throw NoSuchElementException()
 var max = iterator.next()
 while (iterator.hasNext()) {
 val e = iterator.next()
 max = maxOf(max, e)
 }
 return max
}

Returns the largest element.
* The operation is _terminal_.
* @throws NoSuchElementException if the sequence is empty.

@SinceKotlin("1.7")@kotlin.jvm.JvmName("maxOrThrow")@Suppress("CONFLICTING_OVERLOADS")
public fun <T : Comparable<T>> Sequence<T>.max(): T {
 val iterator = iterator()
 if (!iterator.hasNext()) throw NoSuchElementException()
 var max = iterator.next()
 while (iterator.hasNext()) {
 val e = iterator.next()
 if (max < e) max = e
 }
 return max
}

Returns the first element yielding the largest value of the given function.
* The operation is _terminal_.
* @throws NoSuchElementException if the sequence is empty.
* @sample samples.collections.Collections.Aggregates.maxBy

@SinceKotlin("1.7")@kotlin.jvm.JvmName("maxByOrThrow")@Suppress("CONFLICTING_OVERLOADS")
public inline fun <T, R : Comparable<R>> Sequence<T>.maxBy(selector: (T) -> R): T {
 val iterator = iterator()
 if (!iterator.hasNext()) throw NoSuchElementException()
 var maxElem = iterator.next()
 if (!iterator.hasNext()) return maxElem
 var maxValue = selector(maxElem)
 do {
 val e = iterator.next()
 val v = selector(e)
 if (maxValue < v) {
 maxElem = e
 maxValue = v
 }
 } while (iterator.hasNext())
 return maxElem
}

Returns the first element yielding the largest value of the given function or `null` if there are no elements.
* The operation is _terminal_.
* @sample samples.collections.Collections.Aggregates.maxByOrNull

@SinceKotlin("1.4")
public inline fun <T, R : Comparable<R>> Sequence<T>.maxByOrNull(selector: (T) -> R): T? {
 val iterator = iterator()
 if (!iterator.hasNext()) return null
 var maxElem = iterator.next()
 if (!iterator.hasNext()) return maxElem
 var maxValue = selector(maxElem)
 do {
 val e = iterator.next()
 val v = selector(e)
 if (maxValue < v) {
 maxElem = e
 maxValue = v
 }
 } while (iterator.hasNext())
 return maxElem
}

Returns the largest value among all values produced by [selector] function
* applied to each element in the sequence.
* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.
* The operation is _terminal_.
* @throws NoSuchElementException if the sequence is empty.

@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolutionByLambdaReturnType@kotlin.internal.InlineOnly
public inline fun <T> Sequence<T>.maxOf(selector: (T) -> Double): Double {
 val iterator = iterator()
 if (!iterator.hasNext()) throw NoSuchElementException()
 var max = selector(iterator.next())
 while (iterator.hasNext()) {
 val v = selector(iterator.next())
 max = maxOf(max, v)
 }
 return max
}

Returns the largest value among all values produced by [selector] function
* applied to each element in the sequence.
* If any of values

```



produced by [selector] function is `NaN`, the returned result is `NaN`.  
 The operation is \_terminal\_.  
 @throws NoSuchElementException if the sequence is empty.

```

*\/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.maxOf(selector: (T) ->
Float): Float {
 val iterator = iterator()
 if (!iterator.hasNext()) throw NoSuchElementException()
 var
 maxValue = selector(iterator.next())
 while (iterator.hasNext()) {
 val v = selector(iterator.next())
 maxValue = maxOf(maxValue, v)
 }
 return maxValue
}

```

\* Returns the largest value among all values produced by [selector] function applied to each element in the sequence.  
 The operation is \_terminal\_.  
 @throws NoSuchElementException if the sequence is empty.

```

*\/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>>
Sequence<T>.maxOf(selector: (T) -> R): R {
 val iterator = iterator()
 if (!iterator.hasNext()) throw NoSuchElementException()
 var maxValue =
 selector(iterator.next())
 while (iterator.hasNext()) {
 val v = selector(iterator.next())
 if (maxValue <
 v) {
 maxValue = v
 }
 }
 return maxValue
}

```

\* Returns the largest value among all values produced by [selector] function applied to each element in the sequence or `null` if there are no elements.  
 If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.  
 The operation is \_terminal\_.  
 @throws NoSuchElementException if the sequence is empty.

```

*\/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.maxOfOrNull(selector:
(T) -> Double): Double? {
 val iterator = iterator()
 if (!iterator.hasNext()) return null
 var maxValue =
 selector(iterator.next())
 while (iterator.hasNext()) {
 val v = selector(iterator.next())
 maxValue = maxOf(maxValue, v)
 }
 return
 maxValue
}

```

\* Returns the largest value among all values produced by [selector] function applied to each element in the sequence or `null` if there are no elements.  
 If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.  
 The operation is \_terminal\_.  
 @throws NoSuchElementException if the sequence is empty.

```

*\/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.maxOfOrNull(selector:
(T) -> Float): Float? {
 val iterator = iterator()
 if (!iterator.hasNext()) return null
 var maxValue =
 selector(iterator.next())
 while (iterator.hasNext()) {
 val v = selector(iterator.next())
 maxValue =
 maxOf(maxValue, v)
 }
 return
 maxValue
}

```

\* Returns the largest value among all values produced by [selector] function applied to each element in the sequence or `null` if there are no elements.  
 The operation is \_terminal\_.  
 @throws NoSuchElementException if the sequence is empty.

```

*\/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>>
Sequence<T>.maxOfOrNull(selector: (T) -> R): R? {
 val iterator = iterator()
 if (!iterator.hasNext()) return
 null
 var
 maxValue = selector(iterator.next())
 while (iterator.hasNext()) {
 val v =
 selector(iterator.next())
 if (maxValue < v) {
 maxValue = v
 }
 }
 return
 maxValue
}

```

\* Returns the largest value according to the provided [comparator] among all values produced by [selector] function applied to each element in the sequence.  
 @throws NoSuchElementException if the sequence is empty.  
 The operation is \_terminal\_.  
 @throws NoSuchElementException if the sequence is empty.

```

*\/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic
inline fun <T, R> Sequence<T>.maxOfWith(comparator: Comparator<in R>, selector: (T) -> R): R {
 val
 iterator = iterator()
 if (!iterator.hasNext()) throw NoSuchElementException()
 var maxValue =
 selector(iterator.next())
 while (iterator.hasNext()) {
 val v = selector(iterator.next())
 if
 (comparator.compare(maxValue, v) < 0) {
 maxValue = v
 }
 }
 return
 maxValue
}

```

\* Returns the largest value according to the provided [comparator] among all values produced by [selector]

function applied to each element in the sequence or `null` if there are no elements.

```

 * The operation is _terminal_.
 * Since Kotlin("1.4")
 * OptIn(kotlin.experimental.ExperimentalTypeInference::class)
 * OverloadResolutionByLambdaReturnType
 * kotlin.internal.InlineOnly
 public inline fun <T, R>
 Sequence<T>.maxOfWithOrNull(comparator:
 Comparator<in R>, selector: (T) -> R): R? {
 val iterator = iterator()
 if (!iterator.hasNext()) return null
 var maxValue = selector(iterator.next())
 while (iterator.hasNext()) {
 val v = selector(iterator.next())
 if (comparator.compare(maxValue, v) < 0)
 maxValue = v
 }
 return maxValue
 }
 * Returns the largest element or `null` if there are no elements.
 * If any of elements is `NaN` returns `NaN`.
 * The operation is _terminal_.
 * Since Kotlin("1.4")
 public fun Sequence<Double>.maxOrNull():
 Double? {
 val iterator = iterator()
 if (!iterator.hasNext()) return null
 var max = iterator.next()
 while (iterator.hasNext()) {
 val e = iterator.next()
 max = maxOf(max, e)
 }
 return max
 }
 * Returns the largest element or `null` if there are no elements.
 * If any of elements is `NaN` returns `NaN`.
 * The operation is _terminal_.
 * Since Kotlin("1.4")
 public fun Sequence<Float>.maxOrNull(): Float? {
 val iterator = iterator()
 if (!iterator.hasNext()) return null
 var max = iterator.next()
 while (iterator.hasNext()) {
 val e = iterator.next()
 max = maxOf(max, e)
 }
 return max
 }
 * Returns the largest element or `null` if there are no elements.
 * The operation is _terminal_.
 * Since Kotlin("1.4")
 public fun <T : Comparable<T>> Sequence<T>.maxOrNull(): T? {
 val iterator = iterator()
 if (!iterator.hasNext()) return null
 var max = iterator.next()
 while (iterator.hasNext()) {
 val e = iterator.next()
 if (max < e) max = e
 }
 return max
 }
 * Returns the first element having the largest value according to the provided [comparator].
 * The operation is _terminal_.
 * @throws NoSuchElementException if the sequence is empty.
 * Since Kotlin("1.7")
 * kotlin.jvm.JvmName("maxWithOrThrow")
 * Suppress("CONFLICTING_OVERLOADS")
 public fun <T> Sequence<T>.maxWith(comparator: Comparator<in T>): T {
 val iterator = iterator()
 if (!iterator.hasNext()) throw NoSuchElementException()
 var max = iterator.next()
 while (iterator.hasNext()) {
 val e = iterator.next()
 if (comparator.compare(max, e) < 0) max = e
 }
 return max
 }
 * Returns the first element having the largest value according to the provided [comparator] or `null` if there are no elements.
 * The operation is _terminal_.
 * Since Kotlin("1.4")
 public fun <T>
 Sequence<T>.maxWithOrNull(comparator: Comparator<in T>): T? {
 val iterator = iterator()
 if (!iterator.hasNext()) return null
 var max = iterator.next()
 while (iterator.hasNext()) {
 val e =
 iterator.next()
 if (comparator.compare(max, e) < 0) max = e
 }
 return max
 }
 * Returns the smallest element.
 * If any of elements is `NaN` returns `NaN`.
 * The operation is _terminal_.
 * @throws NoSuchElementException if the sequence is empty.
 * Since Kotlin("1.7")
 * kotlin.jvm.JvmName("minOrThrow")
 * Suppress("CONFLICTING_OVERLOADS")
 public fun Sequence<Double>.min(): Double {
 val iterator = iterator()
 if (!iterator.hasNext()) throw
 NoSuchElementException()
 var min = iterator.next()
 while (iterator.hasNext()) {
 val e =
 iterator.next()
 min = minOf(min, e)
 }
 return min
 }
 * Returns the smallest element.
 * If any of elements is `NaN` returns `NaN`.
 * The operation is _terminal_.
 * @throws
 NoSuchElementException if the sequence is empty.
 * Since Kotlin("1.7")
 * kotlin.jvm.JvmName("minOrThrow")
 * Suppress("CONFLICTING_OVERLOADS")
 public fun Sequence<Float>.min(): Float {
 val iterator = iterator()
 if (!iterator.hasNext()) throw
 NoSuchElementException()
 var min = iterator.next()
 while (iterator.hasNext()) {
 val
 e = iterator.next()
 min = minOf(min, e)
 }
 return min
 }
 * Returns the smallest element.
 * The operation is _terminal_.
 * @throws NoSuchElementException if the sequence is empty.
 * Since Kotlin("1.7")
 * kotlin.jvm.JvmName("minOrThrow")
 * Suppress("CONFLICTING_OVERLOADS")
 public fun <T : Comparable<T>> Sequence<T>.min(): T {
 val iterator = iterator()
 if

```

```

(!iterator.hasNext()) throw NoSuchElementException()\n var min = iterator.next()\n while (iterator.hasNext())\n {\n val e = iterator.next()\n if (min > e) min = e\n }\n return min\n}\n\n/**\n * Returns the first element\n * yielding the smallest value of the given function.\n * \n * The operation is _terminal_.\n * \n * @throws\n * NoSuchElementException if the sequence is empty.\n * \n * @sample\n * samples.collections.Collections.Aggregates.minBy\n */\n\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic\n\ninline fun <T, R : Comparable<R>> Sequence<T>.minBy(selector: (T) -> R): T {\n val iterator = iterator()\n if (!iterator.hasNext()) throw NoSuchElementException()\n var minElem = iterator.next()\n if (!iterator.hasNext())\n return minElem\n var minValue = selector(minElem)\n do {\n val e = iterator.next()\n val v =\n selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n }\n } while\n (iterator.hasNext())\n return minElem\n}\n\n/**\n * Returns the first element yielding the smallest value of the\n * given function or `null` if there are no elements.\n * \n * The operation is _terminal_.\n * \n * @sample\n * samples.collections.Collections.Aggregates.minByOrNull\n */\n\n@SinceKotlin("1.4")\npublic inline fun <T, R : Comparable<R>> Sequence<T>.minByOrNull(selector: (T) -> R): T? {\n val iterator = iterator()\n if (!iterator.hasNext()) return null\n var minElem = iterator.next()\n if (!iterator.hasNext())\n return minElem\n var minValue = selector(minElem)\n do {\n val e = iterator.next()\n val v =\n selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n }\n } while\n (iterator.hasNext())\n return minElem\n}\n\n/**\n * Returns the smallest value among all values produced by\n * [selector] function\n * applied to each element in the sequence.\n * \n * If any of values produced by [selector]\n * function is `NaN`, the returned result is `NaN`.\n * \n * The operation is _terminal_.\n * \n * @throws\n * NoSuchElementException if the sequence is empty.\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.minOf(selector: (T) ->\nDouble): Double {\n val iterator = iterator()\n if (!iterator.hasNext()) throw NoSuchElementException()\n var\n minValue = selector(iterator.next())\n while (iterator.hasNext())\n {\n val v = selector(iterator.next())\n minValue = minOf(minValue, v)\n }\n return\n minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to\n * each element in the sequence.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result\n * is `NaN`.\n * \n * The operation is _terminal_.\n * \n * @throws\n * NoSuchElementException if the sequence is\n * empty.\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.minOf(selector: (T) ->\nFloat): Float {\n val iterator = iterator()\n if (!iterator.hasNext()) throw NoSuchElementException()\n var\n minValue = selector(iterator.next())\n while (iterator.hasNext()) {\n val v = selector(iterator.next())\n minValue = minOf(minValue, v)\n }\n return\n minValue\n}\n\n/**\n * Returns the\n * smallest value among all values produced by [selector] function\n * applied to each element in the sequence.\n * \n * The operation is _terminal_.\n * \n * @throws\n * NoSuchElementException if the sequence is empty.\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>>\nSequence<T>.minOf(selector: (T) -> R): R {\n val iterator = iterator()\n if (!iterator.hasNext()) throw\n NoSuchElementException()\n var minValue = selector(iterator.next())\n while (iterator.hasNext()) {\n val v\n = selector(iterator.next())\n if (minValue > v) {\n minValue = v\n }\n }\n return\n minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to\n * each element in the sequence or `null` if there are no elements.\n * \n * If any of values produced by [selector]\n * function is `NaN`,\n * the returned result is `NaN`.\n * \n * The operation is _terminal_.\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution

```

```

ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.minOrNull(selector:
(T) -> Double): Double? {\n val iterator = iterator()\n if (!iterator.hasNext()) return null\n var minValue =
selector(iterator.next())\n while (iterator.hasNext()) {\n val v = selector(iterator.next())\n minValue =
minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the sequence or `null` if there are no elements.\n * \n * If any of
values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * The operation is _terminal_.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic
inline fun <T> Sequence<T>.minOrNull(selector: (T) -> Float): Float? {\n val iterator = iterator()\n if
(!iterator.hasNext()) return null\n var minValue = selector(iterator.next())\n while (iterator.hasNext()) {\n
val v = selector(iterator.next())\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n *
Returns the smallest value among all values produced by [selector] function\n * applied to each element in the
sequence or `null` if there are no elements.\n * \n * The operation is _terminal_.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>>
Sequence<T>.minOrNull(selector: (T) -> R): R? {\n val iterator = iterator()\n if (!iterator.hasNext()) return
null\n var minValue = selector(iterator.next())\n while (iterator.hasNext()) {\n
val v = selector(iterator.next())\n if (minValue > v) {\n minValue = v\n }\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the sequence.\n * \n * @throws
NoSuchElementException if the sequence is empty.\n * \n * The operation is _terminal_.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R>
Sequence<T>.minOfWith(comparator: Comparator<in R>, selector: (T) -> R): R {\n val iterator = iterator()\n if
(!iterator.hasNext()) throw NoSuchElementException()\n var minValue = selector(iterator.next())\n while
(iterator.hasNext()) {\n val v = selector(iterator.next())\n if (comparator.compare(minValue, v) > 0) {\n
minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the sequence or `null` if there are no elements.\n * \n * The operation is
terminal.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R>
Sequence<T>.minOfOrNull(comparator: Comparator<in R>, selector: (T) -> R): R? {\n val iterator =
iterator()\n if (!iterator.hasNext()) return null\n var minValue = selector(iterator.next())\n while
(iterator.hasNext()) {\n val v = selector(iterator.next())\n if (comparator.compare(minValue, v) > 0) {\n
minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest element or `null` if there are
no elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n * \n * The operation is _terminal_.\n
*/\n\n@SinceKotlin("1.4")\npublic
fun Sequence<Double>.minOrNull(): Double? {\n val iterator = iterator()\n if (!iterator.hasNext()) return null\n
var min = iterator.next()\n while (iterator.hasNext()) {\n val e = iterator.next()\n min = minOf(min, e)\n
}\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n * \n * If any of
elements is `NaN` returns `NaN`.\n * \n * The operation is _terminal_.\n
*/\n\n@SinceKotlin("1.4")\npublic fun
Sequence<Float>.minOrNull(): Float? {\n val iterator = iterator()\n if (!iterator.hasNext()) return null\n var
min = iterator.next()\n while (iterator.hasNext()) {\n val e = iterator.next()\n min = minOf(min, e)\n
}\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n * \n * The operation is
terminal.\n
*/\n\n@SinceKotlin("1.4")\npublic fun <T : Comparable<T>> Sequence<T>.minOrNull(): T? {\n
val iterator = iterator()\n

```

```

 if (!iterator.hasNext()) return null\n var min = iterator.next()\n while (iterator.hasNext()) {\n val e =
iterator.next()\n if (min > e) min = e\n }\n return min\n}\n\n/**\n * Returns the first element having the
smallest value according to the provided [comparator].\n * \n * The operation is _terminal_.\n * \n * @throws
NoSuchElementException if the sequence is empty.\n
\n\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minWithOrThrow")\n@Suppress("CONFLICTING_OVER
LOADS")\npublic fun <T> Sequence<T>.minWith(comparator: Comparator<in T>): T {\n val iterator =
iterator()\n if (!iterator.hasNext()) throw NoSuchElementException()\n var min = iterator.next()\n while
(iterator.hasNext()) {\n val e = iterator.next()\n if (comparator.compare(min, e) > 0) min = e\n }\n return
min\n}\n\n/**\n * Returns the first element having the smallest value according to the provided [comparator] or
`null` if there are no elements.\n * \n * The
operation is _terminal_.\n * \n*\n@SinceKotlin("1.4")\npublic fun <T> Sequence<T>.minWithOrNull(comparator:
Comparator<in T>): T? {\n val iterator = iterator()\n if (!iterator.hasNext()) return null\n var min =
iterator.next()\n while (iterator.hasNext()) {\n val e = iterator.next()\n if (comparator.compare(min, e) >
0) min = e\n }\n return min\n}\n\n/**\n * Returns `true` if the sequence has no elements.\n * \n * The operation is
terminal.\n * \n * @sample samples.collections.Collections.Aggregates.none\n * \n*\npublic fun <T>
Sequence<T>.none(): Boolean {\n return !iterator().hasNext()\n}\n\n/**\n * Returns `true` if no elements match
the given [predicate].\n * \n * The operation is _terminal_.\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n * \n*\npublic inline fun <T>
Sequence<T>.none(predicate: (T) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return
false\n return true\n}\n\n/**\n * Returns
a sequence which performs the given [action] on each element of the original sequence as they pass through it.\n * \n*\n * The operation is _intermediate_ and _stateless_.\n * \n*\n@SinceKotlin("1.1")\npublic fun <T>
Sequence<T>.onEach(action: (T) -> Unit): Sequence<T> {\n return map {\n action(it)\n it\n }\n}\n\n/**\n * Returns a sequence which performs the given [action] on each element of the original sequence as
they pass through it.\n * @param [action] function that takes the index of an element and the element itself\n * and
performs the action on the element.\n * \n * The operation is _intermediate_ and _stateless_.\n
\n\n@SinceKotlin("1.4")\npublic fun <T> Sequence<T>.onEachIndexed(action: (index: Int, T) -> Unit):
Sequence<T> {\n return mapIndexed { index, element ->\n action(index, element)\n element\n }\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to
current accumulator value
and each element.\n * \n * Throws an exception if this sequence is empty. If the sequence can be empty in an
expected way,\n * please use [reduceOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param
[operation] function that takes current accumulator value and an element,\n * and calculates the next accumulator
value.\n * \n * The operation is _terminal_.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n * \n*\npublic inline fun <S, T : S> Sequence<T>.reduce(operation: (acc: S, T) -> S): S {\n val iterator =
this.iterator()\n if (!iterator.hasNext()) throw UnsupportedOperationException("Empty sequence can't be
reduced.")\n var accumulator: S = iterator.next()\n while (iterator.hasNext()) {\n accumulator =
operation(accumulator, iterator.next())\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with
the first element and applying [operation] from left to right\n * to current accumulator value and each
element with its index in the original sequence.\n * \n * Throws an exception if this sequence is empty. If the
sequence can be empty in an expected way,\n * please use [reduceIndexedOrNull] instead. It returns `null` when its
receiver is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator
value and the element itself,\n * and calculates the next accumulator value.\n * \n * The operation is _terminal_.\n * \n *
@sample samples.collections.Collections.Aggregates.reduce\n * \n*\npublic inline fun <S, T : S>
Sequence<T>.reduceIndexed(operation: (index: Int, acc: S, T) -> S): S {\n val iterator = this.iterator()\n if
(!iterator.hasNext()) throw UnsupportedOperationException("Empty sequence can't be reduced.")\n var index =
1\n var accumulator: S = iterator.next()\n while (iterator.hasNext()) {\n accumulator =
operation(checkIndexOverflow(index++), accumulator, iterator.next())\n }\n return accumulator\n}\n\n/**\n *

```



```

fun <S, T : S> Sequence<T>.runningReduce(operation: (acc: S, T) -> S): Sequence<S> {
 return sequence {
 val iterator = iterator()
 if (iterator.hasNext()) {
 var accumulator: S = iterator.next()
 yield(accumulator)
 while (iterator.hasNext()) {
 accumulator = operation(accumulator,
 iterator.next())
 yield(accumulator)
 }
 }
 }
}

```

\* Returns a sequence containing successive accumulation values generated by applying [operation] from left to right to each element, its index in the original sequence and current accumulator value that starts with the first element of this sequence. Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting sequence. @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value. The operation is `_intermediate_ and _stateless_`.

```

* @sample samples.collections.Collections.Aggregates.runningReduce
* ^\n@SinceKotlin("1.4")\npublic fun
<S, T : S> Sequence<T>.runningReduceIndexed(operation: (index: Int, acc: S, T) -> S): Sequence<S> {
 return sequence {
 val iterator = iterator()
 if (iterator.hasNext()) {
 var accumulator: S =
 iterator.next()
 yield(accumulator)
 var index = 1
 while (iterator.hasNext()) {
 accumulator = operation(checkIndexOverflow(index++), accumulator, iterator.next())
 yield(accumulator)
 }
 }
 }
}

```

\* Returns a sequence containing successive accumulation values generated by applying [operation] from left to right to each element and current accumulator value that starts with [initial] value. Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting sequence. The [initial] value should also be immutable (or should not be mutated) as it may be passed to [operation] function later because of sequence's lazy nature. @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value. The operation is `_intermediate_ and _stateless_`.

```

* @sample samples.collections.Collections.Aggregates.scan
* ^\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T, R>
Sequence<T>.scan(initial: R, operation: (acc: R, T) -> R): Sequence<R> {
 return runningFold(initial,
 operation)
}

```

\* Returns a sequence containing successive accumulation values generated by applying [operation] from left to right to each element, its index in the original sequence and current accumulator value that starts with [initial] value.

\* Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting sequence. The [initial] value should also be immutable (or should not be mutated) as it may be passed to [operation] function later because of sequence's lazy nature. @param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value. The operation is `_intermediate_ and _stateless_`.

```

* @sample samples.collections.Collections.Aggregates.scan
* ^\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T, R>
Sequence<T>.scanIndexed(initial: R, operation: (index: Int, acc: R, T) -> R): Sequence<R> {
 return
 runningFoldIndexed(initial, operation)
}

```

\* Returns the sum of all values produced by [selector] function applied to each element in the sequence. The operation is `_terminal_`.

```

* ^\n@Deprecated("Use sumOf instead.")
ReplaceWith("this.sumOf(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun <T>
Sequence<T>.sumBy(selector: (T) -> Int): Int {
 var sum: Int = 0
 for (element in this) {
 sum +=
 selector(element)
 }
 return sum
}

```

\* Returns the sum of all values produced by [selector] function applied to each element in the sequence. The operation is `_terminal_`.

```

* ^\n@Deprecated("Use sumOf
instead.", ReplaceWith("this.sumOf(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline
fun <T> Sequence<T>.sumByDouble(selector: (T) -> Double): Double {
 var sum: Double = 0.0
 for (element
 in this) {
 sum += selector(element)
 }
 return sum
}

```

\* Returns the sum of all values produced by [selector] function applied to each element in the sequence. The operation is `_terminal_`.

```

* ^\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution

```

```

ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfDouble")\n@kotlin.internal.InlineOnly\npublic
inline fun <T> Sequence<T>.sumOf(selector: (T) -> Double): Double {\n var sum: Double = 0.toDouble()\n for
(element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values
produced by [selector] function applied to each element in the sequence.\n *\n * The operation is _terminal_.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfInt")\n@kotlin.internal.InlineOnly\npublic inline fun <T>
Sequence<T>.sumOf(selector: (T) -> Int): Int {\n var sum: Int = 0.toInt()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the sequence.\n *\n * The operation
is _terminal_.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfLong")\n@kotlin.internal.InlineOnly\npublic inline fun
<T> Sequence<T>.sumOf(selector: (T) -> Long): Long {\n var sum: Long = 0.toLong()\n for (element in this)
{\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the sequence.\n *\n * The operation is _terminal_.\n
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType
s::class)\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.sumOf(selector: (T) -> UInt): UInt {\n
var sum: UInt = 0.toUInt()\n for (element in this) {\n sum += selector(element)\n }\n return
sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the sequence.\n
*\n * The
operation is _terminal_.\n
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfULong")\n@WasExperimental(ExperimentalUnsignedType
s::class)\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.sumOf(selector: (T) -> ULong):
ULong {\n var sum: ULong = 0.toULong()\n for (element in this) {\n sum += selector(element)\n }\n
return sum\n}\n\n/**\n * Returns an original collection containing all the non-`null` elements, throwing an
[IllegalArgumentException] if there are any `null` elements.\n *\n * The operation is _intermediate_ and
stateless.\n *\n@public fun <T : Any> Sequence<T?>.requireNonNulls(): Sequence<T> {\n return map { it ?:
throw IllegalArgumentException("\null element found in $this.") }\n}\n\n/**\n * Splits this sequence
into a sequence of lists each not exceeding the given [size].\n *\n * The last list in the resulting sequence may have
fewer elements than the given [size].\n *\n * @param size the number of elements to take in each list, must be
positive and can be greater than the number of elements in this sequence.\n *\n * The operation is _intermediate_
and _stateful_.\n *\n * @sample samples.collections.Collections.chunked\n
*\n@SinceKotlin("1.2")\npublic fun <T> Sequence<T>.chunked(size: Int): Sequence<List<T>> {\n return
windowed(size, size, partialWindows = true)\n}\n\n/**\n * Splits this sequence into several lists each not exceeding
the given [size]\n * and applies the given [transform] function to an each.\n *\n * @return sequence of results of the
[transform] applied to an each list.\n *\n * Note that the list passed to the [transform] function is ephemeral and is
valid only inside that function.\n *\n * You should not store it or allow it to escape in some way, unless
you made a snapshot of it.\n *\n * The last list may have fewer elements than the given [size].\n *\n * @param size the
number of elements to take in each list, must be positive and can be greater than the number of elements in this
sequence.\n *\n * The operation is _intermediate_ and _stateful_.\n *\n * @sample
samples.text.Strings.chunkedTransform\n
*\n@SinceKotlin("1.2")\npublic fun <T, R>
Sequence<T>.chunked(size: Int, transform: (List<T>) -> R): Sequence<R> {\n return windowed(size, size,
partialWindows = true, transform = transform)\n}\n\n/**\n * Returns a sequence containing all elements of the
original sequence without the first occurrence of the given [element].\n *\n * The operation is _intermediate_ and
stateless.\n *\n@public operator fun <T> Sequence<T>.minus(element: T): Sequence<T> {\n return object:
Sequence<T> {\n override fun iterator(): Iterator<T> {\n var removed = false\n return

```





containing all elements of original sequence and then all elements of the given [elements] array.

`Sequence<T>.plus(elements: Array<out T>): Sequence<T>` {  
`return this.plus(elements.asList())`}  
Returns a sequence containing all elements of original sequence and then all elements of the given [elements] collection.

`Sequence<T>.plus(elements: Iterable<T>): Sequence<T>` {  
`return sequenceOf(this, elements.asSequence()).flatten()`}  
Returns a sequence containing all elements of original sequence and then all elements of the given [elements] sequence.

`Sequence<T>.plus(element: T): Sequence<T>` {  
`return sequenceOf(this, element).flatten()`}  
Returns a sequence containing all elements of the original sequence and then the given [element].

`Sequence<T>.windowed(size: Int, step: Int = 1, partialWindows: Boolean = false): Sequence<List<T>>` {  
`return windowedSequence(size, step, partialWindows, reuseBuffer = false)`}  
Returns a sequence of results of applying the given [transform] function to an each list representing a view over the window of the given [size] sliding along this sequence with the given [step].

`Sequence<T>.windowed(size: Int, step: Int = 1, partialWindows: Boolean = false, transform: (List<T>) -> R): Sequence<R>` {  
`return windowedSequence(size, step, partialWindows, reuseBuffer = true).map(transform)`}  
Returns a sequence of values built from the elements of `this` sequence and the [other] sequence with the same index.

`Sequence<T>.zip(other: Sequence<R>): Sequence<Pair<T, R>>` {  
`return MergingSequence(this, other) { t1, t2 -> t1 to t2 }`}  
Returns a sequence of values built from the elements of `this` sequence and the [other] sequence with the same index using the provided [transform] function applied to each pair of elements.

```

samples.collections.Sequences.Transformations.zipWithTransform\n *\npublic fun <T, R, V>
Sequence<T>.zip(other: Sequence<R>, transform: (a: T, b: R) -> V): Sequence<V> {\n return
MergingSequence(this, other, transform)\n}\n\n**\n * Returns a sequence of pairs of each two adjacent elements in
this sequence.\n * \n * The returned sequence is empty if this sequence contains less than two elements.\n *\n * The
operation is _intermediate_ and _stateless_.\n * \n * @sample
samples.collections.Collections.Transformations.zipWithNext\n *\n@SinceKotlin("1.2")\npublic fun <T>
Sequence<T>.zipWithNext(): Sequence<Pair<T, T>> {\n return zipWithNext { a, b -> a to b }\n}\n\n**\n *
Returns a sequence containing the results
of applying the given [transform] function\n * to an each pair of two adjacent elements in this sequence.\n * \n *
The returned sequence is empty if this sequence contains less than two elements.\n *\n * The operation is
intermediate and _stateless_.\n * \n * @sample
samples.collections.Collections.Transformations.zipWithNextToFindDeltas\n *\n@SinceKotlin("1.2")\npublic
fun <T, R> Sequence<T>.zipWithNext(transform: (a: T, b: T) -> R): Sequence<R> {\n return sequence result@
{\n val iterator = iterator()\n if (!iterator.hasNext()) return @result\n var current = iterator.next()\n
while (iterator.hasNext()) {\n val next = iterator.next()\n yield(transform(current, next))\n
current = next\n }\n }\n}\n\n**\n * Appends the string from all the elements separated using [separator] and
using the given [prefix] and [postfix] if supplied.\n * \n * If the collection could be huge, you can specify a non-
negative value
of [limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string
(which defaults to "...").\n *\n * The operation is _terminal_.\n * \n * @sample
samples.collections.Collections.Transformations.joinTo\n *\npublic fun <T, A : Appendable>
Sequence<T>.joinTo(buffer: A, separator: CharSequence = "\", \"", prefix: CharSequence = "\\\"", postfix:
CharSequence = "\\\"", limit: Int = -1, truncated: CharSequence = "...", transform: ((T) -> CharSequence)? = null): A
{\n buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count > 1)
buffer.append(separator)\n if (limit < 0 || count <= limit) {\n buffer.appendElement(element, transform)\n
 } else break\n }\n if (limit >= 0 && count > limit) buffer.append(truncated)\n buffer.append(postfix)\n
return buffer}\n}\n\n**\n * Creates a string from all the elements separated using [separator] and using the given
[prefix] and [postfix]
if supplied.\n * \n * If the collection could be huge, you can specify a non-negative value of [limit], in which case
only the first [limit]\n * elements will be appended, followed by the [truncated] string (which defaults to "...").\n
*\n * The operation is _terminal_.\n * \n * @sample samples.collections.Collections.Transformations.joinToString\n
*\npublic fun <T> Sequence<T>.joinToString(separator: CharSequence = "\", \"", prefix: CharSequence = "\\\"",
postfix: CharSequence = "\\\"", limit: Int = -1, truncated: CharSequence = "...", transform: ((T) -> CharSequence)? =
null): String {\n return joinTo(StringBuilder(), separator, prefix, postfix, limit, truncated,
transform).toString()\n}\n\n**\n * Creates an [Iterable] instance that wraps the original sequence returning its
elements when being iterated.\n *\npublic fun <T> Sequence<T>.asIterable(): Iterable<T> {\n return Iterable {
this.iterator() }\n}\n\n**\n * Returns this sequence as a [Sequence].\n *\n@kotlin.internal.InlineOnly\npublic
inline fun <T> Sequence<T>.asSequence(): Sequence<T> {\n return this}\n}\n\n**\n * Returns an average value
of elements in the sequence.\n *\n * The operation is _terminal_.\n
*\n@kotlin.jvm.JvmName("averageOfByte")\npublic fun Sequence<Byte>.average(): Double {\n var sum:
Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n
checkCountOverflow(++count)\n }\n return if (count == 0) Double.NaN else sum / count}\n}\n\n**\n * Returns
an average value of elements in the sequence.\n *\n * The operation is _terminal_.\n
*\n@kotlin.jvm.JvmName("averageOfShort")\npublic fun Sequence<Short>.average(): Double {\n var sum:
Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n
checkCountOverflow(++count)\n }\n return if (count == 0) Double.NaN else sum / count}\n}\n\n**\n * Returns
an average value of elements in the sequence.\n *\n * The operation is _terminal_.\n

```

```

*^@kotlin.jvm.JvmName("averageOfInt")\npublic fun Sequence<Int>.average(): Double {\n var sum: Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n checkCountOverflow(++count)\n }\n return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns an average value of elements in the sequence.\n * The operation is _terminal_.\n */\n*^@kotlin.jvm.JvmName("averageOfLong")\npublic fun Sequence<Long>.average(): Double {\n var sum: Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n checkCountOverflow(++count)\n }\n return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns an average value of elements in the sequence.\n * The operation is _terminal_.\n */\n*^@kotlin.jvm.JvmName("averageOfFloat")\npublic fun Sequence<Float>.average(): Double {\n var sum: Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n checkCountOverflow(++count)\n }\n return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns an average value of elements in the sequence.\n * The operation is _terminal_.\n */\n*^@kotlin.jvm.JvmName("averageOfDouble")\npublic fun Sequence<Double>.average(): Double {\n var sum: Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n checkCountOverflow(++count)\n }\n return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns the sum of all elements in the sequence.\n * The operation is _terminal_.\n */\n*^@kotlin.jvm.JvmName("sumOfByte")\npublic fun Sequence<Byte>.sum(): Int {\n var sum: Int = 0\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the sequence.\n * The operation is _terminal_.\n */\n*^@kotlin.jvm.JvmName("sumOfShort")\npublic fun Sequence<Short>.sum(): Int {\n var sum: Int = 0\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the sequence.\n * The operation is _terminal_.\n */\n*^@kotlin.jvm.JvmName("sumOfInt")\npublic fun Sequence<Int>.sum(): Int {\n var sum: Int = 0\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the sequence.\n * The operation is _terminal_.\n */\n*^@kotlin.jvm.JvmName("sumOfLong")\npublic fun Sequence<Long>.sum(): Long {\n var sum: Long = 0L\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the sequence.\n * The operation is _terminal_.\n */\n*^@kotlin.jvm.JvmName("sumOfFloat")\npublic fun Sequence<Float>.sum(): Float {\n var sum: Float = 0.0f\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the sequence.\n * The operation is _terminal_.\n */\n*^@kotlin.jvm.JvmName("sumOfDouble")\npublic fun Sequence<Double>.sum(): Double {\n var sum: Double = 0.0\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n"/\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n\n\n*^@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("SetsKt")\n\npackage kotlin.collections\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See: https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport kotlin.random.*\nimport kotlin.ranges.contains\nimport kotlin.ranges.reversed\n\n/**\n * Returns a set containing all elements of the original set except the given [element].\n * The returned set preserves the element iteration order of the original set.\n */\n\npublic operator fun <T> Set<T>.minus(element: T): Set<T> {\n val result = LinkedHashSet<T>(mapCapacity(size))\n var removed = false\n return this.filterTo(result) { if (!removed && it == element) { removed = true; false } else true }\n}\n\n/**\n * Returns a set containing all elements of the original set except the elements contained in the given [elements] array.\n * The returned set preserves the element iteration order of the original set.\n * Before Kotlin 1.6, the [elements] array may have been converted to a [HashSet] to speed up the operation, thus the elements were required to have a correct and stable implementation of `hashCode()` that didn't change between successive invocations.\n * On JVM, you can enable this behavior back with the system property `kotlin.collections.convert_arg_to_set_in_removeAll` set to `true`.\n */\n\npublic operator fun <T> Set<T>.minus(elements: Array<out T>): Set<T> {\n val result = LinkedHashSet<T>(this)\n result.removeAll(elements)\n return result\n}\n\n}

```

```

* Returns a set containing all elements of the original set except the elements contained in the given [elements]
collection.\n * \n * The returned set preserves the element iteration order of the original set.\n * \n * Before Kotlin
1.6, the [elements] collection may have been converted to a [HashSet] to speed up the operation, thus the elements
were required to have\n * a correct and stable implementation of `hashCode()` that didn't change between successive
invocations.\n * On JVM, you can enable this behavior back with the system property
`kotlin.collections.convert_arg_to_set_in_removeAll` set to `true`.\n * \n\npublic operator fun <T>
Set<T>.minus(elements: Iterable<T>): Set<T> {\n val other = elements.convertToSetForSetOperationWith(this)\n
 if (other.isEmpty())\n return this.toSet()\n if (other is Set)\n return
this.filterNotTo(LinkedHashSet<T>()) { it in other }\n val result = LinkedHashSet<T>(this)\n
result.removeAll(other)\n return result\n}\n\n/**\n
* Returns a set containing all elements of the original set except the elements contained in the given [elements]
sequence.\n * \n * The returned set preserves the element iteration order of the original set.\n * \n * Before Kotlin
1.6, the [elements] sequence may have been converted to a [HashSet] to speed up the operation, thus the elements
were required to have\n * a correct and stable implementation of `hashCode()` that didn't change between successive
invocations.\n * On JVM, you can enable this behavior back with the system property
`kotlin.collections.convert_arg_to_set_in_removeAll` set to `true`.\n * \n\npublic operator fun <T>
Set<T>.minus(elements: Sequence<T>): Set<T> {\n val result = LinkedHashSet<T>(this)\n
result.removeAll(elements)\n return result\n}\n\n/**\n
* Returns a set containing all elements of the original set
except the given [element].\n * \n * The returned set preserves the element iteration order of the original set.\n
*\n * \n\n@kotlin.internal.InlineOnly\npublic
inline fun <T> Set<T>.minusElement(element: T): Set<T> {\n return minus(element)\n}\n\n/**\n
* Returns a set
containing all elements of the original set and then the given [element] if it isn't already in this set.\n * \n * The
returned set preserves the element iteration order of the original set.\n * \n\npublic operator fun <T>
Set<T>.plus(element: T): Set<T> {\n val result = LinkedHashSet<T>(mapCapacity(size + 1))\n
result.addAll(this)\n result.add(element)\n return result\n}\n\n/**\n
* Returns a set containing all elements of the
original set and the given [elements] array,\n * which aren't already in this set.\n * \n * The returned set preserves
the element iteration order of the original set.\n * \n\npublic operator fun <T> Set<T>.plus(elements: Array<out T>):
Set<T> {\n val result = LinkedHashSet<T>(mapCapacity(this.size + elements.size))\n result.addAll(this)\n
result.addAll(elements)\n return result\n}\n\n/**\n
* Returns a set containing all
elements of the original set and the given [elements] collection,\n * which aren't already in this set.\n * The returned
set preserves the element iteration order of the original set.\n * \n\npublic operator fun <T> Set<T>.plus(elements:
Iterable<T>): Set<T> {\n val result = LinkedHashSet<T>(mapCapacity(elements.collectionSizeOrNull()?).let {
this.size + it } ?: this.size * 2))\n result.addAll(this)\n result.addAll(elements)\n return result\n}\n\n/**\n
* Returns a set containing all elements of the original set and the given [elements] sequence,\n * which aren't already
in this set.\n * \n * The returned set preserves the element iteration order of the original set.\n * \n\npublic operator fun
<T> Set<T>.plus(elements: Sequence<T>): Set<T> {\n val result = LinkedHashSet<T>(mapCapacity(this.size *
2))\n result.addAll(this)\n result.addAll(elements)\n return result\n}\n\n/**\n
* Returns a set containing all
elements of the original set and then the given [element] if
it isn't already in this set.\n * \n * The returned set preserves the element iteration order of the original set.\n
*\n * \n\n@kotlin.internal.InlineOnly\npublic inline fun <T> Set<T>.plusElement(element: T): Set<T> {\n return
plus(element)\n}\n\n"/\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("StringsKt")\n\npackage
kotlin.text\n\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport kotlin.random.*\n\n/**\n
* Returns a
character at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this char
sequence.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n * \n\npublic expect fun

```

CharSequence.elementAt(index:

Int): Char Returns a character at the given [index] or the result of calling the [defaultValue] function if the [index] is out of bounds of this char sequence.

samples.collections.Collections.Elements.elementAtOrElse

CharSequence.elementAtOrElse(index: Int, defaultValue: (Int) -> Char): Char { return if (index >= 0 && index <= lastIndex) get(index) else defaultValue(index)}

samples.collections.Collections.Elements.elementAtOrNull

CharSequence.elementAtOrNull(index: Int): Char? { return this.getOrNull(index)}

samples.collections.Collections.Elements.find

inline fun CharSequence.find(predicate: (Char) -> Boolean): Char? { return firstOrNull(predicate)}

samples.collections.Collections.Elements.find

CharSequence.findLast(predicate: (Char) -> Boolean): Char? { return lastOrNull(predicate)}

Returns the first character.

fun CharSequence.first(): Char { if (isEmpty()) throw NoSuchElementException("Char sequence is empty.")

return this[0]}

CharSequence.first(predicate: (Char) -> Boolean): Char { for (element in this) if (predicate(element)) return

element

throw NoSuchElementException("Char sequence contains no character matching the

predicate.")}

CharSequence.firstNotNullOf(transform: (Char) -> R?): R { return firstNotNullOfOrNull(transform)?: throw

NoSuchElementException("No element of the char sequence was transformed to a non-null value.")}

CharSequence.firstNotNullOf(transform: (Char) -> R?): R { return firstNotNullOfOrNull(transform)?: throw

NoSuchElementException("No element of the char sequence was transformed to a non-null value.")}

Returns the first non-null value produced by [transform] function being applied to characters of this char sequence in iteration order, or `null` if no non-null value was produced.

samples.collections.Collections.Transformations.firstNotNullOf

CharSequence.firstNotNullOf(transform: (Char) -> R?): R { return firstNotNullOfOrNull(transform)?: throw

NoSuchElementException("No element of the char sequence was transformed to a non-null value.")}

inline fun <R : Any> CharSequence.firstNotNullOfOrNull(transform: (Char) -> R?): R? { for (element in this)

{ val result = transform(element) if (result != null) { return result } }

return null }

CharSequence.firstOrNull(): Char? { return if (isEmpty()) null else this[0]}

CharSequence.firstOrNull(predicate: (Char) -> Boolean): Char? { for (element in this) if (predicate(element))

return element

return null }

CharSequence.getOrNull(index: Int, defaultValue: (Int) -> Char): Char { return if (index >= 0 && index <= lastIndex) get(index) else

defaultValue(index)}

CharSequence.getOrNull(index: Int): Char? { return if (index >= 0 && index <= lastIndex) get(index) else

null }

CharSequence.indexOfFirst(predicate: (Char) -> Boolean): Int { for (index in indices) { if (predicate(this[index])) { return index }

return -1 }

CharSequence.indexOfLast(predicate: (Char) -> Boolean): Int { for (index in indices) { if (predicate(this[index])) { return index }

return -1 }

CharSequence.indexOfLast(predicate: (Char) -> Boolean): Int { for (index in indices) { if (predicate(this[index])) { return index }

```

not contain such character.\n */\npublic inline fun CharSequence.indexOfLast(predicate:
(Char) -> Boolean): Int {\n for (index in indices.reversed()) {\n if (predicate(this[index])) {\n return
index\n }\n }\n return -1\n}\n\n/**\n * Returns the last character.\n * \n * @throws
NoSuchElementException if the char sequence is empty.\n * \n * @sample samples.text.Strings.last\n */\npublic fun
CharSequence.last(): Char {\n if (isEmpty())\n throw NoSuchElementException("Char sequence is
empty.")\n return this[lastIndex]\n}\n\n/**\n * Returns the last character matching the given [predicate].\n * \n *
@throws NoSuchElementException if no such character is found.\n * \n * @sample samples.text.Strings.last\n */\npublic inline fun CharSequence.last(predicate: (Char) -> Boolean): Char {\n for (index in
this.indices.reversed()) {\n val element = this[index]\n if (predicate(element)) return element\n }\n throw NoSuchElementException("Char sequence contains no character matching the predicate.")\n}\n\n/**\n * Returns the last character, or `null` if the char sequence is empty.\n * \n * @sample samples.text.Strings.last\n */\npublic fun CharSequence.lastOrNull(): Char? {\n return if (isEmpty()) null else this[length - 1]\n}\n\n/**\n * Returns the last character matching the given [predicate], or `null` if no such character was found.\n * \n * @sample
samples.text.Strings.last\n */\npublic inline fun CharSequence.lastOrNull(predicate: (Char) -> Boolean): Char? {\n for (index in this.indices.reversed()) {\n val element = this[index]\n if (predicate(element)) return element\n }\n return null\n}\n\n/**\n * Returns a random character from this char sequence.\n * \n * @throws
NoSuchElementException if this char sequence is empty.\n */\n\n/**\n * @SinceKotlin("1.3")\n */\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.random(): Char {\n return random(Random)\n}\n\n/**\n * Returns a random character from this char sequence using the specified
source of randomness.\n * \n * @throws NoSuchElementException if this char sequence is empty.\n */\n\n/**\n * @SinceKotlin("1.3")\n */\npublic fun
CharSequence.random(random: Random): Char {\n if (isEmpty())\n throw NoSuchElementException("Char
sequence is empty.")\n return get(random.nextInt(length))\n}\n\n/**\n * Returns a random character from this
char sequence, or `null` if this char sequence is empty.\n */\n\n/**\n * @SinceKotlin("1.4")\n */\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
inline fun CharSequence.randomOrNull(): Char? {\n return randomOrNull(Random)\n}\n\n/**\n * Returns a
random character from this char sequence using the specified source of randomness, or `null` if this char sequence is
empty.\n */\n\n/**\n * @SinceKotlin("1.4")\n */\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun
CharSequence.randomOrNull(random: Random): Char? {\n if (isEmpty())\n return null\n return
get(random.nextInt(length))\n}\n\n/**\n * Returns the single character,
or throws an exception if the char sequence is empty or has more than one character.\n */\npublic fun
CharSequence.single(): Char {\n return when (length) {\n 0 -> throw NoSuchElementException("Char
sequence is empty.")\n 1 -> this[0]\n else -> throw IllegalArgumentException("Char sequence has more
than one element.")\n }\n}\n\n/**\n * Returns the single character matching the given [predicate], or throws
exception if there is no or more than one matching character.\n */\npublic inline fun CharSequence.single(predicate:
(Char) -> Boolean): Char {\n var single: Char? = null\n var found = false\n for (element in this) {\n if
(predicate(element)) {\n if (found) throw IllegalArgumentException("Char sequence contains more than one
matching element.")\n single = element\n found = true\n }\n }\n if (!found) throw
NoSuchElementException("Char sequence contains no character matching the predicate.")\n}\n\n @Suppress("UNCHECKED_CAST")\n return single as Char\n}\n\n/**\n * Returns single character, or `null`
if the char sequence is empty or has more than one character.\n */\npublic fun CharSequence.singleOrNull(): Char?
{\n return if (length == 1) this[0] else null\n}\n\n/**\n * Returns the single character matching the given
[predicate], or `null` if character was not found or more than one character was found.\n */\npublic inline fun
CharSequence.singleOrNull(predicate: (Char) -> Boolean): Char? {\n var single: Char? = null\n var found =
false\n for (element in this) {\n if (predicate(element)) {\n if (found) return null\n single =
element\n found = true\n }\n }\n if (!found) return null\n return single\n}\n\n/**\n * Returns a
subsequence of this char sequence with the first [n] characters removed.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample samples.text.Strings.drop\n

```

```

*^public fun CharSequence.drop(n: Int): CharSequence {
 require(n >= 0) { "Requested character count $n is less than zero." }
 return subSequence(n.coerceAtMost(length), length)
}

* Returns a string with the first [n] characters removed.
* @throws IllegalArgumentException if [n] is negative.
* @sample samples.text.Strings.drop

*^public fun String.drop(n: Int): String {
 require(n >= 0) { "Requested character count $n is less than zero." }
 return substring(n.coerceAtMost(length))
}

* Returns a subsequence of this char sequence with the last [n] characters removed.
* @throws IllegalArgumentException if [n] is negative.
* @sample samples.text.Strings.drop

*^public fun CharSequence.dropLast(n: Int): CharSequence {
 require(n >= 0) { "Requested character count $n is less than zero." }
 return take((length - n).coerceAtLeast(0))
}

* Returns a string with the last [n] characters removed.
* @throws IllegalArgumentException if [n] is negative.
* @sample samples.text.Strings.drop

*^public fun String.dropLast(n: Int): String {
 require(n >= 0) { "Requested character count $n is less than zero." }
 return take((length - n).coerceAtLeast(0))
}

* Returns a subsequence of this char sequence containing all characters except last characters that satisfy the given [predicate].
* @sample samples.text.Strings.drop

*^public inline fun CharSequence.dropLastWhile(predicate: (Char) -> Boolean): CharSequence {
 for (index in lastIndex downTo 0)
 if (!predicate(this[index]))
 return subSequence(0, index + 1)
 return ""
}

* Returns a string containing all characters except last characters that satisfy the given [predicate].
* @sample samples.text.Strings.drop

*^public inline fun String.dropLastWhile(predicate: (Char) -> Boolean): String {
 for (index in lastIndex downTo 0)
 if (!predicate(this[index]))
 return substring(0, index + 1)
 return ""
}

* Returns a subsequence of this char sequence containing all characters except first characters that satisfy the given [predicate].
* @sample samples.text.Strings.drop

*^public inline fun CharSequence.dropWhile(predicate: (Char) -> Boolean): CharSequence {
 for (index in this.indices)
 if (!predicate(this[index]))
 return subSequence(index, length)
 return ""
}

* Returns a string containing all characters except first characters that satisfy the given [predicate].
* @sample samples.text.Strings.drop

*^public inline fun String.dropWhile(predicate: (Char) -> Boolean): String {
 for (index in this.indices)
 if (!predicate(this[index]))
 return substring(index)
 return ""
}

* Returns a char sequence containing only those characters from the original char sequence that match the given [predicate].
* @sample samples.text.Strings.filter

*^public inline fun CharSequence.filter(predicate: (Char) -> Boolean): CharSequence {
 return filterTo(StringBuilder(), predicate)
}

* Returns a string containing only those characters from the original string that match the given [predicate].
* @sample samples.text.Strings.filter

*^public inline fun String.filter(predicate: (Char) -> Boolean): String {
 return filterTo(StringBuilder(), predicate).toString()
}

* Returns a char sequence containing only those characters from the original char sequence that match the given [predicate].
* @param [predicate] function that takes the index of a character and the character itself
* and returns the result of predicate evaluation on the character.
* @sample samples.collections.Collections.Filtering.filterIndexed

*^public inline fun CharSequence.filterIndexed(predicate: (index: Int, Char) -> Boolean): CharSequence {
 return filterIndexedTo(StringBuilder(), predicate)
}

* Returns a string containing only those characters from the original string that match the given [predicate].
* @param [predicate] function that takes the index of a character and the character itself
* and returns the result of predicate evaluation on the character.
* @sample samples.collections.Collections.Filtering.filterIndexed

*^public inline fun String.filterIndexed(predicate: (index: Int, Char) -> Boolean): String {
 return filterIndexedTo(StringBuilder(), predicate).toString()
}

* Appends all characters matching the given [predicate] to the given [destination].
* @param [predicate] function that takes the index of a character and the character itself
* and returns the result of predicate evaluation on the character.
* @sample samples.collections.Collections.Filtering.filterIndexedTo

*^public inline fun <C : Appendable> CharSequence.filterIndexedTo(destination: C, predicate: (index: Int, Char) -> Boolean): C {
 forEachIndexed { index, element ->
 if (predicate(index, element)) destination.append(element)
 }
 return destination
}

* Returns a char sequence containing only those characters from the original

```



```

char sequence that do not match the given [predicate].\n * \n * @sample samples.text.Strings.filterNot\n * \n\npublic
inline fun CharSequence.filterNot(predicate: (Char) -> Boolean): CharSequence {\n return
filterNotTo(StringBuilder(), predicate)\n}\n\n/**\n * Returns a string containing only those characters from the
original string that do not match the given [predicate].\n * \n * @sample samples.text.Strings.filterNot\n * \n\npublic
inline fun String.filterNot(predicate: (Char) -> Boolean): String {\n return filterNotTo(StringBuilder(),
predicate).toString()\n}\n\n/**\n * Appends all characters not matching the given [predicate] to the given
[destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n * \n\npublic inline fun
<C : Appendable> CharSequence.filterNotTo(destination: C, predicate: (Char) -> Boolean): C {\n for (element in
this) if (!predicate(element)) destination.append(element)\n return destination\n}\n\n/**\n * Appends all characters
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n * \n\npublic inline fun <C : Appendable>
CharSequence.filterTo(destination: C, predicate: (Char) -> Boolean): C {\n for (index in 0 until length) {\n val
element = get(index)\n if (predicate(element)) destination.append(element)\n }\n return
destination\n}\n\n/**\n * Returns a char sequence containing characters of the original char sequence at the
specified range of [indices].\n * \n\npublic fun CharSequence.slice(indices: IntRange): CharSequence {\n if
(indices.isEmpty()) return ""\n return subSequence(indices)\n}\n\n/**\n * Returns a string containing characters
of the original string at the specified
range of [indices].\n * \n\npublic fun String.slice(indices: IntRange): String {\n if (indices.isEmpty()) return ""\n
return substring(indices)\n}\n\n/**\n * Returns a char sequence containing characters of the original char sequence
at specified [indices].\n * \n\npublic fun CharSequence.slice(indices: Iterable<Int>): CharSequence {\n val size =
indices.collectionSizeOrDefault(10)\n if (size == 0) return ""\n val result = StringBuilder(size)\n for (i in
indices) {\n result.append(get(i))\n }\n return result\n}\n\n/**\n * Returns a string containing characters of
the original string at specified [indices].\n * \n\n@kotlin.internal.InlineOnly\npublic inline fun String.slice(indices:
Iterable<Int>): String {\n return (this as CharSequence).slice(indices).toString()\n}\n\n/**\n * Returns a
subsequence of this char sequence containing the first [n] characters from this char sequence, or the entire char
sequence if this char sequence is shorter.\n * \n * \n *
@throws IllegalArgumentException if [n] is negative.\n * \n * @sample samples.text.Strings.take\n * \n\npublic fun
CharSequence.take(n: Int): CharSequence {\n require(n >= 0) { "Requested character count $n is less than zero." }\n
return subSequence(0, n.coerceAtMost(length))\n}\n\n/**\n * Returns a string containing the first [n]
characters from this string, or the entire string if this string is shorter.\n * \n * \n * @throws IllegalArgumentException if
[n] is negative.\n * \n * @sample samples.text.Strings.take\n * \n\npublic fun String.take(n: Int): String {\n require(n
>= 0) { "Requested character count $n is less than zero." }\n return substring(0,
n.coerceAtMost(length))\n}\n\n/**\n * Returns a subsequence of this char sequence containing the last [n]
characters from this char sequence, or the entire char sequence if this char sequence is shorter.\n * \n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample samples.text.Strings.take\n * \n\npublic fun
CharSequence.takeLast(n:
Int): CharSequence {\n require(n >= 0) { "Requested character count $n is less than zero." }\n val length =
length\n return subSequence(length - n.coerceAtMost(length), length)\n}\n\n/**\n * Returns a string containing
the last [n] characters from this string, or the entire string if this string is shorter.\n * \n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample samples.text.Strings.take\n * \n\npublic fun
String.takeLast(n: Int): String {\n require(n >= 0) { "Requested character count $n is less than zero." }\n val
length = length\n return substring(length - n.coerceAtMost(length))\n}\n\n/**\n * Returns a subsequence of this
char sequence containing last characters that satisfy the given [predicate].\n * \n * \n * @sample
samples.text.Strings.take\n * \n\npublic inline fun CharSequence.takeLastWhile(predicate: (Char) -> Boolean):
CharSequence {\n for (index in lastIndex downTo 0) {\n if (!predicate(this[index])) {\n
return subSequence(index + 1, length)\n }\n }\n return subSequence(0, length)\n}\n\n/**\n * Returns
a string containing last characters that satisfy the given [predicate].\n * \n * \n * @sample samples.text.Strings.take\n *
\n\npublic inline fun String.takeLastWhile(predicate: (Char) -> Boolean): String {\n for (index in lastIndex

```

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downTo 0) {\n if (!predicate(this[index])) {\n return substring(index + 1)\n }\n }\n return
this}\n\n/**\n * Returns a subsequence of this char sequence containing the first characters that satisfy the given
[predicate].\n * \n * @sample samples.text.Strings.take\n */\npublic inline fun CharSequence.takeWhile(predicate:
(Char) -> Boolean): CharSequence {\n for (index in 0 until length)\n if (!predicate(get(index))) {\n
return subSequence(0, index)\n }\n return subSequence(0, length)\n}\n\n/**\n * Returns a string containing
the first characters that satisfy the given [predicate].\n
\n * \n * @sample samples.text.Strings.take\n */\npublic inline fun String.takeWhile(predicate: (Char) -> Boolean):
String {\n for (index in 0 until length)\n if (!predicate(get(index))) {\n return substring(0, index)\n
}\n return this}\n\n/**\n * Returns a char sequence with characters in reversed order.\n */\npublic fun
CharSequence.reversed(): CharSequence {\n return StringBuilder(this).reverse()\n}\n\n/**\n * Returns a string
with characters in reversed order.\n */\n@kotlin.internal.InlineOnly\npublic inline fun String.reversed(): String {\n
return (this as CharSequence).reversed().toString()\n}\n\n/**\n * Returns a [Map] containing key-value pairs
provided by [transform] function\n * applied to characters of the given char sequence.\n * \n * If any of two pairs
would have the same key the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original char sequence.\n * \n * @sample samples.text.Strings.associate\n
\n */\npublic inline fun <K, V> CharSequence.associate(transform: (Char) -> Pair<K, V>): Map<K, V> {\n val
capacity = mapCapacity(length).coerceAtLeast(16)\n return associateTo(LinkedHashMap<K, V>(capacity),
transform)\n}\n\n/**\n * Returns a [Map] containing the characters from the given char sequence indexed by the
key\n * returned from [keySelector] function applied to each character.\n * \n * If any two characters would have the
same key returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry
iteration order of the original char sequence.\n * \n * @sample samples.text.Strings.associateBy\n */\npublic inline
fun <K> CharSequence.associateBy(keySelector: (Char) -> K): Map<K, Char> {\n val capacity =
mapCapacity(length).coerceAtLeast(16)\n return associateByTo(LinkedHashMap<K, Char>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the values provided by [valueTransform] and indexed by
[keySelector]
functions applied to characters of the given char sequence.\n * \n * If any two characters would have the same key
returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original char sequence.\n * \n * @sample samples.text.Strings.associateByWithValueTransform\n
\n */\npublic inline fun <K, V> CharSequence.associateBy(keySelector: (Char) -> K, valueTransform: (Char) -> V):
Map<K, V> {\n val capacity = mapCapacity(length).coerceAtLeast(16)\n return
associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)\n}\n\n/**\n * Populates and
returns the [destination] mutable map with key-value pairs,\n * where key is provided by the [keySelector] function
applied to each character of the given char sequence\n * and value is the character itself.\n * \n * If any two
characters would have the same key returned by [keySelector] the last one gets added to the map.\n * \n * @sample
samples.text.Strings.associateByTo\n
\n */\npublic inline fun <K, M : MutableMap<in K, in Char>> CharSequence.associateByTo(destination: M,
keySelector: (Char) -> K): M {\n for (element in this) {\n destination.put(keySelector(element), element)\n
}\n return destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs,\n *
where key is provided by the [keySelector] function and\n * and value is provided by the [valueTransform] function
applied to characters of the given char sequence.\n * \n * If any two characters would have the same key returned by
[keySelector] the last one gets added to the map.\n * \n * @sample
samples.text.Strings.associateByToWithValueTransform\n */\npublic inline fun <K, V, M : MutableMap<in K, in
V>> CharSequence.associateByTo(destination: M, keySelector: (Char) -> K, valueTransform: (Char) -> V): M {\n
for (element in this) {\n destination.put(keySelector(element), valueTransform(element))\n }\n return
destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs\n * provided by [transform] function
applied to each character of the given char sequence.\n * \n * If any of two pairs would have the same key the last
one gets added to the map.\n * \n * @sample samples.text.Strings.associateTo\n */\npublic inline fun <K, V, M :

```

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MutableMap<in K, in V>> CharSequence.associateTo(destination: M, transform: (Char) -> Pair<K, V>): M {
 for (element in this) {
 destination += transform(element)
 }
 return destination
}
Returns a [Map] where keys are characters from the given char sequence and values are produced by the [valueSelector] function applied to each character.
If any two characters are equal, the last one gets added to the map.
The returned map preserves the entry iteration order of the original char sequence.
@sample
samples.text.Strings.associateWith
*/
@SinceKotlin("1.3")
public inline
fun <V> CharSequence.associateWith(valueSelector: (Char) -> V): Map<Char, V> {
 val result =
 LinkedHashMap<Char, V>(mapCapacity(length.coerceAtMost(128)).coerceAtLeast(16))
 return
 associateWithTo(result, valueSelector)
}
Populates and returns the [destination] mutable map with key-value pairs for each character of the given char sequence, where key is the character itself and value is provided by the [valueSelector] function applied to that key.
If any two characters are equal, the last one overwrites the former value in the map.
@sample
samples.text.Strings.associateWithTo
*/
@SinceKotlin("1.3")
public inline fun <V, M : MutableMap<in Char, in V>>
CharSequence.associateWithTo(destination: M, valueSelector: (Char) -> V): M {
 for (element in this) {
 destination.put(element, valueSelector(element))
 }
 return destination
}
Appends all characters to the given [destination] collection.
public fun
<C : MutableCollection<in Char>> CharSequence.toCollection(destination: C): C {
 for (item in this) {
 destination.add(item)
 }
 return destination
}
Returns a new [HashSet] of all characters.
public fun CharSequence.toHashSet(): HashSet<Char> {
 return
 toCollection(HashSet<Char>(mapCapacity(length.coerceAtMost(128))))
}
Returns a [List] containing all characters.
public fun CharSequence.toList(): List<Char> {
 return when (length) {
 0 ->
 emptyList()
 1 -> listOf(this[0])
 else -> this.toMutableList()
 }
}
Returns a new [MutableList] filled with all characters of this char sequence.
public fun CharSequence.toMutableList():
MutableList<Char> {
 return toCollection(ArrayList<Char>(length))
}
Returns a [Set] of all characters.
The returned set preserves the element iteration order of the original char sequence.
public fun CharSequence.toSet(): Set<Char>
{
 return when (length) {
 0 -> emptySet()
 1 -> setOf(this[0])
 else ->
 toCollection(LinkedHashSet<Char>(mapCapacity(length.coerceAtMost(128))))
 }
}
Returns a single list of all elements yielded from results of [transform] function being invoked on each character of original char sequence.
@sample
samples.collections.Collections.Transformations.flatMap
*/
public inline fun <R>
CharSequence.flatMap(transform: (Char) -> Iterable<R>): List<R> {
 return flatMapTo(ArrayList<R>(),
 transform)
}
Returns a single list of all elements yielded from results of [transform] function being invoked on each character and its index in the original char sequence.
@sample
samples.collections.Collections.Transformations.flatMapIndexed
*/
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@kotlin.jvm.JvmName("flatMapIndexedIterable")
@kotlin.internal.InlineOnly
public
inline fun <R> CharSequence.flatMapIndexed(transform: (index: Int, Char) -> Iterable<R>): List<R> {
 return
 flatMapIndexedTo(ArrayList<R>(), transform)
}
Appends all elements yielded from results of [transform] function being invoked on each character and its index in the original char sequence, to the given [destination].
*/
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@kotlin.jvm.JvmName("flatMapIndexedIterableTo")
@kotlin.internal.InlineOnly
public
c inline fun <R, C : MutableCollection<in R>> CharSequence.flatMapIndexedTo(destination: C, transform: (index: Int, Char) -> Iterable<R>): C {
 var index = 0
 for (element in this) {
 val list = transform(index++,
 element)
 destination.addAll(list)
 }
 return destination
}
Appends all elements yielded from results of [transform] function being invoked on each character of original char sequence, to the given [destination].
public inline fun <R, C : MutableCollection<in R>>
CharSequence.flatMapTo(destination: C, transform: (Char) -> Iterable<R>): C {
 for (element in this) {
 val

```

```

list = transform(element)\n destination.addAll(list)\n }\n return destination\n}\n\n/**\n * Groups characters
of the original char sequence by the key returned by the given [keySelector] function\n * applied to each character
and returns a map where each group key is associated with a list of corresponding characters.\n * \n * The returned
map preserves the entry iteration order of the keys produced from the original char sequence.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n */\npublic inline fun <K>
CharSequence.groupBy(keySelector: (Char) -> K): Map<K, List<Char>> {\n return
groupByTo(LinkedHashMap<K, MutableList<Char>>(), keySelector)\n}\n\n/**\n * Groups values returned by the
[valueTransform] function
applied to each character of the original char sequence\n * by the key returned by the given [keySelector] function
applied to the character\n * and returns a map where each group key is associated with a list of corresponding
values.\n * \n * The returned map preserves the entry iteration order of the keys produced from the original char
sequence.\n * \n * @sample samples.collections.Collections.Transformations.groupByKeysAndValues\n */\npublic
inline fun <K, V> CharSequence.groupBy(keySelector: (Char) -> K, valueTransform: (Char) -> V): Map<K,
List<V>> {\n return groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector,
valueTransform)\n}\n\n/**\n * Groups characters of the original char sequence by the key returned by the given
[keySelector] function\n * applied to each character and puts to the [destination] map each group key associated
with a list of corresponding characters.\n * \n * @return The [destination] map.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n */\npublic inline fun <K, M : MutableMap<in K, MutableList<Char>>>
CharSequence.groupByTo(destination: M,
keySelector: (Char) -> K): M {\n for (element in this) {\n val key = keySelector(element)\n val list =
destination.getOrPut(key) { ArrayList<Char>() }\n list.add(element)\n }\n return destination\n}\n\n/**\n *
Groups values returned by the [valueTransform] function applied to each character of the original char sequence\n *
by the key returned by the given [keySelector] function applied to the character\n * and puts to the [destination] map
each group key associated with a list of corresponding values.\n * \n * @return The [destination] map.\n * \n *
@sample samples.collections.Collections.Transformations.groupByKeysAndValues\n */\npublic inline fun <K, V,
M : MutableMap<in K, MutableList<V>>>
CharSequence.groupByTo(destination: M, keySelector: (Char) -> K,
valueTransform: (Char) -> V): M {\n for (element in this) {\n val key
= keySelector(element)\n val list = destination.getOrPut(key) { ArrayList<V>() }\n
list.add(valueTransform(element))\n }\n return destination\n}\n\n/**\n * Creates a [Grouping] source from a
char sequence to be used later with one of group-and-fold operations\n * using the specified [keySelector] function
to extract a key from each character.\n * \n * @sample samples.collections.Grouping.groupingByEachCount\n */\n@SinceKotlin("1.1")\npublic inline fun <K>
CharSequence.groupingBy(crossinline keySelector: (Char) -> K):
Grouping<Char, K> {\n return object : Grouping<Char, K> {\n override fun sourceIterator(): Iterator<Char>
= this@groupingBy.iterator()\n override fun keyOf(element: Char): K = keySelector(element)\n }\n}\n\n/**\n *
Returns a list containing the results of applying the given [transform] function\n * to each character in the original
char sequence.\n * \n * @sample samples.text.Strings.map\n */\npublic inline fun <R>
CharSequence.map(transform:
(Char) -> R): List<R> {\n return mapTo(ArrayList<R>(length), transform)\n}\n\n/**\n * Returns a list containing
the results of applying the given [transform] function\n * to each character and its index in the original char
sequence.\n * \n * @param [transform] function that takes the index of a character and the character itself\n * and returns
the result of the transform applied to the character.\n */\npublic inline fun <R>
CharSequence.mapIndexed(transform: (index: Int, Char) -> R): List<R> {\n return
mapIndexedTo(ArrayList<R>(length), transform)\n}\n\n/**\n * Returns a list containing only the non-null results of
applying the given [transform] function\n * to each character and its index in the original char sequence.\n *
@param [transform] function that takes the index of a character and the character itself\n * and returns the result of
the transform applied to the character.\n */\npublic inline fun <R : Any>
CharSequence.mapIndexedNotNull(transform: (index: Int, Char)

```

```

-> R?): List<R> {
 return mapIndexedNotNullTo(ArrayList<R>(), transform)
}

Applies the given [transform] function to each character and its index in the original char sequence and appends only the non-null results to the given [destination].

@param [transform] function that takes the index of a character and the character itself and returns the result of the transform applied to the character.

public inline fun <R : Any, C : MutableCollection<in R>> CharSequence.mapIndexedNotNullTo(destination: C, transform: (index: Int, Char) -> R?): C {
 forEachIndexed { index, element -> transform(index, element)?.let { destination.add(it) } }
 return destination
}

Applies the given [transform] function to each character and its index in the original char sequence and appends the results to the given [destination].

@param [transform] function that takes the index of a character and the character itself and returns the result of the transform applied to the character.

public inline fun <R, C : MutableCollection<in R>> CharSequence.mapIndexedTo(destination: C, transform: (index: Int, Char) -> R): C {
 var index = 0
 for (item in this)
 destination.add(transform(index++, item))
 return destination
}

Returns a list containing only the non-null results of applying the given [transform] function to each character in the original char sequence.

@sample samples.collections.Collections.Transformations.mapNotNull

public inline fun <R : Any> CharSequence.mapNotNull(transform: (Char) -> R?): List<R> {
 return mapNotNullTo(ArrayList<R>(), transform)
}

Applies the given [transform] function to each character in the original char sequence and appends only the non-null results to the given [destination].

public inline fun <R : Any, C : MutableCollection<in R>> CharSequence.mapNotNullTo(destination: C, transform: (Char) -> R?): C {
 forEach {
 element -> transform(element)?.let { destination.add(it) }
 }
 return destination
}

Applies the given [transform] function to each character of the original char sequence and appends the results to the given [destination].

public inline fun <R, C : MutableCollection<in R>> CharSequence.mapTo(destination: C, transform: (Char) -> R): C {
 for (item in this)
 destination.add(transform(item))
 return destination
}

Returns a lazy [Iterable] that wraps each character of the original char sequence into an [IndexedValue] containing the index of that character and the character itself.

public fun CharSequence.withIndex(): Iterable<IndexedValue<Char>> {
 return IndexingIterable { iterator() }
}

Returns `true` if all characters match the given [predicate].

@sample samples.collections.Collections.Aggregates.all

public inline fun CharSequence.all(predicate: (Char) -> Boolean): Boolean {
 for (element in this)
 if (!predicate(element)) return false
 return true
}

Returns `true` if char sequence has at least one character.

@sample samples.collections.Collections.Aggregates.any

public fun CharSequence.any(): Boolean {
 return !isEmpty()
}

Returns `true` if at least one character matches the given [predicate].

@sample samples.collections.Collections.Aggregates.anyWithPredicate

public inline fun CharSequence.any(predicate: (Char) -> Boolean): Boolean {
 for (element in this)
 if (predicate(element)) return true
 return false
}

Returns the length of this char sequence.

@kotlin.internal.InlineOnly

public inline fun CharSequence.count(): Int {
 return length
}

Returns the number of characters matching the given [predicate].

public inline fun CharSequence.count(predicate: (Char) -> Boolean): Int {
 var count = 0
 for (element in this)
 if (predicate(element)) ++count
 return count
}

Accumulates value starting with [initial] value and applying [operation] from left to right to current accumulator value and each character.

Returns the specified [initial] value if the char sequence is empty.

@param [operation] function that takes current accumulator value and a character, and calculates the next accumulator value.

public inline fun <R> CharSequence.fold(initial: R, operation: (acc: R, Char) -> R): R {
 var accumulator = initial
 for (element in this)
 accumulator = operation(accumulator, element)
 return accumulator
}

Accumulates value starting with [initial] value and applying [operation] from left to right to current accumulator value and each character with its index in the original char sequence.

Returns the specified [initial] value if the char sequence is empty.

@param [operation] function that takes the index of a character, current accumulator value and the character

```

itself, and calculates the next accumulator value.

```

public inline fun <R> CharSequence.foldIndexed(initial: R,
operation: (index: Int, acc: R, Char) -> R): R {
 var index = 0
 var accumulator = initial
 for (element in this)
 accumulator = operation(index++, accumulator, element)
 return accumulator
}

```

\* Accumulates value starting with [initial] value and applying [operation] from right to left to each character and current accumulator value.

\* Returns the specified [initial] value if the char sequence is empty.

@param [operation] function that takes a character and current accumulator value, and calculates the next accumulator value.

```

public inline fun <R> CharSequence.foldRight(initial: R, operation: (Char, acc: R) -> R): R {
 var index = lastIndex
 var accumulator = initial
 while (index >= 0) {
 accumulator = operation(get(index--), accumulator)
 }
 return accumulator
}

```

\* Accumulates value starting with [initial] value and applying [operation] from right to left to each character with its index in the original char sequence and current accumulator value.

\* Returns the specified [initial] value if the char sequence is empty.

@param [operation] function that takes the index of a character, the character itself and current accumulator value, and calculates the next accumulator value.

```

public inline fun <R> CharSequence.foldRightIndexed(initial: R, operation: (index: Int, Char, acc: R) -> R): R {
 var index = lastIndex
 var accumulator = initial
 while (index >= 0) {
 accumulator = operation(index, get(index), accumulator)
 --index
 }
 return accumulator
}

```

\* Performs the given [action] on each character.

```

public inline fun CharSequence.forEach(action: (Char) -> Unit): Unit {
 for (element in this)
 action(element)
}

```

\* Performs the given [action] on each character, providing sequential index with the character.

@param [action] function that takes the index of a character and the character itself and performs the action on the character.

```

public inline fun CharSequence.forEachIndexed(action: (index: Int, Char) -> Unit): Unit {
 var index = 0
 for (item in this)
 action(index++, item)
}

```

\* Returns the largest character.

\* @throws NoSuchElementException if the char sequence is empty.

```

@SinceKotlin("1.7")
@kotlin.jvm.JvmName("maxOrThrow")
@Suppress("CONFLICTING_OVERLOADS")
public fun CharSequence.max(): Char {
 if (isEmpty()) throw NoSuchElementException()
 var max = this[0]
 for (i in 1..lastIndex) {
 val e = this[i]
 if (max < e) max = e
 }
 return max
}

```

\* Returns the first character yielding the largest value of the given function.

\* @throws NoSuchElementException if the char sequence is empty.

@sample samples.collections.Collections.Aggregates.maxBy

```

@SinceKotlin("1.7")
@kotlin.jvm.JvmName("maxByOrThrow")
@Suppress("CONFLICTING_OVERLOADS")
public inline fun <R : Comparable<R>> CharSequence.maxBy(selector: (Char) -> R): Char {
 if (isEmpty()) throw NoSuchElementException()
 var maxElem = this[0]
 val lastIndex = this.lastIndex
 if (lastIndex == 0) return maxElem
 var maxValue = selector(maxElem)
 for (i in 1..lastIndex) {
 val e = this[i]
 val v = selector(e)
 if (maxValue < v) {
 maxElem = e
 maxValue = v
 }
 }
 return maxElem
}

```

\* Returns the first character yielding the largest value of the given function or `null` if there are no characters.

@sample samples.collections.Collections.Aggregates.maxByOrNull

```

@SinceKotlin("1.4")
public inline fun <R : Comparable<R>> CharSequence.maxByOrNull(selector: (Char) -> R): Char? {
 if (isEmpty()) return null
 var maxElem = this[0]
 val lastIndex = this.lastIndex
 if (lastIndex == 0) return maxElem
 var maxValue = selector(maxElem)
 for (i in 1..lastIndex) {
 val e = this[i]
 val v = selector(e)
 if (maxValue < v) {
 maxElem = e
 maxValue = v
 }
 }
 return maxElem
}

```

\* Returns the largest value among all values produced by [selector] function applied to each character in the char sequence.

\* If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.

@throws NoSuchElementException if the char sequence is empty.

```

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun CharSequence.maxOf(selector: (Char) -> Double): Double {
 if (isEmpty()) throw NoSuchElementException()
 var maxValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 maxValue = maxOf(maxValue, v)
 }
 return maxValue
}

```

\* Returns the largest value among all values produced by [selector] function applied to each character in the char sequence.

\* If any of values produced

by [selector] function is `NaN`, the returned result is `NaN`.  
@throws NoSuchElementException if the char sequence is empty.

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.maxOf(selector: (Char) -> Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return\n maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each character in the char sequence.\n * @throws NoSuchElementException\n * if the char sequence is empty.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>\nCharSequence.maxOf(selector: (Char) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var\n maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values\n * produced by [selector] function\n * applied to each character in the char sequence or `null` if there are no\n * characters.\n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.maxOfOrNull(selector:\n(Char) -> Double): Double? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in\n 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return\n maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each character in the char sequence or `null` if there are no characters.\n * If any of values produced by\n * [selector] function is `NaN`, the returned result is `NaN`.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.maxOfOrNull(selector:\n(Char) -> Float): Float? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in\n 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return\n maxValue\n}\n\n/**\n * Returns the largest value\n * among all values produced by [selector] function\n * applied to each character in the char sequence or `null` if there\n * are no characters.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>\nCharSequence.maxOfOrNull(selector: (Char) -> R): R? {\n if (isEmpty()) return null\n var maxValue =\n selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value according to the provided\n * [comparator]\n * among all values produced by [selector] function applied to each character in the char sequence.\n * @throws NoSuchElementException if the char sequence is empty.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic\ninline fun <R> CharSequence.maxOfWith(comparator: Comparator<in R>, selector: (Char) -> R): R {\n if\n (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all\n * values produced by [selector] function applied to each character in the char sequence or `null` if there are no\n * characters.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nCharSequence.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Char) -> R): R? {\n if (isEmpty())
```

```

return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest character or `null` if there are no characters.\n */\n\n@SinceKotlin("1.4")\npublic fun CharSequence.maxOrNull(): Char? {\n if (isEmpty()) return null\n var\n max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (max < e) max = e\n }\n return\n max\n}\n\n/**\n * Returns the first character having the largest value according to the provided [comparator].\n * \n * @throws NoSuchElementException if the char sequence is empty.\n */\n\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxWithOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun CharSequence.maxWith(comparator: Comparator<in Char>): Char {\n if (isEmpty())\n throw NoSuchElementException()\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if\n (comparator.compare(max, e) < 0)\n max = e\n }\n return max\n}\n\n/**\n * Returns the first character having the largest value according to the\n provided [comparator] or `null` if there are no characters.\n */\n\n@SinceKotlin("1.4")\npublic fun\n CharSequence.maxWithOrNull(comparator: Comparator<in Char>): Char? {\n if (isEmpty()) return null\n var\n max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return max\n}\n\n/**\n * Returns the smallest character.\n * \n * @throws NoSuchElementException if the\n char sequence is empty.\n */\n\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun CharSequence.min(): Char {\n if (isEmpty()) throw NoSuchElementException()\n var min =\n this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return min\n}\n\n/**\n * Returns the first character yielding the smallest value of the given function.\n * \n * \n * @throws NoSuchElementException if the char sequence is empty.\n * \n * @sample\n samples.collections.Collections.Aggregates.minBy\n */\n\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow")\n@Suppress("CONFLICTING_OVERLOADS")\npublic inline fun <R : Comparable<R>> CharSequence.minBy(selector: (Char) -> R): Char {\n if\n (isEmpty()) throw NoSuchElementException()\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if\n (lastIndex == 0) return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e =\n this[i]\n val v = selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the first character yielding the smallest value of the given function or\n `null` if there are no characters.\n * \n * \n * @sample samples.collections.Collections.Aggregates.minByOrNull\n */\n\n@SinceKotlin("1.4")\npublic inline fun <R : Comparable<R>>\n CharSequence.minByOrNull(selector: (Char) -> R): Char? {\n if (isEmpty()) return null\n var minElem =\n this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var minValue =\n selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue > v)\n {\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the smallest\n value among all values produced by [selector] function\n * applied to each character in the char sequence.\n * \n * \n * If\n any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws\n NoSuchElementException if the char sequence is empty.\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\n ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.minOf(selector: (Char) ->\n Double): Double {\n if (isEmpty()) throw\n NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =\n selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest\n value among all values produced by [selector] function\n * applied to each character in the char sequence.\n * \n * \n * If\n any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws\n NoSuchElementException if the char sequence is empty.\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\n ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.minOf(selector: (Char) ->

```



```

Float): Float {
 if (isEmpty()) throw NoSuchElementException()
 var minValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 minValue = minOf(minValue, v)
 }
 return
 minValue
}

Returns the smallest value among all values produced by [selector] function applied to each character in the char sequence.

@throws NoSuchElementException if the char sequence is empty.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>>
CharSequence.minOf(selector: (Char) -> R): R {
 if (isEmpty()) throw NoSuchElementException()
 var
 minValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if (minValue > v) {
 minValue = v
 }
 }
 return minValue
}

Returns the smallest value among all values produced by [selector] function applied to each character in the char sequence or `null` if there are no characters.

If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public
inline fun CharSequence.minOfOrNull(selector: (Char) -> Double): Double? {
 if (isEmpty()) return null
 var
 minValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 minValue =
 minOf(minValue, v)
 }
 return minValue
}

Returns the smallest value among all values produced by [selector] function applied to each character in the char sequence or `null` if there are no characters.

If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun CharSequence.minOfOrNull(selector:
(Char) -> Float): Float? {
 if (isEmpty()) return null
 var minValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 minValue = minOf(minValue, v)
 }
 return minValue
}

Returns the smallest value among all values produced by [selector] function applied to each character in the char sequence or `null` if there are no characters.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>>
CharSequence.minOfOrNull(selector: (Char) -> R): R? {
 if (isEmpty()) return null
 var minValue =
 selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if (minValue > v) {
 minValue = v
 }
 }
 return minValue
}

Returns the smallest value according to the provided [comparator] among all values produced by [selector] function applied to each character in the char sequence.

@throws NoSuchElementException if the char sequence is empty.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <R> CharSequence.minOfWith(comparator:
Comparator<in R>, selector: (Char) -> R): R {
 if (isEmpty()) throw NoSuchElementException()
 var
 minValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if
 (comparator.compare(minValue, v) > 0) {
 minValue = v
 }
 }
 return minValue
}

Returns the smallest value according to the provided [comparator] among all values produced by [selector] function applied to each character in the char sequence or `null` if there are no characters.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <R>
CharSequence.minOfWithOrNull(comparator: Comparator<in
R>, selector: (Char) -> R): R? {
 if (isEmpty()) return null
 var minValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if (comparator.compare(minValue, v) > 0) {
 minValue =
 v
 }
 }
 return minValue
}

Returns the smallest character or `null` if there are no characters.

@SinceKotlin("1.4")
public fun CharSequence.minOrNull(): Char? {
 if (isEmpty()) return
 null
 var min = this[0]
 for (i in 1..lastIndex) {
 val e = this[i]
 if (min > e) min = e
 }
 return
}

```

```

min\n}\n\n/**\n * Returns the first character having the smallest value according to the provided [comparator].\n *
\n * @throws NoSuchElementException if the char sequence is empty.\n
\n *\n *\n @SinceKotlin("1.7")\n @kotlin.jvm.JvmName("minWithOrThrow")\n @Suppress("CONFLICTING_OVERLOADS")\n public fun CharSequence.minWith(comparator: Comparator<in Char>): Char {\n if (isEmpty()) throw
\n NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if
\n (comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n/**\n * Returns the first character having the
\n * smallest value according to the provided [comparator] or `null` if there are no characters.\n
\n *\n *\n @SinceKotlin("1.4")\n public fun CharSequence.minWithOrNull(comparator: Comparator<in Char>): Char?
\n {\n if (isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if
\n (comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n/**\n * Returns `true` if the char sequence has
\n * no characters.\n * \n * @sample samples.collections.Collections.Aggregates.none\n *\n *\n public fun
\n CharSequence.none(): Boolean {\n return isEmpty()\n}\n\n/**\n * Returns `true` if no characters match the given
\n * [predicate].\n * \n * @sample samples.collections.Collections.Aggregates.noneWithPredicate\n *\n *\n public inline
\n fun CharSequence.none(predicate: (Char) -> Boolean): Boolean {\n for (element in this) if (predicate(element))
\n return false\n return true\n}\n\n/**\n * Performs the given [action] on each character and returns the char sequence
\n * itself afterwards.\n * \n *\n @SinceKotlin("1.1")\n public inline fun <S : CharSequence> S.onEach(action: (Char) ->
\n Unit): S {\n return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given [action] on
\n * each character, providing sequential index with the character,\n * and returns the char sequence itself afterwards.\n *
\n * @param [action] function that takes the index of a character and the character itself\n * and performs the action on
\n * the character.\n * \n *\n @SinceKotlin("1.4")\n public inline fun <S : CharSequence> S.onEachIndexed(action: (index:
\n Int, Char) -> Unit): S {\n return apply { forEachIndexed(action) }\n}\n\n/**\n * Accumulates value starting with
\n * the first character and applying [operation] from left to right\n * to
\n * current accumulator value and each character.\n * \n * Throws an exception if this char sequence is empty. If the
\n * char sequence can be empty in an expected way,\n * please use [reduceOrNull] instead. It returns `null` when its
\n * receiver is empty.\n * \n * @param [operation] function that takes current accumulator value and a character,\n *
\n * and calculates the next accumulator value.\n * \n *\n @sample samples.collections.Collections.Aggregates.reduce\n *\n *\n public inline fun CharSequence.reduce(operation: (acc: Char, Char) -> Char): Char {\n if (isEmpty())\n throw UnsupportedOperationException("Empty char sequence can't be reduced.")\n var accumulator = this[0]\n for
\n (index in 1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return
\n accumulator\n}\n\n/**\n * Accumulates value starting with the first character and applying [operation] from left to
\n * right\n * to current accumulator value and each character with its index in the original
\n * char sequence.\n * \n * Throws an exception if this char sequence is empty. If the char sequence can be empty in an
\n * expected way,\n * please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n *
\n * @param [operation] function that takes the index of a character, current accumulator value and the character itself,\n *
\n * and calculates the next accumulator value.\n * \n *\n @sample samples.collections.Collections.Aggregates.reduce\n *\n *\n public inline fun CharSequence.reduceIndexed(operation: (index: Int, acc: Char, Char) -> Char): Char {\n if
\n (isEmpty())\n throw UnsupportedOperationException("Empty char sequence can't be reduced.")\n var
\n accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(index, accumulator,
\n this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first character and
\n * applying [operation] from left to right\n * to current accumulator value and each character
\n * with its index in the original char sequence.\n * \n * Returns `null` if the char sequence is empty.\n * \n * @param
\n * [operation] function that takes the index of a character, current accumulator value and the character itself,\n * and
\n * calculates the next accumulator value.\n * \n *\n @sample samples.collections.Collections.Aggregates.reduceOrNull\n *\n *\n @SinceKotlin("1.4")\n public inline fun CharSequence.reduceIndexedOrNull(operation: (index: Int, acc: Char,
\n Char) -> Char): Char? {\n if (isEmpty())\n return null\n var accumulator = this[0]\n for (index in
\n 1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n return
\n accumulator\n}\n\n/**\n * Accumulates value starting with the first character and applying [operation] from left to
\n * right\n * to current accumulator value and each character.\n * \n * Returns `null` if the char sequence is empty.\n *
\n *

```

```

\n * @param [operation] function that takes current accumulator value and a character,\n
 * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceOrNull\n
*/\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
CharSequence.reduceOrNull(operation: (acc: Char, Char) -> Char): Char? {\n if (isEmpty())\n return null\n
var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n
}\n return accumulator\n}\n\n/**\n * Accumulates value starting with the last character and applying [operation]
from right to left\n * to each character and current accumulator value.\n * \n * Throws an exception if this char
sequence is empty. If the char sequence can be empty in an expected way,\n * please use [reduceRightOrNull]
instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function that takes a character and
current accumulator value,\n * and calculates the next accumulator value.\n * \n
 * @sample samples.collections.Collections.Aggregates.reduceRight\n */\npublic inline fun
CharSequence.reduceRight(operation: (Char, acc: Char) -> Char): Char {\n var index = lastIndex\n if (index < 0)
throw UnsupportedOperationException("Empty char sequence can't be reduced.")\n var accumulator = get(index-
-)\n while (index >= 0) {\n accumulator = operation(get(index--), accumulator)\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with the last character and applying [operation] from right to
left\n * to each character with its index in the original char sequence and current accumulator value.\n * \n * Throws
an exception if this char sequence is empty. If the char sequence can be empty in an expected way,\n * please use
[reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation]
function that takes the index of a character, the character itself and current accumulator value,\n * and calculates
the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRight\n */\npublic
inline fun CharSequence.reduceRightIndexed(operation: (index: Int, Char, acc: Char) -> Char): Char {\n var index
= lastIndex\n if (index < 0) throw UnsupportedOperationException("Empty char sequence can't be reduced.")\n
var accumulator = get(index--)\n while (index >= 0) {\n accumulator = operation(index, get(index),
accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the last
character and applying [operation] from right to left\n * to each character with its index in the original char sequence
and current accumulator value.\n * \n * Returns `null` if the char sequence is empty.\n * \n * @param [operation]
function that takes the index of a character, the character itself and current accumulator value,\n * and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRightOrNull\n
*/\n@SinceKotlin("1.4")\npublic inline fun CharSequence.reduceRightIndexedOrNull(operation: (index: Int,
Char, acc: Char) -> Char): Char? {\n var index = lastIndex\n if (index < 0) return null\n var accumulator =
get(index--)\n while (index >= 0) {\n accumulator = operation(index, get(index), accumulator)\n --index\n
}\n return accumulator\n}\n\n/**\n * Accumulates value starting with the last character and applying [operation]
from right to left\n * to each character and current accumulator value.\n * \n * Returns `null` if the char sequence is
empty.\n * \n * @param [operation] function that takes a character and current accumulator value,\n * and calculates
the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRightOrNull\n
*/\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
CharSequence.reduceRightOrNull(operation: (Char, acc: Char) ->
Char): Char? {\n var index = lastIndex\n if (index < 0) return null\n var accumulator = get(index--)\n while
(index >= 0) {\n accumulator = operation(get(index--), accumulator)\n }\n return accumulator\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to
each character and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to
[operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n *
@param [operation] function that takes current accumulator value and a character, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*/\n@SinceKotlin("1.4")\npublic inline fun <R> CharSequence.runningFold(initial: R, operation: (acc: R, Char) ->
R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(length

```

```

+ 1).apply { add(initial) }
var accumulator = initial
for (element in this) {
 accumulator =
operation(accumulator, element)
result.add(accumulator)
}
return result
}

Returns a list
containing successive accumulation values generated by applying [operation] from left to right
to each character,
its index in the original char sequence and current accumulator value that starts with [initial] value.
Note
that `acc` value passed to [operation] function should not be mutated;
otherwise it would affect the previous
value in resulting list.
@param [operation] function that takes the index of a character, current accumulator
value
and the character itself, and calculates the next accumulator value.
@sample
samples.collections.Collections.Aggregates.runningFold
*/
@SinceKotlin("1.4")
public inline fun <R>
CharSequence.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Char) -> R): List<R>
{
 if (isEmpty()) return listOf(initial)
 val result = ArrayList<R>(length + 1).apply { add(initial) }
 var
accumulator = initial
for (index in indices) {
 accumulator = operation(index, accumulator, this[index])
result.add(accumulator)
}
return result
}

Returns a list containing successive accumulation
values generated by applying [operation] from left to right
to each character and current accumulator value that
starts with the first character of this char sequence.
Note
that `acc` value passed to [operation] function
should not be mutated;
otherwise it would affect the previous value in resulting list.
@param [operation]
function that takes current accumulator value and a character, and calculates the next accumulator value.
@sample
samples.collections.Collections.Aggregates.runningReduce
*/
@SinceKotlin("1.4")
public inline fun
CharSequence.runningReduce(operation: (acc: Char, Char)
-> Char): List<Char> {
 if (isEmpty()) return emptyList()
 var accumulator = this[0]
 val result =
ArrayList<Char>(length).apply { add(accumulator) }
for (index in 1 until length) {
 accumulator =
operation(accumulator, this[index])
result.add(accumulator)
}
return result
}

Returns a list
containing successive accumulation values generated by applying [operation] from left to right
to each character,
its index in the original char sequence and current accumulator value that starts with the first character of this char
sequence.
Note
that `acc` value passed to [operation] function should not be mutated;
otherwise it would
affect the previous value in resulting list.
@param [operation] function that takes the index of a character,
current accumulator value
and the character itself, and calculates the next accumulator value.
@sample
samples.collections.Collections.Aggregates.runningReduce
*/
@SinceKotlin("1.4")
public inline fun CharSequence.runningReduceIndexed(operation: (index: Int, acc:
Char, Char) -> Char): List<Char> {
 if (isEmpty()) return emptyList()
 var accumulator = this[0]
 val result
= ArrayList<Char>(length).apply { add(accumulator) }
for (index in 1 until length) {
 accumulator =
operation(index, accumulator, this[index])
result.add(accumulator)
}
return result
}

Returns a list containing successive accumulation values generated by applying [operation] from left to right
to each character and current accumulator value that starts with [initial] value.
Note
that `acc` value passed to
[operation] function should not be mutated;
otherwise it would affect the previous value in resulting list.
@param [operation] function that takes current accumulator value and a character, and calculates the next
accumulator value.
@sample
samples.collections.Collections.Aggregates.scan
*/
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public inline fun <R>
CharSequence.scan(initial: R, operation: (acc: R, Char) -> R): List<R> {
 return runningFold(initial,
operation)
}

Returns a list containing successive accumulation values generated by applying [operation]
from left to right
to each character, its index in the original char sequence and current accumulator value that
starts with [initial] value.
Note
that `acc` value passed to [operation] function should not be mutated;
otherwise it would affect the previous value in resulting list.
@param [operation] function that takes the
index of a character, current accumulator value
and the character itself, and calculates the next accumulator
value.
@sample
samples.collections.Collections.Aggregates.scan
*/
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public inline fun <R>
CharSequence.scanIndexed(initial: R,
operation: (index: Int, acc: R, Char) -> R): List<R> {
 return runningFoldIndexed(initial, operation)
}

Returns the sum of all values produced by [selector] function applied to each character in the char sequence.

```

```

*\n@Deprecated("Use sumOf instead.\n",
ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun
CharSequence.sumBy(selector: (Char) -> Int): Int {\n var sum: Int = 0\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each character in the char sequence.\n */\n@Deprecated("Use sumOf instead.\n",
ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun
CharSequence.sumByDouble(selector: (Char) -> Double): Double {\n var sum: Double = 0.0\n for (element in
this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns
the sum of all values produced by [selector] function applied to each character in the char sequence.\n */
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfDouble")\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence.sumOf(selector: (Char) -> Double): Double {\n var sum: Double = 0.toDouble()\n for (element in
this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each character in the char sequence.\n */
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfInt")\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence.sumOf(selector: (Char) -> Int): Int {\n var sum: Int = 0.toInt()\n for (element in this) {\n sum
+= selector(element)\n }\n return
sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each character in the
char sequence.\n */
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfLong")\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence.sumOf(selector: (Char) -> Long): Long {\n var sum: Long = 0.toLong()\n for (element in this) {\n
sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each character in the char sequence.\n */
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType
s::class)\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.sumOf(selector: (Char) -> UInt): UInt {\n
var sum: UInt = 0.toUInt()\n for (element
in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced
by [selector] function applied to each character in the char sequence.\n */
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfULong")\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.sumOf(selector: (Char) -> ULong):
ULong {\n var sum: ULong = 0.toULong()\n for (element in this) {\n sum += selector(element)\n }\n
return sum\n}\n\n/**\n * Splits this char sequence into a list of strings each not exceeding the given [size].\n * \n *
The last string in the resulting list may have fewer characters than the given [size].\n * \n * @param size the number
of elements to take in each string, must be positive and can be greater than the number of elements in this char
sequence.\n * \n * @sample
samples.text.Strings.chunked\n */\n@SinceKotlin("1.2")\npublic fun CharSequence.chunked(size: Int):
List<String> {\n return windowed(size, size, partialWindows = true)\n}\n\n/**\n * Splits this char sequence into
several char sequences each not exceeding the given [size]\n * and applies the given [transform] function to an
each.\n * \n * @return list of results of the [transform] applied to an each char sequence.\n * \n * Note that the char
sequence passed to the [transform] function is ephemeral and is valid only inside that function.\n * You should not
store it or allow it to escape in some way, unless you made a snapshot of it.\n * The last char sequence may have
fewer characters than the given [size].\n * \n * @param size the number of elements to take in each char sequence,
must be positive and can be greater than the number of elements in this char sequence.\n * \n * @sample
samples.text.Strings.chunkedTransform\n */\n@SinceKotlin("1.2")\npublic fun <R> CharSequence.chunked(size:

```

```

Int, transform: (CharSequence) -> R): List<R> {\n return windowed(size, size, partialWindows = true, transform
= transform)\n}\n\n/**\n * Splits this char sequence into a sequence of strings each not exceeding the given [size].\n
* \n * The last string in the resulting sequence may have fewer characters than the given [size].\n * \n * @param size
the number of elements to take in each string, must be positive and can be greater than the number of elements in
this char sequence.\n * \n * @sample samples.collections.Collections.Transformations.chunked\n
*\n@SinceKotlin("1.2")\npublic fun CharSequence.chunkedSequence(size: Int): Sequence<String> {\n return
chunkedSequence(size) { it.toString() }\n}\n\n/**\n * Splits this char sequence into several char sequences each not
exceeding the given [size]\n * and applies the given [transform] function to an each.\n * \n * @return sequence of
results of the [transform] applied to an each char sequence.\n * \n * Note that the
char sequence passed to the [transform] function is ephemeral and is valid only inside that function.\n * You should
not store it or allow it to escape in some way, unless you made a snapshot of it.\n * The last char sequence may have
fewer characters than the given [size].\n * \n * @param size the number of elements to take in each char sequence,
must be positive and can be greater than the number of elements in this char sequence.\n * \n * @sample
samples.text.Strings.chunkedTransformToSequence\n
*\n@SinceKotlin("1.2")\npublic fun <R>
CharSequence.chunkedSequence(size: Int, transform: (CharSequence) -> R): Sequence<R> {\n return
windowedSequence(size, size, partialWindows = true, transform = transform)\n}\n\n/**\n * Splits the original char
sequence into pair of char sequences,\n * where *first* char sequence contains characters for which [predicate]
yielded `true`,\n * while *second* char sequence contains characters for which [predicate] yielded `false`.\n * \n *
@sample samples.text.Strings.partition\n
*\npublic inline fun CharSequence.partition(predicate: (Char) -> Boolean): Pair<CharSequence, CharSequence>
{\n val first = StringBuilder()\n val second = StringBuilder()\n for (element in this) {\n if
(predicate(element)) {\n first.append(element)\n } else {\n second.append(element)\n }\n }\n return Pair(first, second)\n}\n\n/**\n * Splits the original string into pair of strings,\n * where *first* string
contains characters for which [predicate] yielded `true`,\n * while *second* string contains characters for which
[predicate] yielded `false`.\n * \n * @sample samples.text.Strings.partition\n
*\npublic inline fun
String.partition(predicate: (Char) -> Boolean): Pair<String, String> {\n val first = StringBuilder()\n val second =
StringBuilder()\n for (element in this) {\n if (predicate(element)) {\n first.append(element)\n } else
{\n second.append(element)\n }\n }\n return Pair(first.toString(), second.toString())\n}\n\n/**\n * Returns a list of snapshots of the
window of the given [size]\n * sliding along this char sequence with the given [step], where each\n * snapshot is a
string.\n * \n * Several last strings may have fewer characters than the given [size].\n * \n * Both [size] and [step]
must be positive and can be greater than the number of elements in this char sequence.\n * @param size the number
of elements to take in each window\n * @param step the number of elements to move the window forward by on an
each step, by default 1\n * @param partialWindows controls whether or not to keep partial windows in the end if
any,\n * by default `false` which means partial windows won't be preserved\n * \n * @sample
samples.collections.Sequences.Transformations.takeWindows\n
*\n@SinceKotlin("1.2")\npublic fun
CharSequence.windowed(size: Int, step: Int = 1, partialWindows: Boolean = false): List<String> {\n return
windowed(size,
step, partialWindows) { it.toString() }\n}\n\n/**\n * Returns a list of results of applying the given [transform]
function to\n * an each char sequence representing a view over the window of the given [size]\n * sliding along this
char sequence with the given [step].\n * \n * Note that the char sequence passed to the [transform] function is
ephemeral and is valid only inside that function.\n * You should not store it or allow it to escape in some way,
unless you made a snapshot of it.\n * Several last char sequences may have fewer characters than the given [size].\n
* \n * Both [size] and [step] must be positive and can be greater than the number of elements in this char sequence.\n
* @param size the number of elements to take in each window\n * @param step the number of elements to move
the window forward by on an each step, by default 1\n * @param partialWindows controls whether or not to keep
partial windows in the end if any,\n * by default `false` which means partial windows

```

won't be preserved

```

@sample samples.collections.Sequences.Transformations.averageWindows
*/@SinceKotlin("1.2")
public fun <R> CharSequence.windowed(size: Int, step: Int = 1, partialWindows:
Boolean = false, transform: (CharSequence) -> R): List<R> {
 checkWindowSizeStep(size, step)
 val thisSize = this.length
 val resultCapacity = thisSize / step + if (thisSize % step == 0) 0 else 1
 val result = ArrayList<R>(resultCapacity)
 var index = 0
 while (index in 0 until thisSize) {
 val end = index + size
 val coercedEnd = if (end < 0 || end > thisSize) { if (partialWindows) thisSize else break } else end
 result.add(transform(subSequence(index, coercedEnd)))
 index += step
 }
 return result
}

```

Returns a sequence of snapshots of the window of the given [size] sliding along this char sequence with the given [step], where each snapshot is a string. Several last strings may have fewer characters than the given [size]. Both [size] and [step] must be positive and can be greater than the number of elements in this char sequence.

@param size the number of elements to take in each window

@param step the number of elements to move the window forward by on an each step, by default 1

@param partialWindows controls whether or not to keep partial windows in the end if any, by default `false` which means partial windows won't be preserved

@sample samples.collections.Sequences.Transformations.takeWindows

```

*/@SinceKotlin("1.2")
public fun CharSequence.windowedSequence(size: Int, step: Int = 1, partialWindows:
Boolean = false): Sequence<String> {
 return windowedSequence(size, step, partialWindows) { it.toString() }
}

```

Returns a sequence of results of applying the given [transform] function to an each char sequence representing a view over the window of the given [size] sliding along this char sequence with the given [step]. Note that the char sequence passed to the [transform] function is ephemeral and is valid only inside that function. You should not store it or allow it to escape in some way, unless you made a snapshot of it. Several last char sequences may have fewer characters than the given [size]. Both [size] and [step] must be positive and can be greater than the number of elements in this char sequence.

@param size the number of elements to take in each window

@param step the number of elements to move the window forward by on an each step, by default 1

@param partialWindows controls whether or not to keep partial windows in the end if any, by default `false` which means partial windows won't be preserved

@sample samples.collections.Sequences.Transformations.averageWindows

```

*/@SinceKotlin("1.2")
public fun <R> CharSequence.windowedSequence(size: Int, step: Int = 1, partialWindows: Boolean = false, transform:
(CharSequence) -> R):
Sequence<R> {
 checkWindowSizeStep(size, step)
 val windows = (if (partialWindows) indices else 0 until length - size + 1) step step
 return windows.asSequence().map { index ->
 val end = index + size
 val coercedEnd = if (end < 0 || end > length) length else end
 transform(subSequence(index, coercedEnd))
 }
}

```

Returns a list of pairs built from the characters of `this` and the [other] char sequences with the same index. The returned list has length of the shortest char sequence.

@sample samples.text.Strings.zip

```

*/public infix fun CharSequence.zip(other: CharSequence): List<Pair<Char, Char>> {
 return zip(other) { c1, c2 -> c1 to c2 }
}

```

Returns a list of values built from the characters of `this` and the [other] char sequences with the same index using the provided [transform] function applied to each pair of characters. The returned list has length of the shortest char sequence.

@sample samples.text.Strings.zipWithTransform

```

*/public inline fun <V> CharSequence.zip(other: CharSequence,
transform: (a: Char, b: Char) -> V): List<V> {
 val length = minOf(this.length, other.length)
 val list = ArrayList<V>(length)
 for (i in 0 until length) {
 list.add(transform(this[i], other[i]))
 }
 return list
}

```

Returns a list of pairs of each two adjacent characters in this char sequence. The returned list is empty if this char sequence contains less than two characters.

@sample samples.collections.Collections.Transformations.zipWithNext

```

*/@SinceKotlin("1.2")
public fun CharSequence.zipWithNext(): List<Pair<Char, Char>> {
 return zipWithNext { a, b -> a to b }
}

```

Returns a list containing the results of applying the given [transform] function to an each pair of two adjacent characters in this char sequence. The returned list is empty if this char sequence contains less than two characters.

```

* \n * @sample samples.collections.Collections.Transformations.zipWithNextToFindDeltas\n
*\n@SinceKotlin("1.2")\npublic inline fun <R> CharSequence.zipWithNext(transform: (a: Char, b: Char) -> R):
List<R> {\n val size = length - 1\n if (size < 1) return emptyList()\n val result = ArrayList<R>(size)\n for
(index in 0 until size) {\n result.add(transform(this[index], this[index + 1]))\n }\n return result\n}\n\n/**\n *
Creates an [Iterable] instance that wraps the original char sequence returning its characters when being iterated.\n
*\npublic fun CharSequence.asIterable(): Iterable<Char> {\n if (this is String && isEmpty()) return emptyList()\n
return Iterable { this.iterator() }\n}\n\n/**\n * Creates a [Sequence] instance that wraps the original char sequence
returning its characters when being iterated.\n
*\npublic fun CharSequence.asSequence(): Sequence<Char> {\n if
(this is String && isEmpty()) return emptySequence()\n return Sequence {
this.iterator() }\n}\n\n", "/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("StringsKt")\n\npackage
kotlin.text\nimport kotlin.contracts.contract\nimport kotlin.jvm.JvmName\n\n/**\n * Returns a copy of this string
converted to upper case using the rules of the default locale.\n
*\n@Deprecated("Use uppercase() instead.",
ReplaceWith("uppercase()"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic expect fun
String.toUpperCase(): String\n\n/**\n * Returns a copy of this string converted to upper case using Unicode
mapping rules of the invariant locale.\n
*\n * This function supports one-to-many and many-to-one character
mapping,\n
*\n * thus the length of the returned string can be different from the length of the original string.\n
*\n *
@sample samples.text.Strings.uppercase\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun
String.uppercase(): String\n\n/**\n * Returns a copy of this string converted to lower case using the rules of the
default locale.\n
*\n@Deprecated("Use lowercase() instead.",
ReplaceWith("lowercase()"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic expect fun
String.toLowerCase(): String\n\n/**\n * Returns a copy of this string converted to lower case using Unicode
mapping rules of the invariant locale.\n
*\n * This function supports one-to-many and many-to-one character
mapping,\n
*\n * thus the length of the returned string can be different from the length of the original string.\n
*\n *
@sample samples.text.Strings.lowercase\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun
String.lowercase(): String\n\n/**\n * Returns a copy of this string having its first letter titlecased using the rules of
the default locale,\n
*\n * or the original string if it's empty or already starts with a title case letter.\n
*\n * The title case of a character is
usually the same as its upper case with several exceptions.\n
*\n * The particular list of characters with the special title
case form depends on the underlying platform.\n
*\n *
@sample samples.text.Strings.capitalize\n
*\n@Deprecated("Use replaceFirstChar instead.", ReplaceWith("replaceFirstChar { if (it.isLowerCase())
it.titlecase() else it.toString() }"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic expect fun
String.capitalize(): String\n\n/**\n * Returns a copy of this string having its first letter lowercased using the rules of
the default locale,\n
*\n * or the original string if it's empty or already starts with a lower case letter.\n
*\n *
@sample
samples.text.Strings.decapsialize\n
*\n@Deprecated("Use replaceFirstChar instead.",
ReplaceWith("replaceFirstChar { it.lowercase() }"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic
expect fun String.decapsialize(): String\n\n/**\n * Returns a sub sequence of this char sequence having leading and
trailing characters matching the [predicate] removed.\n
*\npublic inline fun CharSequence.trim(predicate: (Char) ->
Boolean): CharSequence {\n var startIndex = 0\n var endIndex = length - 1\n var startFound = false\n\n while (startIndex <= endIndex) {\n val index = if (!startFound) startIndex else endIndex\n val match =
predicate(this[index])\n\n if (!startFound) {\n if (!match)\n startFound = true\n else\n startIndex += 1\n } else {\n if (!match)\n break\n else\n endIndex -= 1\n }\n }\n\n return subSequence(startIndex, endIndex + 1)\n}\n\n/**\n * Returns a string having leading and
trailing characters matching the [predicate] removed.\n
*\npublic inline fun String.trim(predicate: (Char) ->

```



Boolean): String =\n

(this as CharSequence).trim(predicate).toString()\n\n/\*\*\n \* Returns a sub sequence of this char sequence having leading characters matching the [predicate] removed.\n \*/\npublic inline fun CharSequence.trimStart(predicate: (Char) -> Boolean): CharSequence {\n for (index in this.indices)\n if (!predicate(this[index]))\n return subSequence(index, length)\n}\n\n/\*\*\n \* Returns a string having leading characters matching the [predicate] removed.\n \*/\npublic inline fun String.trimStart(predicate: (Char) -> Boolean): String =\n (this as CharSequence).trimStart(predicate).toString()\n\n/\*\*\n \* Returns a sub sequence of this char sequence having trailing characters matching the [predicate] removed.\n \*/\npublic inline fun CharSequence.trimEnd(predicate: (Char) -> Boolean): CharSequence {\n for (index in this.indices.reversed())\n if (!predicate(this[index]))\n return subSequence(0, index + 1)\n}\n\n/\*\*\n \* Returns a string having trailing characters matching the [predicate] removed.\n \*/\npublic inline fun String.trimEnd(predicate: (Char) -> Boolean): String =\n (this as CharSequence).trimEnd(predicate).toString()\n\n/\*\*\n \* Returns a sub sequence of this char sequence having leading and trailing characters from the [chars] array removed.\n \*/\npublic fun CharSequence.trim(vararg chars: Char): CharSequence = trim { it in chars }\n\n/\*\*\n \* Returns a string having leading and trailing characters from the [chars] array removed.\n \*/\npublic fun String.trim(vararg chars: Char): String = trim { it in chars }\n\n/\*\*\n \* Returns a sub sequence of this char sequence having leading characters from the [chars] array removed.\n \*/\npublic fun CharSequence.trimStart(vararg chars: Char): CharSequence = trimStart { it in chars }\n\n/\*\*\n \* Returns a string having leading characters from the [chars] array removed.\n \*/\npublic fun String.trimStart(vararg chars: Char): String = trimStart { it in chars }\n\n/\*\*\n \* Returns a sub sequence of this char sequence having trailing characters from the [chars] array removed.\n \*/\npublic fun CharSequence.trimEnd(vararg chars: Char): CharSequence = trimEnd { it in chars }\n\n/\*\*\n \* Returns a string having trailing characters from the [chars] array removed.\n \*/\npublic fun String.trimEnd(vararg chars: Char): String = trimEnd { it in chars }\n\n/\*\*\n \* Returns a sub sequence of this char sequence having leading and trailing whitespace removed.\n \*/\npublic fun CharSequence.trim(): CharSequence = trim(Char::isWhitespace)\n\n/\*\*\n \* Returns a string having leading and trailing whitespace removed.\n \*/\npublic fun String.trim(): String = (this as CharSequence).trim().toString()\n\n/\*\*\n \* Returns a sub sequence of this char sequence having leading whitespace removed.\n \*/\npublic fun CharSequence.trimStart(): CharSequence = trimStart(Char::isWhitespace)\n\n/\*\*\n \* Returns a string having leading whitespace removed.\n \*/\npublic fun String.trimStart(): String = (this as CharSequence).trimStart().toString()\n\n/\*\*\n \* Returns a sub sequence of this char sequence having trailing whitespace removed.\n \*/\npublic fun CharSequence.trimEnd(): CharSequence = trimEnd(Char::isWhitespace)\n\n/\*\*\n \* Returns a string having trailing whitespace removed.\n \*/\npublic fun String.trimEnd(): String = (this as CharSequence).trimEnd().toString()\n\n/\*\*\n \* Returns a char sequence with content of this char sequence padded at the beginning\n \* to the specified [length] with the specified character or space.\n \* @param length the desired string length.\n \* @param padChar the character to pad string with, if it has length less than the [length] specified. Space is used by default.\n \* @return Returns a char sequence of length at least [length] consisting of `this` char sequence prepended with [padChar] as many times\n \* as are necessary to reach that length.\n \*/\npublic fun CharSequence.padStart(length: Int, padChar: Char = ' '): CharSequence {\n if (length < 0)\n throw IllegalArgumentException("Desired length \$length is less than zero.")\n if (length <= this.length)\n return this.subSequence(0, this.length)\n val sb = StringBuilder(length)\n for (i in 1..(length - this.length))\n sb.append(padChar)\n sb.append(this)\n return sb\n}\n\n/\*\*\n \* Pads the string to the specified [length] at the beginning with the specified character or space.\n \* @param length the desired string length.\n \* @param padChar the character to pad string with, if it has length less than the [length] specified. Space is used by default.\n \* @return Returns a string of length at least [length] consisting of `this` string prepended with [padChar] as many times\n \* as are necessary to reach that length.\n \*/\n

```

@sample samples.text.Strings.padStart\n *\npublic fun
String.padStart(length: Int, padChar: Char = ' '): String =\n (this as CharSequence).padStart(length,
padChar).toString()\n\n/**\n * Returns a char sequence with content of this char sequence padded at the end\n * to
the specified [length] with the specified character or space.\n *\n * @param length the desired string length.\n *
@param padChar the character to pad string with, if it has length less than the [length] specified. Space is used by
default.\n * @return Returns a char sequence of length at least [length] consisting of `this` char sequence appended
with [padChar] as many times\n * as are necessary to reach that length.\n * @sample samples.text.Strings.padEnd\n
*\npublic fun CharSequence.padEnd(length: Int, padChar: Char = ' '): CharSequence {\n if (length < 0)\n
throw IllegalArgumentException("Desired length $length is less than zero.")\n if (length <= this.length)\n
return this.subSequence(0, this.length)\n\n val sb = StringBuilder(length)\n
sb.append(this)\n for (i in 1..(length - this.length))\n sb.append(padChar)\n return sb\n}\n\n/**\n * Pads
the string to the specified [length] at the end with the specified character or space.\n *\n * @param length the
desired string length.\n * @param padChar the character to pad string with, if it has length less than the [length]
specified. Space is used by default.\n * @return Returns a string of length at least [length] consisting of `this` string
appended with [padChar] as many times\n * as are necessary to reach that length.\n * @sample
samples.text.Strings.padEnd\n *\npublic fun String.padEnd(length: Int, padChar: Char = ' '): String =\n (this as
CharSequence).padEnd(length, padChar).toString()\n\n/**\n * Returns `true` if this nullable char sequence is either
`null` or empty.\n *\n * @sample samples.text.Strings.stringIsNullOrEmpty\n
*\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence?.isNullOrEmpty(): Boolean {\n contract {\n
returns(false)
implies (this@isNullOrEmpty != null)\n } \n\n return this == null || this.length == 0\n}\n\n/**\n * Returns `true`
if this char sequence is empty (contains no characters).\n *\n * @sample samples.text.Strings.stringIsEmpty\n
*\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.isEmpty(): Boolean = length == 0\n\n/**\n *
Returns `true` if this char sequence is not empty.\n *\n * @sample samples.text.Strings.stringIsNotEmpty\n
*\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.isNotEmpty(): Boolean = length > 0\n\n//
implemented differently in JVM and JS\npublic fun String.isBlank(): Boolean = length() == 0 || all {
it.isWhitespace() }\n\n/**\n * Returns `true` if this char sequence is not empty and contains some characters
except of whitespace characters.\n *\n * @sample samples.text.Strings.stringIsNotBlank\n
*\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.isNotBlank(): Boolean = !isBlank()\n\n/**\n *
Returns `true` if this nullable
char sequence is either `null` or empty or consists solely of whitespace characters.\n *\n * @sample
samples.text.Strings.stringIsNullOrBlank\n *\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence?.isNullOrBlank(): Boolean {\n contract {\n returns(false) implies (this@isNullOrBlank !=
null)\n } \n\n return this == null || this.isBlank()\n}\n\n/**\n * Iterator for characters of the given char sequence.\n
*\npublic operator fun CharSequence.iterator(): CharIterator = object : CharIterator() {\n private var index = 0\n\n
public override fun nextChar(): Char = get(index++)\n\n public override fun hasNext(): Boolean = index <
length\n}\n\n/** Returns the string if it is not `null`, or the empty string otherwise.
*\n@kotlin.internal.InlineOnly\npublic inline fun String?.orEmpty(): String = this ?: ""\n\n/**\n * Returns this
char sequence if it's not empty\n * or the result of calling [defaultValue] function if the char sequence is empty.\n
*\n * @sample
samples.text.Strings.stringIfEmpty\n *\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun <C,
R> C.ifEmpty(defaultValue: () -> R): R where C : CharSequence, C : R =\n if (isEmpty()) defaultValue() else
this\n\n/**\n * Returns this char sequence if it is not empty and doesn't consist solely of whitespace characters,\n *
or the result of calling [defaultValue] function otherwise.\n *\n * @sample samples.text.Strings.stringIfBlank\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun <C, R> C.ifBlank(defaultValue: () -> R):
R where C : CharSequence, C : R =\n if (isBlank()) defaultValue() else this\n\n/**\n * Returns the range of valid
character indices for this char sequence.\n *\npublic val CharSequence.indices: IntRange\n get() = 0..length -
1\n\n/**\n * Returns the index of the last character in the char sequence or -1 if it is empty.\n *\npublic val

```

```

CharSequence.lastIndex: Int\n get() = this.length - 1\n\n/**\n * Returns `true`
if this CharSequence has Unicode surrogate pair at the specified [index].\n */\npublic fun
CharSequence.hasSurrogatePairAt(index: Int): Boolean {\n return index in 0..length - 2\n &&
this[index].isHighSurrogate()\n && this[index + 1].isLowSurrogate()\n}\n\n/**\n * Returns a substring
specified by the given [range] of indices.\n */\npublic fun String.substring(range: IntRange): String =
substring(range.start, range.endInclusive + 1)\n\n/**\n * Returns a subsequence of this char sequence specified by
the given [range] of indices.\n */\npublic fun CharSequence.subSequence(range: IntRange): CharSequence =
subSequence(range.start, range.endInclusive + 1)\n\n/**\n * Returns a subsequence of this char sequence.\n */\n *
This extension is chosen only for invocation with old-named parameters.\n * Replace parameter names with the
same as those of [CharSequence.subSequence].\n
*/\n@kotlin.internal.InlineOnly\n@Suppress("EXTENSION_SHADOWED_BY_MEMBER") // false
warning\n@Deprecated("Use
parameters named startIndex and endIndex.", ReplaceWith("subSequence(startIndex = start, endIndex =
end)"))\npublic inline fun String.subSequence(start: Int, end: Int): CharSequence = subSequence(start,
end)\n\n/**\n * Returns a substring of chars from a range of this char sequence starting at the [startIndex] and
ending right before the [endIndex].\n */\n * @param startIndex the start index (inclusive).\n * @param endIndex the
end index (exclusive). If not specified, the length of the char sequence is used.\n
*/\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.substring(startIndex: Int, endIndex: Int = length):
String = subSequence(startIndex, endIndex).toString()\n\n/**\n * Returns a substring of chars at indices from the
specified [range] of this char sequence.\n */\npublic fun CharSequence.substring(range: IntRange): String =
subSequence(range.start, range.endInclusive + 1).toString()\n\n/**\n * Returns a substring before the first
occurrence of
[delimiter].\n */\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the
original string.\n */\npublic fun String.substringBefore(delimiter: Char, missingDelimiterValue: String = this):
String {\n val index = indexOf(delimiter)\n return if (index == -1) missingDelimiterValue else substring(0,
index)\n}\n\n/**\n * Returns a substring before the first occurrence of [delimiter].\n */\n * If the string does not contain
the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun
String.substringBefore(delimiter: String, missingDelimiterValue: String = this): String {\n val index =
indexOf(delimiter)\n return if (index == -1) missingDelimiterValue else substring(0, index)\n}\n\n/**\n * Returns
a substring after the first occurrence of [delimiter].\n */\n * If the string does not contain the delimiter, returns
[missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.substringAfter(delimiter:
Char, missingDelimiterValue: String = this): String {\n val index = indexOf(delimiter)\n return if (index == -1)
missingDelimiterValue else substring(index + 1, length)\n}\n\n/**\n * Returns a substring after the first occurrence
of [delimiter].\n */\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the
original string.\n */\npublic fun String.substringAfter(delimiter: String, missingDelimiterValue: String = this):
String {\n val index = indexOf(delimiter)\n return if (index == -1) missingDelimiterValue else substring(index +
delimiter.length, length)\n}\n\n/**\n * Returns a substring before the last occurrence of [delimiter].\n */\n * If the string
does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic
fun String.substringBeforeLast(delimiter: Char, missingDelimiterValue: String = this): String {\n val index =
lastIndexOf(delimiter)\n return if (index
== -1) missingDelimiterValue else substring(0, index)\n}\n\n/**\n * Returns a substring before the last occurrence
of [delimiter].\n */\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the
original string.\n */\npublic fun String.substringBeforeLast(delimiter: String, missingDelimiterValue: String = this):
String {\n val index = lastIndexOf(delimiter)\n return if (index == -1) missingDelimiterValue else substring(0,
index)\n}\n\n/**\n * Returns a substring after the last occurrence of [delimiter].\n */\n * If the string does not contain the
delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun
String.substringAfterLast(delimiter: Char, missingDelimiterValue: String = this): String {\n val index =
lastIndexOf(delimiter)\n return if (index == -1) missingDelimiterValue else substring(index + 1,

```

```

length)\n}\n\n/**\n * Returns a substring after the last occurrence of [delimiter].\n * If the string
does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic
fun String.substringAfterLast(delimiter: String, missingDelimiterValue: String = this): String {\n val index =
lastIndexOf(delimiter)\n return if (index == -1) missingDelimiterValue else substring(index + delimiter.length,
length)\n}\n\n/**\n * Returns a char sequence with content of this char sequence where its part at the given range\n
* is replaced with the [replacement] char sequence.\n * @param startIndex the index of the first character to be
replaced.\n * @param endIndex the index of the first character after the replacement to keep in the string.\n
*/\npublic fun CharSequence.replaceRange(startIndex: Int, endIndex: Int, replacement: CharSequence):
CharSequence {\n if (endIndex < startIndex)\n throw IndexOutOfBoundsException("\u201cEnd index ($endIndex)
is less than start index ($startIndex).\u201c")\n val sb = StringBuilder()\n sb.appendRange(this,
0, startIndex)\n sb.append(replacement)\n sb.appendRange(this, endIndex, length)\n return sb\n}\n\n/**\n *
Replaces the part of the string at the given range with the [replacement] char sequence.\n * @param startIndex the
index of the first character to be replaced.\n * @param endIndex the index of the first character after the replacement
to keep in the string.\n */\n@kotlin.internal.InlineOnly\npublic inline fun String.replaceRange(startIndex: Int,
endIndex: Int, replacement: CharSequence): String =\n (this as CharSequence).replaceRange(startIndex, endIndex,
replacement).toString()\n\n/**\n * Returns a char sequence with content of this char sequence where its part at the
given [range]\n * is replaced with the [replacement] char sequence.\n * @param range the range to be replaced.\n
* The end index of the [range] is included in the part to be replaced.\n */\npublic fun CharSequence.replaceRange(range: IntRange, replacement:
CharSequence): CharSequence =\n replaceRange(range.start, range.endInclusive + 1, replacement)\n\n/**\n * Replace the part of string at the given [range] with the [replacement] string.\n * The end index of the [range]
is included in the part to be replaced.\n */\n@kotlin.internal.InlineOnly\npublic inline fun
String.replaceRange(range: IntRange, replacement: CharSequence): String =\n (this as
CharSequence).replaceRange(range, replacement).toString()\n\n/**\n * Returns a char sequence with content of this
char sequence where its part at the given range is removed.\n * @param startIndex the index of the first
character to be removed.\n * @param endIndex the index of the first character after the removed part to keep in the
string.\n * [endIndex] is not included in the removed part.\n */\npublic fun
CharSequence.removeRange(startIndex: Int, endIndex: Int): CharSequence {\n if (endIndex < startIndex)\n throw IndexOutOfBoundsException("\u201cEnd index ($endIndex) is less than start index ($startIndex).\u201c")\n if
(endIndex == startIndex)\n return
this.subSequence(0, length)\n val sb = StringBuilder(length - (endIndex - startIndex))\n sb.appendRange(this,
0, startIndex)\n sb.appendRange(this, endIndex, length)\n return sb\n}\n\n/**\n * Removes the part of a string at
a given range.\n * @param startIndex the index of the first character to be removed.\n * @param endIndex the index
of the first character after the removed part to keep in the string.\n * [endIndex] is not included in the removed
part.\n */\n@kotlin.internal.InlineOnly\npublic inline fun String.removeRange(startIndex: Int, endIndex: Int): String
=\n (this as CharSequence).removeRange(startIndex, endIndex).toString()\n\n/**\n * Returns a char sequence with
content of this char sequence where its part at the given [range] is removed.\n * The end index of the [range] is
included in the removed part.\n */\npublic fun CharSequence.removeRange(range: IntRange): CharSequence =
removeRange(range.start, range.endInclusive + 1)\n\n/**\n * Removes
the part of a string at the given [range].\n * The end index of the [range] is included in the removed part.\n
*/\n@kotlin.internal.InlineOnly\npublic inline fun String.removeRange(range: IntRange): String =\n (this as
CharSequence).removeRange(range).toString()\n\n/**\n * If this char sequence starts with the given [prefix], returns
a new char sequence\n * with the prefix removed. Otherwise, returns a new char sequence with the same
characters.\n */\npublic fun CharSequence.removePrefix(prefix: CharSequence): CharSequence {\n if
(startsWith(prefix)) {\n return subSequence(prefix.length, length)\n }\n return subSequence(0,
length)\n}\n\n/**\n * If this string starts with the given [prefix], returns a copy of this string\n * with the prefix
removed. Otherwise, returns this string.\n */\npublic fun String.removePrefix(prefix: CharSequence): String {\n if
(startsWith(prefix)) {\n return substring(prefix.length)\n }\n return this\n}\n\n/**\n * If this

```

char sequence ends with the given [suffix], returns a new char sequence with the suffix removed. Otherwise, returns a new char sequence with the same characters.

```

CharSequence.removeSuffix(suffix:
CharSequence): CharSequence {
 if (endsWith(suffix)) {
 return subSequence(0, length - suffix.length)
 }
 return subSequence(0, length)
}

```

If this string ends with the given [suffix], returns a copy of this string with the suffix removed. Otherwise, returns this string.

```

String.removeSuffix(suffix:
CharSequence): String {
 if (endsWith(suffix)) {
 return substring(0, length - suffix.length)
 }
 return this
}

```

When this char sequence starts with the given [prefix] and ends with the given [suffix], returns a new char sequence having both the given [prefix] and [suffix] removed. Otherwise returns a new char sequence with the same characters.

```

CharSequence.removeSurrounding(prefix:
CharSequence, suffix: CharSequence): CharSequence {
 if ((length >= prefix.length + suffix.length) &&
 startsWith(prefix) && endsWith(suffix)) {
 return subSequence(prefix.length, length - suffix.length)
 }
 return subSequence(0, length)
}

```

Removes from a string both the given [prefix] and [suffix] if and only if it starts with the [prefix] and ends with the [suffix]. Otherwise returns this string unchanged.

```

String.removeSurrounding(prefix: CharSequence, suffix: CharSequence): String {
 if ((length >=
 prefix.length + suffix.length) && startsWith(prefix) && endsWith(suffix)) {
 return substring(prefix.length,
 length - suffix.length)
 }
 return this
}

```

When this char sequence starts with and ends with the given [delimiter], returns a new char sequence having this [delimiter] removed both from the start and end. Otherwise returns a new char sequence with the same characters.

```

CharSequence.removeSurrounding(delimiter: CharSequence): CharSequence =
 removeSurrounding(delimiter,
 delimiter)

```

Removes the given [delimiter] string from both the start and the end of this string if and only if it starts with and ends with the [delimiter]. Otherwise returns this string unchanged.

```

String.removeSurrounding(delimiter: CharSequence): String =
 removeSurrounding(delimiter, delimiter)

```

Replace part of string before the first occurrence of given delimiter with the [replacement] string. If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.

```

String.replaceBefore(delimiter: Char, replacement: String,
 missingDelimiterValue: String = this): String {
 val index = indexOf(delimiter)
 return if (index == -1) missingDelimiterValue else
 replaceRange(0, index, replacement)
}

```

Replace part of string before the first occurrence of given delimiter with the [replacement] string. If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.

```

String.replaceBefore(delimiter:
String, replacement: String, missingDelimiterValue: String = this):
String {
 val index = indexOf(delimiter)
 return if (index == -1) missingDelimiterValue else
 replaceRange(0, index, replacement)
}

```

Replace part of string after the first occurrence of given delimiter with the [replacement] string. If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.

```

String.replaceAfter(delimiter: Char, replacement: String,
 missingDelimiterValue: String = this): String {
 val index = indexOf(delimiter)
 return if (index == -1) missingDelimiterValue else
 replaceRange(index + 1, length, replacement)
}

```

Replace part of string after the first occurrence of given delimiter with the [replacement] string. If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.

```

String.replaceAfter(delimiter: String, replacement: String,
 missingDelimiterValue: String = this): String {
 val index = indexOf(delimiter)
 return if (index == -1)
 missingDelimiterValue else
 replaceRange(index + delimiter.length, length, replacement)
}

```

Replace part of string after the last occurrence of given delimiter with the [replacement] string. If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.

```

String.replaceAfterLast(delimiter: String, replacement: String,
 missingDelimiterValue: String = this): String {
 val index = lastIndexOf(delimiter)
 return if (index == -1) missingDelimiterValue else
 replaceRange(index +
 delimiter.length, length, replacement)
}

```

Replace part of string after the last occurrence of given delimiter with the [replacement] string. If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.

```

String.replaceAfterLast(delimiter:
Char, replacement: String, missingDelimiterValue: String = this):
String {
 val index = lastIndexOf(delimiter)

```

```

return if (index == -1) missingDelimiterValue else replaceRange(index + 1, length, replacement)\n}\n\n/**\n *
Replace part of string before the last occurrence of given delimiter with the [replacement] string.\n * If the string
does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic
fun String.replaceBeforeLast(delimiter: Char, replacement: String, missingDelimiterValue: String = this): String {\n
 val index = lastIndexOf(delimiter)\n return if (index == -1) missingDelimiterValue else replaceRange(0, index,
replacement)\n}\n\n/**\n * Replace part of string before the last occurrence
of given delimiter with the [replacement] string.\n * If the string does not contain the delimiter, returns
[missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.replaceBeforeLast(delimiter:
String, replacement: String, missingDelimiterValue: String = this): String {\n val index = lastIndexOf(delimiter)\n
return if (index == -1) missingDelimiterValue else replaceRange(0, index, replacement)\n}\n\n// public fun
String.replace(oldChar: Char, newChar: Char, ignoreCase: Boolean): String // JVM- and JS-specific\n// public fun
String.replace(oldValue: String, newValue: String, ignoreCase: Boolean): String // JVM- and JS-specific\n\n/**\n *
Returns a new string obtained by replacing each substring of this char sequence that matches the given regular
expression\n * with the given [replacement].\n * The [replacement] can consist of any combination of literal text
and $-substitutions. To treat the replacement string\n * literally escape it with the
[kotlin.text.Regex.Companion.escapeReplacement] method.\n */\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence.replace(regex: Regex, replacement: String): String = regex.replace(this, replacement)\n\n/**\n *
Returns a new string obtained by replacing each substring of this char sequence that matches the given regular
expression\n * with the result of the given function [transform] that takes [MatchResult] and returns a string to be
used as a\n * replacement for that match.\n */\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence.replace(regex: Regex, noinline transform: (MatchResult) -> CharSequence): String =\nregex.replace(this, transform)\n\n/**\n * Replaces the first occurrence of the given regular expression [regex] in this
char sequence with specified [replacement] expression.\n * \n * @param replacement A replacement expression that
can include substitutions. See [Regex.replaceFirst] for details.\n */\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence.replaceFirst(regex:
Regex, replacement: String): String = regex.replaceFirst(this, replacement)\n\n/**\n * Returns a copy of this string
having its first character replaced with the result of the specified [transform],\n * or the original string if it's empty.\n *
\n * @param transform function that takes the first character and returns the result of the transform applied to the
character.\n * \n * @sample samples.text.Strings.replaceFirstChar\n
\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\n@OptIn(kotlin.experimental.Exper
imentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@JvmName("replaceFirstCharWithC
har")\n@kotlin.internal.InlineOnly\npublic inline fun String.replaceFirstChar(transform: (Char) -> Char): String {\n
 return if (isEmpty()) transform(this[0]) + substring(1) else this\n}\n\n/**\n * Returns a copy of this string
having its first character replaced with the result of the specified [transform],\n * or the original
string if it's empty.\n * \n * @param transform function that takes the first character and returns the result of the
transform applied to the character.\n * \n * @sample samples.text.Strings.replaceFirstChar\n
\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\n@OptIn(kotlin.experimental.Exper
imentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@JvmName("replaceFirstCharWithC
harSequence")\n@kotlin.internal.InlineOnly\npublic inline fun String.replaceFirstChar(transform: (Char) ->
CharSequence): String {\n return if (isEmpty()) transform(this[0]).toString() + substring(1) else
this\n}\n\n/**\n * Returns `true` if this char sequence matches the given regular expression.\n
\n */\n@kotlin.internal.InlineOnly\npublic inline infix fun CharSequence.matches(regex: Regex): Boolean =
regex.matches(this)\n\n/**\n * Implementation of [regionMatches] for CharSequences.\n * Invoked when it's
already known that arguments are not Strings, so that no additional
type checks are performed.\n */\ninternal fun CharSequence.regionMatchesImpl(thisOffset: Int, other:
CharSequence, otherOffset: Int, length: Int, ignoreCase: Boolean): Boolean {\n if ((otherOffset < 0) || (thisOffset <
0) || (thisOffset > this.length - length) || (otherOffset > other.length - length)) {\n return false\n }\n for
(index in 0 until length) {\n if (!this[thisOffset + index].equals(other[otherOffset + index], ignoreCase))\n

```

```

return false\n } \n return true\n}\n\n/**\n * Returns `true` if this char sequence starts with the specified
character.\n */\npublic fun CharSequence.startsWith(char: Char, ignoreCase: Boolean = false): Boolean =\nthis.length > 0 && this[0].equals(char, ignoreCase)\n\n/**\n * Returns `true` if this char sequence ends with the
specified character.\n */\npublic fun CharSequence.endsWith(char: Char, ignoreCase: Boolean = false): Boolean =\nthis.length > 0 && this[lastIndex].equals(char, ignoreCase)\n\n/**\n * Returns `true` if this char sequence starts with the specified prefix.\n */\npublic fun
CharSequence.startsWith(prefix: CharSequence, ignoreCase: Boolean = false): Boolean {\n if (!ignoreCase &&
this is String && prefix is String)\n return this.startsWith(prefix)\n else\n return regionMatchesImpl(0,
prefix, 0, prefix.length, ignoreCase)\n}\n\n/**\n * Returns `true` if a substring of this char sequence starting at the
specified offset [startIndex] starts with the specified prefix.\n */\npublic fun CharSequence.startsWith(prefix:
CharSequence, startIndex: Int, ignoreCase: Boolean = false): Boolean {\n if (!ignoreCase && this is String &&
prefix is String)\n return this.startsWith(prefix, startIndex)\n else\n return regionMatchesImpl(startIndex,
prefix, 0, prefix.length, ignoreCase)\n}\n\n/**\n * Returns `true` if this char sequence ends with the specified
suffix.\n */\npublic fun CharSequence.endsWith(suffix: CharSequence, ignoreCase: Boolean
= false): Boolean {\n if (!ignoreCase && this is String && suffix is String)\n return this.endsWith(suffix)\n
else\n return regionMatchesImpl(length - suffix.length, suffix, 0, suffix.length, ignoreCase)\n}\n\n\n// common
prefix and suffix\n\n/**\n * Returns the longest string `prefix` such that this char sequence and [other] char sequence
both start with this prefix,\n * taking care not to split surrogate pairs.\n * If this and [other] have no common prefix,
returns the empty string.\n */\n * @param ignoreCase `true` to ignore character case when matching a character. By
default `false`.\n * @sample samples.text.Strings.commonPrefixWith\n */\npublic fun
CharSequence.commonPrefixWith(other: CharSequence, ignoreCase: Boolean = false): String {\n val
shortestLength = minOf(this.length, other.length)\n var i = 0\n while (i < shortestLength &&
this[i].equals(other[i], ignoreCase = ignoreCase)) {\n i++\n }\n if (this.hasSurrogatePairAt(i - 1) ||
other.hasSurrogatePairAt(i
- 1)) {\n i--\n }\n return subSequence(0, i).toString()\n}\n\n/**\n * Returns the longest string `suffix` such
that this char sequence and [other] char sequence both end with this suffix,\n * taking care not to split surrogate
pairs.\n * If this and [other] have no common suffix, returns the empty string.\n */\n * @param ignoreCase `true` to
ignore character case when matching a character. By default `false`.\n * @sample
samples.text.Strings.commonSuffixWith\n */\npublic fun CharSequence.commonSuffixWith(other: CharSequence,
ignoreCase: Boolean = false): String {\n val thisLength = this.length\n val otherLength = other.length\n val
shortestLength = minOf(thisLength, otherLength)\n var i = 0\n while (i < shortestLength && this[thisLength -
i - 1].equals(other[otherLength - i - 1], ignoreCase = ignoreCase)) {\n i++\n }\n if
(this.hasSurrogatePairAt(thisLength - i - 1) || other.hasSurrogatePairAt(otherLength - i - 1)) {\n
i--\n }\n return subSequence(thisLength - i, thisLength).toString()\n}\n\n\n// indexOfAny()\n\n/**\n * Finds
the index of the first occurrence of any of the specified [chars] in this char sequence,\n * starting from the specified
[startIndex] and optionally ignoring the case.\n */\n * @param ignoreCase `true` to ignore character case when
matching a character. By default `false`.\n * @return An index of the first occurrence of matched character from
[chars] or -1 if none of [chars] are found.\n */\npublic fun CharSequence.indexOfAny(chars: CharArray,
startIndex: Int = 0, ignoreCase: Boolean = false): Int {\n if (!ignoreCase && chars.size == 1 && this is String) {\n
val char = chars.single()\n return nativeIndexOf(char, startIndex)\n }\n\n for (index in
startIndex.coerceAtLeast(0)..lastIndex) {\n val charAtIndex = get(index)\n if (chars.any {
it.equals(charAtIndex, ignoreCase) })\n return index\n }\n return -1\n}\n\n/**\n * Finds the index of the last
occurrence of any of the specified [chars] in this char sequence,\n * starting from the
specified [startIndex] and optionally ignoring the case.\n */\n * @param startIndex The index of character to start
searching at. The search proceeds backward toward the beginning of the string.\n * @param ignoreCase `true` to
ignore character case when matching a character. By default `false`.\n * @return An index of the last occurrence of
matched character from [chars] or -1 if none of [chars] are found.\n */\npublic fun
CharSequence.lastIndexOfAny(chars: CharArray, startIndex: Int = lastIndex, ignoreCase: Boolean = false): Int {\n

```

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if (!ignoreCase && chars.size == 1 && this is String) {\n val char = chars.single()\n return
nativeLastIndexOf(char, startIndex)\n } \n\n for (index in startIndex.coerceAtMost(lastIndex) downTo 0) {\n
 val charAtIndex = get(index)\n if (chars.any { it.equals(charAtIndex, ignoreCase) })\n return
index\n } \n\n return -1\n}\n\nprivate fun CharSequence.indexOf(other: CharSequence, startIndex: Int,
endIndex: Int, ignoreCase: Boolean, last: Boolean = false): Int {\n val indices = if (!last)\nstartIndex.coerceAtLeast(0)..endIndex.coerceAtMost(length)\n else\n startIndex.coerceAtMost(lastIndex)
downTo endIndex.coerceAtLeast(0)\n\n if (this is String && other is String) { // smart cast\n for (index in
indices) {\n if (other.regionMatches(0, this, index, other.length, ignoreCase))\n return index\n
 }\n } else {\n for (index in indices) {\n if (other.regionMatchesImpl(0, this, index, other.length,
ignoreCase))\n return index\n }\n }\n\n return -1\n}\n\nprivate fun CharSequence.findAnyOf(strings:
Collection<String>, startIndex: Int, ignoreCase: Boolean, last: Boolean): Pair<Int, String>? {\n if (!ignoreCase
&& strings.size == 1) {\n val string = strings.single()\n
 val index = if (!last) indexOf(string, startIndex) else lastIndexOf(string, startIndex)\n return if (index < 0)
null else index to string\n }\n\n val indices = if (!last) startIndex.coerceAtLeast(0)..length else
startIndex.coerceAtMost(lastIndex) downTo 0\n\n if (this is String) {\n for (index in indices) {\n val
matchingString = strings.firstOrNull { it.regionMatches(0, this, index, it.length, ignoreCase) }\n if
(matchingString != null)\n return index to matchingString\n }\n } else {\n for (index in indices)
{\n val matchingString = strings.firstOrNull { it.regionMatchesImpl(0, this, index, it.length, ignoreCase) }\n
 if (matchingString != null)\n return index to matchingString\n }\n }\n\n return
null\n}\n\n/**\n * Finds the first occurrence of any of the specified [strings] in this char sequence,\n * starting from
the specified [startIndex] and
optionally ignoring the case.\n * @param ignoreCase `true` to ignore character case when matching a string. By
default `false`.\n * @return A pair of an index of the first occurrence of matched string from [strings] and the string
matched\n * or `null` if none of [strings] are found.\n * To avoid ambiguous results when strings in [strings]
have characters in common, this method proceeds from\n * the beginning to the end of this string, and finds at each
position the first element in [strings]\n * that matches this string at that position.\n */\n\npublic fun
CharSequence.findAnyOf(strings: Collection<String>, startIndex: Int = 0, ignoreCase: Boolean = false): Pair<Int,
String>? =\n findAnyOf(strings, startIndex, ignoreCase, last = false)\n\n/**\n * Finds the last occurrence of any of
the specified [strings] in this char sequence,\n * starting from the specified [startIndex] and optionally ignoring the
case.\n * @param startIndex The index of character to start searching at.
The search proceeds backward toward the beginning of the string.\n * @param ignoreCase `true` to ignore character
case when matching a string. By default `false`.\n * @return A pair of an index of the last occurrence of matched
string from [strings] and the string matched or `null` if none of [strings] are found.\n * To avoid ambiguous
results when strings in [strings] have characters in common, this method proceeds from\n * the end toward the
beginning of this string, and finds at each position the first element in [strings]\n * that matches this string at
that position.\n */\n\npublic fun CharSequence.findLastAnyOf(strings: Collection<String>, startIndex: Int = lastIndex,
ignoreCase: Boolean = false): Pair<Int, String>? =\n findAnyOf(strings, startIndex, ignoreCase, last =
true)\n\n/**\n * Finds the index of the first occurrence of any of the specified [strings] in this char sequence,\n *
starting from the specified [startIndex] and optionally ignoring the case.\n * @param ignoreCase `true` to ignore
character case when matching a string. By default `false`.\n * @return An index of the
first occurrence of matched string from [strings] or -1 if none of [strings] are found.\n * To avoid ambiguous
results when strings in [strings] have characters in common, this method proceeds from\n * the beginning to the end
of this string, and finds at each position the first element in [strings]\n * that matches this string at that
position.\n */\n\npublic fun CharSequence.indexOfAny(strings: Collection<String>, startIndex: Int = 0, ignoreCase: Boolean =
false): Int =\n findAnyOf(strings, startIndex, ignoreCase, last = false)?.first ?: -1\n\n/**\n * Finds the index of the
last occurrence of any of the specified [strings] in this char sequence,\n * starting from the specified [startIndex] and
optionally ignoring the case.\n * @param startIndex The index of character to start searching at. The search
proceeds backward toward the beginning of the string.\n * @param

```



```

ignoreCase `true` to ignore character case when matching a string. By default `false`.
 * @return An index of the last occurrence of matched string from [strings] or -1 if none of [strings] are found.
 * To avoid ambiguous results when strings in [strings] have characters in common, this method proceeds from the end toward the beginning of this string, and finds at each position the first element in [strings] that matches this string at that position.
 * public fun CharSequence.lastIndexOfAny(strings: Collection<String>, startIndex: Int = lastIndex, ignoreCase: Boolean = false): Int {
 return findAnyOf(strings, startIndex, ignoreCase, last = true)?.first ?: -1
 }
 * Returns the index within this string of the first occurrence of the specified character, starting from the specified [startIndex].
 * @param ignoreCase `true` to ignore character case when matching a character. By default `false`.
 * @return An index of the first occurrence of [char] or -1 if none is found.
 * public fun CharSequence.indexOf(char: Char, startIndex: Int = 0, ignoreCase: Boolean = false): Int {
 return if (ignoreCase || this !is String)
 indexOfAny(charArrayOf(char), startIndex, ignoreCase)
 else
 nativeIndexOf(char, startIndex)
 }
 * Returns the index within this char sequence of the first occurrence of the specified [string], starting from the specified [startIndex].
 * @param ignoreCase `true` to ignore character case when matching a string. By default `false`.
 * @return An index of the first occurrence of [string] or -1 if none is found.
 * @sample samples.text.Strings.indexOf
 * public fun CharSequence.indexOf(string: String, startIndex: Int = 0, ignoreCase: Boolean = false): Int {
 return if (ignoreCase || this !is String)
 indexOf(string, startIndex, length, ignoreCase)
 else
 nativeIndexOf(string, startIndex)
 }
 * Returns the index within this char sequence of the last occurrence of the specified character, starting from the specified [startIndex].
 * @param startIndex The index of character to start searching at. The search proceeds backward toward the beginning of the string.
 * @param ignoreCase `true` to ignore character case when matching a character. By default `false`.
 * @return An index of the last occurrence of [char] or -1 if none is found.
 * public fun CharSequence.lastIndexOf(char: Char, startIndex: Int = lastIndex, ignoreCase: Boolean = false): Int {
 return if (ignoreCase || this !is String)
 lastIndexOfAny(charArrayOf(char), startIndex, ignoreCase)
 else
 nativeLastIndexOf(char, startIndex)
 }
 * Returns the index within this char sequence of the last occurrence of the specified [string], starting from the specified [startIndex].
 * @param startIndex The index of character to start searching at. The search proceeds backward toward the beginning of the string.
 * @param ignoreCase `true` to ignore character case when matching a string. By default `false`.
 * @return An index of the last occurrence of [string] or -1 if none is found.
 * public fun CharSequence.lastIndexOf(string: String, startIndex: Int = lastIndex, ignoreCase: Boolean = false): Int {
 return if (ignoreCase || this !is String)
 indexOf(string, startIndex, 0, ignoreCase, last = true)
 else
 nativeLastIndexOf(string, startIndex)
 }
 * Returns `true` if this char sequence contains the specified [other] sequence of characters as a substring.
 * @param ignoreCase `true` to ignore character case when comparing strings. By default `false`.
 * @Suppress("INAPPLICABLE_OPERATOR_MODIFIER")
 * public operator fun CharSequence.contains(other: CharSequence, ignoreCase: Boolean = false): Boolean {
 return if (other is String)
 indexOf(other, ignoreCase = ignoreCase) >= 0
 else
 indexOf(other, 0, length, ignoreCase) >= 0
 }
 * Returns `true` if this char sequence contains the specified character [char].
 * @param ignoreCase `true` to ignore character case when comparing characters. By default `false`.
 * @Suppress("INAPPLICABLE_OPERATOR_MODIFIER")
 * public operator fun CharSequence.contains(char: Char, ignoreCase: Boolean = false): Boolean {
 return indexOf(char, ignoreCase = ignoreCase) >= 0
 }
 * Returns `true` if this char sequence contains at least one match of the specified regular expression [regex].
 * @kotlin.internal
 * public inline operator fun CharSequence.contains(regex: Regex): Boolean = regex.containsMatchIn(this)
 * private class DelimitedRangesSequence(
 private input: CharSequence,
 private val startIndex: Int,
 private val limit: Int,
 private val getNextMatch: CharSequence.(currentIndex: Int) -> Pair<Int, Int>?
) : Sequence<IntRange> {
 override fun iterator(): Iterator<IntRange> = object : Iterator<IntRange>

```

```

{\n var nextState: Int = -1 // -1 for unknown, 0 for done, 1 for continue\n var currentStartIndex: Int =
startIndex.coerceIn(0, input.length)\n var nextSearchIndex: Int = currentStartIndex\n var nextItem:
IntRange? = null\n var counter: Int = 0\n\n private fun calcNext() {\n if (nextSearchIndex < 0) {\n
 nextState = 0\n nextItem = null\n } else {\n if (limit > 0 && ++counter >= limit ||
nextSearchIndex > input.length) {\n nextItem = currentStartIndex..input.lastIndex\n
nextSearchIndex = -1\n } else {\n val match = input.getNextMatch(nextSearchIndex)\n
 if (match == null) {\n nextItem = currentStartIndex..input.lastIndex\n
nextSearchIndex = -1\n } else {\n val (index, length) = match\n
 nextItem = currentStartIndex until index\n currentStartIndex = index + length\n
nextSearchIndex = currentStartIndex + if (length == 0) 1 else 0\n }\n }\n nextState =
1\n }\n }\n\n override fun next(): IntRange {\n if (nextState == -1)\n calcNext()\n if (nextState == 0)\n throw NoSuchElementException()\n val result = nextItem as IntRange\n
// Clean next to avoid keeping reference on yielded instance\n nextItem = null\n nextState = -1\n
return result\n }\n\n override fun hasNext(): Boolean {\n if (nextState == -1)\n calcNext()\n return nextState == 1\n }\n}\n\n/**\n * Returns a sequence of index ranges of
substrings in this char sequence around occurrences of the specified [delimiters].\n * @param
delimiters One or more characters to be used as delimiters.\n * @param startIndex The index to start searching
delimiters from.\n * No range having its start value less than [startIndex] is returned.\n * [startIndex] is coerced to
be non-negative and not greater than length of this string.\n * @param ignoreCase `true` to ignore character case
when matching a delimiter. By default `false`.\n * @param limit The maximum number of substrings to return. Zero
by default means no limit is set.\n */\nprivate fun CharSequence.rangesDelimitedBy(delimiters: CharArray,
startIndex: Int = 0, ignoreCase: Boolean = false, limit: Int = 0): Sequence<IntRange> {\n
requireNonNegativeLimit(limit)\n\n return DelimitedRangesSequence(this, startIndex, limit, { currentIndex ->\n
 indexOfAny(delimiters, currentIndex, ignoreCase = ignoreCase).let { if (it < 0) null else it to 1 }\n
})\n}\n\n/**\n * Returns a sequence of index ranges of substrings in this char sequence around occurrences of
the specified [delimiters].\n * @param delimiters One or more strings to be used as delimiters.\n * @param
startIndex The index to start searching delimiters from.\n * No range having its start value less than [startIndex] is
returned.\n * [startIndex] is coerced to be non-negative and not greater than length of this string.\n * @param
ignoreCase `true` to ignore character case when matching a delimiter. By default `false`.\n * @param limit The
maximum number of substrings to return. Zero by default means no limit is set.\n * @param To avoid ambiguous results
when strings in [delimiters] have characters in common, this method proceeds from\n * the beginning to the end of
this string, and finds at each position the first element in [delimiters]\n * that matches this string at that position.\n
*/\nprivate fun CharSequence.rangesDelimitedBy(delimiters: Array<out String>, startIndex: Int = 0, ignoreCase:
Boolean = false, limit: Int = 0): Sequence<IntRange> {\n requireNonNegativeLimit(limit)\n
 val delimitersList = delimiters.asList()\n return DelimitedRangesSequence(this, startIndex, limit, {\n
 currentIndex -> findAnyOf(delimitersList, currentIndex, ignoreCase = ignoreCase, last = false)?.let { it.first to
it.second.length } })\n}\n\ninternal fun requireNonNegativeLimit(limit: Int) =\n require(limit >= 0) { \"Limit
must be non-negative, but was $limit\" }\n\n// split\n\n/**\n * Splits this char sequence to a sequence of strings
around occurrences of the specified [delimiters].\n * @param delimiters One or more strings to be used as
delimiters.\n * @param ignoreCase `true` to ignore character case when matching a delimiter. By default `false`.\n
* @param limit The maximum number of substrings to return. Zero by default means no limit is set.\n * @param To avoid
ambiguous results when strings in [delimiters] have characters in common, this method proceeds from\n * the
beginning to the end of this string, and finds at each position the first element in
[delimiters]\n * that matches this string at that position.\n */\npublic fun CharSequence.splitToSequence(vararg
delimiters: String, ignoreCase: Boolean = false, limit: Int = 0): Sequence<String> =\n
rangesDelimitedBy(delimiters, ignoreCase = ignoreCase, limit = limit).map { substring(it) }\n\n/**\n * Splits this
char sequence to a list of strings around occurrences of the specified [delimiters].\n * @param delimiters One or
more strings to be used as delimiters.\n * @param ignoreCase `true` to ignore character case when matching a

```

delimiter. By default `false`.  
 \* @param limit The maximum number of substrings to return. Zero by default means no limit is set.  
 \* To avoid ambiguous results when strings in [delimiters] have characters in common, this method proceeds from the beginning to the end of this string, and matches at each position the first element in [delimiters] that is equal to a delimiter in this instance at that position.  
 public fun

CharSequence.split(vararg

delimiters: String, ignoreCase: Boolean = false, limit: Int = 0): List<String> {  
 if (delimiters.size == 1) {  
 val delimiter = delimiters[0]  
 if (!delimiter.isEmpty()) {  
 return split(delimiter, ignoreCase, limit)  
 }  
 }  
 return rangesDelimitedBy(delimiters, ignoreCase = ignoreCase, limit = limit).asIterable().map {  
 substring(it) }  
 }  
 }  
 \* Splits this char sequence to a sequence of strings around occurrences of the specified [delimiters].  
 \* @param delimiters One or more characters to be used as delimiters.  
 \* @param ignoreCase `true` to ignore character case when matching a delimiter. By default `false`.  
 \* @param limit The maximum number of substrings to return.  
 public fun

CharSequence.splitToSequence(vararg delimiters: Char, ignoreCase: Boolean = false, limit: Int = 0): Sequence<String> =  
 rangesDelimitedBy(delimiters, ignoreCase = ignoreCase, limit = limit).map { substring(it) }  
 }  
 \* Splits this

char sequence to a list of strings around occurrences of the specified [delimiters].  
 \* @param delimiters One or more characters to be used as delimiters.  
 \* @param ignoreCase `true` to ignore character case when matching a delimiter. By default `false`.  
 \* @param limit The maximum number of substrings to return.  
 public fun

CharSequence.split(vararg delimiters: Char, ignoreCase: Boolean = false, limit: Int = 0): List<String> {  
 if (delimiters.size == 1) {  
 return split(delimiters[0].toString(), ignoreCase, limit)  
 }  
 }  
 return rangesDelimitedBy(delimiters, ignoreCase = ignoreCase, limit = limit).asIterable().map { substring(it) }  
 }  
 \* Splits this char sequence to a list of strings around occurrences of the specified [delimiter].  
 \* This is specialized version of split which receives single non-empty delimiter and offers better performance.  
 \* @param delimiter String used as delimiter.  
 \* @param ignoreCase `true` to ignore character case

when matching a delimiter. By default `false`.  
 \* @param limit The maximum number of substrings to return.  
 private fun CharSequence.split(delimiter: String, ignoreCase: Boolean, limit: Int): List<String> {  
 requireNonNegativeLimit(limit)  
 var currentOffset = 0  
 var nextIndex = indexOf(delimiter, currentOffset, ignoreCase)  
 if (nextIndex == -1 || limit == 1) {  
 return listOf(this.toString())  
 }  
 val isLimited = limit > 0  
 val result = ArrayList<String>(if (isLimited) limit.coerceAtMost(10) else 10)  
 do {  
 result.add(substring(currentOffset, nextIndex))  
 currentOffset = nextIndex + delimiter.length // Do not search for next occurrence if we're reaching limit  
 if (isLimited && result.size == limit - 1) break  
 nextIndex = indexOf(delimiter, currentOffset, ignoreCase)  
 } while (nextIndex != -1)  
 result.add(substring(currentOffset, length))  
 return result  
 }  
 }  
 \* Splits this char sequence

to a list of strings around matches of the given regular expression.  
 \* @param limit Non-negative value specifying the maximum number of substrings to return.  
 \* Zero by default means no limit is set.

@kotlin.internal.InlineOnly  
 public inline fun CharSequence.split(regex: Regex, limit: Int = 0): List<String> =  
 regex.split(this, limit)  
 }  
 \* Splits this char sequence to a sequence of strings around matches of the given regular expression.  
 \* @param limit Non-negative value specifying the maximum number of substrings to return.  
 \* Zero by default means no limit is set.  
 \* @sample samples.text.Strings.splitToSequence

@SinceKotlin("1.6")  
 @WasExperimental(ExperimentalStdlibApi::class)  
 @kotlin.internal.InlineOnly  
 public inline fun CharSequence.splitToSequence(regex: Regex, limit: Int = 0): Sequence<String> =  
 regex.splitToSequence(this, limit)  
 }  
 \* Splits this char sequence to a sequence of lines delimited by any of the following character sequences:

CRLF, LF or CR.  
 \* The lines returned do not include terminating line separators.  
 public fun

CharSequence.lineSequence(): Sequence<String> = splitToSequence("\\r\\n", "\\n", "\\r")  
 }  
 \* Splits this char sequence to a list of lines delimited by any of the following character sequences: CRLF, LF or CR.  
 \* The lines returned do not include terminating line separators.  
 public fun CharSequence.lines(): List<String> =

lineSequence().toList()  
 }  
 \* Returns `true` if the contents of this char sequence are equal to the contents of the specified [other],  
 \* i.e. both char sequences contain the same number of the same characters in the same order.

```

*\n * @sample samples.text.Strings.contentEquals\n *\n@SinceKotlin("1.5")\npublic expect infix fun
CharSequence?.contentEquals(other: CharSequence?): Boolean\n\n/**\n * Returns `true` if the contents of this char
sequence are equal to the contents of the specified [other], optionally ignoring case difference.\n
*\n * @param ignoreCase `true` to ignore character case when comparing contents.\n *\n * @sample
samples.text.Strings.contentEquals\n *\n@SinceKotlin("1.5")\npublic expect fun
CharSequence?.contentEquals(other: CharSequence?, ignoreCase: Boolean): Boolean\n\ninternal fun
CharSequence?.contentEqualsIgnoreCaseImpl(other: CharSequence?): Boolean {\n if (this is String && other is
String) {\n return this.equals(other, ignoreCase = true)\n }\n\n if (this === other) return true\n if (this ==
null || other == null || this.length != other.length) return false\n\n for (i in 0 until length) {\n if
(!this[i].equals(other[i], ignoreCase = true)) {\n return false\n }\n }\n\n return true\n}\n\ninternal fun
CharSequence?.contentEqualsImpl(other: CharSequence?): Boolean {\n if (this is String && other is String) {\n
 return this == other\n }\n\n if (this === other) return true\n if (this == null || other == null || this.length
!= other.length) return false\n\n for (i in 0 until length) {\n if (this[i] != other[i]) {\n return false\n
 }\n }\n\n return true\n}\n\n/**\n * Returns `true` if the content of this string is equal to the word "true", `false`
if it is equal to "false",\n * and throws an exception otherwise.\n *\n * There is also a lenient version of the
function available on nullable String, [String?.toBoolean].\n *\n * Note that this function is case-sensitive.\n *\n *
@sample samples.text.Strings.toBooleanStrict\n *\n@SinceKotlin("1.5")\npublic fun String.toBooleanStrict():
Boolean = when (this) {\n "true" -> true\n "false" -> false\n else -> throw IllegalArgumentException("The
string doesn't represent a boolean value: $this")\n}\n\n/**\n * Returns `true` if the content of this string is equal to
the word "true", `false` if it is equal to "false",\n * and `null` otherwise.\n *\n * There is also a lenient version of
the function available
on nullable String, [String?.toBoolean].\n *\n * Note that this function is case-sensitive.\n *\n * @sample
samples.text.Strings.toBooleanStrictOrNull\n *\n@SinceKotlin("1.5")\npublic fun
String.toBooleanStrictOrNull(): Boolean? = when (this) {\n "true" -> true\n "false" -> false\n else ->
null\n},"/**\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\n@n\n//
Auto-generated file. DO NOT EDIT!\n\npackage kotlin\n\nimport
kotlin.jvm.*\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@JvmInline\npublic value class
UByteArray\n@PublishedApi\ninternal constructor(@PublishedApi internal val storage: ByteArray) :
Collection<UByte> {\n\n /** Creates a new array of the specified [size], with all elements initialized to zero. *\n
public constructor(size: Int) : this(ByteArray(size))\n\n /**\n * Returns the array
element at the given [index]. This method can be called using the index operator.\n *\n * If the [index] is out of
bounds of this array, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is
unspecified.\n *\n * public operator fun get(index: Int): UByte = storage[index].toUByte()\n\n */\n * Sets
the element at the given [index] to the given [value]. This method can be called using the index operator.\n *\n *
If the [index] is out of bounds of this array, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n *
where the behavior is unspecified.\n *\n * public operator fun set(index: Int, value: UByte) {\n
storage[index] = value.toByte()\n }\n\n */\n * Returns the number of elements in the array. *\n public override
val size: Int get() = storage.size\n\n /** Creates an iterator over the elements of the array. *\n public override
operator fun iterator(): kotlin.collections.Iterator<UByte>
= Iterator(storage)\n\n private class Iterator(private val array: ByteArray) : kotlin.collections.Iterator<UByte> {\n
private var index = 0\n override fun hasNext() = index < array.size\n override fun next() = if (index <
array.size) array[index++].toUByte() else throw NoSuchElementException(index.toString())\n }\n\n override
fun contains(element: UByte): Boolean {\n // TODO: Eliminate this check after KT-30016 gets fixed.\n //
Currently JS BE does not generate special bridge method for this method.\n
@Suppress("USELESS_CAST")\n if ((element as Any?) !is UByte) return false\n\n return
storage.contains(element.toByte())\n }\n\n override fun containsAll(elements: Collection<UByte>): Boolean {\n
return (elements as Collection<*>).all { it is UByte && storage.contains(it.toByte()) }\n }\n\n override fun

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isEmpty(): Boolean = this.storage.size == 0\n\n/**\n * Creates a new array of the specified [size],
where each element is calculated by calling the specified\n * [init] function.\n *\n * The function [init] is called for
each array element sequentially starting from the first one.\n * It should return the value for an array element given
its index.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline
fun UByteArray(size: Int, init: (Int) -> UByte): UByteArray {\n return UByteArray(ByteArray(size) { index ->
init(index).toByte()
})\n}\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ubyteArrayOf(vararg elements: UByte): UByteArray = elements\n", "/*\n * Copyright 2010-2022 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n *\n\n// Auto-generated file. DO NOT EDIT!\n\npackage
kotlin\n\nimport kotlin.jvm.*\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@JvmInline\npublic
value class UIntArray\n@PublishedApi\ninternal constructor(@PublishedApi internal val storage: IntArray) :
Collection<UInt> {\n\n /** Creates a new array of the specified [size], with all elements initialized to zero. *\n
public constructor(size: Int) : this(IntArray(size))\n\n /**\n * Returns the array element at the given [index].
This method can be called using the index operator.\n *\n * If the [index] is out of bounds of this array, throws
an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n *\n public
operator fun get(index: Int): UInt = storage[index].toUInt()\n\n /**\n * Sets the element at the given [index] to
the given [value]. This method can be called using the index operator.\n *\n * If the [index] is out of bounds
of this array, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
 *\n public operator fun
set(index: Int, value: UInt) {\n storage[index] = value.toInt()\n }\n\n /** Returns the number of elements in
the array. *\n public override val size: Int get() = storage.size\n\n /** Creates an iterator over the elements of
the array. *\n public override operator fun iterator(): kotlin.collections.Iterator<UInt> = Iterator(storage)\n\n private
class Iterator(private val array: IntArray) : kotlin.collections.Iterator<UInt> {\n private var index = 0\n
override fun hasNext() = index < array.size\n override fun next() = if (index < array.size)
array[index++].toUInt() else throw NoSuchElementException(index.toString())\n }\n\n override fun
contains(element: UInt): Boolean {\n // TODO: Eliminate this check after KT-30016 gets fixed.\n //
Currently JS BE does not generate special bridge method for this method.\n
 @Suppress("USELESS_CAST")\n if ((element as Any?) !is UInt) return false\n\n return
storage.contains(element.toInt())\n }\n\n override fun containsAll(elements: Collection<UInt>): Boolean {\n return (elements as
Collection<*>).all { it is UInt && storage.contains(it.toInt()) }\n }\n\n override fun isEmpty(): Boolean =
this.storage.size == 0\n\n/**\n * Creates a new array of the specified [size], where each element is calculated by
calling the specified\n * [init] function.\n *\n * The function [init] is called for each array element sequentially
starting from the first one.\n * It should return the value for an array element given its index.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray(size: Int, init: (Int) -> UInt): UIntArray {\n return UIntArray(IntArray(size) { index ->
init(index).toInt()
})\n}\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
uintArrayOf(vararg elements: UInt): UIntArray = elements\n", "/*\n * Copyright 2010-2022
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\n\n// Auto-generated file. DO NOT
EDIT!\n\npackage kotlin\n\nimport
kotlin.jvm.*\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@JvmInline\npublic value class
ULongArray\n@PublishedApi\ninternal constructor(@PublishedApi internal val storage: LongArray) :
Collection<ULong> {\n\n /** Creates a new array of the specified [size], with all elements initialized to zero. *\n
public constructor(size: Int) : this(LongArray(size))\n\n /**\n * Returns the array element at the given [index].
This method can be called using the index operator.\n *\n * If the [index] is out of bounds of this array, throws

```

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an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n *\n public
operator fun get(index: Int): ULong = storage[index].toULong()\n\n
/**\n * Sets the element at the given [index] to the given [value]. This method can be called using the index
operator.\n *\n * If the [index] is out of bounds of this array, throws an [IndexOutOfBoundsException] except
in Kotlin/JS\n * where the behavior is unspecified.\n *\n public operator fun set(index: Int, value: ULong)
{\n storage[index] = value.toLong()\n }\n\n /** Returns the number of elements in the array. *\n public
override val size: Int get() = storage.size\n\n /** Creates an iterator over the elements of the array. *\n public
override operator fun iterator(): kotlin.collections.Iterator<ULong> = Iterator(storage)\n\n private class
Iterator(private val array: LongArray) : kotlin.collections.Iterator<ULong> {\n private var index = 0\n
override fun hasNext() = index < array.size\n override fun next() = if (index < array.size)
array[index++].toULong() else throw NoSuchElementException(index.toString())\n
}\n\n override fun contains(element: ULong): Boolean {\n // TODO: Eliminate this check after KT-30016
gets fixed.\n // Currently JS BE does not generate special bridge method for this method.\n
@Suppress("USELESS_CAST")\n if ((element as Any?) !is ULong) return false\n\n return
storage.contains(element.toLong())\n }\n\n override fun containsAll(elements: Collection<ULong>): Boolean
{\n return (elements as Collection<*>).all { it is ULong && storage.contains(it.toLong()) }\n }\n\n override
fun isEmpty(): Boolean = this.storage.size == 0\n\n**\n * Creates a new array of the specified [size], where each
element is calculated by calling the specified\n * [init] function.\n * \n * The function [init] is called for each array
element sequentially starting from the first one.\n * It should return the value for an array element given its index.\n
*\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public
inline fun ULongArray(size: Int, init: (Int) -> ULong): ULongArray {\n return ULongArray(LongArray(size) {
index -> init(index).toLong()
})\n}\n\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun
ulongArrayOf(vararg elements: ULong): ULongArray = elements\n", "/*\n * Copyright 2010-2022 JetBrains s.r.o.
and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license
that can be found in the license/LICENSE.txt file.\n */\n\n // Auto-generated file. DO NOT EDIT!\n\n package
kotlin\n\n import kotlin.jvm.*\n\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @JvmInline\n public
value class UShortArray\n @PublishedApi\n internal constructor(@PublishedApi internal val storage: ShortArray) :
Collection<UShort> {\n\n /** Creates a new array of the specified [size], with all elements initialized to zero. *\n
public constructor(size: Int) : this(ShortArray(size))\n\n /**\n * Returns
the array element at the given [index]. This method can be called using the index operator.\n *\n * If the
[index] is out of bounds of this array, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the
behavior is unspecified.\n *\n public operator fun get(index: Int): UShort = storage[index].toUShort()\n\n
/**\n * Sets the element at the given [index] to the given [value]. This method can be called using the index
operator.\n *\n * If the [index] is out of bounds of this array, throws an [IndexOutOfBoundsException] except
in Kotlin/JS\n * where the behavior is unspecified.\n *\n public operator fun set(index: Int, value: UShort)
{\n storage[index] = value.toShort()\n }\n\n /** Returns the number of elements in the array. *\n public
override val size: Int get() = storage.size\n\n /** Creates an iterator over the elements of the array. *\n public
override operator fun iterator(): kotlin.collections.Iterator<UShort>
= Iterator(storage)\n\n private class Iterator(private val array: ShortArray) : kotlin.collections.Iterator<UShort>
{\n private var index = 0\n override fun hasNext() = index < array.size\n override fun next() = if (index
< array.size) array[index++].toUShort() else throw NoSuchElementException(index.toString())\n }\n\n override
fun contains(element: UShort): Boolean {\n // TODO: Eliminate this check after KT-30016 gets fixed.\n //
Currently JS BE does not generate special bridge method for this method.\n
@Suppress("USELESS_CAST")\n if ((element as Any?) !is UShort) return false\n\n return
storage.contains(element.toShort())\n }\n\n override fun containsAll(elements: Collection<UShort>): Boolean
{\n return (elements as Collection<*>).all { it is UShort && storage.contains(it.toShort()) }\n }\n\n override
fun isEmpty(): Boolean = this.storage.size == 0\n\n**\n * Creates a new

```

array of the specified [size], where each element is calculated by calling the specified [init] function. The function [init] is called for each array element sequentially starting from the first one. It should return the value for an array element given its index.

```
\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUShortArray(size: Int, init: (Int) -> UShort): UShortArray {\n return UShortArray(ShortArray(size) { index ->\n init(index).toShort()\n })\n}\n\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nushortArrayOf(vararg elements: UShort): UShortArray = elements\n\n", /*\n * Copyright 2010-2022 JetBrains s.r.o.\n * and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license\n * that can be found in the license/LICENSE.txt file.\n *\n *\n * @file: kotlin.jvm.JvmMultifileClass\n * @file: kotlin.jvm.JvmName("UArraysKt")\n * @file: kotlin.jvm.JvmPackageName("kotlin.collections.unsigned")\n *\n * package\n * kotlin.collections\n *\n * // NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n * // See:\n * https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n *\n * \nimport kotlin.random.*\nimport\n * kotlin.ranges.contains\nimport kotlin.ranges.reversed\n *\n * Returns 1st *element* from the array.\n *\n * If the size of this array is less than 1, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n *\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * public\n * inline operator fun\n * UIntArray.component1(): UInt {\n * return get(0)\n * }\n *\n * Returns 1st *element* from the array.\n *\n * If the size of this array is less than 1, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n *\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * public inline operator fun\n * ULongArray.component1():\n * ULong {\n * return get(0)\n * }\n *\n * Returns 1st *element* from the array.\n *\n * If the size of this array is less than 1, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n *\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * public inline operator fun\n * UByteArray.component1(): UByte {\n * return get(0)\n * }\n *\n * Returns 1st *element* from the array.\n *\n * If the size of this array is less than 1, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n *\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * public inline operator fun\n * UShortArray.component1(): UShort {\n * return get(0)\n * }\n *\n * Returns 2nd *element* from the array.\n *\n * If the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n *\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * public\n * inline operator fun\n * UIntArray.component2(): UInt {\n * return get(1)\n * }\n *\n * Returns 2nd *element* from the array.\n *\n * If the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n *\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * public inline operator fun\n * ULongArray.component2(): ULong {\n * return get(1)\n * }\n *\n * Returns 2nd *element* from the array.\n *\n * If the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n *\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * public inline operator fun\n * UByteArray.component2(): UByte {\n * return get(1)\n * }\n *\n * Returns 2nd *element* from the array.\n *\n * If the size of this array is less than 2, throws an [IndexOutOfBoundsException]\n * except in Kotlin/JS\n * where the behavior is unspecified.\n *\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * public inline operator fun\n * UShortArray.component2(): UShort {\n * return get(1)\n * }\n *\n * Returns 3rd *element* from the array.\n *\n * If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n *\n
```

\*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun  
UIntArray.component3(): UInt {\n return get(2)\n}\n\n/\*\*\n \* Returns 3rd \*element\* from the array.\n \* \n \* If  
the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the  
behavior is unspecified.\n

\*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun  
ULongArray.component3(): ULong {\n return get(2)\n}\n\n/\*\*\n \* Returns 3rd \*element\*  
from the array.\n \* \n \* If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in  
Kotlin/JS\n \* where the behavior is unspecified.\n

\*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun  
UByteArray.component3(): UByte {\n return get(2)\n}\n\n/\*\*\n \* Returns 3rd \*element\* from the array.\n \* \n \*  
If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the  
behavior is unspecified.\n

\*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun  
UShortArray.component3(): UShort {\n return get(2)\n}\n\n/\*\*\n \* Returns 4th \*element\* from the array.\n \* \n \*  
If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the  
behavior is unspecified.\n

\*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline  
operator fun UIntArray.component4(): UInt {\n return get(3)\n}\n\n/\*\*\n \* Returns 4th \*element\* from the  
array.\n \* \n \* If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \*  
\* where the behavior is unspecified.\n

\*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun  
ULongArray.component4(): ULong {\n return get(3)\n}\n\n/\*\*\n \* Returns 4th \*element\* from the array.\n \* \n \*  
If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the  
behavior is unspecified.\n

\*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun  
UByteArray.component4(): UByte {\n return get(3)\n}\n\n/\*\*\n \* Returns 4th \*element\* from the array.\n \* \n \*  
If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the  
behavior is unspecified.\n

\*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic  
inline operator fun UShortArray.component4(): UShort {\n return get(3)\n}\n\n/\*\*\n \* Returns 5th \*element\*  
from the array.\n \* \n \* If the size of this array is less than 5, throws an [IndexOutOfBoundsException] except in  
Kotlin/JS\n \* where the behavior is unspecified.\n

\*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun  
UIntArray.component5(): UInt {\n return get(4)\n}\n\n/\*\*\n \* Returns 5th \*element\* from the array.\n \* \n \* If  
the size of this array is less than 5, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior  
is unspecified.\n

\*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic  
inline operator fun ULongArray.component5(): ULong {\n return get(4)\n}\n\n/\*\*\n \* Returns 5th \*element\* from  
the array.\n \* \n \* If the size of this array is less than 5, throws an  
[IndexOutOfBoundsException] except in Kotlin/JS\n \* where the behavior is unspecified.\n

\*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun  
UByteArray.component5(): UByte {\n return get(4)\n}\n\n/\*\*\n \* Returns 5th \*element\* from the array.\n \* \n \*  
If the size of this array is less than 5, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n \* where the  
behavior is unspecified.\n

\*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun  
UShortArray.component5(): UShort {\n return get(4)\n}\n\n/\*\*\n \* Returns an element at the given [index] or  
throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n \* \n \* @sample  
samples.collections.Collections.Elements.elementAt\n

\*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic expect fun UIntArray.elementAt(index: Int):



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UInt\n\n/**\n * Returns an element at the given [index] or throws
an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic expect fun ULongArray.elementAt(index: Int):
ULong\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index]
is out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic expect fun UByteArray.elementAt(index: Int):
UByte\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index]
is out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic expect fun UShortArray.elementAt(index: Int):
UShort\n\n/**\n * Returns an element at the given [index] or the result of calling the [defaultValue]
function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.elementAtOrElse(index: Int, defaultValue: (Int) -> UInt): UInt {\n return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.elementAtOrElse(index: Int, defaultValue: (Int) -> ULong): ULong {\n return if (index >= 0 &&
index <= lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the
result of calling the [defaultValue] function
if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.elementAtOrElse(index: Int, defaultValue: (Int) -> UByte): UByte {\n return if (index >= 0 &&
index <= lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result
of calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.elementAtOrElse(index: Int, defaultValue: (Int) -> UShort): UShort {\n return if (index >= 0 &&
index <= lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or
`null` if the [index] is out of bounds of this array.\n
* \n * @sample samples.collections.Collections.Elements.elementAtOrNull\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.elementAtOrNull(index: Int): UInt? {\n return this.getOrNull(index)\n}\n\n/**\n * Returns an element
at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.elementAtOrNull(index: Int): ULong? {\n return this.getOrNull(index)\n}\n\n/**\n * Returns an
element at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.elementAtOrNull(index: Int): UByte? {\n return this.getOrNull(index)\n}\n\n/**\n * Returns an element
at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.elementAtOrNull(index: Int): UShort? {\n return this.getOrNull(index)\n}\n\n/**\n * Returns the

```

first element matching the given [predicate], or `null` if no such element was found.\n \* \n \* @sample samples.collections.Collections.Elements.find\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.find(predicate: (UInt) -> Boolean): UInt? {\n return firstOrNull(predicate)\n}\n\n/**\n * Returns the
first element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun ULongArray.find(predicate: (ULong) -> Boolean): ULong? {\n return
firstOrNull(predicate)\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null` if no such
element was found.\n * \n * @sample samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.find(predicate: (UByte) -> Boolean): UByte? {\n return firstOrNull(predicate)\n}\n\n/**\n * Returns
the first element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.find(predicate: (UShort) -> Boolean): UShort? {\n return firstOrNull(predicate)\n}\n\n/**\n *
Returns the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.findLast(predicate: (UInt) -> Boolean): UInt? {\n return lastOrNull(predicate)\n}\n\n/**\n * Returns the
last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.findLast(predicate: (ULong) -> Boolean): ULong? {\n return lastOrNull(predicate)\n}\n\n/**\n *
Returns the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.findLast(predicate: (UByte) -> Boolean): UByte? {\n return lastOrNull(predicate)\n}\n\n/**\n *
Returns
the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.findLast(predicate: (UShort) -> Boolean): UShort? {\n return lastOrNull(predicate)\n}\n\n/**\n *
Returns the first element.\n * \n * @throws NoSuchElementException if the array is empty.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.first(): UInt {\n return storage.first().toUInt()\n}\n\n/**\n * Returns the first element.\n * \n * @throws
NoSuchElementException if the array is empty.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.first(): ULong {\n return storage.first().toULong()\n}\n\n/**\n * Returns the first element.\n * \n *
@throws NoSuchElementException if the array is empty.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.first(): UByte {\n return storage.first().toUByte()\n}\n\n/**\n * Returns the first element.\n * \n *
@throws NoSuchElementException if the array is empty.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.first(): UShort {\n return storage.first().toUShort()\n}\n\n/**\n * Returns the first element matching
the given [predicate].\n * \n * @throws [NoSuchElementException] if no such element is found.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.first(predicate: (UInt) -> Boolean): UInt {\n for (element in this) if (predicate(element)) return
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element\n throw NoSuchElementException("\nArray contains no element matching the predicate.\n")\n}\n\n/**\n *
Returns the first element matching the given [predicate].\n * @throws [NoSuchElementException]
if no such element is found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.first(predicate: (ULong) -> Boolean): ULong {\n for (element in this) if (predicate(element)) return
element\n throw NoSuchElementException("\nArray contains no element matching the predicate.\n")\n}\n\n/**\n *
Returns the first element matching the given [predicate].\n * @throws [NoSuchElementException] if no such
element is found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.first(predicate: (UByte) -> Boolean): UByte {\n for (element in this) if (predicate(element)) return
element\n throw NoSuchElementException("\nArray contains no element matching the predicate.\n")\n}\n\n/**\n *
Returns the first element matching the given [predicate].\n * @throws [NoSuchElementException] if no such
element is found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UShortArray.first(predicate: (UShort) -> Boolean): UShort {\n for (element in this) if
(predicate(element)) return element\n throw NoSuchElementException("\nArray contains no element matching the
predicate.\n")\n}\n\n/**\n * Returns the first element, or `null` if the array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.firstOrNull(): UInt? {\n return
if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first element, or `null` if the array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.firstOrNull(): ULong? {\n
return if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first element, or `null` if the array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.firstOrNull(): UByte? {\n
return if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first element, or `null` if the array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.firstOrNull(): UShort? {\n
return if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null`
if element was not found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.firstOrNull(predicate: (UInt) -> Boolean): UInt? {\n for (element in this) if (predicate(element)) return
element\n return null\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null` if element
was not found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun ULongArray.firstOrNull(predicate: (ULong) -> Boolean): ULong? {\n for (element in this) if
(predicate(element)) return element\n return null\n}\n\n/**\n * Returns the first element matching the given
[predicate], or `null` if element was not found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UByteArray.firstOrNull(predicate: (UByte) -> Boolean): UByte? {\n for (element in this) if
(predicate(element)) return element\n return null\n}\n\n/**\n * Returns the first element matching the given
[predicate], or `null` if element was not found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.firstOrNull(predicate: (UShort) -> Boolean): UShort? {\n for (element in this) if (predicate(element))
return element\n return null\n}\n\n/**\n * Returns an element at the given [index] or the result of calling the
[defaultValue] function if the [index] is out of bounds of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.getOrNull(index: Int, defaultValue: (Int) -> UInt): UInt {\n return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result of calling the
[defaultValue] function if the [index] is out of
bounds of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.getOrNull(index: Int, defaultValue: (Int) -> ULong): ULong {\n return if (index >= 0 && index <=

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lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.getOrNull(index: Int, defaultValue: (Int) -> UByte): UByte {\n return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UShortArray.getOrNull(index: Int, defaultValue: (Int) -> UShort): UShort {\n return if (index >= 0 &&
index <= lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or
`null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.getOrNull\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.getOrNull(index: Int): UInt? {\n
 return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n/**\n * Returns an element at the given
[index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.getOrNull\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.getOrNull(index: Int):
ULong? {\n return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n/**\n * Returns an
element at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.getOrNull\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.getOrNull(index: Int): UByte?
{\n return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n/**\n * Returns an element at the
given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.getOrNull\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.getOrNull(index: Int):
UShort? {\n return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n/**\n * Returns first index of
[element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.indexOf(element: UInt): Int {\n return storage.indexOf(element.toInt())\n}\n\n/**\n * Returns
first index of [element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.indexOf(element: ULong): Int {\n return storage.indexOf(element.toLong())\n}\n\n/**\n * Returns
first index of [element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.indexOf(element: UByte): Int {\n return storage.indexOf(element.toByte())\n}\n\n/**\n * Returns
first index of [element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.indexOf(element: UShort): Int {\n return storage.indexOf(element.toShort())\n}\n\n/**\n * Returns
index of the first element matching the given [predicate], or -1 if the array does not contain such element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UIntArray.indexOfFirst(predicate: (UInt) -> Boolean): Int {\n return storage.indexOfFirst {
predicate(it.toInt()) }\n}\n\n/**\n * Returns index of the first element matching the given [predicate], or -1 if the
array does not contain such element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.indexOfFirst(predicate: (ULong) -> Boolean): Int {\n return storage.indexOfFirst {
predicate(it.toULong()) }\n}\n\n/**\n * Returns index of the first element matching the given [predicate], or -1 if the
array does not contain such element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.indexOfFirst(predicate: (UByte) -> Boolean): Int {\n return storage.indexOfFirst {

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predicate(it.toUByte()) } } \n \n /** \n * Returns index of the first element matching the given [predicate], or -1 if
the array does not contain such element. \n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.indexOfFirst(predicate: (UShort) -> Boolean): Int { \n return storage.indexOfFirst {
predicate(it.toUShort()) } } \n \n /** \n * Returns index of the last element matching the given [predicate], or -1 if the
array does not contain such element. \n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.indexOfLast(predicate: (UInt) -> Boolean): Int { \n return storage.indexOfLast { predicate(it.toUInt())
} } \n \n /** \n * Returns index of the last element matching the given [predicate], or -1 if the array does not contain
such element. \n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun ULongArray.indexOfLast(predicate: (ULong) -> Boolean): Int { \n return storage.indexOfLast {
predicate(it.toULong()) } } \n \n /** \n * Returns
index of the last element matching the given [predicate], or -1 if the array does not contain such element. \n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.indexOfLast(predicate: (UByte) -> Boolean): Int { \n return storage.indexOfLast {
predicate(it.toUByte()) } } \n \n /** \n * Returns index of the last element matching the given [predicate], or -1 if the
array does not contain such element. \n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.indexOfLast(predicate: (UShort) -> Boolean): Int { \n return storage.indexOfLast {
predicate(it.toUShort()) } } \n \n /** \n * Returns the last element. \n * \n * @throws NoSuchElementException if the
array is empty. \n * \n * @sample samples.collections.Collections.Elements.last \n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.last(): UInt { \n return storage.last().toUInt() } \n \n /** \n
* Returns the last element. \n * \n * @throws NoSuchElementException if the array is empty. \n * \n * @sample
samples.collections.Collections.Elements.last \n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.last(): ULong { \n return storage.last().toULong() } \n \n /** \n * Returns the last element. \n * \n *
@throws NoSuchElementException if the array is empty. \n * \n * @sample
samples.collections.Collections.Elements.last \n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.last(): UByte { \n return storage.last().toUByte() } \n \n /** \n * Returns the last element. \n * \n *
@throws NoSuchElementException if the array is empty. \n * \n * @sample
samples.collections.Collections.Elements.last \n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.last(): UShort { \n return
storage.last().toUShort() } \n \n /** \n * Returns the last element matching the given [predicate]. \n * \n * @throws
NoSuchElementException if no such element is found. \n * \n * @sample
samples.collections.Collections.Elements.last \n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.last(predicate: (UInt) -> Boolean): UInt { \n for (index in this.indices.reversed()) { \n val element =
this[index] \n if (predicate(element)) return element \n } \n throw NoSuchElementException("Array contains
no element matching the predicate.") } \n \n /** \n * Returns the last element matching the given [predicate]. \n * \n *
@throws NoSuchElementException if no such element is found. \n * \n * @sample
samples.collections.Collections.Elements.last \n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.last(predicate: (ULong) -> Boolean): ULong { \n for (index in this.indices.reversed())
{ \n val element = this[index] \n if (predicate(element)) return element \n } \n throw
NoSuchElementException("Array contains no element matching the predicate.") } \n \n /** \n * Returns the last

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element matching the given [predicate].\n * \n * @throws NoSuchElementException if no such element is found.\n
* \n * @sample samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.last(predicate: (UByte) -> Boolean): UByte {\n for (index in this.indices.reversed()) {\n val
element = this[index]\n if (predicate(element)) return element\n }\n throw
NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the last
element matching the given [predicate].\n * \n * @throws NoSuchElementException if no such element is found.\n
* \n * @sample samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UShortArray.last(predicate: (UShort) -> Boolean): UShort {\n for (index in this.indices.reversed()) {\n
 val element = this[index]\n if (predicate(element)) return element\n }\n throw
NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns last index
of [element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.lastIndexOf(element: UInt): Int {\n return storage.lastIndexOf(element.toInt())\n}\n\n/**\n * Returns
last index of [element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.lastIndexOf(element: ULong): Int {\n return storage.lastIndexOf(element.toLong())\n}\n\n/**\n *
Returns last index of [element],
or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.lastIndexOf(element: UByte): Int {\n return storage.lastIndexOf(element.toByte())\n}\n\n/**\n *
Returns last index of [element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.lastIndexOf(element: UShort): Int {\n return storage.lastIndexOf(element.toShort())\n}\n\n/**\n *
Returns the last element, or `null` if the array is empty.\n * \n * @sample
samples.collections.Collections.Elements.last\n*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
fun UIntArray.lastOrNull(): UInt? {\n return if (isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last
element, or `null` if the array is empty.\n * \n * @sample samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
fun ULongArray.lastOrNull(): ULong? {\n return if (isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the
last element, or `null` if the array is empty.\n * \n * @sample samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.lastOrNull(): UByte? {\n
return if (isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element, or `null` if the array is empty.\n
*\n * @sample samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.lastOrNull(): UShort? {\n
return if (isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element matching the given [predicate], or
`null` if no such element was found.\n * \n * @sample samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.lastOrNull(predicate:
(UInt) -> Boolean): UInt? {\n for (index in this.indices.reversed()) {\n val element = this[index]\n
 if
(predicate(element)) return element\n }\n return null\n}\n\n/**\n * Returns the last element matching the given
[predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.lastOrNull(predicate: (ULong) -> Boolean): ULong? {\n for (index in this.indices.reversed()) {\n
val element = this[index]\n if (predicate(element)) return element\n }\n return null\n}\n\n/**\n * Returns the
last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample

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samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.lastOrNull(predicate:
(UByte) -> Boolean): UByte? {\n for (index in this.indices.reversed()) {\n val element = this[index]\n if
(predicate(element)) return element\n }\n return null\n}\n\n/**\n * Returns the last element matching the given
[predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.lastOrNull(predicate: (UShort) -> Boolean): UShort? {\n for (index in this.indices.reversed()) {\n
val element = this[index]\n if (predicate(element)) return element\n }\n return null\n}\n\n/**\n * Returns a
random element from this array.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.random(): UInt {\n return random(Random)\n}\n\n/**\n * Returns a random element
from this array.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.random(): ULong {\n return random(Random)\n}\n\n/**\n * Returns a random element from this
array.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.random(): UByte {\n return random(Random)\n}\n\n/**\n * Returns a random element from this
array.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.random(): UShort {\n return random(Random)\n}\n\n/**\n * Returns a random element from this
array using the specified source of randomness.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
fun UIntArray.random(random: Random): UInt {\n if (isEmpty())\n throw NoSuchElementException("Array
is empty.")\n return get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the
specified source of randomness.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.random(random: Random):
ULong {\n if (isEmpty())\n throw NoSuchElementException("Array is empty.")\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of
randomness.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.random(random: Random):
UByte {\n if (isEmpty())\n throw NoSuchElementException("Array is empty.")\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns a random
element from this array using the specified source of randomness.\n * \n * @throws NoSuchElementException if
this array is empty.\n * \n * @SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UShortArray.random(random: Random): UShort {\n if (isEmpty())\n throw
NoSuchElementException("Array is empty.")\n return get(random.nextInt(size))\n}\n\n/**\n * Returns a random
element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun UIntArray.randomOrNull(): UInt? {\n return
randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun ULongArray.randomOrNull(): ULong? {\n return
randomOrNull(Random)\n}\n\n/**\n * Returns
a random element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun UByteArray.randomOrNull(): UByte? {\n return

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randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun UShortArray.randomOrNull(): UShort? {\n return
randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array using the specified source of
randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
public fun UIntArray.randomOrNull(random: Random): UInt? {\n if (isEmpty())\n return null\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns
a random element from this array using the specified source of randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
public fun ULongArray.randomOrNull(random: Random): ULong? {\n if (isEmpty())\n return null\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of
randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
public fun UByteArray.randomOrNull(random: Random): UByte? {\n if (isEmpty())\n return null\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of
randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
public fun UShortArray.randomOrNull(random:
Random): UShort? {\n if (isEmpty())\n return null\n return get(random.nextInt(size))\n}\n\n/**\n * Returns
the single element, or throws an exception if the array is empty or has more than one element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.single(): UInt {\n return storage.single().toUInt()\n}\n\n/**\n * Returns the single element, or throws an
exception if the array is empty or has more than one element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.single(): ULong {\n return storage.single().toULong()\n}\n\n/**\n * Returns the single element, or
throws an exception if the array is empty or has more than one element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.single(): UByte {\n return storage.single().toUByte()\n}\n\n/**\n * Returns the single
element, or throws an exception if the array is empty or has more than one element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.single(): UShort {\n return storage.single().toUShort()\n}\n\n/**\n * Returns the single element
matching the given [predicate], or throws exception if there is no or more than one matching element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.single(predicate: (UInt) -> Boolean): UInt {\n var single: UInt? = null\n var found = false\n for
(element in this) {\n if (predicate(element)) {\n if (found) throw IllegalArgumentException("Array
contains more than one matching element.")\n single = element\n found = true\n }\n }\n if
(!found) throw NoSuchElementException("Array contains no element matching the predicate.")\n @Suppress("UNCHECKED_CAST")\n
return single as UInt\n}\n\n/**\n * Returns the single element matching the given [predicate], or throws exception
if there is no or more than one matching element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.single(predicate: (ULong) -> Boolean): ULong {\n var single: ULong? = null\n var found = false\n
for (element in this) {\n if (predicate(element)) {\n if (found) throw IllegalArgumentException("Array
contains more than one matching element.")\n single = element\n found = true\n }\n }\n if
(!found) throw NoSuchElementException("Array contains no element matching the predicate.")\n @Suppress("UNCHECKED_CAST")\n
return single as ULong\n}\n\n/**\n * Returns the single element
matching the given [predicate], or throws exception if there is no or more than one matching element.\n

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*^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^@kotlin.internal.InlineOnly^public
inline fun UByteArray.single(predicate: (UByte) -> Boolean): UByte {^n var single: UByte? = null^n var found
= false^n for (element in this) {^n if (predicate(element)) {^n if (found) throw
IllegalArgumentOutOfRangeException("Array contains more than one matching element.")^n single = element^n
found = true^n }^n }^n if (!found) throw NoSuchElementException("Array contains no element matching
the predicate.")^n @Suppress("UNCHECKED_CAST")^n return single as UByte^n}^n/**^n * Returns the
single element matching the given [predicate], or throws exception if there is no or more than one matching
element.^n *^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^@kotlin.internal.InlineOnly^public inline
fun UShortArray.single(predicate: (UShort) -> Boolean): UShort {^n var single: UShort? = null^n var found =
false^n for (element in this) {^n if (predicate(element)) {^n
if (found) throw IllegalArgumentOutOfRangeException("Array contains more than one matching element.")^n single
= element^n found = true^n }^n }^n if (!found) throw NoSuchElementException("Array contains no
element matching the predicate.")^n @Suppress("UNCHECKED_CAST")^n return single as
UShort^n}^n/**^n * Returns single element, or `null` if the array is empty or has more than one element.^n
*^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^public fun UIntArray.singleOrNull(): UInt? {^n
return if (size == 1) this[0] else null^n}^n/**^n * Returns single element, or `null` if the array is empty or has more
than one element.^n *^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^public fun
ULongArray.singleOrNull(): ULong? {^n return if (size == 1) this[0] else null^n}^n/**^n * Returns single
element, or `null` if the array is empty or has more than one element.^n
*^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^public fun
UByteArray.singleOrNull(): UByte? {^n return if (size == 1) this[0] else null^n}^n/**^n * Returns single
element, or `null` if the array is empty or has more than one element.^n
*^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^public fun UShortArray.singleOrNull(): UShort? {^n
return if (size == 1) this[0] else null^n}^n/**^n * Returns the single element matching the given [predicate], or
`null` if element was not found or more than one element was found.^n
*^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^@kotlin.internal.InlineOnly^public inline fun
UIntArray.singleOrNull(predicate: (UInt) -> Boolean): UInt? {^n var single: UInt? = null^n var found = false^n
for (element in this) {^n if (predicate(element)) {^n if (found) return null^n single = element^n
found = true^n }^n }^n if (!found) return null^n return single^n}^n/**^n * Returns the single element
matching the given [predicate], or `null`
if element was not found or more than one element was found.^n
*^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^@kotlin.internal.InlineOnly^public inline fun
ULongArray.singleOrNull(predicate: (ULong) -> Boolean): ULong? {^n var single: ULong? = null^n var found
= false^n for (element in this) {^n if (predicate(element)) {^n if (found) return null^n single =
element^n found = true^n }^n }^n if (!found) return null^n return single^n}^n/**^n * Returns the
single element matching the given [predicate], or `null` if element was not found or more than one element was
found.^n *^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^@kotlin.internal.InlineOnly^public inline
fun UByteArray.singleOrNull(predicate: (UByte) -> Boolean): UByte? {^n var single: UByte? = null^n var found
= false^n for (element in this) {^n if (predicate(element)) {^n if (found) return null^n single =
element^n
found = true^n }^n }^n if (!found) return null^n return single^n}^n/**^n * Returns the single
element matching the given [predicate], or `null` if element was not found or more than one element was found.^n
*^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^@kotlin.internal.InlineOnly^public inline fun
UShortArray.singleOrNull(predicate: (UShort) -> Boolean): UShort? {^n var single: UShort? = null^n var found
= false^n for (element in this) {^n if (predicate(element)) {^n if (found) return null^n single =
element^n found = true^n }^n }^n if (!found) return null^n return single^n}^n/**^n * Returns a list
containing all elements except first [n] elements.^n * ^n * @throws IllegalArgumentException if [n] is negative.^n *
^n * @sample samples.collections.Collections.Transformations.drop^n

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*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.drop(n: Int): List<UInt>
{\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.drop(n: Int): List<ULong> {\n
 require(n >= 0) { \"Requested element count $n is less than zero.\" }\n return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.drop(n: Int): List<UByte> {\n
 require(n >= 0) { \"Requested element count $n is less than zero.\" }\n return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * \n * @throws
IllegalArgumentException if [n]
is negative.\n * \n * @sample samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.drop(n: Int): List<UShort> {\n
 require(n >= 0) { \"Requested element count $n is less than zero.\" }\n return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.dropLast(n: Int): List<UInt> {\n
 require(n >= 0) { \"Requested element count $n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.dropLast(n: Int):
List<ULong> {\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.dropLast(n: Int): List<UByte>
{\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.dropLast(n: Int):
List<UShort> {\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last elements that satisfy the given
[predicate].\n * \n * @sample samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.dropLastWhile(predicate: (UInt) -> Boolean): List<UInt> {\n for (index in lastIndex downTo 0) {\n
 if (!predicate(this[index])) {\n return take(index + 1)\n }\n }\n return emptyList()\n}\n\n/**\n * Returns a list containing all elements except last elements that satisfy the given
[predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun ULongArray.dropLastWhile(predicate: (ULong) -> Boolean): List<ULong> {\n for (index in lastIndex
downTo 0) {\n if (!predicate(this[index])) {\n return take(index + 1)\n }\n }\n return
emptyList()\n}\n\n/**\n * Returns a list containing all elements except last elements that satisfy the given

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[predicate].\n * \n * @sample samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.dropLastWhile(predicate: (UByte) -> Boolean): List<UByte> {\n for (index in lastIndex downTo 0)
{\n if (!predicate(this[index])) {\n return take(index + 1)\n }\n }\n return emptyList()\n}\n\n/**\n * Returns a list containing all elements except last elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UShortArray.dropLastWhile(predicate: (UShort) -> Boolean): List<UShort> {\n for (index in lastIndex
downTo 0) {\n if (!predicate(this[index])) {\n return take(index + 1)\n }\n }\n return
emptyList()\n}\n\n/**\n * Returns a list containing all elements except first elements that satisfy the given
[predicate].\n * \n * @sample samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.dropWhile(predicate: (UInt) -> Boolean): List<UInt> {\n var yielding = false\n val list =
ArrayList<UInt>()\n for (item in this)\n if (yielding)\n list.add(item)\n else if (!predicate(item)) {\n
 list.add(item)\n yielding = true\n }\n return list\n}\n\n/**\n * Returns a list containing all
elements except first elements that satisfy the given [predicate].\n
 * \n * @sample samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.dropWhile(predicate: (ULong) -> Boolean): List<ULong> {\n var yielding = false\n val list =
ArrayList<ULong>()\n for (item in this)\n if (yielding)\n list.add(item)\n else if (!predicate(item))
{\n list.add(item)\n yielding = true\n }\n return list\n}\n\n/**\n * Returns a list containing all
elements except first elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.dropWhile(predicate: (UByte) -> Boolean): List<UByte> {\n var yielding = false\n val list =
ArrayList<UByte>()\n for (item in this)\n if (yielding)\n list.add(item)\n else if (!predicate(item)) {\n
 list.add(item)\n yielding = true\n }\n return list\n}\n\n/**\n * Returns a list containing all
elements except first elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.dropWhile(predicate: (UShort) -> Boolean): List<UShort> {\n var yielding = false\n val list =
ArrayList<UShort>()\n for (item in this)\n if (yielding)\n list.add(item)\n else if (!predicate(item))
{\n list.add(item)\n yielding = true\n }\n return list\n}\n\n/**\n * Returns a list containing only
elements matching the given [predicate].\n * \n * @sample samples.collections.Collections.Filtering.filter\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.filter(predicate:
(UInt) -> Boolean): List<UInt> {\n return filterTo(ArrayList<UInt>(), predicate)\n}\n\n/**\n * Returns a list
containing only elements matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.filter(predicate: (ULong) -> Boolean): List<ULong> {\n return filterTo(ArrayList<ULong>(),
predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.filter(predicate: (UByte) -> Boolean): List<UByte> {\n return filterTo(ArrayList<UByte>(),
predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n

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*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.filter(predicate: (UShort) -> Boolean): List<UShort> {\n return filterTo(ArrayList<UShort>(),
predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * @param
[predicate] function that takes the index of an element and the element itself\n * and returns the result of predicate
evaluation on the element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexed\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.filterIndexed(predicate: (index: Int, UInt) -> Boolean): List<UInt> {\n return
filterIndexedTo(ArrayList<UInt>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the
given [predicate].\n * @param [predicate] function that takes the index of an element and the element itself\n * and
returns the result of predicate evaluation
on the element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexed\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.filterIndexed(predicate: (index: Int, ULong) -> Boolean): List<ULong> {\n return
filterIndexedTo(ArrayList<ULong>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the
given [predicate].\n * @param [predicate] function that takes the index of an element and the element itself\n * and
returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexed\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.filterIndexed(predicate: (index: Int, UByte) -> Boolean): List<UByte> {\n return
filterIndexedTo(ArrayList<UByte>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the
given [predicate].\n * @param
[predicate] function that takes the index of an element and the element itself\n * and returns the result of predicate
evaluation on the element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexed\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.filterIndexed(predicate: (index: Int, UShort) -> Boolean): List<UShort> {\n return
filterIndexedTo(ArrayList<UShort>(), predicate)\n}\n\n/**\n * Appends all elements matching the given [predicate]
to the given [destination].\n * @param [predicate] function that takes the index of an element and the element
itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UInt>> UIntArray.filterIndexedTo(destination: C, predicate: (index: Int,
UInt) -> Boolean): C {\n forEachIndexed { index, element ->\n if (predicate(index, element))
destination.add(element)\n }\n return destination\n}\n\n/**\n * Appends all elements matching the given
[predicate] to the given [destination].\n * @param [predicate] function that takes the index of an element and the
element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in ULong>> ULongArray.filterIndexedTo(destination: C, predicate: (index: Int, ULong) ->
Boolean): C {\n forEachIndexed { index, element ->\n if (predicate(index, element))
destination.add(element)\n }\n return destination\n}\n\n/**\n * Appends all elements matching the given
[predicate] to the given [destination].\n * @param [predicate] function that takes the index of
an element and the element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UByte>> UByteArray.filterIndexedTo(destination: C, predicate: (index: Int, UByte) ->
Boolean): C {\n forEachIndexed { index, element ->\n if (predicate(index, element))
destination.add(element)\n }\n return destination\n}\n\n/**\n * Appends all elements matching the given
[predicate] to the given [destination].\n * @param [predicate] function that takes the index of an element and the

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element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UShort>>
 UShortArray.filterIndexedTo(destination: C, predicate: (index: Int, UShort) -> Boolean): C {\n forEachIndexed {
index, element ->\n if (predicate(index, element)) destination.add(element)\n }\n return
destination\n}\n\n/**\n * Returns a list containing all elements not matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.filterNot(predicate: (UInt) -> Boolean): List<UInt> {\n return filterNotTo(ArrayList<UInt>(),
predicate)\n}\n\n/**\n * Returns a list containing all elements not matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.filterNot(predicate: (ULong) -> Boolean): List<ULong> {\n return filterNotTo(ArrayList<ULong>(),
predicate)\n}\n\n/**\n * Returns a list containing all elements not matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.filterNot(predicate: (UByte) -> Boolean): List<UByte> {\n return filterNotTo(ArrayList<UByte>(),
predicate)\n}\n\n/**\n * Returns a list containing all elements not matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.filterNot(predicate: (UShort) -> Boolean): List<UShort> {\n return
filterNotTo(ArrayList<UShort>(), predicate)\n}\n\n/**\n * Appends all elements not matching the given [predicate]
to the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun <C : MutableCollection<in UInt>> UIntArray.filterNotTo(destination: C, predicate: (UInt) -> Boolean):
C {\n for (element in this) if (!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements not matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in ULong>> ULongArray.filterNotTo(destination: C, predicate: (ULong) -> Boolean): C {\n
for (element in this) if (!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends
all elements not matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in
UByte>> UByteArray.filterNotTo(destination: C, predicate: (UByte) -> Boolean): C {\n for (element in this) if
(!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements not
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UShort>> UShortArray.filterNotTo(destination: C, predicate: (UShort) -> Boolean): C {\n
for (element in this) if (!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends
all elements matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UInt>> UIntArray.filterTo(destination:

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C, predicate: (UInt) -> Boolean): C { \n for (element in this) if (predicate(element)) destination.add(element)\n
return destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n *
\n * @sample samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in ULong>> ULongArray.filterTo(destination: C, predicate: (ULong) -> Boolean): C { \n for
(element in this) if (predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all
elements matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UByte>> UByteArray.filterTo(destination: C, predicate: (UByte) -> Boolean): C { \n for
(element in this) if (predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all
elements matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UShort>> UShortArray.filterTo(destination: C, predicate: (UShort) -> Boolean): C { \n for
(element in this) if (predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Returns a list
containing elements at indices in the specified [indices] range.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.slice(indices: IntRange):
List<UInt> { \n if (indices.isEmpty()) return listOf()\n return copyOfRange(indices.start, indices.endInclusive +
1).asList()\n}\n\n/**\n * Returns a list containing elements at indices in the specified [indices] range.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
fun ULongArray.slice(indices: IntRange): List<ULong> { \n if (indices.isEmpty()) return listOf()\n return
copyOfRange(indices.start, indices.endInclusive + 1).asList()\n}\n\n/**\n * Returns a list containing elements at
indices in the specified [indices] range.\n * \n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UByteArray.slice(indices: IntRange): List<UByte> { \n if (indices.isEmpty()) return listOf()\n return
copyOfRange(indices.start, indices.endInclusive + 1).asList()\n}\n\n/**\n * Returns a list containing elements at
indices in the specified [indices] range.\n * \n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UShortArray.slice(indices: IntRange): List<UShort> { \n if (indices.isEmpty()) return listOf()\n return
copyOfRange(indices.start, indices.endInclusive + 1).asList()\n}\n\n/**\n * Returns a list containing elements at
specified [indices].\n * \n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
fun UIntArray.slice(indices: Iterable<Int>): List<UInt> { \n val size = indices.collectionSizeOrDefault(10)\n if
(size == 0) return emptyList()\n val list = ArrayList<UInt>(size)\n for (index in indices) { \n
list.add(get(index))\n }\n return list\n}\n\n/**\n * Returns a list containing elements at specified [indices].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.slice(indices: Iterable<Int>):
List<ULong> { \n val size = indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n val list =
ArrayList<ULong>(size)\n for (index in indices) { \n list.add(get(index))\n }\n return list\n}\n\n/**\n *
Returns a list containing elements at specified [indices].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.slice(indices: Iterable<Int>):
List<UByte> { \n val size = indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n
val list = ArrayList<UByte>(size)\n for (index in indices) { \n list.add(get(index))\n }\n return
list\n}\n\n/**\n * Returns a list containing elements at specified [indices].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.slice(indices: Iterable<Int>):
List<UShort> { \n val size = indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n val list =
ArrayList<UShort>(size)\n for (index in indices) { \n list.add(get(index))\n }\n return list\n}\n\n/**\n *
Returns an array containing elements of this array at specified [indices].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.sliceArray(indices:
Collection<Int>): UIntArray { \n return UIntArray(storage.sliceArray(indices))\n}\n\n/**\n * Returns an array
containing elements of this array at specified [indices].\n

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*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.sliceArray(indices:
Collection<Int>):
 ULongArray {\n return ULongArray(storage.sliceArray(indices))\n}\n\n/**\n * Returns an array containing
elements of this array at specified [indices].\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
fun UByteArray.sliceArray(indices: Collection<Int>): UByteArray {\n return
UByteArray(storage.sliceArray(indices))\n}\n\n/**\n * Returns an array containing elements of this array at
specified [indices].\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UShortArray.sliceArray(indices: Collection<Int>): UShortArray {\n return
UShortArray(storage.sliceArray(indices))\n}\n\n/**\n * Returns an array containing elements at indices in the
specified [indices] range.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UIntArray.sliceArray(indices: IntRange): UIntArray {\n return UIntArray(storage.sliceArray(indices))\n}\n\n/**\n * Returns an array containing elements at indices in the specified [indices] range.\n
\n\n*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
fun ULongArray.sliceArray(indices: IntRange): ULongArray {\n return
ULongArray(storage.sliceArray(indices))\n}\n\n/**\n * Returns an array containing elements at indices in the
specified [indices] range.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UByteArray.sliceArray(indices: IntRange): UByteArray {\n return
UByteArray(storage.sliceArray(indices))\n}\n\n/**\n * Returns an array containing elements at indices in the
specified [indices] range.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UShortArray.sliceArray(indices: IntRange): UShortArray {\n return
UShortArray(storage.sliceArray(indices))\n}\n\n/**\n * Returns a list containing first [n] elements.\n * \n *
@throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n
\n*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.take(n: Int): List<UInt> {\n
 require(n >= 0) { \ "Requested element count $n is less than zero.\ " }\n if (n == 0) return emptyList()\n if (n >=
size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list = ArrayList<UInt>(n)\n for
(item in this) {\n list.add(item)\n if (++count == n)\n break\n }\n return list\n}\n\n/**\n * Returns
a list containing first [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n
\n*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.take(n: Int): List<ULong> {\n
 require(n >= 0) { \ "Requested element count $n is less than zero.\ " }\n if (n == 0) return emptyList()\n if (n >=
size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list = ArrayList<ULong>(n)\n for
(item in this) {\n list.add(item)\n if (++count == n)\n break\n }\n return list\n}\n\n/**\n * Returns a list containing first [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n
\n*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.take(n: Int): List<UByte> {\n
 require(n >= 0) { \ "Requested element count $n is less than zero.\ " }\n if (n == 0) return emptyList()\n if (n >=
size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list = ArrayList<UByte>(n)\n for
(item in this) {\n list.add(item)\n if (++count == n)\n break\n }\n return list\n}\n\n/**\n * Returns
a list containing first [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n
\n*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.take(n: Int): List<UShort> {\n
 require(n
 >= 0) { \ "Requested element count $n is less than zero.\ " }\n if (n == 0) return emptyList()\n if (n >= size)
return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list = ArrayList<UShort>(n)\n for
(item in this) {\n list.add(item)\n if (++count == n)\n break\n }\n return list\n}\n\n/**\n * Returns
a list containing last [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample

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samples.collections.Collections.Transformations.take\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.takeLast(n: Int): List<UInt> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val size =
size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list = ArrayList<UInt>(n)\n
for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n *
Returns a list containing last [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n *
@sample samples.collections.Collections.Transformations.take\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.takeLast(n: Int): List<ULong>\n
{\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val
size = size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list =
ArrayList<ULong>(n)\n for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n *
Returns a list containing last [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n *
@sample samples.collections.Collections.Transformations.take\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.takeLast(n: Int): List<UByte>\n
{\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val
size = size\n if (n >= size) return toList()\n if (n == 1) return
listOf(this[size - 1])\n val list = ArrayList<UByte>(n)\n for (index in size - n until size)\n
list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.takeLast(n: Int): List<UShort>\n
{\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val
size = size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list =
ArrayList<UShort>(n)\n for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n *
Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.takeLastWhile(predicate: (UInt) -> Boolean): List<UInt> {\n for (index in lastIndex downTo 0) {\n
if (!predicate(this[index])) {\n return drop(index + 1)\n }\n }\n return toList()\n}\n\n/**\n * Returns a
list containing last elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.takeLastWhile(predicate: (ULong) -> Boolean): List<ULong> {\n for (index in lastIndex downTo 0)
{\n if (!predicate(this[index])) {\n return drop(index + 1)\n }\n }\n return toList()\n}\n\n/**\n *
Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.takeLastWhile(predicate: (UByte) -> Boolean): List<UByte> {\n for (index in lastIndex downTo 0)
{\n if (!predicate(this[index])) {\n return drop(index + 1)\n }\n }\n return toList()\n}\n\n/**\n *
Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.takeLastWhile(predicate: (UShort) -> Boolean): List<UShort> {\n for (index in lastIndex downTo 0)
{\n if (!predicate(this[index])) {\n return drop(index + 1)\n }\n }\n return toList()\n}\n\n/**\n *
Returns a list containing first elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.takeWhile(predicate: (UInt) -> Boolean): List<UInt> {\n val list = ArrayList<UInt>()\n for (item in

```



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this) {\n if (!predicate(item))\n break\n list.add(item)\n }\n return list\n}\n\n/**\n * Returns a list containing first elements satisfying the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.take\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun ULongArray.takeWhile(predicate: (ULong) -> Boolean): List<ULong> {\n val list = ArrayList<ULong>()\n for (item in this) {\n if (!predicate(item))\n break\n list.add(item)\n }\n return list\n}\n\n/**\n * Returns a list containing first elements satisfying the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.take\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UByteArray.takeWhile(predicate: (UByte) -> Boolean): List<UByte> {\n val list = ArrayList<UByte>()\n for (item in this) {\n if (!predicate(item))\n break\n list.add(item)\n }\n return list\n}\n\n/**\n * Returns a list containing first elements satisfying the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.take\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UShortArray.takeWhile(predicate: (UShort) -> Boolean): List<UShort> {\n val list = ArrayList<UShort>()\n for (item in this) {\n if (!predicate(item))\n break\n list.add(item)\n }\n return list\n}\n\n/**\n * Reverses elements in the array in-place.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UIntArray.reverse(): Unit {\n storage.reverse()\n}\n\n/**\n * Reverses elements in the array in-place.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun ULongArray.reverse(): Unit {\n storage.reverse()\n}\n\n/**\n * Reverses elements in the array in-place.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UByteArray.reverse(): Unit {\n storage.reverse()\n}\n\n/**\n * Reverses elements of the array in the specified range in-place.\n * \n * @param fromIndex the start of the range (inclusive) to reverse.\n * @param toIndex the end of the range (exclusive) to reverse.\n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UIntArray.reverse(fromIndex: Int, toIndex: Int): Unit {\n storage.reverse(fromIndex, toIndex)\n}\n\n/**\n * Reverses elements of the array in the specified range in-place.\n * \n * @param fromIndex the start of the range (inclusive) to reverse.\n * @param toIndex the end of the range (exclusive) to reverse.\n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun ULongArray.reverse(fromIndex: Int, toIndex: Int): Unit {\n storage.reverse(fromIndex, toIndex)\n}\n\n/**\n * Reverses elements of the array in the specified range in-place.\n * \n * @param fromIndex the start of the range (inclusive) to reverse.\n * @param toIndex the end of the range (exclusive) to reverse.\n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UByteArray.reverse(fromIndex: Int, toIndex: Int): Unit {\n storage.reverse(fromIndex, toIndex)\n}\n\n/**\n * Reverses elements of the array in the specified range in-place.\n * \n * @param fromIndex the start of the range (inclusive) to reverse.\n * @param toIndex the end of the range (exclusive) to reverse.\n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */

```

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UShortArray.reverse(fromIndex: Int, toIndex: Int): Unit {\n storage.reverse(fromIndex,
toIndex)\n}\n\n/**\n * Returns a list with elements in reversed order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.reversed(): List<UInt> {\n if
(isEmpty()) return emptyList()\n val list = toMutableList()\n list.reverse()\n return list\n}\n\n/**\n * Returns a
list with elements in reversed order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
ULongArray.reversed(): List<ULong> {\n if (isEmpty()) return emptyList()\n val list = toMutableList()\n
list.reverse()\n return list\n}\n\n/**\n * Returns a list with elements in reversed order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.reversed(): List<UByte> {\n
if (isEmpty()) return emptyList()\n val list = toMutableList()\n list.reverse()\n return list\n}\n\n/**\n
 * Returns a list with elements in reversed order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.reversed(): List<UShort> {\n
if (isEmpty()) return emptyList()\n val list = toMutableList()\n list.reverse()\n return list\n}\n\n/**\n
 * Returns
an array with elements of this array in reversed order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.reversedArray(): UIntArray {\n return UIntArray(storage.reversedArray())\n}\n\n/**\n * Returns an
array with elements of this array in reversed order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.reversedArray(): ULongArray {\n return ULongArray(storage.reversedArray())\n}\n\n/**\n *
Returns an array with elements of this array in reversed order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.reversedArray():
UByteArray {\n return UByteArray(storage.reversedArray())\n}\n\n/**\n * Returns an array with elements of this
array in reversed order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.reversedArray(): UShortArray {\n return UShortArray(storage.reversedArray())\n}\n\n/**\n *
Randomly shuffles elements in this array in-place.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.shuffle(): Unit {\n
shuffle(Random)\n}\n\n/**\n * Randomly shuffles elements in this array in-place.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.shuffle(): Unit {\n
shuffle(Random)\n}\n\n/**\n * Randomly shuffles elements in this array in-place.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.shuffle(): Unit {\n
shuffle(Random)\n}\n\n/**\n * Randomly shuffles elements in this array in-place.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic
fun UShortArray.shuffle(): Unit {\n shuffle(Random)\n}\n\n/**\n * Randomly shuffles elements in this array in-
place using the specified [random] instance as the source of randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.shuffle(random: Random): Unit
{\n for (i in lastIndex downTo 1) {\n val j = random.nextInt(i + 1)\n val copy = this[i]\n this[i] =
this[j]\n this[j] = copy\n }\n}\n\n/**\n * Randomly shuffles elements in this array in-place using the specified
[random] instance as the source of randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.shuffle(random: Random):
Unit {\n for (i in lastIndex downTo 1) {\n val j = random.nextInt(i + 1)\n
 val copy = this[i]\n this[i] = this[j]\n this[j] = copy\n }\n}\n\n/**\n * Randomly shuffles elements in this
array in-place using the specified [random] instance as the source of randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.shuffle(random: Random):

```

```

Unit {
 for (i in lastIndex downTo 1) {
 val j = random.nextInt(i + 1)
 val copy = this[i]
 this[i] =
 this[j]
 this[j] = copy
 }
}

```

\* Randomly shuffles elements in this array in-place using the specified [random] instance as the source of randomness.

\* See:  
[https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\\_shuffle#The\\_modern\\_algorithm](https://en.wikipedia.org/wiki/Fisher%20%80%93Yates_shuffle#The_modern_algorithm)

```

@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun UShortArray.shuffle(random: Random):
Unit {
 for (i in lastIndex downTo 1) {
 val j = random.nextInt(i + 1)
 val
 copy = this[i]
 this[i] = this[j]
 this[j] = copy
 }
}

```

\* Sorts elements in the array in-place descending according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun UIntArray.sortDescending(): Unit {
 if
 (size > 1) {
 sort()
 reverse()
 }
}

```

\* Sorts elements in the array in-place descending according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun ULongArray.sortDescending(): Unit {
 if (size > 1) {
 sort()
 reverse()
 }
}

```

\* Sorts elements in the array in-place descending according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun UByteArray.sortDescending(): Unit {
 if
 (size > 1) {
 sort()
 reverse()
 }
}

```

\* Sorts elements in the array in-place descending according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun UShortArray.sortDescending(): Unit {
 if (size > 1) {
 sort()
 reverse()
 }
}

```

\* Returns a list of all elements sorted according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun UIntArray.sorted(): List<UInt> {
 return
 copyOf().apply { sort() }.asList()
}

```

\* Returns a list of all elements sorted according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun ULongArray.sorted():
List<ULong> {
 return copyOf().apply { sort() }.asList()
}

```

\* Returns a list of all elements sorted according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun
UByteArray.sorted(): List<UByte> {
 return copyOf().apply { sort() }.asList()
}

```

\* Returns a list of all elements sorted according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public
fun UShortArray.sorted(): List<UShort> {
 return copyOf().apply { sort() }.asList()
}

```

\* Returns an array with all elements of this array sorted according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun UIntArray.sortedArray(): UIntArray {
 if
 (isEmpty()) return this
 return this.copyOf().apply { sort() }
}

```

\* Returns an array with all elements of this array sorted according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun ULongArray.sortedArray(): ULongArray {
 if
 (isEmpty()) return this
 return this.copyOf().apply { sort() }
}

```

\* Returns an array with all elements of this array sorted according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun UByteArray.sortedArray(): UByteArray {
 if
 (isEmpty()) return this
 return this.copyOf().apply { sort() }
}

```

\* Returns an array with all elements of this array sorted according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun UShortArray.sortedArray(): UShortArray {
 if
 (isEmpty()) return this
 return this.copyOf().apply { sort() }
}

```

\* Returns an array with all elements of this array sorted descending according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun UIntArray.sortedArrayDescending():
UIntArray {
 if (isEmpty()) return this
 return this.copyOf().apply { sortDescending() }
}

```

\* Returns an array with all elements of this array sorted descending according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun ULongArray.sortedArrayDescending():
ULongArray {
 if (isEmpty()) return this
 return this.copyOf().apply { sortDescending() }
}

```

\* Returns an array with all elements of this array sorted descending according to their natural sort order.

```

@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun
UByteArray.sortedArrayDescending(): UByteArray {
 if (isEmpty()) return this
 return this.copyOf().apply {

```

```

sortDescending() } } } \n\n/** \n * Returns an array with all elements of this array sorted descending according to
their natural sort order. \n * \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n public fun
UShortArray.sortedArrayDescending(): UShortArray { \n if (isEmpty()) return this \n return this.copyOf().apply {
sortDescending() } } } \n\n/** \n * Returns a list of all elements sorted descending according to their natural sort
order. \n * \n * The sort is _stable_. It means that equal elements preserve their order relative to each other after
sorting. \n * \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n public fun UIntArray.sortedDescending():
List<UInt> { \n return copyOf().apply { sort() }.reversed() } } \n\n/** \n * Returns a list of all elements sorted
descending
according to their natural sort order. \n * \n * The sort is _stable_. It means that equal elements preserve their order
relative to each other after sorting. \n * \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n public fun
ULongArray.sortedDescending(): List<ULong> { \n return copyOf().apply { sort() }.reversed() } } \n\n/** \n *
Returns a list of all elements sorted descending according to their natural sort order. \n * \n * The sort is _stable_. It
means that equal elements preserve their order relative to each other after sorting. \n
* \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n public fun UByteArray.sortedDescending():
List<UByte> { \n return copyOf().apply { sort() }.reversed() } } \n\n/** \n * Returns a list of all elements sorted
descending according to their natural sort order. \n * \n * The sort is _stable_. It means that equal elements preserve
their order relative to each other after sorting. \n * \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n public
fun
UShortArray.sortedDescending(): List<UShort> { \n return copyOf().apply { sort() }.reversed() } } \n\n/** \n *
Returns an array of type [ByteArray], which is a view of this array where each element is a signed reinterpretation \n
* of the corresponding element of this array. \n
* \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UByteArray.asByteArray(): ByteArray { \n return storage } } \n\n/** \n * Returns an array of type [IntArray], which
is a view of this array where each element is a signed reinterpretation \n * of the corresponding element of this
array. \n * \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UIntArray.asIntArray(): IntArray { \n return storage } } \n\n/** \n * Returns a [List] that wraps the original array. \n
* \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n public expect fun UIntArray.asList():
List<UInt> \n\n/** \n * Returns a [List] that wraps the original array. \n
* \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n public expect fun ULongArray.asList():
List<ULong> \n\n/** \n * Returns a [List] that wraps the original array. \n
* \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n public expect fun UByteArray.asList():
List<UByte> \n\n/** \n * Returns a [List] that wraps the original array. \n
* \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n public expect fun UShortArray.asList():
List<UShort> \n\n/** \n * Returns an array of type [LongArray], which is a view of this array where each element is
a signed reinterpretation \n * of the corresponding element of this array. \n
* \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
ULongArray.asLongArray(): LongArray { \n return storage } } \n\n/** \n * Returns an array of type [ShortArray],
which is a view of this array where each element is a signed reinterpretation \n * of the corresponding element of this
array. \n * \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public
inline fun UShortArray.asShortArray(): ShortArray { \n return storage } } \n\n/** \n * Returns an array of type
[UByteArray], which is a view of this array where each element is an unsigned reinterpretation \n * of the
corresponding element of this array. \n
* \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
ByteArray.asUByteArray(): UByteArray { \n return UByteArray(this) } } \n\n/** \n * Returns an array of type
[UIntArray], which is a view of this array where each element is an unsigned reinterpretation \n * of the
corresponding element of this array. \n
* \n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
IntArray.asUIntArray(): UIntArray { \n return UIntArray(this) } } \n\n/** \n * Returns an array of type

```



```

\1.4\)\n@ExperimentalUnsignedTypes\npublic fun ULongArray.contentHashCode(): Int {\n return
this.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n
\n\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince =
\1.4\)\n@ExperimentalUnsignedTypes\npublic fun UByteArray.contentHashCode(): Int {\n return
this.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n
\n\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince
= \1.4\)\n@ExperimentalUnsignedTypes\npublic fun UShortArray.contentHashCode(): Int {\n return
this.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray?.contentHashCode(): Int {\n
return this?.storage.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it
is [List].\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun
ULongArray?.contentHashCode(): Int {\n return this?.storage.contentHashCode()\n}\n\n/**\n * Returns a hash
code based on the contents of this array as if it is [List].\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray?.contentHashCode(): Int {\n
return this?.storage.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it
is [List].\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UShortArray?.contentHashCode(): Int {\n
return this?.storage.contentHashCode()\n}\n\n/**\n * Returns a string representation of the contents of the specified
array as if it is [List].\n
*\n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
\n\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince =
\1.4\)\n@ExperimentalUnsignedTypes\npublic fun UIntArray.contentToString(): String {\n return
this.contentToString()\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is
[List].\n
*\n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
\n\n@Deprecated("Use
Kotlin compiler 1.4 to avoid deprecation
warning.")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince =
\1.4\)\n@ExperimentalUnsignedTypes\npublic fun ULongArray.contentToString(): String {\n
return this.contentToString()\n}\n\n/**\n * Returns a string representation of the contents of the specified array as
if it is [List].\n
*\n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
\n\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince =
\1.4\)\n@ExperimentalUnsignedTypes\npublic fun UByteArray.contentToString(): String {\n return
this.contentToString()\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is
[List].\n
*\n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
\n\n@Deprecated("Use
Kotlin compiler 1.4 to avoid deprecation
warning.")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince =
\1.4\)\n@ExperimentalUnsignedTypes\npublic fun UShortArray.contentToString(): String {\n return
this.contentToString()\n}\n\n/**\n * Returns a string representation of the contents of the specified
array as if it is [List].\n
*\n * @sample samples.collections.Arrays.ContentOperations.contentToString\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray?.contentToString(): String {\n
return this?.joinToString(", ", "[", "]") ?: "null"\n}\n\n/**\n * Returns a string representation of the contents of
the specified array as if it is [List].\n
*\n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun ULongArray?.contentToString(): String {\n
return this?.joinToString(", ", "[", "]") ?: "null"\n}\n\n/**\n * Returns a string representation of the contents of
the specified array as if it is [List].\n
*\n * @sample

```

```

samples.collections.Arrays.ContentOperations.contentToString\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray?.contentToString(): String {\n
return this?.joinToString(", ", "[", "]") ?: "null"\n}\n\n/**\n
 * Returns a string representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UShortArray?.contentToString(): String {\n
return this?.joinToString(", ", "[", "]") ?: "null"\n}\n\n/**\n
 * Copies this array or its subrange into the
 [destination] array and returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even
 specify the subrange so that it overlaps with the destination range.\n * \n * @param destination the array to copy
 to.\n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param
 startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive)
 of the subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or
 [IllegalArgumentException] when [startIndex]
 or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws
 IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified
 [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the
 [destination] array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
 UIntArray.copyInto(destination: UIntArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size):
 UIntArray {\n
storage.copyInto(destination.storage, destinationOffset, startIndex, endIndex)\n
return
destination\n}\n\n/**\n
 * Copies this array or its subrange into the [destination] array and returns that array.\n * \n *
 It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the
 destination range.\n * \n * @param destination the array to copy to.\n * @param
 destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the
 beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the
 subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or
 [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex
 > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array
 starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices
 range.\n * \n * @return the [destination] array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
 ULongArray.copyInto(destination: ULongArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size):
 ULongArray {\n
storage.copyInto(destination.storage, destinationOffset, startIndex,
endIndex)\n
return destination\n}\n\n/**\n
 * Copies this array or its subrange into the [destination] array and
 returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so
 that it overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param
 destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the
 beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the
 subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or
 [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex
 > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array
 starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices
 range.\n * \n * @return the [destination] array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
 UByteArray.copyInto(destination: UByteArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size):
 UByteArray {\n
storage.copyInto(destination.storage, destinationOffset, startIndex, endIndex)\n
return
destination\n}\n\n/**\n
 * Copies this array or its subrange into the [destination] array and returns that array.\n * \n *
 It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the

```

destination range.\n \* \n \* @param destination the array to copy to.\n \* @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n \* @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n \* @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n \* \n \* @throws IndexOutOfBoundsException

or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n \* @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n \* or when that index is out of the [destination] array indices range.\n \* \n \* @return the [destination] array.\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.copyInto(destination: UShortArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int =
size): UShortArray {\n storage.copyInto(destination.storage, destinationOffset, startIndex, endIndex)\n return
destination\n}\n\n/**\n * Returns new array which is a copy of the original array.\n * \n * @sample
samples.collections.Arrays.CopyOfOperations.copyOfOf\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.copyOfOf():
```

```
UIntArray {\n return UIntArray(storage.copyOfOf())\n}\n\n/**\n * Returns new array which is a copy of the
original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.copyOfOf(): ULongArray {\n return ULongArray(storage.copyOfOf())\n}\n\n/**\n * Returns new array
which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.copyOfOf(): UByteArray {\n return UByteArray(storage.copyOfOf())\n}\n\n/**\n * Returns new array
which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.copyOfOf(): UShortArray {\n return UShortArray(storage.copyOfOf())\n}\n\n/**\n * Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either
truncated or padded at the end with zero values if necessary.\n * \n * - If [newSize] is less than the size of the
original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original
array, the extra elements in the copy array are filled with zero values.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.copyOfOf(newSize: Int): UIntArray {\n return UIntArray(storage.copyOfOf(newSize))\n}\n\n/**\n * Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either
truncated or padded at the end with zero values if necessary.\n * \n * - If [newSize] is less than the size of the
original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the
original array, the extra elements in the copy array are filled with zero values.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.copyOfOf(newSize: Int): ULongArray {\n return ULongArray(storage.copyOfOf(newSize))\n}\n\n/**\n * Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either
truncated or padded at the end with zero values if necessary.\n * \n * - If [newSize] is less than the size of the
original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original
array, the extra elements in the copy array are filled with zero values.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.copyOfOf(newSize: Int): UByteArray {\n return UByteArray(storage.copyOfOf(newSize))\n}\n\n/**\n * Returns new array which is a copy of the original array, resized to the
given [newSize].\n * The copy is either truncated or padded at the end with zero values if necessary.\n * \n * - If
[newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is
greater than the size of the original array, the extra elements in the copy array are filled with zero values.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
```



```

UShortArray.copyOf(newSize: Int): UShortArray {\n return UShortArray(storage.copyOf(newSize))\n}\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * @public\n * inline fun UIntArray.copyOfRange(fromIndex: Int, toIndex: Int): UIntArray {\n return\n UIntArray(storage.copyOfRange(fromIndex, toIndex))\n}\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws\n IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * @public\n * inline fun ULongArray.copyOfRange(fromIndex: Int, toIndex: Int): ULongArray {\n return\n ULongArray(storage.copyOfRange(fromIndex, toIndex))\n}\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param\n fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws\n IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * @public\n * inline fun UByteArray.copyOfRange(fromIndex: Int, toIndex: Int): UByteArray {\n return\n UByteArray(storage.copyOfRange(fromIndex, toIndex))\n}\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws\n IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * @public\n * inline fun UShortArray.copyOfRange(fromIndex: Int, toIndex: Int): UShortArray {\n return\n UShortArray(storage.copyOfRange(fromIndex, toIndex))\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws\n IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws\n IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @public\n * fun UIntArray.fill(element: UInt, fromIndex: Int = 0, toIndex: Int = size): Unit {\n storage.fill(element.toInt(), fromIndex, toIndex)\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param\n fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws\n IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws\n IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @public\n * fun ULongArray.fill(element: ULong, fromIndex: Int = 0, toIndex: Int = size): Unit {\n storage.fill(element.toLong(), fromIndex, toIndex)\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws\n IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws\n IllegalArgumentException if [fromIndex] is greater than [toIndex].\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @public\n * fun UByteArray.fill(element: UByte, fromIndex: Int = 0, toIndex: Int = size): Unit {\n storage.fill(element.toByte(), fromIndex, toIndex)\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n *

```



```

operator fun UShortArray.plus(elements: Collection<UShort>): UShortArray {\n var index = size\n val result =
storage.copyOfOf(size + elements.size)\n for (element in elements) result[index++] = element.toShort()\n return
UShortArray(result)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all
elements of the given [elements] array.\n
\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun
UIntArray.plus(elements: UIntArray): UIntArray {\n return UIntArray(storage + elements.storage)\n}\n\n/**\n *
Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n
\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline operator fun ULongArray.plus(elements: ULongArray): ULongArray {\n return ULongArray(storage +
elements.storage)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all elements
of the given [elements] array.\n
\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun
UByteArray.plus(elements: UByteArray): UByteArray {\n return UByteArray(storage +
elements.storage)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all elements
of the given [elements] array.\n
\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun
UShortArray.plus(elements: UShortArray): UShortArray {\n return UShortArray(storage +
elements.storage)\n}\n\n/**\n * Sorts the array in-place.\n * \n * @sample
samples.collections.Arrays.Sorting.sortArray\n
\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
fun UIntArray.sort(): Unit {\n if (size > 1) sortArray(this, 0, size)\n}\n\n/**\n * Sorts the array in-place.\n * \n *
@sample samples.collections.Arrays.Sorting.sortArray\n
\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.sort(): Unit {\n if (size > 1)
sortArray(this, 0, size)\n}\n\n/**\n * Sorts the array in-place.\n * \n * @sample
samples.collections.Arrays.Sorting.sortArray\n
\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
fun UByteArray.sort(): Unit {\n if (size > 1) sortArray(this, 0, size)\n}\n\n/**\n * Sorts the array in-place.\n * \n *
@sample samples.collections.Arrays.Sorting.sortArray\n
\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.sort(): Unit {\n if (size > 1)
sortArray(this, 0, size)\n}\n\n/**\n * Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the
range (inclusive) to sort, 0 by default.\n * @param toIndex the end of
the range (exclusive) to sort, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n * @sample
samples.collections.Arrays.Sorting.sortRangeOfArray\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.sort(fromIndex: Int = 0, toIndex:
Int = size): Unit {\n AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n sortArray(this, fromIndex,
toIndex)\n}\n\n/**\n * Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the range
(inclusive) to sort, 0 by default.\n * @param toIndex the end of the range (exclusive) to sort, size of this array by
default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than
the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n *
@sample samples.collections.Arrays.Sorting.sortRangeOfArray\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.sort(fromIndex: Int = 0,
toIndex: Int = size): Unit {\n AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n sortArray(this,
fromIndex, toIndex)\n}\n\n/**\n * Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the
range (inclusive) to sort, 0 by default.\n * @param toIndex the end of the range (exclusive) to sort, size of this array
by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater
than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n *
@sample samples.collections.Arrays.Sorting.sortRangeOfArray\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.sort(fromIndex: Int = 0,

```

```

toIndex: Int = size): Unit {
 AbstractList.checkRangeIndexes(fromIndex, toIndex,
 size)
 sortArray(this, fromIndex, toIndex)
}

/**
 * Sorts a range in the array in-place.
 * @param fromIndex the start of the range (inclusive) to sort, 0 by default.
 * @param toIndex the end of the range (exclusive) to sort, size of this array by default.
 * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].
 */
@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun UShortArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {
 AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
 sortArray(this, fromIndex, toIndex)
}

/**
 * Sorts elements of the array in the specified range in-place.
 * The elements are sorted descending according to their natural sort order.
 * @param fromIndex the start of the range (inclusive) to sort.
 * @param toIndex the end of the range (exclusive) to sort.
 * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].
 */
@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun UIntArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {
 sort(fromIndex, toIndex)
 reverse(fromIndex, toIndex)
}

/**
 * Sorts elements of the array in the specified range in-place.
 * The elements are sorted descending according to their natural sort order.
 * @param fromIndex the start of the range (inclusive) to sort.
 * @param toIndex the end of the range (exclusive) to sort.
 * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].
 */
@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun ULongArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {
 sort(fromIndex, toIndex)
 reverse(fromIndex, toIndex)
}

/**
 * Sorts elements of the array in the specified range in-place.
 * The elements are sorted descending according to their natural sort order.
 * @param fromIndex the start of the range (inclusive) to sort.
 * @param toIndex the end of the range (exclusive) to sort.
 * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].
 */
@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun UByteArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {
 sort(fromIndex, toIndex)
 reverse(fromIndex, toIndex)
}

/**
 * Returns an array of type [ByteArray], which is a copy of this array where each element is a signed reinterpretation
 * of the corresponding element of this array.
 */
@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun UByteArray.toByteArray(): ByteArray {
 return storage.copyOf()
}

/**
 * Returns an array of type [IntArray], which is a copy of this array where each element is a signed reinterpretation
 * of the corresponding element of this array.
 */
@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun UIntArray.toIntArray(): IntArray {
 return storage.copyOf()
}

/**
 * Returns an array of type [LongArray], which is a copy of this array where each element is a signed reinterpretation
 * of the corresponding element of this array.
 */
@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun ULongArray.toLongArray(): LongArray {
 return storage.copyOf()
}

/**
 * Returns an array of type [ShortArray], which is a copy of this array where each element is a signed reinterpretation
 * of the corresponding element of this array.
 */
@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun

```

```

UShortArray.toShortArray(): ShortArray {\n return storage.copyOfOf()\n}\n\n/**\n * Returns a *typed* object array
containing all
of the elements of this primitive array.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UIntArray.toTypedArray(): Array<UInt> {\n return Array(size) { index -> this[index] }\n}\n\n/**\n * Returns a
typed object array containing all of the elements of this primitive array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.toTypedArray():
Array<ULong> {\n return Array(size) { index -> this[index] }\n}\n\n/**\n * Returns a *typed* object array
containing all of the elements of this primitive array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.toTypedArray():
Array<UByte> {\n return Array(size) { index -> this[index] }\n}\n\n/**\n * Returns a *typed* object array
containing all of the elements of this primitive array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.toTypedArray():
Array<UShort> {\n return Array(size) { index -> this[index] }\n}\n\n/**\n * Returns
an array of UByte containing all of the elements of this generic array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun Array<out UByte>.toUByteArray():
UByteArray {\n return UByteArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of type
[UByteArray], which is a copy of this array where each element is an unsigned reinterpretation\n * of the
corresponding element of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ByteArray.toUByteArray(): UByteArray {\n return UByteArray(this.copyOfOf())\n}\n\n/**\n * Returns an array of
UInt containing all of the elements of this generic array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun Array<out UInt>.toUIntArray(): UIntArray
{\n return UIntArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of type [UIntArray], which is a
copy of this array where each element is an unsigned reinterpretation\n * of
the corresponding element of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
IntArray.toUIntArray(): UIntArray {\n return UIntArray(this.copyOfOf())\n}\n\n/**\n * Returns an array of ULong
containing all of the elements of this generic array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun Array<out ULong>.toULongArray():
ULongArray {\n return ULongArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of type
[ULongArray], which is a copy of this array where each element is an unsigned reinterpretation\n * of the
corresponding element of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
LongArray.toULongArray(): ULongArray {\n return ULongArray(this.copyOfOf())\n}\n\n/**\n * Returns an array
of UShort containing all of the elements of this generic array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
fun Array<out UShort>.toUShortArray(): UShortArray {\n return UShortArray(size) { index -> this[index]
}\n}\n\n/**\n * Returns an array of type [UShortArray], which is a copy of this array where each element is an
unsigned reinterpretation\n * of the corresponding element of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ShortArray.toUShortArray(): UShortArray {\n return UShortArray(this.copyOfOf())\n}\n\n/**\n * Returns a [Map]
where keys are elements from the given array and values are\n * produced by the [valueSelector] function applied to
each element.\n * \n * If any two elements are equal, the last one gets added to the map.\n * \n * The returned map
preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Collections.Transformations.associateWith\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>
UIntArray.associateWith(valueSelector:

```

```

(UInt) -> V): Map<UInt, V> {\n val result = LinkedHashMap<UInt, V>(mapCapacity(size).coerceAtLeast(16))\n
return associateWithTo(result, valueSelector)\n}\n\n/**\n * Returns a [Map] where keys are elements from the
given array and values are\n * produced by the [valueSelector] function applied to each element.\n * \n * If any two
elements are equal, the last one gets added to the map.\n * \n * The returned map preserves the entry iteration order
of the original array.\n * \n * @sample samples.collections.Collections.Transformations.associateWith\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>
UIntArray.associateWith(valueSelector: (ULong) -> V): Map<ULong, V> {\n val result =
LinkedHashMap<ULong, V>(mapCapacity(size).coerceAtLeast(16))\n return associateWithTo(result,
valueSelector)\n}\n\n/**\n * Returns a [Map] where keys are elements from the given array and values are\n *
produced by
the [valueSelector] function applied to each element.\n * \n * If any two elements are equal, the last one gets added
to the map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Collections.Transformations.associateWith\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>
UByteArray.associateWith(valueSelector: (UByte) -> V): Map<UByte, V> {\n val result =
LinkedHashMap<UByte, V>(mapCapacity(size).coerceAtLeast(16))\n return associateWithTo(result,
valueSelector)\n}\n\n/**\n * Returns a [Map] where keys are elements from the given array and values are\n *
produced by the [valueSelector] function applied to each element.\n * \n * If any two elements are equal, the last one
gets added to the map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n *
@sample samples.collections.Collections.Transformations.associateWith\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>
UShortArray.associateWith(valueSelector: (UShort) -> V): Map<UShort, V> {\n val result =
LinkedHashMap<UShort, V>(mapCapacity(size).coerceAtLeast(16))\n return associateWithTo(result,
valueSelector)\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs for each
element of the given array,\n * where key is the element itself and value is provided by the [valueSelector] function
applied to that key.\n * \n * If any two elements are equal, the last one overwrites the former value in the map.\n * \n
*\n * @sample samples.collections.Collections.Transformations.associateWithTo\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V, M >
MutableMap<in UInt, in V>> UIntArray.associateWithTo(destination: M, valueSelector: (UInt) -> V): M {\n for
(element in this) {\n destination.put(element,
valueSelector(element))\n }\n return destination\n}\n\n/**\n * Populates and returns the [destination] mutable
map with key-value pairs for each element of the given array,\n * where key is the element itself and value is
provided by the [valueSelector] function applied to that key.\n * \n * If any two elements are equal, the last one
overwrites the former value in the map.\n * \n * @sample
samples.collections.Collections.Transformations.associateWithTo\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V, M >
MutableMap<in ULong, in V>> ULongArray.associateWithTo(destination: M, valueSelector: (ULong) -> V): M
{\n for (element in this) {\n destination.put(element, valueSelector(element))\n }\n return
destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs for each element
of the given array,\n * where key is the element itself and value is provided by the [valueSelector]
function applied to that key.\n * \n * If any two elements are equal, the last one overwrites the former value in the
map.\n * \n * @sample samples.collections.Collections.Transformations.associateWithTo\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V, M >
MutableMap<in UByte, in V>> UByteArray.associateWithTo(destination: M, valueSelector: (UByte) -> V): M {\n for
(element in this) {\n destination.put(element, valueSelector(element))\n }\n return
destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs for each element
of the given array,\n * where key is the element itself and value is provided by the [valueSelector] function applied
to that key.\n * \n * If any two elements are equal, the last one overwrites the former value in the map.\n * \n *

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@sample samples.collections.Collections.Transformations.associateWithTo\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun <V, M : MutableMap<in UShort, in V>> UShortArray.associateWithTo(destination: M, valueSelector:
(UShort) -> V): M {\n for (element in this) {\n destination.put(element, valueSelector(element))\n }\n
return destination\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function
being invoked on each element of original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.flatMap(transform: (UInt) -> Iterable<R>): List<R> {\n return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element of original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun <R> ULongArray.flatMap(transform: (ULong) -> Iterable<R>): List<R> {\n return
flatMapTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of
[transform] function being invoked on each element of original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UByteArray.flatMap(transform: (UByte) -> Iterable<R>): List<R> {\n return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element of original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UShortArray.flatMap(transform: (UShort) -> Iterable<R>): List<R>
{\n return flatMapTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.flatMapIndexed(transform: (index: Int, UInt) -> Iterable<R>): List<R> {\n return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun <R> ULongArray.flatMapIndexed(transform: (index: Int, ULong) -> Iterable<R>): List<R> {\n return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UByteArray.flatMapIndexed(transform: (index: Int, UByte) -> Iterable<R>): List<R> {\n return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original
array.\n * \n * @sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UShortArray.flatMapIndexed(transform: (index: Int, UShort) -> Iterable<R>): List<R> {\n return

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flatMapIndexedTo(ArrayList<R>(), transform)\n\n/**\n * Appends all elements yielded from results of
 [transform] function being invoked on each element\n * and its index in the original array, to the given
 [destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
 MutableCollection<in R>> UIntArray.flatMapIndexedTo(destination: C, transform: (index: Int, UInt) ->
 Iterable<R>): C {\n var index = 0\n for (element in this)\n {\n val list = transform(index++, element)\n destination.addAll(list)\n }\n return destination\n}\n\n/**\n * Appends all elements yielded from results of [transform] function being invoked on each element\n * and its index
 in the original array, to the given [destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
 MutableCollection<in R>> ULongArray.flatMapIndexedTo(destination: C, transform: (index: Int, ULong) ->
 Iterable<R>): C {\n var index = 0\n for (element in this) {\n val list = transform(index++, element)\n
 destination.addAll(list)\n }\n return destination\n}\n\n/**\n * Appends all elements yielded from results of
 [transform] function being invoked on each element\n * and its index in the original array, to the given
 [destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
 inline fun <R, C : MutableCollection<in R>> UByteArray.flatMapIndexedTo(destination: C, transform: (index: Int,
 UByte) -> Iterable<R>): C {\n var index = 0\n for (element in this) {\n val list = transform(index++,
 element)\n destination.addAll(list)\n }\n return destination\n}\n\n/**\n * Appends all elements yielded from
 results of [transform] function being invoked on each element\n * and its index in the original array, to the given
 [destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
 MutableCollection<in R>> UShortArray.flatMapIndexedTo(destination: C, transform: (index: Int, UShort) ->
 Iterable<R>): C {\n var index = 0\n
 for (element in this) {\n val list = transform(index++, element)\n destination.addAll(list)\n }\n
 return destination\n}\n\n/**\n * Appends all elements yielded from results of [transform] function being invoked on each
 element of original array, to the given [destination].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
 MutableCollection<in R>> UIntArray.flatMapTo(destination: C, transform: (UInt) -> Iterable<R>): C {\n for
 (element in this) {\n val list = transform(element)\n destination.addAll(list)\n }\n return
 destination\n}\n\n/**\n * Appends all elements yielded from results of [transform] function being invoked on each
 element of original array, to the given [destination].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
 MutableCollection<in R>> ULongArray.flatMapTo(destination: C, transform: (ULong) -> Iterable<R>):
 C {\n for (element in this) {\n val list = transform(element)\n destination.addAll(list)\n }\n
 return destination\n}\n\n/**\n * Appends all elements yielded from results of [transform] function being invoked on each
 element of original array, to the given [destination].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
 MutableCollection<in R>> UByteArray.flatMapTo(destination: C, transform: (UByte) -> Iterable<R>): C {\n for
 (element in this) {\n val list = transform(element)\n destination.addAll(list)\n }\n return
 destination\n}\n\n/**\n * Appends all elements yielded from results of [transform] function being invoked on each
 element of original array, to the given [destination].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
 MutableCollection<in R>> UShortArray.flatMapTo(destination: C, transform: (UShort)

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-> Iterable<R>): C {\n for (element in this) {\n val list = transform(element)\n destination.addAll(list)\n }\n return destination\n}\n\n/**\n * Groups elements of the original array by the key returned by the given
[keySelector] function\n * applied to each element and returns a map where each group key is associated with a list
of corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced from
the original array.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K>
UIntArray.groupBy(keySelector: (UInt) -> K): Map<K, List<UInt>> {\n return groupByTo(LinkedHashMap<K,
MutableList<UInt>>(), keySelector)\n}\n\n/**\n * Groups elements of the original array by the key returned by the given
[keySelector] function\n * applied to each element and returns a map where each group key is associated
with a list of corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys
produced from the original array.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K>
ULongArray.groupBy(keySelector: (ULong) -> K): Map<K, List<ULong>> {\n return
groupByTo(LinkedHashMap<K, MutableList<ULong>>(), keySelector)\n}\n\n/**\n * Groups elements of the original array by the key returned by the given
[keySelector] function\n * applied to each element and returns a map
where each group key is associated with a list of corresponding elements.\n * \n * The returned map preserves the
entry iteration order of the keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K>
UByteArray.groupBy(keySelector:
(UByte) -> K): Map<K, List<UByte>> {\n return groupByTo(LinkedHashMap<K, MutableList<UByte>>(),
keySelector)\n}\n\n/**\n * Groups elements of the original array by the key returned by the given [keySelector]
function\n * applied to each element and returns a map where each group key is associated with a list of
corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced from the
original array.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K>
UShortArray.groupBy(keySelector: (UShort) -> K): Map<K, List<UShort>> {\n return
groupByTo(LinkedHashMap<K, MutableList<UShort>>(), keySelector)\n}\n\n/**\n * Groups values returned by
the [valueTransform] function applied to each element of the original array\n * by the key returned by the given
[keySelector] function applied to the element\n * and returns a map where each group key is associated with a list of corresponding values.\n * \n * The returned
map preserves the entry iteration order of the keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeysAndValues\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, V>
UIntArray.groupBy(keySelector: (UInt) -> K, valueTransform: (UInt) -> V): Map<K, List<V>> {\n return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups values
returned by the [valueTransform] function applied to each element of the original array\n * by the key returned by
the given [keySelector] function applied to the element\n * and returns a map where each group key is associated
with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys
produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeysAndValues\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, V>
ULongArray.groupBy(keySelector: (ULong) -> K, valueTransform: (ULong) -> V): Map<K, List<V>> {\n return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups values
returned by the [valueTransform] function applied to each element of the original array\n * by the key returned by
the given [keySelector] function applied to the element\n * and returns a map where each group key is associated
with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys
produced from the original array.\n * \n * @sample

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samples.collections.Collections.Transformations.groupByKeyAndValues\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, V>
UByteArray.groupBy(keySelector: (UByte) -> K,
 valueTransform: (UByte) -> V): Map<K, List<V>> {\n return groupByTo(LinkedHashMap<K,
MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups values returned by the [valueTransform]
function applied to each element of the original array\n * by the key returned by the given [keySelector] function
applied to the element\n * and returns a map where each group key is associated with a list of corresponding
values.\n * \n * The returned map preserves the entry iteration order of the keys produced from the original array.\n
*\n * @sample samples.collections.Collections.Transformations.groupByKeyAndValues\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, V>
UShortArray.groupBy(keySelector: (UShort) -> K, valueTransform: (UShort) -> V): Map<K, List<V>> {\n return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups elements
of the original array by the key returned by the given
[keySelector] function\n * applied to each element and puts to the [destination] map each group key associated with
a list of corresponding elements.\n * \n * @return The [destination] map.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, M :
MutableMap<in K, MutableList<UInt>>> UIntArray.groupByTo(destination: M, keySelector: (UInt) -> K): M {\n for
(element in this) {\n val key = keySelector(element)\n val list = destination.getOrPut(key) {\n
ArrayList<UInt>() }\n list.add(element)\n }\n return destination\n}\n\n/**\n * Groups elements of the
original array by the key returned by the given [keySelector] function\n * applied to each element and puts to the
[destination] map each group key associated with a list of corresponding elements.\n * \n * @return The
[destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, M :
MutableMap<in K, MutableList<ULong>>> ULongArray.groupByTo(destination: M, keySelector: (ULong) ->
K): M {\n for (element in this) {\n val key = keySelector(element)\n val list = destination.getOrPut(key) {\n
ArrayList<ULong>() }\n list.add(element)\n }\n return destination\n}\n\n/**\n * Groups elements of the
original array by the key returned by the given [keySelector] function\n * applied to each element and puts to the
[destination] map each group key associated with a list of corresponding elements.\n * \n * @return The
[destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, M :
MutableMap<in K, MutableList<UByte>>> UByteArray.groupByTo(destination: M, keySelector: (UByte) ->
K): M {\n for (element in this) {\n val key = keySelector(element)\n val list = destination.getOrPut(key)
{\n ArrayList<UByte>() }\n list.add(element)\n }\n return destination\n}\n\n/**\n * Groups elements of the
original array by the key returned by the given [keySelector] function\n * applied to each element and puts to the
[destination] map each group key associated with a list of corresponding elements.\n * \n * @return The
[destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, M :
MutableMap<in K, MutableList<UShort>>> UShortArray.groupByTo(destination: M, keySelector: (UShort) -> K):
M {\n for (element in this) {\n val key = keySelector(element)\n val list = destination.getOrPut(key) {\n
ArrayList<UShort>() }\n list.add(element)\n }\n return destination\n}\n\n/**\n * Groups values
returned by the [valueTransform] function applied to each element of the original array\n * by the key returned by
the given [keySelector] function applied to the element\n * and puts to the [destination] map each group key
associated with a list of corresponding values.\n * \n * @return The [destination] map.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeyAndValues\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, V,
M : MutableMap<in K, MutableList<V>>> UIntArray.groupByTo(destination: M, keySelector: (UInt) -> K,
valueTransform: (UInt) -> V): M {\n for (element in this) {\n val key = keySelector(element)\n val list =

```



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mapIndexedTo(ArrayList<R>(size), transform)\n\n\n/**\n * Returns a list containing the results of applying the
given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function
that takes the index of an element and the element itself\n * and returns the result of the transform applied to the
element.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline
fun <R> ULongArray.mapIndexed(transform: (index: Int, ULong) -> R): List<R> {\n return
mapIndexedTo(ArrayList<R>(size), transform)\n\n\n\n/**\n * Returns a list containing the results of applying the
given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function
that takes the index of an element and the element itself\n * and returns the result of the transform applied to the
element.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline
fun <R> UByteArray.mapIndexed(transform: (index: Int, UByte) -> R): List<R> {\n return
mapIndexedTo(ArrayList<R>(size), transform)\n\n\n\n\n/**\n * Returns a list containing the results of applying the
given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function
that takes the index of an
element and the element itself\n * and returns the result of the transform applied to the element.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UShortArray.mapIndexed(transform: (index: Int, UShort) -> R): List<R> {\n return
mapIndexedTo(ArrayList<R>(size), transform)\n\n\n\n\n/**\n * Applies the given [transform] function to each
element and its index in the original array\n * and appends the results to the given [destination].\n * @param
[transform] function that takes the index of an element and the element itself\n * and returns the result of the
transform applied to the element.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UIntArray.mapIndexedTo(destination: C, transform: (index: Int, UInt) -> R): C {\n var
index = 0\n for (item in this)\n destination.add(transform(index++, item))\n return destination\n}\n\n\n\n\n/**\n * Applies the given [transform] function to each element and its index in the original array\n * and appends the
results to the given [destination].\n * @param [transform] function that takes the index of an element and the
element itself\n * and returns the result of the transform applied to the element.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> ULongArray.mapIndexedTo(destination: C, transform: (index: Int, ULong) -> R): C {\n var
index = 0\n for (item in this)\n destination.add(transform(index++, item))\n return
destination\n}\n\n\n\n\n/**\n * Applies the given [transform] function to each element and its index in the original array\n *
and appends the results to the given [destination].\n * @param [transform] function that takes the index of an
element and the element itself\n * and returns the result of the transform applied to the element.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun <R, C : MutableCollection<in R>> UByteArray.mapIndexedTo(destination: C, transform: (index: Int,
UByte) -> R): C {\n var index = 0\n for (item in this)\n destination.add(transform(index++, item))\n return
destination\n}\n\n\n\n\n/**\n * Applies the given [transform] function to each element and its index in the original array\n *
and appends the results to the given [destination].\n * @param [transform] function that takes the index of an
element and the element itself\n * and returns the result of the transform applied to the element.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UShortArray.mapIndexedTo(destination: C, transform: (index: Int, UShort) -> R): C {\n var
index = 0\n for (item in this)\n destination.add(transform(index++, item))\n return
destination\n}\n\n\n\n\n/**\n * Applies the given [transform]
function to each element of the original array\n * and appends the results to the given [destination].\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UIntArray.mapTo(destination: C, transform: (UInt) -> R): C {\n for (item in this)\n destination.add(transform(item))\n return destination\n}\n\n\n\n\n/**\n * Applies the given [transform] function to each
element of the original array\n * and appends the results to the given [destination].\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :

```

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MutableCollection<in R>> ULongArray.mapTo(destination: C, transform: (ULong) -> R): C {\n for (item in
this)\n destination.add(transform(item))\n return destination\n}\n\n/**\n * Applies the given [transform]
function to each element of the original array\n * and appends the results to the given [destination].\n
*\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public
inline fun <R, C : MutableCollection<in R>> UByteArray.mapTo(destination: C, transform: (UByte) -> R): C {\n
for (item in this)\n destination.add(transform(item))\n return destination\n}\n\n/**\n * Applies the given
[transform] function to each element of the original array\n * and appends the results to the given [destination].\n
*\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun <R, C :
MutableCollection<in R>> UShortArray.mapTo(destination: C, transform: (UShort) -> R): C {\n for (item in
this)\n destination.add(transform(item))\n return destination\n}\n\n/**\n * Returns a lazy [Iterable] that wraps
each element of the original array\n * into an [IndexedValue] containing the index of that element and the element
itself.\n *\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n public fun UIntArray.withIndex():
Iterable<IndexedValue<UInt>>
{\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of the
original array\n * into an [IndexedValue] containing the index of that element and the element itself.\n
*\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n public fun ULongArray.withIndex():
Iterable<IndexedValue<ULong>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable]
that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the
element itself.\n *\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n public fun UByteArray.withIndex():
Iterable<IndexedValue<UByte>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable]
that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the
element itself.\n *\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n public fun UShortArray.withIndex():
Iterable<IndexedValue<UShort>>
{\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns `true` if all elements match the given [predicate].\n
*\n * @sample samples.collections.Collections.Aggregates.all\n
*\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun
UIntArray.all(predicate: (UInt) -> Boolean): Boolean {\n for (element in this) if (!predicate(element)) return
false\n return true\n}\n\n/**\n * Returns `true` if all elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n
*\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun
ULongArray.all(predicate: (ULong) -> Boolean): Boolean {\n for (element in this) if (!predicate(element)) return
false\n return true\n}\n\n/**\n * Returns `true` if all elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n
*\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public
inline fun UByteArray.all(predicate: (UByte) -> Boolean): Boolean {\n for (element in this) if
(!predicate(element)) return false\n return true\n}\n\n/**\n * Returns `true` if all elements match the given
[predicate].\n * \n * @sample samples.collections.Collections.Aggregates.all\n
*\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun
UShortArray.all(predicate: (UShort) -> Boolean): Boolean {\n for (element in this) if (!predicate(element)) return
false\n return true\n}\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n
*\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun
UIntArray.any(): Boolean {\n return storage.any()\n}\n\n/**\n * Returns `true` if array has at least one element.\n
*\n * @sample samples.collections.Collections.Aggregates.any\n
*\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun
ULongArray.any(): Boolean {\n return storage.any()\n}\n\n/**\n * Returns `true` if array has at least one
element.\n * \n * @sample samples.collections.Collections.Aggregates.any\n
*\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun

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UByteArray.any(): Boolean {\n return storage.any()\n}\n\n/**\n * Returns `true` if array has at least one
element.\n * \n * @sample samples.collections.Collections.Aggregates.any\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.any(): Boolean {\n return storage.any()\n}\n\n/**\n * Returns `true` if at least one element matches
the given [predicate].\n * \n * @sample samples.collections.Collections.Aggregates.anyWithPredicate\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline
fun UIntArray.any(predicate: (UInt) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return
true\n return false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n *
@sample samples.collections.Collections.Aggregates.anyWithPredicate\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.any(predicate: (ULong) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return
true\n return false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n *
@sample samples.collections.Collections.Aggregates.anyWithPredicate\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.any(predicate: (UByte) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return
true\n return false\n}\n\n/**\n * Returns `true` if at least one element
matches the given [predicate].\n * \n * @sample samples.collections.Collections.Aggregates.anyWithPredicate\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.any(predicate: (UShort) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return
true\n return false\n}\n\n/**\n * Returns the number of elements matching the given [predicate].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.count(predicate: (UInt) -> Boolean): Int {\n var count = 0\n for (element in this) if
(predicate(element)) ++count\n return count\n}\n\n/**\n * Returns the number of elements matching the given
[predicate].\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun ULongArray.count(predicate: (ULong) -> Boolean): Int {\n var count = 0\n for (element in this) if
(predicate(element)) ++count\n
 return count\n}\n\n/**\n * Returns the number of elements matching the given [predicate].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.count(predicate: (UByte) -> Boolean): Int {\n var count = 0\n for (element in this) if
(predicate(element)) ++count\n return count\n}\n\n/**\n * Returns the number of elements matching the given
[predicate].\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UShortArray.count(predicate: (UShort) -> Boolean): Int {\n var count = 0\n for (element in this) if
(predicate(element)) ++count\n return count\n}\n\n/**\n * Accumulates value starting with [initial] value and
applying [operation] from left to right\n * to current accumulator value and each element.\n * \n * Returns the
specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes current accumulator
value and an element,
and calculates the next accumulator value.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.fold(initial: R, operation: (acc: R, UInt) -> R): R {\n var accumulator = initial\n for (element in this)
accumulator = operation(accumulator, element)\n return accumulator\n}\n\n/**\n * Accumulates value starting
with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element.\n *
Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes
current accumulator value and an element, and calculates the next accumulator value.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
ULongArray.fold(initial: R, operation: (acc: R, ULong) -> R): R {\n var accumulator = initial\n for (element in
this) accumulator = operation(accumulator, element)\n return accumulator\n}\n\n/**\n * Accumulates value starting
with [initial] value and applying [operation] from left to right\n * to current
accumulator value and each element.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n *

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@param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nUByteArray.fold(initial: R, operation: (acc: R, UByte) -> R): R {\n var accumulator = initial\n for (element in this) accumulator = operation(accumulator, element)\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element.\n * Returns the specified [initial] value if the array is empty.\n * @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nUShortArray.fold(initial: R, operation: (acc: R, UShort) -> R): R {\n var accumulator = initial\n for (element in this) accumulator = operation(accumulator, element)\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * Returns the specified [initial] value if the array is empty.\n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nUIntArray.foldIndexed(initial: R, operation: (index: Int, acc: R, UInt) -> R): R {\n var index = 0\n var accumulator = initial\n for (element in this) accumulator = operation(index++, accumulator, element)\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * Returns the specified [initial] value if the array is empty.\n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nULongArray.foldIndexed(initial: R, operation: (index: Int, acc: R, ULong) -> R): R {\n var index = 0\n var accumulator = initial\n for (element in this) accumulator = operation(index++, accumulator, element)\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * Returns the specified [initial] value if the array is empty.\n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nUByteArray.foldIndexed(initial: R, operation: (index: Int, acc: R, UByte) -> R): R {\n var index = 0\n var accumulator = initial\n for (element in this) accumulator = operation(index++, accumulator, element)\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * Returns the specified [initial] value if the array is empty.\n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nUShortArray.foldIndexed(initial: R, operation: (index: Int, acc: R, UShort) -> R): R {\n var index = 0\n var accumulator = initial\n for (element in this) accumulator = operation(index++, accumulator, element)\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to left\n * to each element and current accumulator value.\n * Returns the specified [initial] value if the array is empty.\n * @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nUIntArray.foldRight(initial: R, operation: (UInt, acc: R) -> R): R {\n
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var index = lastIndex\n var accumulator = initial\n while (index >= 0) {\n accumulator =
operation(get(index--), accumulator)\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with
[initial] value and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n *
Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes an element
and current accumulator value, and calculates the next accumulator value.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
ULongArray.foldRight(initial: R, operation: (ULong, acc: R) -> R): R {\n var index = lastIndex\n var
accumulator = initial\n while (index >= 0) {\n accumulator = operation(get(index--), accumulator)\n }\n
return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right
to left\n * to each element and current accumulator value.\n * \n * Returns the specified [initial] value if the array is
empty.\n * \n * @param [operation] function that takes an element and current accumulator value, and calculates the next
accumulator value.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UByteArray.foldRight(initial: R, operation: (UByte, acc: R) -> R): R {\n var index = lastIndex\n var
accumulator = initial\n while (index >= 0) {\n accumulator = operation(get(index--), accumulator)\n }\n
return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right
to left\n * to each element and current accumulator value.\n * \n * Returns the specified [initial] value if the array is
empty.\n * \n * @param [operation] function that takes an element and current accumulator value, and calculates the
next accumulator value.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun <R> UShortArray.foldRight(initial: R, operation: (UShort, acc: R) -> R): R {\n var index = lastIndex\n
var accumulator = initial\n while (index >= 0) {\n accumulator = operation(get(index--), accumulator)\n }\n
return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from
right to left\n * to each element with its index in the original array and current accumulator value.\n * \n * Returns
the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the index of an
element, the element itself\n * and current accumulator value, and calculates the next accumulator value.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.foldRightIndexed(initial: R, operation: (index: Int, UInt, acc: R) -> R): R {\n var index = lastIndex\n
var accumulator =
initial\n while (index >= 0) {\n accumulator = operation(index, get(index), accumulator)\n --index\n }\n
return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from
right to left\n * to each element with its index in the original array and current accumulator value.\n * \n * Returns
the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the index of an
element, the element itself\n * and current accumulator value, and calculates the next accumulator value.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
ULongArray.foldRightIndexed(initial: R, operation: (index: Int, ULong, acc: R) -> R): R {\n var index =
lastIndex\n var accumulator = initial\n while (index >= 0) {\n accumulator = operation(index, get(index),
accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates
value starting with [initial] value and applying [operation] from right to left\n * to each element with its index in the
original array and current accumulator value.\n * \n * Returns the specified [initial] value if the array is empty.\n *
\n * @param [operation] function that takes the index of an element, the element itself\n * and current accumulator
value, and calculates the next accumulator value.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UByteArray.foldRightIndexed(initial: R, operation: (index: Int, UByte, acc: R) -> R): R {\n var index =
lastIndex\n var accumulator = initial\n while (index >= 0) {\n accumulator = operation(index, get(index),
accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial]
value and applying [operation] from right to left\n * to each element with its index in the original array and current

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accumulator value.\n
 * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the
index of an element, the element itself\n * and current accumulator value, and calculates the next accumulator
value.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
<R> UShortArray.foldRightIndexed(initial: R, operation: (index: Int, UShort, acc: R) -> R): R {\n var index =
lastIndex\n var accumulator = initial\n while (index >= 0) {\n accumulator = operation(index, get(index),
accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Performs the given [action] on each
element.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline
fun UIntArray.forEach(action: (UInt) -> Unit): Unit {\n for (element in this) action(element)\n}\n\n/**\n *
Performs the given [action] on each element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun ULongArray.forEach(action: (ULong) -> Unit): Unit {\n for (element in this)
action(element)\n}\n\n/**\n * Performs the given [action] on each element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.forEach(action: (Byte) -> Unit): Unit {\n for (element in this) action(element)\n}\n\n/**\n *
Performs the given [action] on each element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.forEach(action: (UShort) -> Unit): Unit {\n for (element in this) action(element)\n}\n\n/**\n *
Performs the given [action] on each element, providing sequential index with the element.\n * @param [action]
function that takes the index of an element and the element itself\n * and performs the action on the element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline
fun UIntArray.forEachIndexed(action: (index: Int, UInt) -> Unit): Unit {\n var index = 0\n for (item in this)
action(index++, item)\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index with
the element.\n * @param [action] function that takes the index of an element and the element itself\n * and performs
the action on the element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.forEachIndexed(action: (index: Int, ULong) -> Unit): Unit {\n var index = 0\n for (item in this)
action(index++, item)\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index with
the element.\n * @param [action] function that takes the index of an element and the element itself\n * and performs
the action on the element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.forEachIndexed(action: (index: Int,
Byte) -> Unit): Unit {\n var index = 0\n for (item in this) action(index++, item)\n}\n\n/**\n * Performs the
given [action] on each element, providing sequential index with the element.\n * @param [action] function that
takes the index of an element and the element itself\n * and performs the action on the element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.forEachIndexed(action: (index: Int, UShort) -> Unit): Unit {\n var index = 0\n for (item in this)
action(index++, item)\n}\n\n/**\n * Returns the largest element.\n * \n * @throws NoSuchElementException if the
array is empty.\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxOrThrow-
U")\n@ExperimentalUnsignedTypes\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun
UIntArray.max(): UInt {\n if (isEmpty()) throw NoSuchElementException()\n var max = this[0]\n for (i in
1..lastIndex) {\n val e = this[i]\n if (max < e) max =
e\n }\n return max\n}\n\n/**\n * Returns the largest element.\n * \n * @throws NoSuchElementException if the
array is empty.\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxOrThrow-
U")\n@ExperimentalUnsignedTypes\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun
ULongArray.max(): ULong {\n if (isEmpty()) throw NoSuchElementException()\n var max = this[0]\n for (i
in 1..lastIndex) {\n val e = this[i]\n if (max < e) max = e\n }\n return max\n}\n\n/**\n * Returns the
largest element.\n * \n * @throws NoSuchElementException if the array is empty.\n

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*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxOrThrow-
U")\n@ExperimentalUnsignedTypes\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun
UByteArray.max(): UByte {\n if (isEmpty()) throw NoSuchElementException()\n var max = this[0]\n for (i in
1..lastIndex) {\n val e = this[i]\n if (max < e) max = e\n }\n return max\n}\n\n/**\n * Returns the largest
element.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxOrThrow-
U")\n@ExperimentalUnsignedTypes\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun
UShortArray.max(): UShort {\n if (isEmpty()) throw NoSuchElementException()\n var max = this[0]\n for (i
in 1..lastIndex) {\n val e = this[i]\n if (max < e) max = e\n }\n return max\n}\n\n/**\n * Returns the first
element yielding the largest value of the given function.\n * \n * @throws NoSuchElementException if the array is
empty.\n * \n * @sample samples.collections.Collections.Aggregates.maxBy\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxByOrThrow-
U")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\n@Suppress("CONFLICTING_OVERLOADS
")\npublic inline fun <R : Comparable<R>> UIntArray.maxBy(selector: (UInt) -> R): UInt {\n if (isEmpty())
throw NoSuchElementException()\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex
== 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n
val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return
maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function.\n * \n * @throws
NoSuchElementException if the array is empty.\n * \n * @sample
samples.collections.Collections.Aggregates.maxBy\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxByOrThrow-
U")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\n@Suppress("CONFLICTING_OVERLOADS
")\npublic inline fun <R : Comparable<R>> ULongArray.maxBy(selector: (ULong) -> R): ULong {\n if
(isEmpty()) throw NoSuchElementException()\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return
maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function.\n * \n * @throws
NoSuchElementException if the array is empty.\n * \n * @sample
samples.collections.Collections.Aggregates.maxBy\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxByOrThrow-
U")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\n@Suppress("CONFLICTING_OVERLOADS
")\npublic inline fun <R : Comparable<R>> UByteArray.maxBy(selector: (UByte) -> R): UByte {\n if
(isEmpty()) throw NoSuchElementException()\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return
maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function.\n * \n * @throws
NoSuchElementException if the array is empty.\n * \n * @sample
samples.collections.Collections.Aggregates.maxBy\n
*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxByOrThrow-
U")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\n@Suppress("CONFLICTING_OVERLOADS
")\npublic inline fun <R : Comparable<R>> UShortArray.maxBy(selector: (UShort) -> R): UShort {\n if
(isEmpty()) throw NoSuchElementException()\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return
maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or

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`null` if there are no elements.\n
 * \n * @sample samples.collections.Collections.Aggregates.maxByOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>> UIntArray.maxByOrNull(selector: (UInt) -> R): UInt? {\n if (isEmpty()) return null\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample samples.collections.Collections.Aggregates.maxByOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>> ULongArray.maxByOrNull(selector: (ULong) -> R): ULong? {\n if (isEmpty()) return null\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample samples.collections.Collections.Aggregates.maxByOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>> UByteArray.maxByOrNull(selector: (UByte) -> R): UByte? {\n if (isEmpty()) return null\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample samples.collections.Collections.Aggregates.maxByOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>> UShortArray.maxByOrNull(selector: (UShort) -> R): UShort? {\n if (isEmpty()) return null\n var maxElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return maxElem\n var maxValue = selector(maxElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (maxValue < v) {\n maxElem = e\n maxValue = v\n }\n }\n return maxElem\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UIntArray.maxOf(selector: (UInt) -> Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun ULongArray.maxOf(selector: (ULong) -> Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun

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ByteArray.maxOf(selector: (Byte) -> Double): Double {
 if (isEmpty()) throw NoSuchElementException()
 var maxValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 maxValue = maxOf(maxValue, v)
 }
 return maxValue
}
// Returns the largest value among all values produced by [selector] function
// applied to each element in the array.
// If any of values produced by [selector] function is NaN, the returned result is NaN.
// @throws NoSuchElementException if the array is empty.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun
UShortArray.maxOf(selector: (UShort) -> Double): Double {
 if (isEmpty()) throw
 NoSuchElementException()
 var maxValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v =
 selector(this[i])
 maxValue = maxOf(maxValue, v)
 }
 return maxValue
}
// Returns the largest value among all values produced by [selector] function
// applied to each element in the array.
// If any of values produced by [selector] function is NaN, the returned result is NaN.
// @throws NoSuchElementException if the array is empty.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun
UIntArray.maxOf(selector: (UInt) -> Float): Float {
 if (isEmpty()) throw NoSuchElementException()
 var
 maxValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 maxValue =
 maxOf(maxValue, v)
 }
 return maxValue
}
// Returns the largest value among all values produced
// by [selector] function
// applied to each element in the array.
// If any of values produced by [selector]
// function is NaN, the returned result is NaN.
// @throws NoSuchElementException if the array is empty.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun
ULongArray.maxOf(selector: (ULong) -> Float): Float {
 if (isEmpty()) throw NoSuchElementException()
 var
 maxValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 maxValue =
 maxOf(maxValue, v)
 }
 return maxValue
}
// Returns the largest value among all values produced
// by [selector] function
// applied to each element in the array.
// If any of values produced by [selector]
// function is NaN, the returned result is NaN.
// @throws NoSuchElementException if the array is empty.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public
inline fun ByteArray.maxOf(selector: (Byte) -> Float): Float {
 if (isEmpty()) throw
 NoSuchElementException()
 var maxValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v =
 selector(this[i])
 maxValue = maxOf(maxValue, v)
 }
 return maxValue
}
// Returns the
// largest value among all values produced by [selector] function
// applied to each element in the array.
// If
// any of values produced by [selector] function is NaN, the returned result is NaN.
// @throws
// NoSuchElementException if the array is empty.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun
UShortArray.maxOf(selector: (UShort) -> Float): Float {
 if (isEmpty()) throw NoSuchElementException()
 var
 maxValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 maxValue =
 maxOf(maxValue, v)
 }
 return maxValue
}
// Returns the largest value among all
// values produced by [selector] function
// applied to each element in the array.
// @throws
// NoSuchElementException if the array is empty.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun <R :
Comparable<R>> UIntArray.maxOf(selector: (UInt) -> R): R {
 if (isEmpty()) throw
 NoSuchElementException()
 var maxValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v =

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selector(this[i])\n if (maxValue < v) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic\ninline fun <R : Comparable<R>> ULongArray.maxOf(selector: (ULong) -> R): R {\n if (isEmpty()) throw\n NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =\n selector(this[i])\n if (maxValue < v) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>> UByteArray.maxOf(selector: (UByte) -> R): R {\n if (isEmpty()) throw\n NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =\n selector(this[i])\n if (maxValue < v) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>> UShortArray.maxOf(selector: (UShort) -> R): R {\n if (isEmpty()) throw\n NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =\n selector(this[i])\n if (maxValue < v) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced\n * by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of\n * values produced by [selector] function is `NaN`, the returned result is `NaN`.\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUIntArray.maxOfOrNull(selector: (UInt) -> Double): Double? {\n if (isEmpty()) return null\n var maxValue =\n selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector]\n * function is `NaN`, the returned result is `NaN`.\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic\ninline fun ULongArray.maxOfOrNull(selector: (ULong) -> Double): Double? {\n if (isEmpty()) return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue =\n maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced\n * by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of\n * values produced by [selector] function is `NaN`, the returned result is `NaN`.\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUByteArray.maxOfOrNull(selector: (UByte) -> Double): Double? {\n if (isEmpty()) return null\n var maxValue\n = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return\n maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to\n * each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function\n * is `NaN`, the returned result is `NaN`.\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution

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ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.maxOfOrNull(selector: (UShort) -> Double): Double? {\n if (isEmpty()) return null\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue =
maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
by [selector] function\n * applied to each element in
the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the
returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.maxOfOrNull(selector: (UInt) -> Float): Float? {\n if (isEmpty()) return null\n var maxValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n
}\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n *
applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector]
function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun ULongArray.maxOfOrNull(selector: (ULong) -> Float): Float? {\n if (isEmpty()) return null\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue =
maxOf(maxValue, v)\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of
values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.maxOfOrNull(selector: (UByte) -> Float): Float? {\n if (isEmpty()) return null\n var maxValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n
}\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n *
applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector]
function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.maxOfOrNull(selector: (UShort) -> Float): Float? {\n if (isEmpty()) return null\n var maxValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n
}\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n *
applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun <R : Comparable<R>> UIntArray.maxOfOrNull(selector: (UInt) -> R): R? {\n if (isEmpty()) return
null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(maxValue < v) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value
among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no
elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> ULongArray.maxOfOrNull(selector: (ULong) -> R): R? {\n if (isEmpty()) return null\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n
 maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n *
applied to each element in the array or `null` if there are no elements.\n

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*\/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun <R :
Comparable<R>> UByteArray.maxOfOrNull(selector: (UByte) -> R): R? {n if (isEmpty()) return nulln var
maxValue = selector(this[0])n for (i in 1..lastIndex) {n val v = selector(this[i])n if (maxValue < v) {n
maxValue = v\n }n }n return maxValue\n}n/n/**n * Returns the largest value among all values
produced by [selector] functionn * applied to each element in the array or `null` if there are no elements.n
*\/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun <R :
Comparable<R>> UShortArray.maxOfOrNull(selector: (UShort) -> R): R? {n if (isEmpty()) return nulln var
maxValue = selector(this[0])n for (i in 1..lastIndex) {n val v = selector(this[i])n if (maxValue < v) {n
maxValue = v\n }n }n return maxValue\n}n/n/**n * Returns the largest value according to the
provided [comparator]n * among all values produced by [selector] function applied to each element in the array.n *
n * @throws NoSuchElementException if the array is empty.n
*\/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun <R>
UIntArray.maxOfWith(comparator: Comparator<in R>,
selector: (UInt) -> R): R {n if (isEmpty()) throw NoSuchElementException()n var maxValue =
selector(this[0])n for (i in 1..lastIndex) {n val v = selector(this[i])n if (comparator.compare(maxValue,
v) < 0) {n maxValue = v\n }n }n return maxValue\n}n/n/**n * Returns the largest value
according to the provided [comparator]n * among all values produced by [selector] function applied to each
element in the array.n * n * @throws NoSuchElementException if the array is empty.n
*\/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun <R>
ULongArray.maxOfWith(comparator: Comparator<in R>, selector: (ULong) -> R): R {n if (isEmpty()) throw
NoSuchElementException()n var maxValue = selector(this[0])n for (i in 1..lastIndex) {n val v =
selector(this[i])n if (comparator.compare(maxValue,
v) < 0) {n maxValue = v\n }n }n return maxValue\n}n/n/**n * Returns the largest value
according to the provided [comparator]n * among all values produced by [selector] function applied to each
element in the array.n * n * @throws NoSuchElementException if the array is empty.n
*\/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun <R>
UByteArray.maxOfWith(comparator: Comparator<in R>, selector: (UByte) -> R): R {n if (isEmpty()) throw
NoSuchElementException()n var maxValue = selector(this[0])n for (i in 1..lastIndex) {n val v =
selector(this[i])n if (comparator.compare(maxValue, v) < 0) {n maxValue = v\n }n }n return
maxValue\n}n/n/**n * Returns the largest value according to the provided [comparator]n * among all values
produced by
[selector] function applied to each element in the array.n * n * @throws NoSuchElementException if the array is
empty.n
*\/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun <R>
UShortArray.maxOfWith(comparator: Comparator<in R>, selector: (UShort) -> R): R {n if (isEmpty()) throw
NoSuchElementException()n var maxValue = selector(this[0])n for (i in 1..lastIndex) {n val v =
selector(this[i])n if (comparator.compare(maxValue, v) < 0) {n maxValue = v\n }n }n return
maxValue\n}n/n/**n * Returns the largest value according to the provided [comparator]n * among all values
produced by [selector] function applied to each element in the array or `null` if there are no elements.n
*\/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic

```

```

inline fun <R> UIntArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (UInt) -> R): R? {
 if (isEmpty()) return null
 var maxValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if (comparator.compare(maxValue, v) < 0) {
 maxValue = v
 }
 }
 return maxValue
}
/** Returns the largest value according to the provided [comparator] among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun <R> ULongArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (ULong) -> R): R? {
 if (isEmpty()) return null
 var maxValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if (comparator.compare(maxValue, v) < 0) {
 maxValue = v
 }
 }
 return maxValue
}
/** Returns the largest value according to the provided [comparator] among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun <R> UByteArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (UByte) -> R): R? {
 if (isEmpty()) return null
 var maxValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if (comparator.compare(maxValue, v) < 0) {
 maxValue = v
 }
 }
 return maxValue
}
/** Returns the largest value according to the provided [comparator] among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun <R> UShortArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (UShort) -> R): R? {
 if (isEmpty()) return null
 var maxValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if (comparator.compare(maxValue, v) < 0) {
 maxValue = v
 }
 }
 return maxValue
}
/** Returns the largest element or `null` if there are no elements.
 */
@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun UIntArray.maxOrNull(): UInt? {
 if (isEmpty()) return null
 var max = this[0]
 for (i in 1..lastIndex) {
 val e = this[i]
 if (max < e) max = e
 }
 return max
}
/** Returns the largest element or `null` if there are no elements.
 */
@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun ULongArray.maxOrNull(): ULong? {
 if (isEmpty()) return null
 var max = this[0]
 for (i in 1..lastIndex) {
 val e = this[i]
 if (max < e) max = e
 }
 return max
}
/** Returns the largest element or `null` if there are no elements.
 */
@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun UByteArray.maxOrNull(): UByte? {
 if (isEmpty()) return null
 var max = this[0]
 for (i in 1..lastIndex) {
 val e = this[i]
 if (max < e) max = e
 }
 return max
}
/** Returns the largest element or `null` if there are no elements.
 */
@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun UShortArray.maxOrNull(): UShort? {
 if (isEmpty()) return null
 var max = this[0]
 for (i in 1..lastIndex) {
 val e = this[i]
 if (max < e) max = e
 }
 return max
}
/** Returns the first element having the largest value according to the provided [comparator].
 * @throws NoSuchElementException if the array is empty.
 */
@SinceKotlin("1.7")
@kotlin.jvm.JvmName("maxWithOrThrow-U")
@ExperimentalUnsignedTypes
@Suppress("CONFLICTING_OVERLOADS")
public fun UIntArray.maxWith(comparator: Comparator<in UInt>): UInt {
 if (isEmpty()) throw NoSuchElementException()
 var max = this[0]
 for (i in 1..lastIndex) {
 val e = this[i]
 if (comparator.compare(max, e) < 0) max = e
 }
 return max
}
/** Returns the first element having the largest value according to the provided [comparator].
 * @throws NoSuchElementException if the array is empty.
 */
@SinceKotlin("1.7")
@kotlin.jvm.JvmName("maxWithOrThrow-U")
@ExperimentalUnsignedTypes
@Suppress("CONFLICTING_OVERLOADS")
public fun

```



```

ULongArray.maxWith(comparator:
 Comparator<in ULong>): ULong {\n if (isEmpty()) throw NoSuchElementException()\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return\n max}\n\n/**\n * Returns the first element having the largest value according to the provided [comparator].\n * \n * \n * @throws NoSuchElementException if the array is empty.\n *\n*/\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxWithOrThrow-
U")\n@ExperimentalUnsignedTypes\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun
UByteArray.maxWith(comparator: Comparator<in UByte>): UByte {\n if (isEmpty()) throw
NoSuchElementException()\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if
(comparator.compare(max, e) < 0) max = e\n }\n return max}\n\n/**\n * Returns the first element having the
largest value according to the provided [comparator].\n * \n * \n * @throws NoSuchElementException if the array is
empty.\n *\n*/\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("maxWithOrThrow-
U")\n@ExperimentalUnsignedTypes\n@Suppress("CONFLICTING_OVERLOADS")\npublic
fun UShortArray.maxWith(comparator: Comparator<in UShort>): UShort {\n if (isEmpty()) throw
NoSuchElementException()\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if
(comparator.compare(max, e) < 0) max = e\n }\n return max}\n\n/**\n * Returns the first element having the
largest value according to the provided [comparator] or `null` if there are no elements.\n *\n*/\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.maxWithOrNull(comparator:
Comparator<in UInt>): UInt? {\n if (isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n
val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return max}\n\n/**\n * Returns the
first element having the largest value according to the provided [comparator] or `null` if there are
no elements.\n *\n*/\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun
ULongArray.maxWithOrNull(comparator: Comparator<in ULong>): ULong? {\n if (isEmpty()) return null\n
var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max =
e\n }\n return max}\n\n/**\n * Returns the first element having the largest value according to the provided
[comparator] or `null` if there are no elements.\n *\n*/\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.maxWithOrNull(comparator:
Comparator<in UByte>): UByte? {\n if (isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n
val e = this[i]\n if (comparator.compare(max, e) < 0) max = e\n }\n return max}\n\n/**\n * Returns the
first element having the largest value according to the provided [comparator] or `null` if there are no elements.\n *\n*/\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic
fun UShortArray.maxWithOrNull(comparator: Comparator<in UShort>): UShort? {\n if (isEmpty()) return null\n
var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(max, e) < 0) max =
e\n }\n return max}\n\n/**\n * Returns the smallest element.\n * \n * \n * @throws NoSuchElementException if
the array is empty.\n *\n*/\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow-
U")\n@ExperimentalUnsignedTypes\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun
UIntArray.min(): UInt {\n if (isEmpty()) throw NoSuchElementException()\n var min = this[0]\n for (i in
1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return min}\n\n/**\n * Returns the smallest
element.\n * \n * \n * @throws NoSuchElementException if the array is empty.\n *\n*/\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow-
U")\n@ExperimentalUnsignedTypes\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun
UByteArray.min(): UByte {\n if (isEmpty()) throw NoSuchElementException()\n var min = this[0]\n for (i in

```

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1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return min\n}\n\n/**\n * Returns the smallest element.\n * \n * @throws NoSuchElementException if the array is empty.\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minOrThrow-
U")\n@ExperimentalUnsignedTypes\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun
UShortArray.min(): UShort {\n if (isEmpty()) throw NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return min\n}\n\n/**\n * Returns the first element yielding the smallest value of the given function.\n * \n * @throws NoSuchElementException if the array is empty.\n * \n * @sample samples.collections.Collections.Aggregates.minBy\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow-
U")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\n@Suppress("CONFLICTING_OVERLOADS
")\npublic inline fun <R : Comparable<R>> UIntArray.minBy(selector: (UInt) -> R): UInt {\n if (isEmpty())
throw NoSuchElementException()\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex ==
0) return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val
v = selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n }\n }\n return
minElem\n}\n\n/**\n * Returns the first element yielding the smallest value of the given function.\n * \n * @throws NoSuchElementException if the array is empty.\n * \n * @sample samples.collections.Collections.Aggregates.minBy\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow-
U")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\n@Suppress("CONFLICTING_OVERLOADS
")\npublic inline fun <R : Comparable<R>> ULongArray.minBy(selector: (ULong) -> R): ULong {\n if
(isEmpty()) throw NoSuchElementException()\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the first element yielding the smallest value of the given function.\n * \n * @throws NoSuchElementException if the array is empty.\n * \n * @sample samples.collections.Collections.Aggregates.minBy\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow-
U")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\n@Suppress("CONFLICTING_OVERLOADS
")\npublic inline fun <R : Comparable<R>> UByteArray.minBy(selector: (UByte) -> R): UByte {\n if
(isEmpty()) throw NoSuchElementException()\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if
(lastIndex == 0) return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e =
this[i]\n val v = selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the first element yielding the smallest value of the given function.\n * \n * @throws NoSuchElementException if the array is empty.\n * \n * @sample samples.collections.Collections.Aggregates.minBy\n *\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minByOrThrow-
U")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\n@Suppress("CONFLICTING_OVERLOADS
")\npublic inline fun <R : Comparable<R>> UShortArray.minBy(selector: (UShort) -> R): UShort {\n if (isEmpty()) throw
NoSuchElementException()\n var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0)
return minElem\n var minValue = selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v =
selector(e)\n if (minValue > v) {\n minElem = e\n minValue = v\n }\n }\n return
minElem\n}\n\n/**\n * Returns the first element yielding the smallest value of the given function or `null` if there
are no elements.\n * \n * @sample samples.collections.Collections.Aggregates.minByOrNull\n *\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UIntArray.minByOrNull(selector: (UInt) -> R): UInt? {\n if (isEmpty()) return null\n var
minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var minValue =
selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue > v)

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{\n minElem = e\n minValue = v\n }\n } \n return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> ULongArray.minByOrNull(selector: (ULong) -> R): ULong? {\n if (isEmpty()) return null\n
var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var minValue =
selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue > v)
{\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UByteArray.minByOrNull(selector: (UByte) -> R): UByte? {\n if (isEmpty()) return null\n
var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var minValue =
selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue > v)
{\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UShortArray.minByOrNull(selector: (UShort) -> R): UShort? {\n if (isEmpty()) return null\n
var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var minValue =
selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue > v)
{\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the smallest
value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of
values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UIntArray.minOf(selector: (UInt) -> Double): Double {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest
value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of
values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.minOf(selector: (ULong) -> Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n
var minValue
= selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue,
v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector]
function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`,
the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.minOf(selector: (UByte) -> Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n
var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue =
minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced
by

```

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[selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function
is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.minOf(selector: (UShort) -> Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n
var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue =
minOf(minValue, v)\n }\n return minValue\n}\n\n**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector]
function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.minOf(selector: (UInt) -> Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue =
minOf(minValue, v)\n }\n return minValue\n}\n\n**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector]
function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.minOf(selector:
(ULong) -> Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n
}\n return minValue\n}\n\n**\n * Returns the smallest value among all values produced by [selector] function\n *
applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned
result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.minOf(selector: (UByte) -> Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue =
minOf(minValue, v)\n
}\n return minValue\n}\n\n**\n * Returns the smallest value among all values produced by [selector]
function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`,
the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.minOf(selector: (UShort) -> Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n
var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue =
minOf(minValue, v)\n }\n return minValue\n}\n\n**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the array.\n * \n * @throws NoSuchElementException if the
array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UIntArray.minOf(selector: (UInt) -> R): R {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (minValue > v) {\n minValue = v\n }\n }\n return minValue\n}\n\n**\n * Returns the smallest value among all values produced by [selector] function\n *
applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :

```

```

Comparable<R>> ULongArray.minOf(selector: (ULong) -> R): R {
 if (isEmpty())
 throw NoSuchElementException()
 var minValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if (minValue > v) {
 minValue = v
 }
 }
 return minValue
}

Returns the smallest value among all values produced by [selector] function
* applied to each element in the array.
* @throws NoSuchElementException if the array is empty.

*
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>> UByteArray.minOf(selector: (UByte) -> R): R {
 if (isEmpty()) throw
 NoSuchElementException()
 var minValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if (minValue > v) {
 minValue = v
 }
 }
 return minValue
}

Returns the smallest value among all values
produced by [selector] function
* applied to each element in the array.
* @throws
NoSuchElementException if the array is empty.

*
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>> UShortArray.minOf(selector: (UShort) -> R): R {
 if (isEmpty()) throw
 NoSuchElementException()
 var minValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 if (minValue > v) {
 minValue = v
 }
 }
 return minValue
}

Returns the smallest value among all values produced by [selector] function
* applied to each element in the array
or `null` if there are no elements.
* If any of values produced by [selector] function is `NaN`, the returned
result is `NaN`.

*
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public
inline fun UIntArray.minOfOrNull(selector: (UInt) -> Double): Double? {
 if (isEmpty()) return null
 var
 minValue = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 minValue =
 minOf(minValue, v)
 }
 return minValue
}

Returns the smallest value among all values produced
by [selector] function
* applied to each element in the array or `null` if there are no elements.
* If any of
values produced by [selector] function is `NaN`, the returned result is `NaN`.

*
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun
ULongArray.minOfOrNull(selector: (ULong) -> Double): Double? {
 if (isEmpty()) return null
 var minValue
 = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 minValue = minOf(minValue, v)
 }
 return
 minValue
}

Returns the smallest value among all values produced by [selector] function
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each element in the array or `null` if there are no elements.
* If any of values produced by [selector] function
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*
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun
UByteArray.minOfOrNull(selector: (UByte) -> Double): Double? {
 if (isEmpty()) return null
 var minValue
 = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 minValue = minOf(minValue, v)
 }
 return
 minValue
}

Returns the smallest value among all values produced by [selector] function
* applied to
each element in the array
or `null` if there are no elements.
* If any of values produced by [selector] function is `NaN`, the returned
result is `NaN`.

*
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution
ByLambdaReturnType
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun
UShortArray.minOfOrNull(selector: (UShort) -> Double): Double? {
 if (isEmpty()) return null
 var minValue
 = selector(this[0])
 for (i in 1..lastIndex) {
 val v = selector(this[i])
 minValue = minOf(minValue, v)
 }
 return
 minValue
}

```



```

 minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values
produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R> :
Comparable<R>> UShortArray.minOrNull(selector: (UShort)
-> R): R? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v
= selector(this[i])\n if (minValue > v) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.minOfWith(comparator: Comparator<in R>, selector: (UInt) -> R): R {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector] function applied to each element in the array.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
ULongArray.minOfWith(comparator: Comparator<in R>, selector: (ULong) -> R): R {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UByteArray.minOfWith(comparator: Comparator<in R>, selector: (UByte) -> R): R {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the array.\n * \n * @throws NoSuchElementException if
the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun <R> UShortArray.minOfWith(comparator: Comparator<in R>, selector: (UShort) -> R): R {\n if
(isEmpty()) throw NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n
val v = selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n}\n return
minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all
values produced by [selector] function applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (UInt) -> R): R? {\n if (isEmpty()) return
null\n var minValue = selector(this[0])\n for
(i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n
minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value according to the provided
[comparator]\n * among all values produced by [selector] function applied to each element in the array or `null` if
there are no elements.\n

```

```

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
ULongArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (ULong) -> R): R? {\n if (isEmpty())
return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n *
Returns the smallest value according to the provided [comparator]\n

```

\* among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.\n

```

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UByteArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (UByte) -> R): R? {\n if (isEmpty())
return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n *
Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array or `null` if there are no elements.\n

```

function applied to each element in the array or `null` if there are no elements.\n

```

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic

```

```

inline fun <R> UShortArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (UShort) -> R): R? {\n
if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return
minValue\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n

```

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.minOrNull(): UInt? {\n if
(isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min =
e\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n

```

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.minOrNull(): ULong? {\n if
(isEmpty()) return null\n

```

```

var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return
min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n

```

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.minOrNull(): UByte? {\n if
(isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min =
e\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n

```

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.minOrNull(): UShort? {\n if
(isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min =
e\n }\n return min\n}\n\n/**\n * Returns the first element having the smallest value according to the provided
[comparator].\n * \n * @throws NoSuchElementException if the array is empty.\n

```

```

*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minWithOrThrow-

```

```

U")\n@ExperimentalUnsignedTypes\n@Suppress("CONFLICTING_OVERLOADS")\npublic

```

```

fun UIntArray.minWith(comparator: Comparator<in UInt>): UInt {\n if (isEmpty()) throw
NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if
(comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n/**\n * Returns the first element having the
smallest value according to the provided [comparator].\n * \n * @throws NoSuchElementException if the array is
empty.\n * \n * @throws NoSuchElementException if the array is empty.\n

```

```

*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minWithOrThrow-

```

```

U")\n@ExperimentalUnsignedTypes\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun

```

```

ULongArray.minWith(comparator: Comparator<in ULong>): ULong {\n if (isEmpty()) throw
NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if
(comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n/**\n

```

\* Returns the first element having the smallest value according to the provided [comparator].\n \* \n \* @throws NoSuchElementException if the array is empty.\n



```

*\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minWithOrThrow-
U")\n@ExperimentalUnsignedTypes\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun
UByteArray.minWith(comparator: Comparator<in UByte>): UByte {\n if (isEmpty()) throw
NoSuchElementException()\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if
(comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n/**\n * Returns the first element having the
smallest value according to the provided [comparator].\n * \n * @throws NoSuchElementException if the array is
empty.\n */\n@SinceKotlin("1.7")\n@kotlin.jvm.JvmName("minWithOrThrow-
U")\n@ExperimentalUnsignedTypes\n@Suppress("CONFLICTING_OVERLOADS")\npublic fun
UShortArray.minWith(comparator: Comparator<in UShort>): UShort {\n if (isEmpty()) throw
NoSuchElementException()\n
var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (comparator.compare(min, e) > 0) min =
e\n }\n return min\n}\n\n/**\n * Returns the first element having the smallest value according to the provided
[comparator] or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun
UIntArray.minWithOrNull(comparator:
Comparator<in UInt>): UInt? {\n if (isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n
val e = this[i]\n if (comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n/**\n * Returns the first
element having the smallest value according to the provided [comparator] or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun
ULongArray.minWithOrNull(comparator:
Comparator<in ULong>): ULong? {\n if (isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n
val
e = this[i]\n if (comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n/**\n * Returns the first
element having the smallest value according to the provided [comparator] or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun
UByteArray.minWithOrNull(comparator:
Comparator<in UByte>): UByte? {\n if (isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n
val e = this[i]\n if (comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n/**\n * Returns the
first element having the smallest value according to the provided [comparator] or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun
UShortArray.minWithOrNull(comparator:
Comparator<in UShort>): UShort? {\n if (isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n
val e = this[i]\n if (comparator.compare(min, e) > 0) min = e\n
}\n return min\n}\n\n/**\n * Returns `true` if the array has no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.none\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.none(): Boolean {\n return isEmpty()\n}\n\n/**\n * Returns `true` if the array has no elements.\n * \n *
@sample samples.collections.Collections.Aggregates.none\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.none(): Boolean {\n return isEmpty()\n}\n\n/**\n * Returns `true` if the array has no elements.\n * \n *
@sample samples.collections.Collections.Aggregates.none\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.none(): Boolean {\n return isEmpty()\n}\n\n/**\n * Returns `true` if the array has no elements.\n * \n *
@sample samples.collections.Collections.Aggregates.none\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun
UShortArray.none(): Boolean {\n return isEmpty()\n}\n\n/**\n * Returns `true` if no elements match
the given [predicate].\n * \n * @sample samples.collections.Collections.Aggregates.noneWithPredicate\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.none(predicate: (UInt) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return
false\n return true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun

```

```

UByteArray.none(predicate: (UByte) -> Boolean): Boolean {
 for (element in this) if (predicate(element)) return false
 return true
}

Returns `true` if no elements match the given [predicate].

@sample samples.collections.Collections.Aggregates.noneWithPredicate

@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly
public inline fun
UByteArray.none(predicate: (UByte) -> Boolean): Boolean {
 for (element in this) if (predicate(element)) return false
 return true
}

Returns `true` if no elements match the given [predicate].

@sample samples.collections.Collections.Aggregates.noneWithPredicate

@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly
public inline fun
UShortArray.none(predicate: (UShort) -> Boolean): Boolean {
 for (element in this) if (predicate(element)) return false
 return true
}

Returns `true` if no elements match the given [predicate].

@sample samples.collections.Collections.Aggregates.noneWithPredicate

@SinceKotlin("1.4")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly
public inline fun
UIntArray.forEach(action: (UInt) -> Unit): UIntArray {
 return apply {
 for (element in this) action(element)
 }
}

Returns the array itself afterwards.

@SinceKotlin("1.4")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly
public inline fun
UIntArray.forEachIndexed(action: (index: Int, UInt) -> Unit): UIntArray {
 return apply {
 for (index, element) in this.withIndex() {
 action(index, element)
 }
 }
}

Returns the array itself afterwards.

@sample samples.collections.Collections.Aggregates.forEachIndexed

@param [action] function that takes the index of an element and the element itself
and performs the action on the element.

@SinceKotlin("1.4")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly
public inline fun
UIntArray.forEachIndexed(action: (index: Int, UInt) -> Unit): UIntArray {
 return apply {
 for (index, element) in this.withIndex() {
 action(index, element)
 }
 }
}

Returns the array itself afterwards.

@sample samples.collections.Collections.Aggregates.forEachIndexed

@param [action] function that takes the index of an element and the element itself
and performs the action on the element.

@SinceKotlin("1.4")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly
public inline fun
UByteArray.forEachIndexed(action: (index: Int, UByte) -> Unit): UByteArray {
 return apply {
 for (index, element) in this.withIndex() {
 action(index, element)
 }
 }
}

Returns the array itself afterwards.

@sample samples.collections.Collections.Aggregates.forEachIndexed

@param [action] function that takes the index of an element and the element itself
and performs the action on the element.

@SinceKotlin("1.4")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly
public inline fun
UShortArray.forEachIndexed(action: (index: Int, UShort) -> Unit): UShortArray {
 return apply {
 for (index, element) in this.withIndex() {
 action(index, element)
 }
 }
}

Returns the array itself afterwards.

@sample samples.collections.Collections.Aggregates.forEachIndexed

@param [action] function that takes the index of an element and the element itself
and performs the action on the element.

@SinceKotlin("1.4")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly
public inline fun
UByteArray.reduceOrNull(operation: (UByte, UByte) -> UByte): UByte? {
 return this.reduceOrNull(operation)
}

Returns `null` when its receiver is empty.

@sample samples.collections.Collections.Aggregates.reduceOrNull

@param [operation] function that takes current accumulator value and an element
and calculates the next

```

```

accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.reduce(operation: (acc: UInt, UInt) -> UInt): UInt {\n if (isEmpty())\n throw
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in
1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n *
Accumulates value starting with the first element and applying [operation] from left to right\n * to current
accumulator value and each element.\n * \n * Throws an exception if this array is empty. If the array can be empty
in an expected way,\n * please use [reduceOrNull] instead. It returns `null` when its receiver is empty.\n * \n *
@param [operation] function that takes current accumulator value and an element,\n * and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.reduce(operation: (acc: ULong, ULong) -> ULong): ULong {\n if (isEmpty())\n throw
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in
1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n *
Accumulates value starting
with the first element and applying [operation] from left to right\n * to current accumulator value and each
element.\n * \n * Throws an exception if this array is empty. If the array can be empty in an expected way,\n *
please use [reduceOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function
that takes current accumulator value and an element,\n * and calculates the next accumulator value.\n * \n *
@sample samples.collections.Collections.Aggregates.reduce\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.reduce(operation: (acc: UByte, UByte) -> UByte): UByte {\n if (isEmpty())\n throw
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in
1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n *
Accumulates value starting with the first element
and applying [operation] from left to right\n * to current accumulator value and each element.\n * \n * Throws an
exception if this array is empty. If the array can be empty in an expected way,\n * please use [reduceOrNull]
instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function that takes current
accumulator
value and an element,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduce\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.reduce(operation: (acc: UShort, UShort) -> UShort): UShort {\n if (isEmpty())\n throw
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in
1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n *
Accumulates value starting with the first element and applying [operation]
from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n *
Throws an exception if this array is empty. If the array can be empty in an expected way,\n * please use
[reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function
that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.reduceIndexed(operation: (index: Int, acc: UInt, UInt) -> UInt): UInt {\n if (isEmpty())\n throw
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in
1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n return
accumulator\n}\n\n/**\n *
Accumulates value starting with the first element and applying [operation] from left to right\n * to current
accumulator value and each element with its index in the original array.\n * \n * Throws an exception if this array
is empty. If the array can be empty in an expected way,\n * please use [reduceIndexedOrNull] instead. It returns `null`

```

when its receiver is empty.\n \* \n \* @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n \* and calculates the next accumulator value.\n \* \n \* @sample samples.collections.Collections.Aggregates.reduce\n

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*\n *@SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun
ULongArray.reduceIndexed(operation: (index: Int, acc: ULong, ULong) -> ULong): ULong {\n if (isEmpty())\n throw UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for
(index in 1..lastIndex) {\n accumulator = operation(index,
accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first
element and applying [operation] from left to right\n * to current accumulator value and each element with its index
in the original array.\n * \n * Throws an exception if this array is empty. If the array can be empty in an expected
way,\n * please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param
[operation] function that takes the index of an element, current accumulator value and the element itself,\n * and
calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n
*/\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun
UByteArray.reduceIndexed(operation: (index: Int, acc: UByte, UByte) -> UByte): UByte {\n if (isEmpty())\n
throw UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator
= this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n
return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from
left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Throws
an exception if this array is empty. If the array can be empty in an expected way,\n * please use
[reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function
that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n
*/\n @SinceKotlin("1.3")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun
UShortArray.reduceIndexed(operation: (index: Int, acc: UShort, UShort) -> UShort): UShort {\n if (isEmpty())\n
throw
UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in
1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to
right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns `null`
if the array is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator
value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceOrNull\n
*/\n @SinceKotlin("1.4")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun
UIntArray.reduceIndexedOrNull(operation: (index: Int, acc: UInt, UInt) -> UInt): UInt? {\n if (isEmpty())\n
return null\n var accumulator = this[0]\n for (index in 1..lastIndex)
{\n accumulator = operation(index, accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates
value starting with the first element and applying [operation] from left to right\n * to current
accumulator value and each element with its index in the original array.\n * \n * Returns `null` if the array is
empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the
element itself,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceOrNull\n
*/\n @SinceKotlin("1.4")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun
ULongArray.reduceIndexedOrNull(operation: (index: Int, acc: ULong, ULong) -> ULong): ULong? {\n if
(isEmpty())\n return null\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator =
operation(index, accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting
with the first element and applying [operation] from left to right\n * to current
accumulator value and each element with its index in the original array.\n * \n * Returns `null` if the array is

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empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the
element itself,\n * and calculates the next accumulator value.\n * \n * @sample
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*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.reduceIndexedOrNull(operation: (index: Int, acc: UByte, UByte) -> UByte): UByte? {\n if
(isEmpty())\n return null\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator =
operation(index, accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting
with the first element and applying [operation] from left to right\n * to
current accumulator value and each element with its index in the original array.\n * \n * Returns `null` if the array is
empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the
element itself,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.reduceIndexedOrNull(operation: (index: Int, acc: UShort, UShort) -> UShort): UShort? {\n if
(isEmpty())\n return null\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator =
operation(index, accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting
with the first element and applying [operation] from left to right\n * to current accumulator value and each
element.\n * \n * Returns `null` if the array is empty.\n * \n * @param
[operation] function that takes current accumulator value and an element,\n * and calculates the next accumulator
value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun UIntArray.reduceOrNull(operation: (acc: UInt, UInt) -> UInt): UInt?
{\n if (isEmpty())\n return null\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n
accumulator = operation(accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value
starting with the first element and applying [operation] from left to right\n * to current accumulator value and each
element.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes current
accumulator value and an element,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun ULongArray.reduceOrNull(operation: (acc: ULong, ULong) ->
ULong): ULong? {\n if (isEmpty())\n return null\n var accumulator = this[0]\n for (index in 1..lastIndex)
{\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates
value starting with the first element and applying [operation] from left to right\n * to current accumulator value and
each element.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes current
accumulator value and an element,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun UByteArray.reduceOrNull(operation: (acc: UByte, UByte) -> UByte): UByte? {\n if (isEmpty())\n
return null\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator =
operation(accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the
first element and applying [operation] from left to right\n * to current accumulator value and each element.\n * \n *
Returns `null` if the array is empty.\n * \n * @param [operation] function that takes current accumulator value and
an element,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun UShortArray.reduceOrNull(operation: (acc: UShort, UShort) ->
UShort): UShort? {\n if (isEmpty())\n return null\n var accumulator

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= this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to
left\n * to each element and current accumulator value.\n * \n * Throws an exception if this array is empty. If the
array can be empty in an expected way,\n * please use [reduceRightOrNull] instead. It returns `null` when its
receiver is empty.\n * \n * @param [operation] function that takes an element and current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.reduceRight(operation: (UInt, acc: UInt) -> UInt): UInt {\n var index = lastIndex\n if (index < 0)
throw UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator
= get(index--)\n while (index >= 0) {\n accumulator = operation(get(index--), accumulator)\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to
left\n * to each element and current accumulator value.\n * \n * Throws an exception if this array is empty. If the
array can be empty in an expected way,\n * please use [reduceRightOrNull] instead. It returns `null` when its
receiver is empty.\n * \n * @param [operation] function that takes an element and current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.reduceRight(operation: (ULong, acc: ULong) -> ULong): ULong {\n var index = lastIndex\n if
(index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator
= get(index--)\n while (index >= 0) {\n accumulator = operation(get(index--), accumulator)\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to
left\n * to each element and current accumulator value.\n * \n * Throws an exception if this array is empty. If the
array can be empty in an expected way,\n * please use [reduceRightOrNull] instead. It returns `null` when its
receiver is empty.\n * \n * @param [operation] function that takes an element and current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
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*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.reduceRight(operation: (UByte, acc: UByte) -> UByte): UByte {\n var index = lastIndex\n if (index
< 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n var
accumulator = get(index--)\n while (index >= 0) {\n accumulator = operation(get(index--), accumulator)\n
}\n return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation]
from right to left\n * to each element and current accumulator value.\n * \n * Throws an exception if this array is
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when its receiver is empty.\n * \n * @param [operation] function that takes an element and current accumulator
value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.reduceRight(operation: (UShort, acc: UShort) -> UShort): UShort {\n var index = lastIndex\n if
(index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n
var accumulator = get(index--)\n while (index >= 0) {\n accumulator = operation(get(index--),
accumulator)\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and
applying [operation] from right to left\n * to each element with its index in the original array and current
accumulator value.\n * \n * Throws an exception if this array is empty. If the array can be empty in an expected
way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator value,\n
* and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n

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*^@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.reduceRightIndexed(operation: (index: Int, UInt, acc: UInt) -> UInt): UInt {\n var index = lastIndex\n
 if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator =
 get(index--)\n while (index >= 0) {\n accumulator = operation(index, get(index), accumulator)\n --index\n
 }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation]
from right to left\n * to each element with its index in the original array and current accumulator value.\n * \n *
Throws an exception if this array is empty. If the array can be empty in an expected way,\n * please use
[reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation]
function that takes the index of an element, the element itself and current accumulator value,\n * and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRight\n
*^@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline
fun ULongArray.reduceRightIndexed(operation: (index: Int, ULong, acc: ULong) -> ULong): ULong {\n var
index = lastIndex\n if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n
var accumulator = get(index--)\n while (index >= 0) {\n accumulator = operation(index, get(index),
accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the last
element and applying [operation] from right to left\n * to each element with its index in the original array and
current accumulator value.\n * \n * Throws an exception if this array is empty. If the array can be empty in an
expected way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n
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samples.collections.Collections.Aggregates.reduceRight\n
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UByteArray.reduceRightIndexed(operation: (index: Int, UByte, acc: UByte) -> UByte): UByte {\n var index =
lastIndex\n if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n var
accumulator = get(index--)\n while (index >= 0) {\n accumulator = operation(index, get(index),
accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the last
element and applying [operation] from right to left\n * to each element with its index in the original array and
current accumulator value.\n * \n * Throws an exception if this array is empty. If the array can be empty in an
expected way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n
* @param [operation] function that takes the index of an element, the element itself
and current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n
*^@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.reduceRightIndexed(operation: (index: Int, UShort, acc: UShort) -> UShort): UShort {\n var index =
lastIndex\n if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n var
accumulator = get(index--)\n while (index >= 0) {\n accumulator = operation(index, get(index),
accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the last
element and applying [operation] from right to left\n * to each element with its index in the original array and
current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that
takes the index of an element, the element itself and current accumulator
value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*^@SinceKotlin("1.4")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.reduceRightIndexedOrNull(operation: (index: Int, UInt, acc: UInt) -> UInt): UInt? {\n var index =
lastIndex\n if (index < 0) return null\n var accumulator = get(index--)\n while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n *
Accumulates value starting with the last element and applying [operation] from right to left\n * to each element with
its index in the original array and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n
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@param [operation] function that takes the index of an element, the element itself and current accumulator value,\n
* and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.reduceRightIndexedOrNull(operation: (index: Int, ULong, acc: ULong) -> ULong): ULong? {\n var
index = lastIndex\n if (index < 0) return null\n var accumulator = get(index--)\n while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n *
Accumulates value starting with the last element and applying [operation] from right\n * to each element with
its index in the original array and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator value,\n
* and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UByteArray.reduceRightIndexedOrNull(operation: (index: Int, UByte, acc: UByte) -> UByte): UByte?
{\n var index = lastIndex\n if (index < 0) return null\n var accumulator = get(index--)\n while (index >= 0)
{\n accumulator = operation(index, get(index), accumulator)\n --index\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to
left\n * to each element with its index in the original array and current accumulator value.\n * \n * Returns `null`
if the array is empty.\n * \n * @param [operation] function that takes the index of an element, the element itself and
current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UShortArray.reduceRightIndexedOrNull(operation: (index: Int, UShort, acc: UShort) -> UShort):
UShort? {\n var index = lastIndex\n if (index < 0) return null\n var accumulator = get(index--)\n while (index
>= 0) {\n accumulator = operation(index, get(index), accumulator)\n --index\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to
left\n * to each element and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n * @param
[operation] function that takes an element and current accumulator value,\n * and calculates the next accumulator
value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun UIntArray.reduceRightOrNull(operation: (UInt, acc: UInt) -> UInt):
UInt? {\n
 var index = lastIndex\n if (index < 0) return null\n var accumulator = get(index--)\n while (index >= 0) {\n
accumulator = operation(get(index--), accumulator)\n }\n return accumulator\n}\n\n/**\n * Accumulates value
starting with the last element and applying [operation] from right to left\n * to each element and current accumulator
value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and
current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun ULongArray.reduceRightOrNull(operation: (ULong, acc: ULong) ->
ULong): ULong? {\n var index = lastIndex\n if (index < 0) return null\n var accumulator = get(index--)\n
while (index >= 0) {\n accumulator
= operation(get(index--), accumulator)\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with
the last element and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n
* Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and current
accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n

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@kotlin.internal.InlineOnly\npublic inline fun UByteArray.reduceRightOrNull(operation: (UByte, acc: UByte) ->
UByte): UByte? {\n var index = lastIndex\n if (index < 0) return null\n var accumulator = get(index--)\n
while (index >= 0) {\n accumulator = operation(get(index--), accumulator)\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with the last element
and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns
`null` if the array is empty.\n * \n * @param [operation] function that takes an element and current accumulator
value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*/\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun UShortArray.reduceRightOrNull(operation: (UShort, acc: UShort) ->
UShort): UShort? {\n var index = lastIndex\n if (index < 0) return null\n var accumulator = get(index--)\n
while (index >= 0) {\n accumulator = operation(get(index--), accumulator)\n }\n return
accumulator\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying
[operation] from left to right\n * to each element and current accumulator value that starts with [initial]
value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would
affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value
and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningFold\n
*/\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.runningFold(initial: R, operation: (acc: R, UInt) -> R): List<R> {\n if (isEmpty()) return
listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for
(element in this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n
return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying
[operation] from left to right\n * to each element and current accumulator
value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be
mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that
takes current accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningFold\n
*/\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
ULongArray.runningFold(initial: R, operation: (acc: R, ULong) -> R): List<R> {\n if (isEmpty()) return
listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for
(element in this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n
return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying
[operation] from left to right\n
* to each element and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed
to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n *
\n * @param [operation] function that takes current accumulator value and an element, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*/\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UByteArray.runningFold(initial: R, operation: (acc: R, UByte) -> R): List<R> {\n if (isEmpty()) return
listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for
(element in this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n
return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying
[operation] from left to right\n * to each element and current accumulator value that starts with [initial] value.\n *
\n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the
previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value and an
element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningFold\n

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*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UShortArray.runningFold(initial: R, operation: (acc: R, UShort) -> R): List<R> {\n if (isEmpty()) return
listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for
(element in this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n
return result\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element, its index in the original array and
current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation]
function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation]
function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, UInt) -> R): List<R> {\n if (isEmpty())
return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n
for (index in indices) {\n accumulator = operation(index, accumulator,
this[index])\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive
accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original
array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to
[operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n *
@param [operation] function that takes the index of an element, current accumulator value\n * and the element
itself, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
ULongArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, ULong) -> R): List<R> {\n if
(isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size +
1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n accumulator =
operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n}\n\n/**\n *
Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to
each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n *
Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the
previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current
accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UByteArray.runningFoldIndexed(initial: R, operation:
(index: Int, acc: R, UByte) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result =
ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n
accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return
result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from
left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial]
value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would
affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element,
current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun <R> UShortArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, UShort) -> R): List<R>
{\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var
accumulator = initial\n for (index in indices) {\n accumulator = operation(index, accumulator, this[index])\n
result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation

```

values generated by applying [operation] from left to right to each element and current accumulator value that starts with the first element of this array.

Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting list.

@param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.runningReduce

```

*\/n@SinceKotlin("1.4")n@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun
UIntArray.runningReduce(operation: (acc: UInt, UInt) -> UInt): List<UInt> {n if (isEmpty()) return
emptyList()n var accumulator = this[0]n val result = ArrayList<UInt>(size).apply { add(accumulator) }n for
(index in 1 until size) {n accumulator = operation(accumulator, this[index])n result.add(accumulator)n
}n return resultn}n/n/**n * Returns a list containing successive accumulation values generated by applying
[operation] from left to rightn * to each element and current accumulator value that starts with the first element of
this array.n * Note that `acc` value passed to [operation] function should not be mutated;n * otherwise it would
affect the previous value in resulting list.n * @param [operation] function that takes current accumulator value
and an element,
and calculates the next accumulator value.n * @sample
samples.collections.Collections.Aggregates.runningReduce
*\/n@SinceKotlin("1.4")n@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun
ULongArray.runningReduce(operation: (acc: ULong, ULong) -> ULong): List<ULong> {n if (isEmpty()) return
emptyList()n var accumulator = this[0]n val result = ArrayList<ULong>(size).apply { add(accumulator) }n
for (index in 1 until size) {n accumulator = operation(accumulator, this[index])n result.add(accumulator)n
}n return resultn}n/n/**n * Returns a list containing successive accumulation values generated by applying
[operation] from left to rightn * to each element and current accumulator value that starts with the first element of
this array.n * Note that `acc` value passed to [operation] function should not be mutated;n * otherwise it would
affect the previous value in resulting list.n * @param [operation]
function that takes current accumulator value and an element, and calculates the next accumulator value.n * @sample
@sample samples.collections.Collections.Aggregates.runningReduce
*\/n@SinceKotlin("1.4")n@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun
UByteArray.runningReduce(operation: (acc: UByte, UByte) -> UByte): List<UByte> {n if (isEmpty()) return
emptyList()n var accumulator = this[0]n val result = ArrayList<UByte>(size).apply { add(accumulator) }n
for (index in 1 until size) {n accumulator = operation(accumulator, this[index])n result.add(accumulator)n
}n return resultn}n/n/**n * Returns a list containing successive accumulation values generated by applying
[operation] from left to rightn * to each element and current accumulator value that starts with the first element of
this array.n * Note that `acc` value passed to [operation] function should not be mutated;n * otherwise it would
affect the
previous value in resulting list.n * @param [operation] function that takes current accumulator value and an
element, and calculates the next accumulator value.n * @sample
samples.collections.Collections.Aggregates.runningReduce
*\/n@SinceKotlin("1.4")n@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun
UShortArray.runningReduce(operation: (acc: UShort, UShort) -> UShort): List<UShort> {n if (isEmpty()) return
emptyList()n var accumulator = this[0]n val result = ArrayList<UShort>(size).apply { add(accumulator) }n
for (index in 1 until size) {n accumulator = operation(accumulator, this[index])n result.add(accumulator)n
}n return resultn}n/n/**n * Returns a list containing successive accumulation values generated by applying
[operation] from left to rightn * to each element, its index in the original array and current accumulator value that
starts with the first element of this array.n * Note that
`acc` value passed to [operation] function should not be mutated;n * otherwise it would affect the previous value in
resulting list.n * @param [operation] function that takes the index of an element, current accumulator valuen *
and the element itself, and calculates the next accumulator value.n * @sample
samples.collections.Collections.Aggregates.runningReduce

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`acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in
resulting list.\n * \n * @param [operation] function that takes current accumulator value and an element, and
calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun <R> ULongArray.scan(initial: R, operation: (acc: R, ULong) -> R):
List<R> {\n return runningFold(initial, operation)\n}\n\n/**\n
 * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n *
to each element and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to
[operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n *
@param [operation] function that takes current accumulator value and an element, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun <R> UByteArray.scan(initial: R, operation: (acc: R, UByte) -> R):
List<R> {\n return runningFold(initial, operation)\n}\n\n/**\n
 * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n *
to each element and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to
[operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n *
@param [operation] function that takes current accumulator value and an element, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun <R> UShortArray.scan(initial: R, operation: (acc: R, UShort) -> R):
List<R> {\n return runningFold(initial, operation)\n}\n\n/**\n
 * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n *
to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n *
Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous
value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator
value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun <R> UIntArray.scanIndexed(initial: R, operation: (index: Int, acc: R,
UInt) -> R): List<R> {\n return runningFoldIndexed(initial, operation)\n}\n\n/**\n
 * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n *
to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n *
Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous
value in resulting list.\n * \n * \n *
@param [operation] function that takes the index of an element, current accumulator value\n * and the element
itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun <R> ULongArray.scanIndexed(initial: R, operation: (index: Int, acc:
R, ULong) -> R): List<R> {\n return runningFoldIndexed(initial, operation)\n}\n\n/**\n
 * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n *
to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n *
Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous
value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator
value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n

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@kotlin.internal.InlineOnly\npublic inline fun <R> UByteArray.scanIndexed(initial: R, operation: (index: Int, acc:
R, UByte) -> R): List<R> {\n return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing
successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in
the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed
to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n *
\n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element
itself, and calculates the next accumulator
value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun <R> UShortArray.scanIndexed(initial: R, operation: (index: Int, acc:
R, UShort) -> R): List<R> {\n return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns the sum of all
values produced by [selector] function applied to each element in the array.\n * \n*\n@Deprecated("Use sumOf
instead.", ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince =
"1.5")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.sumBy(selector: (UInt) -> UInt): UInt {\n var sum: UInt = 0u\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n * \n*\n@Deprecated("Use
sumOf instead.", ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince =
"1.5")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.sumBy(selector: (ULong) -> UInt): UInt {\n var sum: UInt = 0u\n for (element in this) {\n sum
+= selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each element in the array.\n * \n*\n@Deprecated("Use sumOf instead.",
ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince =
"1.5")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.sumBy(selector: (UByte) -> UInt): UInt {\n var sum: UInt = 0u\n for (element in this) {\n sum
+= selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each element in the array.\n
*\n@Deprecated("Use sumOf instead.",
ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince =
"1.5")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.sumBy(selector: (UShort) -> UInt): UInt {\n var sum: UInt = 0u\n for (element in this) {\n sum
+= selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each element in the array.\n * \n*\n@Deprecated("Use sumOf instead.",
ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince =
"1.5")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.sumByDouble(selector: (UInt) -> Double): Double {\n var sum: Double = 0.0\n for (element in this)
{\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each
element in the array.\n * \n*\n@Deprecated("Use sumOf instead.",
ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince =
"1.5")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.sumByDouble(selector: (ULong) -> Double): Double {\n var sum: Double = 0.0\n for (element in
this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n * \n*\n@Deprecated("Use sumOf instead.",
ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince =
"1.5")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.sumByDouble(selector: (UByte) -> Double): Double {\n var sum: Double = 0.0\n for (element in
this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by

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[selector] function applied to each element in the array.\n */\n@Deprecated("Use sumOf instead.\",
ReplaceWith("this.sumOf(selector)")\n@DeprecatedSinceKotlin(warningSince =
"1.5")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.sumByDouble(selector: (UShort) -> Double): Double {\n var sum: Double = 0.0\n for (element in
this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfDouble")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UIntArray.sumOf(selector:
(UInt) -> Double): Double {\n var sum: Double = 0.toDouble()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each
element in the array.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfDouble")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun ULongArray.sumOf(selector:
(ULong) -> Double): Double {\n var sum: Double = 0.toDouble()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfDouble")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.sumOf(selector: (UByte) -> Double): Double {\n var sum: Double = 0.toDouble()\n for (element in
this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfDouble")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.sumOf(selector: (UShort) -> Double): Double {\n var sum: Double = 0.toDouble()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfInt")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UIntArray.sumOf(selector: (UInt) -> Int): Int {\n var sum: Int = 0.toInt()\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each element in the array.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfInt")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.sumOf(selector: (ULong) -> Int): Int {\n var sum: Int = 0.toInt()\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in
the array.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfInt")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UByteArray.sumOf(selector: (UByte) -> Int): Int {\n var sum: Int = 0.toInt()\n for (element in this)
{\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by

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[selector] function applied to each element in the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfInt")\n
@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UShortArray.sumOf(selector:
(UShort) -> Int): Int {\n var sum: Int = 0.toInt()\n for (element in this) {\n sum += selector(element)\n }\n
return sum\n}\n\n/**\n
* Returns the sum of all values produced by [selector] function applied to each element in the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfLong")
\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UIntArray.sumOf(selector: (UInt)
-> Long): Long {\n var sum: Long = 0.toLong()\n for (element in this) {\n sum += selector(element)\n }\n
return sum\n}\n\n/**\n
* Returns the sum of all values produced by [selector] function applied to each element in
the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfLong")
\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun ULongArray.sumOf(selector:
(ULong) -> Long): Long {\n var
sum: Long = 0.toLong()\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n
* Returns the sum of all values produced by [selector] function applied to each element in the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfLong")
\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UByteArray.sumOf(selector:
(UByte) -> Long): Long {\n var sum: Long = 0.toLong()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n
* Returns the sum of all values produced by [selector] function
applied to each element in the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfLong")
\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UShortArray.sumOf(selector: (UShort) -> Long): Long {\n var sum: Long = 0.toLong()\n for
(element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n
* Returns the sum of all values
produced by [selector] function applied to each element in the array.\n
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfUInt")\n
\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.Inline
Only\npublic inline fun UIntArray.sumOf(selector: (UInt) -> UInt): UInt {\n var sum: UInt = 0.toUInt()\n for
(element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n
* Returns the sum of all values
produced by [selector] function applied to each element in the array.\n
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfUInt")\n
\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.Inline
Only\npublic
inline fun ULongArray.sumOf(selector: (ULong) -> UInt): UInt {\n var sum: UInt = 0.toUInt()\n for (element
in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n
* Returns the sum of all values produced by
[selector] function applied to each element in the array.\n
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfUInt")\n
\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.Inline
Only\npublic inline fun UByteArray.sumOf(selector: (UByte) -> UInt): UInt {\n var sum: UInt = 0.toUInt()\n

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 for (element in this) { \n sum += selector(element)\n } \n return sum\n}\n\n/**\n * Returns the sum of all
values produced by [selector] function applied to each element in the array.\n
*\n\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfUInt")\n
\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.Inline
Only\npublic inline fun UShortArray.sumOf(selector: (UShort) -> UInt): UInt { \n var sum: UInt = 0.toUInt()\n
for (element in this) { \n sum += selector(element)\n } \n return sum\n}\n\n/**\n * Returns the sum of all
values produced by [selector] function applied to each element in the array.\n
*\n\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfULong")\n
\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.Inli
neOnly\npublic
inline fun UIntArray.sumOf(selector: (UInt) -> ULong): ULong { \n var sum: ULong = 0.toULong()\n for
(element in this) { \n sum += selector(element)\n } \n return sum\n}\n\n/**\n * Returns the sum of all values
produced by [selector] function applied to each element in the array.\n
*\n\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfULong")\n
\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.Inli
neOnly\npublic inline fun ULongArray.sumOf(selector: (ULong) -> ULong): ULong { \n var sum: ULong =
0.toULong()\n for (element in this) { \n sum += selector(element)\n } \n return sum\n}\n\n/**\n * Returns
the sum of all values produced by [selector]
function applied to each element in the array.\n
*\n\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfULong")\n
\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.Inli
neOnly\npublic inline fun UByteArray.sumOf(selector: (UByte) -> ULong): ULong { \n var sum: ULong =
0.toULong()\n for (element in this) { \n sum += selector(element)\n } \n return sum\n}\n\n/**\n * Returns
the sum of all values produced by [selector] function applied to each element in the array.\n
*\n\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfULong")\n
\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.Inli
neOnly\npublic inline
fun UShortArray.sumOf(selector: (UShort) -> ULong): ULong { \n var sum: ULong = 0.toULong()\n for
(element in this) { \n sum += selector(element)\n } \n return sum\n}\n\n/**\n * Returns a list of pairs built
from the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the
shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun <R> UIntArray.zip(other: Array<out
R>): List<Pair<UInt, R>> { \n return zip(other) { t1, t2 -> t1 to t2 } \n}\n\n/**\n * Returns a list of pairs built from
the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun <R> ULongArray.zip(other:
Array<out R>): List<Pair<ULong, R>>
{ \n return zip(other) { t1, t2 -> t1 to t2 } \n}\n\n/**\n * Returns a list of pairs built from the elements of `this`
array and the [other] array with the same index.\n * The returned list has length of the shortest collection.\n * \n *
@sample samples.collections.Iterables.Operations.zipIterable\n
*\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun <R> UByteArray.zip(other: Array<out
R>): List<Pair<UByte, R>> { \n return zip(other) { t1, t2 -> t1 to t2 } \n}\n\n/**\n * Returns a list of pairs built
from the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the

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shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun <R> UShortArray.zip(other:
Array<out R>): List<Pair<UShort, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of
values built from the elements of `this` array
and the [other] array with the same index\n * using the provided [transform] function applied to each pair of
elements.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V>
UIntArray.zip(other: Array<out R>, transform: (a: UInt, b: R) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i],
other[i]))\n }\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun <R, V> ULongArray.zip(other: Array<out R>, transform: (a: ULong, b: R) -> V): List<V> {\n val size
= minOf(size, other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n
list.add(transform(this[i], other[i]))\n }\n return list\n}\n\n/**\n * Returns a list of values built from the elements
of `this` array and the [other] array with the same index\n * using the provided [transform] function applied to each
pair of elements.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V>
UByteArray.zip(other: Array<out R>, transform: (a: UByte, b: R) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i],
other[i]))\n }\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the
[other] array with the same index\n * using the provided [transform] function applied to each pair of elements.\n *
The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V>
UShortArray.zip(other: Array<out R>, transform: (a: UShort, b: R) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i],
other[i]))\n }\n return list\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` collection and [other] array with
the same index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun <R> UIntArray.zip(other:
Iterable<R>): List<Pair<UInt, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs
built from the elements of `this` collection and [other] array with the same index.\n * The returned list has length of
the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun <R> ULongArray.zip(other:
Iterable<R>): List<Pair<ULong, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs
built from the elements of `this` collection and [other] array with the same index.\n * The returned list has length of
the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun <R> UByteArray.zip(other:
Iterable<R>):
List<Pair<UByte, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the
elements of `this` collection and [other] array with the same index.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun <R> UShortArray.zip(other:

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Iterable<R>): List<Pair<UShort, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of
values built from the elements of `this` array and the [other] collection with the same index\n * using the provided
[transform] function applied to each pair of elements.\n * The returned list has length of the shortest collection.\n *
\n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V>
UIntArray.zip(other:
Iterable<R>, transform: (a: UInt, b: R) -> V): List<V> {\n val arraySize = size\n val list =
ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n var i = 0\n for (element in other) {\n
if (i >= arraySize) break\n list.add(transform(this[i++], element))\n }\n return list\n}\n\n/**\n * Returns a
list of values built from the elements of `this` array and the [other] collection with the same index\n * using the
provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V>
ULongArray.zip(other: Iterable<R>, transform: (a: ULong, b: R) -> V): List<V> {\n val arraySize = size\n val
list = ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n var i = 0\n for (element in
other) {\n if (i >= arraySize) break\n list.add(transform(this[i++], element))\n }\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] collection with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V>
UByteArray.zip(other: Iterable<R>, transform: (a: UByte, b: R) -> V): List<V> {\n val arraySize = size\n val list
= ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n var i = 0\n for (element in other) {\n
if (i >= arraySize) break\n list.add(transform(this[i++], element))\n }\n return list\n}\n\n/**\n * Returns a
list of values built from the elements of `this` array and
the [other] collection with the same index\n * using the provided [transform] function applied to each pair of
elements.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V>
UShortArray.zip(other: Iterable<R>, transform: (a: UShort, b: R) -> V): List<V> {\n val arraySize = size\n val
list = ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n var i = 0\n for (element in other)
{\n if (i >= arraySize) break\n list.add(transform(this[i++], element))\n }\n return list\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n
*\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
infix fun UIntArray.zip(other: UIntArray): List<Pair<UInt, UInt>> {\n return zip(other) { t1, t2 -> t1 to t2
}\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the [other] array with the same
index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n
*\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun ULongArray.zip(other: ULongArray):
List<Pair<ULong, ULong>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built
from the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the
shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun UByteArray.zip(other: UByteArray):
List<Pair<UByte, UByte>> {\n return zip(other) { t1,
t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the [other] array with
the same index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n

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*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun UShortArray.zip(other: UShortArray):
List<Pair<UShort, UShort>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of values built
from the elements of `this` array and the [other] array with the same index\n * using the provided [transform]
function applied to each pair of elements.\n * The returned list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>
UIntArray.zip(other: UIntArray, transform: (a: UInt, b: UInt) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i], other[i]))\n
}\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>
ULongArray.zip(other: ULongArray, transform: (a: ULong, b: ULong) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i], other[i]))\n
}\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the
provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest
array.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>
UByteArray.zip(other: UByteArray, transform: (a: UByte, b: UByte) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i], other[i]))\n
}\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun <V> UShortArray.zip(other: UShortArray, transform: (a: UShort, b: UShort) -> V): List<V> {\n val
size = minOf(size, other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n
list.add(transform(this[i], other[i]))\n }\n return list\n}\n\n/**\n * Returns the sum of all elements in the array.\n
*\n@kotlin.jvm.JvmName("sumOfUInt")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedT
ypes::class)\npublic fun Array<out UInt>.sum(): UInt {\n var sum: UInt = 0u\n for (element in this) {\n
sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n
*\n@kotlin.jvm.JvmName("sumOfULong")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsigned
Types::class)\npublic fun Array<out ULong>.sum(): ULong {\n var sum: ULong = 0uL\n for (element in this)
{\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n
*\n@kotlin.jvm.JvmName("sumOfUByte")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsigned
Types::class)\npublic
fun Array<out UByte>.sum(): UInt {\n var sum: UInt = 0u\n for (element in this) {\n sum += element\n
}\n return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n
*\n@kotlin.jvm.JvmName("sumOfUShort")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsigned
Types::class)\npublic fun Array<out UShort>.sum(): UInt {\n var sum: UInt = 0u\n for (element in this) {\n
sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.sum(): UInt {\n return storage.sum().toUInt()\n}\n\n/**\n * Returns the sum of all elements in the
array.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.sum(): ULong {\n return storage.sum().toULong()\n}\n\n/**\n

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* Returns the sum of all elements in the array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.sum(): UInt {\n return sumOf { it.toUInt() }\n}\n\n/**\n * Returns the sum of all elements in the
array.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.sum(): UInt {\n return sumOf { it.toUInt() }\n}\n\n"/**\n * Copyright 2010-2022 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("UCollectionsKt")\n\npackage
kotlin.collections\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport kotlin.random.*\nimport
kotlin.ranges.contains\nimport
kotlin.ranges.reversed\n\n/**\n * Returns an array of UByte containing all of the elements of this collection.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun Collection<UByte>.toUByteArray():
UByteArray {\n val result = UByteArray(size)\n var index = 0\n for (element in this)\n result[index++] =
element\n return result\n}\n\n/**\n * Returns an array of UInt containing all of the elements of this collection.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun Collection<UInt>.toUIntArray(): UIntArray
{\n val result = UIntArray(size)\n var index = 0\n for (element in this)\n result[index++] = element\n
return result\n}\n\n/**\n * Returns an array of ULong containing all of the elements of this collection.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun Collection<ULong>.toULongArray():
ULongArray {\n val result = ULongArray(size)\n var index = 0\n for (element in this)\n
 result[index++] = element\n return result\n}\n\n/**\n * Returns an array of UShort containing all of the
elements of this collection.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
Collection<UShort>.toUShortArray(): UShortArray {\n val result = UShortArray(size)\n var index = 0\n for
(element in this)\n result[index++] = element\n return result\n}\n\n/**\n * Returns the sum of all elements in
the collection.\n
*\n@kotlin.jvm.JvmName("sumOfUInt")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedT
ypes::class)\npublic fun Iterable<UInt>.sum(): UInt {\n var sum: UInt = 0\n for (element in this) {\n sum
+= element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the collection.\n
*\n@kotlin.jvm.JvmName("sumOfULong")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsigned
Types::class)\npublic fun Iterable<ULong>.sum(): ULong {\n var sum: ULong = 0\n for (element in this) {\n
 sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the collection.\n
*\n@kotlin.jvm.JvmName("sumOfUByte")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsigned
Types::class)\npublic fun Iterable<UByte>.sum(): UInt {\n var sum: UInt = 0\n for (element in this) {\n
 sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the collection.\n
*\n@kotlin.jvm.JvmName("sumOfUShort")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsigned
Types::class)\npublic fun Iterable<UShort>.sum(): UInt {\n var sum: UInt = 0\n for (element in this) {\n
 sum += element\n }\n return sum\n}\n\n"/**\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("UComparisonsKt")\n\npackage
kotlin.comparisons\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport kotlin.random.*\n\n/**\n * Returns the
greater of two values.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun maxOf(a: UInt, b:
UInt): UInt {\n return if (a >= b) a else b\n}\n\n/**\n * Returns the greater of two values.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun maxOf(a: ULong,
b: ULong): ULong {\n return if (a >= b) a else b\n}\n\n/**\n * Returns the greater of two values.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun maxOf(a: UByte,

```

```

b: UByte): UByte { \n return if (a >= b) a else b \n } \n \n /** \n * Returns the greater of two values. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun maxOf(a: UShort,
b: UShort):
 UShort { \n return if (a >= b) a else b \n } \n \n /** \n * Returns the greater of three values. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\
npublic inline fun maxOf(a: UInt, b: UInt, c: UInt): UInt { \n return maxOf(a, maxOf(b, c)) \n } \n \n /** \n * Returns
the greater of three values. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\
npublic inline fun maxOf(a: ULong, b: ULong, c: ULong): ULong { \n return maxOf(a, maxOf(b, c)) \n } \n \n /** \n *
Returns the greater of three values. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\
npublic inline fun maxOf(a: UByte, b: UByte, c: UByte): UByte { \n return maxOf(a, maxOf(b, c)) \n } \n \n /** \n *
Returns the greater of three values. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\
npublic inline fun maxOf(a:
 UShort, b: UShort, c: UShort): UShort { \n return maxOf(a, maxOf(b, c)) \n } \n \n /** \n * Returns the greater of the
given values. \n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun maxOf(a: UInt, vararg
other: UInt): UInt { \n var max = a \n for (e in other) max = maxOf(max, e) \n return max \n } \n \n /** \n * Returns
the greater of the given values. \n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun maxOf(a:
 ULong, vararg other: ULong): ULong { \n var max = a \n for (e in other) max = maxOf(max, e) \n return
max \n } \n \n /** \n * Returns the greater of the given values. \n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun maxOf(a: UByte, vararg other: UByte):
 UByte { \n var max = a \n for (e in other) max = maxOf(max, e) \n return max \n } \n \n /** \n * Returns the greater
of the given values. \n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun maxOf(a: UShort,
vararg other: UShort): UShort { \n var max = a \n for
 (e in other) max = maxOf(max, e) \n return max \n } \n \n /** \n * Returns the smaller of two values. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun minOf(a: UInt, b:
 UInt): UInt { \n return if (a <= b) a else b \n } \n \n /** \n * Returns the smaller of two values. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun minOf(a: ULong,
 b: ULong): ULong { \n return if (a <= b) a else b \n } \n \n /** \n * Returns the smaller of two values. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun minOf(a: UByte,
 b: UByte): UByte { \n return if (a <= b) a else b \n } \n \n /** \n * Returns the smaller of two values. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun minOf(a: UShort,
 b: UShort): UShort { \n return if (a <= b) a else b \n } \n \n /** \n * Returns the smaller of three values. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\
npublic
 inline fun minOf(a: UInt, b: UInt, c: UInt): UInt { \n return minOf(a, minOf(b, c)) \n } \n \n /** \n * Returns the
smaller of three values. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\
npublic inline fun minOf(a: ULong, b: ULong, c: ULong): ULong { \n return minOf(a, minOf(b, c)) \n } \n \n /** \n *
Returns the smaller of three values. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\
npublic inline fun minOf(a: UByte, b: UByte, c: UByte): UByte { \n return minOf(a, minOf(b, c)) \n } \n \n /** \n *
Returns the smaller of three values. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\
npublic inline fun minOf(a: UShort, b: UShort, c: UShort): UShort { \n return minOf(a, minOf(b, c)) \n } \n \n /** \n *
Returns the smaller of the given values. \n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic

```

```

fun minOf(a: UInt, vararg other: UInt): UInt {
 var min = a
 for (e in other) min = minOf(min, e)
 return min
}

/* Returns the smaller of the given values.

@SinceKotlin("1.4")@ExperimentalUnsignedTypes
public fun minOf(a: ULong, vararg other: ULong):
 ULong {
 var min = a
 for (e in other) min = minOf(min, e)
 return min
}

/* Returns the smaller
of the given values.

@SinceKotlin("1.4")@ExperimentalUnsignedTypes
public fun minOf(a: UByte,
vararg other: UByte): UByte {
 var min = a
 for (e in other) min = minOf(min, e)
 return min
}

/* Returns the smaller of the given values.

@SinceKotlin("1.4")@ExperimentalUnsignedTypes
public fun
minOf(a: UShort, vararg other: UShort): UShort {
 var min = a
 for (e in other) min = minOf(min, e)
 return min
}

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of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.

@file:kotlin.jvm.JvmMultifileClass@file:kotlin.jvm.JvmName("URangesKt")
package
kotlin.ranges

// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt
// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib

import kotlin.random.*

/* Returns the
first element.

* @throws NoSuchElementException if the progression is empty.

@SinceKotlin("1.7")
public fun UIntProgression.first(): UInt {
 if (isEmpty())
 throw
 NoSuchElementException("Progression $this is empty.")
 return this.first
}

/* Returns the first
element.

* @throws NoSuchElementException if the progression is empty.

@SinceKotlin("1.7")
public fun ULongProgression.first(): ULong {
 if (isEmpty())
 throw
 NoSuchElementException("Progression $this is empty.")
 return this.first
}

/* Returns the first element, or `null` if the progression is empty.

@SinceKotlin("1.7")
public fun
UIntProgression.firstOrNull(): UInt? {
 return if (isEmpty()) null else this.first
}

/* Returns the first
element, or `null` if the progression is empty.

@SinceKotlin("1.7")
public fun
ULongProgression.firstOrNull(): ULong? {
 return if (isEmpty()) null else this.first
}

/* Returns the last
element.

* @throws NoSuchElementException if the progression is empty.

* @sample
samples.collections.Collections.Elements.last

@SinceKotlin("1.7")
public fun UIntProgression.last(): UInt
{
 if (isEmpty())
 throw NoSuchElementException("Progression $this is empty.")
 return
 this.last
}

/* Returns the last element.

* @throws NoSuchElementException if the progression is
empty.

* @sample samples.collections.Collections.Elements.last

@SinceKotlin("1.7")
public fun
ULongProgression.last(): ULong
{
 if (isEmpty())
 throw NoSuchElementException("Progression $this is empty.")
 return
 this.last
}

/* Returns the last element, or `null` if the progression is empty.

* @sample
samples.collections.Collections.Elements.last

@SinceKotlin("1.7")
public fun
UIntProgression.lastOrNull(): UInt? {
 return if (isEmpty()) null else this.last
}

/* Returns the last
element, or `null` if the progression is empty.

* @sample samples.collections.Collections.Elements.last

@SinceKotlin("1.7")
public fun ULongProgression.lastOrNull(): ULong? {
 return if (isEmpty()) null else
 this.last
}

/* Returns a random element from this range.

* @throws IllegalArgumentException if this
range is empty.

@SinceKotlin("1.5")@WasExperimental(ExperimentalUnsignedTypes::class)@kotlin.internal.InlineOnly
public inline fun UIntRange.random(): UInt {
 return random(Random)
}

/* Returns a random element
from
this range.

* @throws IllegalArgumentException if this range is empty.

@SinceKotlin("1.5")@WasExperimental(ExperimentalUnsignedTypes::class)@kotlin.internal.InlineOnly
public inline fun ULongRange.random(): ULong {
 return random(Random)
}

/* Returns a random
element from this range using the specified source of randomness.

* @throws IllegalArgumentException if
this range is empty.

@SinceKotlin("1.5")@WasExperimental(ExperimentalUnsignedTypes::class)
public fun UIntRange.random(random: Random): UInt {
 try {
 return random.nextUInt(this)
 } catch (e:
 IllegalArgumentException) {
 throw NoSuchElementException(e.message)
 }
}

/* Returns a

```

```

random element from this range using the specified source of randomness.\n * \n * @throws
IllegalArgumentException if this range is empty.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
ULongRange.random(random: Random):
 ULong { \n try { \n return random.nextULong(this)\n } catch(e: IllegalArgumentException) { \n throw
NoSuchElementException(e.message)\n } }\n\n/**\n * Returns a random element from this range, or `null` if this
range is empty.\n *\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun UIntRange.randomOrNull():
 UInt? { \n return randomOrNull(Random)\n } \n\n/**\n * Returns a random element from this range, or `null` if this
range is empty.\n *\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun ULongRange.randomOrNull():
 ULong? { \n return randomOrNull(Random)\n } \n\n/**\n * Returns a random element from this range using the
specified source of randomness, or `null` if this range is empty.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\npublic
 fun UIntRange.randomOrNull(random: Random): UInt? { \n if (isEmpty()) \n return null\n return
random.nextInt(this)\n } \n\n/**\n * Returns a random element from this range using the specified source of
randomness, or `null` if this range is empty.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\npublic fun ULongRange.randomOrNull(random: Random): ULong? { \n if
(isEmpty()) \n return null\n return random.nextULong(this)\n } \n\n/**\n * Returns `true` if this range contains
the specified [element].\n * \n * Always returns `false` if the [element] is `null`.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
public inline operator fun UIntRange.contains(element: UInt?): Boolean { \n return element != null &&
contains(element)\n } \n\n/**\n * Returns `true` if this range contains the specified [element].\n * \n *
Always returns `false` if the [element] is `null`.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
public inline operator fun ULongRange.contains(element: ULong?): Boolean { \n return element != null &&
contains(element)\n } \n\n/**\n * Checks if the specified [value] belongs to this range.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic operator fun
 UIntRange.contains(value: UByte): Boolean { \n return contains(value.toInt())\n } \n\n/**\n * Checks if the
specified [value] belongs to this range.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic operator fun
 ULongRange.contains(value: UByte): Boolean { \n return contains(value.toULong())\n } \n\n/**\n * Checks if the
specified [value] belongs to this range.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic operator fun
 ULongRange.contains(value: UInt): Boolean
 { \n return contains(value.toULong())\n } \n\n/**\n * Checks if the specified [value] belongs to this range.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic operator fun
 UIntRange.contains(value: ULong): Boolean { \n return (value shr UInt.SIZE_BITS) == 0uL &&
contains(value.toInt())\n } \n\n/**\n * Checks if the specified [value] belongs to this range.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic operator fun
 UIntRange.contains(value: UShort): Boolean { \n return contains(value.toInt())\n } \n\n/**\n * Checks if the
specified [value] belongs to this range.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic operator fun
 ULongRange.contains(value: UShort): Boolean { \n return contains(value.toULong())\n } \n\n/**\n * Returns a
progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less
than or equal to `this`

```



value.\n \* If the [to] value is greater than `this` value the returned progression is empty.\n

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun
UByte.downTo(to: UByte): UIntProgression {\n return UIntProgression.fromClosedRange(this.toUInt(),
to.toUInt(), -1)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -
1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value
the returned progression is empty.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun
UInt.downTo(to: UInt): UIntProgression {\n return UIntProgression.fromClosedRange(this, to, -1)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should
be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned
progression is empty.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun
ULong.downTo(to: ULong): ULongProgression {\n return ULongProgression.fromClosedRange(this, to, -
1L)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the
returned progression is empty.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun
UShort.downTo(to: UShort): UIntProgression {\n return UIntProgression.fromClosedRange(this.toUInt(),
to.toUInt(), -1)\n}\n\n/**\n * Returns a progression that goes over the same range in the opposite direction with the
same step.\n * \n * Returns a progression that goes over the same range in the opposite direction with the
same step.\n * \n * Returns a progression that goes over the same range in the opposite direction with the
same step.\n * \n * Returns a progression that goes over the same range with the given step.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
UIntProgression.reversed(): UIntProgression {\n return UIntProgression.fromClosedRange(last,
first, -step)\n}\n\n/**\n * Returns a progression that goes over the same range in the opposite direction with the
same step.\n * \n * Returns a progression that goes over the same range with the given step.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
ULongProgression.reversed(): ULongProgression {\n return ULongProgression.fromClosedRange(last, first, -
step)\n}\n\n/**\n * Returns a progression that goes over the same range with the given step.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun
UIntProgression.step(step: Int): UIntProgression {\n checkStepIsPositive(step > 0, step)\n return
UIntProgression.fromClosedRange(first, last, if (this.step > 0) step else -step)\n}\n\n/**\n * Returns a progression
that goes over the same range with the given step.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun
ULongProgression.step(step: Long): ULongProgression {\n checkStepIsPositive(step > 0, step)\n return
ULongProgression.fromClosedRange(first, last, if (this.step > 0) step else -step)\n}\n\n/**\n * Returns a range from
this value up to but excluding the specified [to] value.\n * \n * If the [to] value is less than or equal to `this` value,
then the returned range is empty.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun
UByte.until(to: UByte): UIntRange {\n if (to <= UByte.MIN_VALUE) return UIntRange.EMPTY\n return
this.toUInt() .. (to - 1u).toUInt()\n}\n\n/**\n * Returns a range from this value up to but excluding the specified [to]
value.\n * \n * If the [to] value is less than or equal to `this` value, then the returned range is empty.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun
UInt.until(to: UInt): UIntRange {\n if (to <= UInt.MIN_VALUE) return UIntRange.EMPTY\n return this .. (to -
1u).toUInt()\n}\n\n/**\n * Returns a range from this value up to but excluding the specified
[to] value.\n * \n * If the [to] value is less than or equal to `this` value, then the returned range is empty.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun
ULong.until(to: ULong): ULongRange {\n if (to <= ULong.MIN_VALUE) return ULongRange.EMPTY\n return
this .. (to - 1u).toULong()\n}\n\n/**\n * Returns a range from this value up to but excluding the specified [to]
value.\n * \n * If the [to] value is less than or equal to `this` value, then the returned range is empty.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun
UShort.until(to: UShort): UIntRange {\n if (to <= UShort.MIN_VALUE) return UIntRange.EMPTY\n return
```

```

this.toUInt() .. (to - 1u).toUInt())\n\n/**\n * Ensures that this value is not less than the specified
[minimumValue].\n * \n * @return this value if it's greater than or equal to the [minimumValue] or the
[minimumValue] otherwise.\n * \n * @sample samples.comparisons.ComparableOps.coerceAtLeastUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
UInt.coerceAtLeast(minimumValue: UInt): UInt {\n return if (this < minimumValue) minimumValue else
this\n}\n\n/**\n * Ensures that this value is not less than the specified [minimumValue].\n * \n * @return this value
if it's greater than or equal to the [minimumValue] or the [minimumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtLeastUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
ULong.coerceAtLeast(minimumValue: ULong): ULong {\n return if (this < minimumValue) minimumValue else
this\n}\n\n/**\n * Ensures that this value is not less than the specified [minimumValue].\n * \n * @return this value
if it's greater than or equal to the [minimumValue] or the [minimumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtLeastUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic
fun UByte.coerceAtLeast(minimumValue: UByte): UByte {\n return if (this < minimumValue) minimumValue
else this\n}\n\n/**\n * Ensures that this value is not less than the specified [minimumValue].\n * \n * @return this
value if it's greater than or equal to the [minimumValue] or the [minimumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtLeastUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
UShort.coerceAtLeast(minimumValue: UShort): UShort {\n return if (this < minimumValue) minimumValue else
this\n}\n\n/**\n * Ensures that this value is not greater than the specified [maximumValue].\n * \n * @return this
value if it's less than or equal to the [maximumValue] or the [maximumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtMostUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic
fun UInt.coerceAtMost(maximumValue: UInt): UInt {\n return if (this > maximumValue) maximumValue else
this\n}\n\n/**\n * Ensures that this value is not greater than the specified [maximumValue].\n * \n * @return this
value if it's less than or equal to the [maximumValue] or the [maximumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtMostUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
ULong.coerceAtMost(maximumValue: ULong): ULong {\n return if (this > maximumValue) maximumValue else
this\n}\n\n/**\n * Ensures that this value is not greater than the specified [maximumValue].\n * \n * @return this
value if it's less than or equal to the [maximumValue] or the [maximumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtMostUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
UByte.coerceAtMost(maximumValue:
UByte): UByte {\n return if (this > maximumValue) maximumValue else this\n}\n\n/**\n * Ensures that this
value is not greater than the specified [maximumValue].\n * \n * @return this value if it's less than or equal to the
[maximumValue] or the [maximumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtMostUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
UShort.coerceAtMost(maximumValue: UShort): UShort {\n return if (this > maximumValue) maximumValue
else this\n}\n\n/**\n * Ensures that this value lies in the specified range [minimumValue]..[maximumValue].\n * \n
* @return this value if it's in the range, or [minimumValue] if this value is less than [minimumValue], or
[maximumValue] if this value is greater than [maximumValue].\n * \n * @sample
samples.comparisons.ComparableOps.coerceInUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
UInt.coerceIn(minimumValue:

```

```

 UInt, maximumValue: UInt): UInt {
 if (minimumValue > maximumValue) throw
 IllegalArgumentException("Cannot coerce value to an empty range: maximum $maximumValue is less than
 minimum $minimumValue.")
 if (this < minimumValue) return minimumValue
 if (this > maximumValue)
 return maximumValue
 return this
 }
 /** Ensures that this value lies in the specified range
 [minimumValue]..[maximumValue].
 * @return this value if it's in the range, or [minimumValue] if this value
 is less than [minimumValue], or [maximumValue] if this value is greater than [maximumValue].
 * @sample
 samples.comparisons.ComparableOps.coerceInUnsigned
 */
 @SinceKotlin("1.5")
 @WasExperimental(ExperimentalUnsignedTypes::class)
 public fun
 ULong.coerceIn(minimumValue: ULong, maximumValue: ULong): ULong {
 if (minimumValue >
 maximumValue) throw IllegalArgumentException("Cannot coerce value to an empty range: maximum
 $maximumValue is less than minimum $minimumValue.")
 if (this < minimumValue) return minimumValue
 if (this > maximumValue) return maximumValue
 return this
 }
 /** Ensures that this value lies in the specified range [minimumValue]..[maximumValue].
 * @return this value if it's in the range, or [minimumValue] if this value is less than [minimumValue], or
 [maximumValue] if this value is greater than [maximumValue].
 * @sample
 samples.comparisons.ComparableOps.coerceInUnsigned
 */
 @SinceKotlin("1.5")
 @WasExperimental(ExperimentalUnsignedTypes::class)
 public fun
 UByte.coerceIn(minimumValue: UByte, maximumValue: UByte): UByte {
 if (minimumValue >
 maximumValue) throw IllegalArgumentException("Cannot coerce value to an empty range: maximum
 $maximumValue is less than minimum $minimumValue.")
 if (this < minimumValue) return minimumValue
 if (this > maximumValue) return maximumValue
 return this
 }
 /** Ensures that this value lies in the
 specified range [minimumValue]..[maximumValue].
 * @return this value if it's in the range, or [minimumValue] if this value is less than [minimumValue], or
 [maximumValue] if this value is greater than [maximumValue].
 * @sample
 samples.comparisons.ComparableOps.coerceInUnsigned
 */
 @SinceKotlin("1.5")
 @WasExperimental(ExperimentalUnsignedTypes::class)
 public fun
 UShort.coerceIn(minimumValue: UShort, maximumValue: UShort): UShort {
 if (minimumValue >
 maximumValue) throw IllegalArgumentException("Cannot coerce value to an empty range: maximum
 $maximumValue is less than minimum $minimumValue.")
 if (this < minimumValue) return minimumValue
 if (this > maximumValue) return maximumValue
 return this
 }
 /** Ensures that this value lies in the
 specified [range].
 * @return this value if it's in the [range], or `range.start` if this value is less than
 `range.start`, or `range.endInclusive` if this value is greater than `range.endInclusive`.
 * @sample
 samples.comparisons.ComparableOps.coerceInUnsigned
 */
 @SinceKotlin("1.5")
 @WasExperimental(ExperimentalUnsignedTypes::class)
 public fun
 UInt.coerceIn(range: ClosedRange<UInt>): UInt {
 if (range is ClosedFloatingPointRange) {
 return
 this.coerceIn<UInt>(range)
 }
 if (range.isEmpty()) throw IllegalArgumentException("Cannot coerce value to
 an empty range: $range.")
 return when {
 this < range.start -> range.start
 this > range.endInclusive -
 > range.endInclusive
 else -> this
 }
 }
 /** Ensures that this value lies in the specified [range].
 * @return this value if it's in the [range], or `range.start` if this value is less than `range.start`, or
 `range.endInclusive` if this value is greater than `range.endInclusive`.
 * @sample
 samples.comparisons.ComparableOps.coerceInUnsigned
 */
 @SinceKotlin("1.5")
 @WasExperimental(ExperimentalUnsignedTypes::class)
 public fun
 ULong.coerceIn(range: ClosedRange<ULong>): ULong {
 if (range
 is ClosedFloatingPointRange) {
 return this.coerceIn<ULong>(range)
 }
 if (range.isEmpty()) throw
 IllegalArgumentException("Cannot coerce value to an empty range: $range.")
 return when {
 this <
 range.start -> range.start
 this > range.endInclusive -> range.endInclusive
 else -> this
 }
 }
}
/**
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 * is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */

```

```

*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("\nUSequencesKt\n")\n\npackage
kotlin.sequences\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n/\n\nimport kotlin.random.*\n\n/**\n * Returns the
sum of all elements in the sequence.\n * \n * The operation is _terminal_.\n
*\n\n@kotlin.jvm.JvmName("\nsumOfUInt\n")\n\n@SinceKotlin("\n1.5\n")\n\n@WasExperimental(ExperimentalUnsignedT
ypes::class)\n\npublic
fun Sequence<UInt>.sum(): UInt {\n var sum: UInt = 0u\n for (element in this) {\n sum += element\n }\n
return sum\n}\n\n/**\n * Returns the sum of all elements in the sequence.\n * \n * The operation is _terminal_.\n
*\n\n@kotlin.jvm.JvmName("\nsumOfULong\n")\n\n@SinceKotlin("\n1.5\n")\n\n@WasExperimental(ExperimentalUnsigned
Types::class)\n\npublic fun Sequence<ULong>.sum(): ULong {\n var sum: ULong = 0uL\n for (element in this)
{\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the sequence.\n * \n *
The operation is _terminal_.\n
*\n\n@kotlin.jvm.JvmName("\nsumOfUByte\n")\n\n@SinceKotlin("\n1.5\n")\n\n@WasExperimental(ExperimentalUnsigned
Types::class)\n\npublic fun Sequence<UByte>.sum(): UInt {\n var sum: UInt = 0u\n for (element in this) {\n
sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the sequence.\n * \n *
The operation is _terminal_.\n
*\n\n@kotlin.jvm.JvmName("\nsumOfUShort\n")\n\n@SinceKotlin("\n1.5\n")\n\n@WasExperimental(ExperimentalUnsigned
Types::class)\n\npublic fun Sequence<UShort>.sum(): UInt {\n var sum: UInt = 0u\n for (element in this) {\n
sum += element\n }\n return sum\n}\n\n"/\n\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n * \n\npackage kotlin\n\n\npublic expect open class Error : Throwable {\n
constructor()\n constructor(message: String?)\n constructor(message: String?, cause: Throwable?)\n
constructor(cause: Throwable?)\n}\n\npublic expect open class Exception : Throwable {\n constructor()\n
constructor(message: String?)\n constructor(message: String?, cause: Throwable?)\n constructor(cause:
Throwable?)\n}\n\npublic expect open class RuntimeException : Exception {\n constructor()\n
constructor(message: String?)\n constructor(message: String?, cause: Throwable?)\n constructor(cause:
Throwable?)\n}\n\npublic expect open class IllegalArgumentException : RuntimeException {\n constructor()\n
constructor(message: String?)\n constructor(message: String?, cause: Throwable?)\n constructor(cause:
Throwable?)\n}\n\npublic expect open class IllegalStateException : RuntimeException {\n constructor()\n
constructor(message: String?)\n constructor(message: String?, cause: Throwable?)\n constructor(cause:
Throwable?)\n}\n\npublic expect open class IndexOutOfBoundsException : RuntimeException {\n constructor()\n
constructor(message: String?)\n}\n\npublic expect open class ConcurrentModificationException :
RuntimeException {\n constructor()\n constructor(message: String?)\n @Deprecated("\nThe constructor is not
supported on all platforms and will be removed from kotlin-stdlib-common soon.\n", level =
DeprecationLevel.ERROR)\n constructor(message:
String?, cause: Throwable?)\n @Deprecated("\nThe constructor is not supported on all platforms and will be
removed from kotlin-stdlib-common soon.\n", level = DeprecationLevel.ERROR)\n constructor(cause:
Throwable?)\n}\n\npublic expect open class UnsupportedOperationException : RuntimeException {\n
constructor()\n constructor(message: String?)\n constructor(message: String?, cause: Throwable?)\n
constructor(cause: Throwable?)\n}\n\npublic expect open class NumberFormatException :
IllegalArgumentException {\n constructor()\n constructor(message: String?)\n}\n\npublic expect open class
NullPointerException : RuntimeException {\n constructor()\n constructor(message: String?)\n}\n\npublic expect
open class ClassCastException : RuntimeException {\n constructor()\n constructor(message:
String?)\n}\n\npublic expect open class AssertionError : Error {\n constructor()\n constructor(message:
Any?)\n}\n\npublic expect open class NoSuchElementException : RuntimeException {\n constructor()\n
constructor(message: String?)\n}\n\n\n@SinceKotlin("\n1.3\n")\n\npublic
expect open class ArithmeticException : RuntimeException {\n constructor()\n constructor(message:
String?)\n}\n\n\n@Deprecated("\nThis exception type is not supposed to be thrown or caught in common code and will

```

```

be removed from kotlin-stdlib-common soon.\", level = DeprecationLevel.ERROR)\npublic expect open class
NoWhenBranchMatchedException : RuntimeException {\n constructor()\n constructor(message: String?)\n
constructor(message: String?, cause: Throwable?)\n constructor(cause: Throwable?)\n}\n\n@Deprecated(\"This
exception type is not supposed to be thrown or caught in common code and will be removed from kotlin-stdlib-
common soon.\", level = DeprecationLevel.ERROR)\npublic expect class UninitializedPropertyAccessException :
RuntimeException {\n constructor()\n constructor(message: String?)\n constructor(message: String?, cause:
Throwable?)\n
 constructor(cause: Throwable?)\n}\n\n/**\n * Thrown after invocation of a function or property that was expected
to return `Nothing`, but returned something instead.\n * /\n@SinceKotlin(\"1.4\")\n@PublishedApi\ninternal class
KotlinNothingValueException : RuntimeException {\n constructor() : super()\n constructor(message: String?) :
super(message)\n constructor(message: String?, cause: Throwable?) : super(message, cause)\n
constructor(cause: Throwable?) : super(cause)\n}\n\n/**\n * Returns the detailed description of this throwable
with its stack trace.\n * *\n * The detailed description includes:\n * - the short description (see [Throwable.toString])
of this throwable;\n * - the complete stack trace;\n * - detailed descriptions of the exceptions that were
[suppressed][suppressedExceptions] in order to deliver this exception;\n * - the detailed description of each
throwable in the [Throwable.cause] chain.\n * /\n@SinceKotlin(\"1.4\")\npublic expect fun
Throwable.stackTraceToString():
String\n\n/**\n * Prints the [detailed description][Throwable.stackTraceToString] of this throwable to the standard
output or standard error output.\n
*\n@SinceKotlin(\"1.4\")\n@Suppress(\"EXTENSION_SHADOWED_BY_MEMBER\")\npublic expect fun
Throwable.printStackTrace(): Unit\n\n/**\n * When supported by the platform, adds the specified exception to the
list of exceptions that were\n * suppressed in order to deliver this exception.\n
*\n@SinceKotlin(\"1.4\")\n@Suppress(\"EXTENSION_SHADOWED_BY_MEMBER\")\npublic expect fun
Throwable.addSuppressed(exception: Throwable)\n\n/**\n * Returns a list of all exceptions that were suppressed in
order to deliver this exception.\n * *\n * The list can be empty:\n * - if no exceptions were suppressed;\n * - if the
platform doesn't support suppressed exceptions;\n * - if this [Throwable] instance has disabled the suppression.\n
\n@SinceKotlin(\"1.4\")\npublic expect val Throwable.suppressedExceptions: List<Throwable>\n\"/\n *
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2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed
by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n * /\n\npackage kotlin.js\n\nimport
kotlin.annotation.AnnotationTarget.*\n\n/**\n * Gives a declaration (a function, a property or a class) specific name
in JavaScript.\n * /\n@Target(CLASS, FUNCTION, PROPERTY, CONSTRUCTOR, PROPERTY_GETTER,
PROPERTY_SETTER)\n@OptionalExpectation\npublic expect annotation class JsName(val name: String)\n\n/**\n *
Marks experimental JS export annotations.\n * *\n * Note that behavior of these annotations will likely be changed
in the future.\n * *\n * Usages of such annotations will be reported as warnings unless an explicit opt-in with\n * the
[OptIn] annotation, e.g. `@OptIn(ExperimentalJsExport::class)`,\n * or with the `opt-
in=kotlin.js.ExperimentalJsExport` compiler option is given.\n * /\n@RequiresOptIn(level =
RequiresOptIn.Level.WARNING)\n@MustBeDocumented\n@Retention(AnnotationRetention.BINARY)\n@Since
Kotlin(\"1.4\")\npublic
annotation class ExperimentalJsExport\n\n/**\n * Exports top-level declaration on JS platform.\n * *\n * Compiled
module exposes declarations that are marked with this annotation without name mangling.\n * *\n * This annotation
can be applied to either files or top-level declarations.\n * *\n * It is currently prohibited to export the following kinds
of declarations:\n * *\n * * `expect` declarations\n * * inline functions with reified type parameters\n * * suspend
functions\n * * secondary constructors without `@JsName`\n * * extension properties\n * * enum classes\n * *
annotation classes\n * *\n * Signatures of exported declarations must only contain `exportable` types:\n * *\n *
`dynamic`, `Any`, `String`, `Boolean`, `Byte`, `Short`, `Int`, `Float`, `Double`\n * * `BooleanArray`, `ByteArray`,
`ShortArray`, `IntArray`, `FloatArray`, `DoubleArray`\n * * `Array<exportable-type>`\n * * Function types with

```



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in the collection.\n *^n public fun add(element: E): Boolean\n\n /**\n * Removes a single instance of the
specified element from this\n * collection, if it is present.\n *\n * @return `true` if the element has been
successfully removed; `false` if it was not present in the collection.\n *^n public fun remove(element: E):
Boolean\n\n // Bulk Modification Operations\n /**\n * Adds all of the elements of the specified collection to
this collection.\n *\n * @return `true` if any of the specified elements was added to the collection, `false` if the
collection was not modified.\n *^n public fun addAll(elements: Collection<E>): Boolean\n\n /**\n *
Removes all of this collection's elements that are also contained in the specified collection.\n *\n * @return
`true` if any of the specified elements was removed from the collection, `false` if the collection was not modified.\n
*^n public fun removeAll(elements:
Collection<E>): Boolean\n\n /**\n * Retains only the elements in this collection that are contained in the
specified collection.\n *\n * @return `true` if any element was removed from the collection, `false` if the
collection was not modified.\n *^n public fun retainAll(elements: Collection<E>): Boolean\n\n /**\n *
Removes all elements from this collection.\n *^n public fun clear(): Unit\n\n/**\n * A generic ordered
collection of elements. Methods in this interface support only read-only access to the list;\n * read/write access is
supported through the [MutableList] interface.\n * @param E the type of elements contained in the list. The list is
covariant in its element type.\n */\npublic interface List<out E> : Collection<E> {\n // Query Operations\n\n
override val size: Int\n override fun isEmpty(): Boolean\n override fun contains(element: @UnsafeVariance E):
Boolean\n override fun iterator(): Iterator<E>\n\n // Bulk Operations\n\n
override fun containsAll(elements: Collection<@UnsafeVariance E>): Boolean\n\n // Positional Access
Operations\n /**\n * Returns the element at the specified index in the list.\n *^n public operator fun
get(index: Int): E\n\n // Search Operations\n /**\n * Returns the index of the first occurrence of the specified
element in the list, or -1 if the specified\n * element is not contained in the list.\n *^n public fun
indexOf(element: @UnsafeVariance E): Int\n\n /**\n * Returns the index of the last occurrence of the specified
element in the list, or -1 if the specified\n * element is not contained in the list.\n *^n public fun
lastIndexOf(element: @UnsafeVariance E): Int\n\n // List Iterators\n /**\n * Returns a list iterator over the
elements in this list (in proper sequence).\n *^n public fun listIterator(): ListIterator<E>\n\n /**\n * Returns
a list iterator over the elements in this list
(in proper sequence), starting at the specified [index].\n *^n public fun listIterator(index: Int):
ListIterator<E>\n\n // View\n /**\n * Returns a view of the portion of this list between the specified
[fromIndex] (inclusive) and [toIndex] (exclusive).\n * The returned list is backed by this list, so non-structural
changes in the returned list are reflected in this list, and vice-versa.\n *\n * Structural changes in the base list
make the behavior of the view undefined.\n *^n public fun subList(fromIndex: Int, toIndex: Int):
List<E>\n\n/**\n * A generic ordered collection of elements that supports adding and removing elements.\n *
@param E the type of elements contained in the list. The mutable list is invariant in its element type.\n */\npublic
interface MutableList<E> : List<E>, MutableCollection<E> {\n // Modification Operations\n /**\n * Adds the
specified element to the end of this list.\n *\n * @return `true` because the
list is always modified as the result of this operation.\n *^n override fun add(element: E): Boolean\n\n
override fun remove(element: E): Boolean\n\n // Bulk Modification Operations\n /**\n * Adds all of the
elements of the specified collection to the end of this list.\n *\n * The elements are appended in the order they
appear in the [elements] collection.\n *\n * @return `true` if the list was changed as the result of the
operation.\n *^n override fun addAll(elements: Collection<E>): Boolean\n\n /**\n * Inserts all of the
elements of the specified collection [elements] into this list at the specified [index].\n *\n * @return `true` if the
list was changed as the result of the operation.\n *^n public fun addAll(index: Int, elements: Collection<E>):
Boolean\n\n override fun removeAll(elements: Collection<E>): Boolean\n override fun retainAll(elements:
Collection<E>): Boolean\n override fun clear(): Unit\n\n // Positional Access Operations\n /**\n * Replaces the
element at the specified position in this list with the
specified element.\n *\n * @return the element previously at the specified position.\n *^n public operator
fun set(index: Int, element: E): E\n\n /**\n * Inserts an element into the list at the specified [index].\n *^n

```

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public fun add(index: Int, element: E): Unit {
 // Removes an element at the specified [index] from the
 // list.
 // @return the element that has been removed.
}

public fun removeAt(index: Int): E {
 // List Iterators
 override fun listIterator(): MutableListIterator<E> {
 override fun listIterator(index: Int):
 MutableListIterator<E> {
 // View
 override fun subList(fromIndex: Int, toIndex: Int):
 MutableList<E> {
 }
}

/** A generic unordered collection of elements that does not support duplicate
elements.
* Methods in this interface support only read-only access to
the set.
* read/write access is supported through the [MutableSet] interface.
* @param E the type of elements
contained in the set. The set is covariant in its element type.
*/
public interface Set<out E> : Collection<E> {
 // Query Operations
 override val size: Int
 override fun isEmpty(): Boolean
 override fun
contains(element: @UnsafeVariance E): Boolean
 override fun iterator(): Iterator<E>
 // Bulk Operations
 override fun containsAll(elements: Collection<@UnsafeVariance E>): Boolean
}

/** A generic unordered
collection of elements that does not support duplicate elements, and supports
adding and removing elements.
* @param E the type of elements contained in the set. The mutable set is invariant in its element type.
*/
public interface MutableSet<E> : Set<E>, MutableCollection<E> {
 // Query Operations
 override fun iterator():
 MutableIterator<E>
 // Modification Operations
 /** Adds the specified
element to the set.
* @return `true` if the element has been added, `false` if the element is already
contained in the set.
*/
 override fun add(element: E): Boolean
 override fun remove(element: E):
 Boolean
 // Bulk Modification Operations
 override fun addAll(elements: Collection<E>): Boolean
 override fun removeAll(elements: Collection<E>): Boolean
 override fun retainAll(elements: Collection<E>):
 Boolean
 override fun clear(): Unit
}

/** A collection that holds pairs of objects (keys and values) and
supports efficiently retrieving
the value corresponding to each key. Map keys are unique; the map holds only one
value for each key.
* Methods in this interface support only read-only access to the map; read-write access is
supported through
the [MutableMap] interface.
* @param K the type of map keys. The map is invariant in its
key type, as it
can accept key as a parameter (of [containsKey] for example)
and return it in [keys] set.
* @param V the type of map values. The map is covariant in its value type.
*/
public interface Map<K, out V> {
 // Query Operations
 /** Returns the number of key/value pairs
in the map.
*/
 public val size: Int
 /** Returns `true` if the map is empty (contains no elements),
`false` otherwise.
*/
 public fun isEmpty(): Boolean
 /** Returns `true` if the map contains the
specified [key].
*/
 public fun containsKey(key: K): Boolean
 /** Returns `true` if the map maps
one or more keys to the specified [value].
*/
 public fun containsValue(value: @UnsafeVariance V):
 Boolean
 /** Returns the value corresponding to the given [key], or `null` if such a key is not present in
the map.
*/
 public operator fun get(key: K): V?
 /** Returns the value corresponding to the given
[key], or [defaultValue] if such a key is not present
in the map.
*/
 @since JDK 1.8
 @SinceKotlin("1.1")
 @PlatformDependent
 public fun
getOrDefault(key: K, defaultValue: @UnsafeVariance V): V {
 // See default implementation in JDK
sources
 throw NotImplementedError()
}
 // Views
 /** Returns a read-only [Set] of all keys
in this map.
*/
 public val keys: Set<K>
 /** Returns a read-only [Collection] of all values in this
map. Note that this collection may contain duplicate values.
*/
 public val values: Collection<V>
 /** Returns a read-only [Set] of all key/value pairs in this map.
*/
 public val entries: Set<Map.Entry<K,
V>>
 /** Represents a key/value pair held by a [Map].
*/
 public interface Entry<out K, out V> {
 /** Returns the key of this key/value pair.
*/
 public val key: K
 /** Returns the value of this key/value
pair.
*/
 public val value: V
 }
}

/** A modifiable collection that holds pairs of objects
(keys and values) and supports efficiently retrieving
the value corresponding to each key. Map keys are unique;
the map holds only one value for each key.
* @param K the type of map keys. The map is invariant in its key
type.
* @param V the type of map values. The mutable map is invariant in its value type.
*/
public interface MutableMap<K, V> : Map<K, V> {
 // Modification Operations
 /** Associates the specified [value]
with the specified [key] in the map.
* @return the previous value associated with the key, or `null` if the

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key was not present in the map.\n */\n public fun put(key: K, value: V): V?\n\n /**\n * Removes the specified key and its corresponding value from this map.\n *\n * @return the previous value associated with the key, or `null` if the key was not present in the map.\n */\n public fun remove(key: K): V?\n\n /**\n * Removes the entry for the specified key only if it is mapped to the specified value.\n *\n * @return true if entry was removed\n */\n @SinceKotlin("1.1")\n @PlatformDependent\n public fun remove(key: K, value: V): Boolean {\n // See default implementation in JDK sources\n return true\n }\n\n // Bulk Modification Operations\n /**\n * Updates this map with key/value pairs from the specified map [from].\n */\n public fun putAll(from: Map<out K, V>): Unit\n\n /**\n * Removes all elements from this map.\n */\n public fun clear(): Unit\n\n // Views\n /**\n * Returns a [MutableSet] of all keys in this map.\n */\n override val keys: MutableSet<K>\n\n /**\n * Returns a [MutableCollection] of all values in this map. Note that this collection may contain duplicate values.\n */\n override val values: MutableCollection<V>\n\n /**\n * Returns a [MutableSet] of all key/value pairs in this map.\n */\n override val entries: MutableSet<MutableMap.MutableEntry<K, V>>\n\n /**\n * Represents a key/value pair held by a [MutableMap].\n */\n public interface MutableEntry<K, V> : Map.Entry<K, V> {\n /**\n * Changes the value associated with the key of this entry.\n *\n * @return the previous value corresponding to the key.\n */\n public fun setValue(newValue: V): V\n }\n\n /*\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n // Auto-generated file. DO NOT EDIT!\n\n package kotlin.collections\n\n /**\n * An iterator over a sequence of values of type `Byte`.\n */\n public abstract class ByteIterator : Iterator<Byte> {\n override final fun next() = nextByte()\n\n /**\n * Returns the next value in the sequence without boxing.\n */\n public abstract fun nextByte(): Byte\n }\n\n /**\n * An iterator over a sequence of values of type `Char`.\n */\n public abstract class CharIterator : Iterator<Char> {\n override final fun next() = nextChar()\n\n /**\n * Returns the next value in the sequence without boxing.\n */\n public abstract fun nextChar(): Char\n }\n\n /**\n * An iterator over a sequence of values of type `Short`.\n */\n public abstract class ShortIterator : Iterator<Short> {\n override final fun next() = nextShort()\n\n /**\n * Returns the next value in the sequence without boxing.\n */\n public abstract fun nextShort(): Short\n }\n\n /**\n * An iterator over a sequence of values of type `Int`.\n */\n public abstract class IntIterator : Iterator<Int> {\n override final fun next() = nextInt()\n\n /**\n * Returns the next value in the sequence without boxing.\n */\n public abstract fun nextInt(): Int\n }\n\n /**\n * An iterator over a sequence of values of type `Long`.\n */\n public abstract class LongIterator : Iterator<Long> {\n override final fun next() = nextLong()\n\n /**\n * Returns the next value in the sequence without boxing.\n */\n public abstract fun nextLong(): Long\n }\n\n /**\n * An iterator over a sequence of values of type `Float`.\n */\n public abstract class FloatIterator : Iterator<Float> {\n override final fun next() = nextFloat()\n\n /**\n * Returns the next value in the sequence without boxing.\n */\n public abstract fun nextFloat(): Float\n }\n\n /**\n * An iterator over a sequence of values of type `Double`.\n */\n public abstract class DoubleIterator : Iterator<Double> {\n override final fun next() = nextDouble()\n\n /**\n * Returns the next value in the sequence without boxing.\n */\n public abstract fun nextDouble(): Double\n }\n\n /**\n * An iterator over a sequence of values of type `Boolean`.\n */\n public abstract class BooleanIterator : Iterator<Boolean> {\n override final fun next() = nextBoolean()\n\n /**\n * Returns the next value in the sequence without boxing.\n */\n public abstract fun nextBoolean(): Boolean\n }\n\n /*\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n // Auto-generated file. DO NOT EDIT!\n\n package kotlin.ranges\n\n /**\n * An iterator over a progression of values of type `Char`.\n *\n * @property step the number by which the value is incremented on each step.\n */\n internal class CharProgressionIterator(first: Char, last: Char, val step: Int) : CharIterator() {\n private val finalElement: Int = last.code\n private var hasNext: Boolean = if (step > 0) first <= last else first >= last\n private var next: Int = if (hasNext) first.code else finalElement\n\n override fun hasNext(): Boolean = hasNext\n\n override fun nextChar(): Char {\n val value = next\n if (value == finalElement)\n if (!hasNext) throw kotlin.NoSuchElementException()\n }\n }

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 hasNext = false\n }\n else {\n next += step\n }\n return value.toChar()\n }\n}\n\n/**\n * An iterator over a progression of values of type `Int`. \n * @property step the number by which the value is\n incremented on each step.\n */\ninternal class IntProgressionIterator(first: Int, last: Int, val step: Int) : IntIterator()\n {\n private val finalElement: Int = last\n private var hasNext: Boolean = if (step > 0) first <= last else first >=\n last\n private var next: Int = if (hasNext) first else finalElement\n\n override fun hasNext(): Boolean =\n hasNext\n\n override fun nextInt(): Int {\n val value = next\n if (value == finalElement) {\n if\n (!hasNext) throw kotlin.NoSuchElementException()\n hasNext = false\n }\n else {\n next +=\n step\n }\n return value\n }\n}\n\n/**\n * An iterator over a progression of values of type `Long`. \n * @property step the number by\n which the value is incremented on each step.\n */\ninternal class LongProgressionIterator(first: Long, last: Long,\n val step: Long) : LongIterator()\n {\n private val finalElement: Long = last\n private var hasNext: Boolean = if\n (step > 0) first <= last else first >= last\n private var next: Long = if (hasNext) first else finalElement\n\n override fun hasNext(): Boolean = hasNext\n\n override fun nextLong(): Long {\n val value = next\n if\n (value == finalElement) {\n if (!hasNext) throw kotlin.NoSuchElementException()\n hasNext = false\n }\n else {\n next += step\n }\n return value\n }\n}\n\n"/*\n * Copyright 2010-2022\n JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the\n Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n// Auto-generated file. DO NOT\n EDIT!\n\npackage kotlin.ranges\n\nimport kotlin.internal.getProgressionLastElement\n\n/**\n * A progression of values of type `Char`. \n */\npublic open class CharProgression\n internal constructor\n (\n start: Char,\n endInclusive: Char,\n step: Int\n) : Iterable<Char> {\n init {\n if (step == 0)\n throw kotlin.IllegalArgumentException("Step must be non-zero.")\n if (step == Int.MIN_VALUE) throw\n kotlin.IllegalArgumentException("Step must be greater than Int.MIN_VALUE to avoid overflow on negation.")\n }\n\n /**\n * The first element in the progression.\n */\n public val first: Char = start\n\n /**\n * The\n last element in the progression.\n */\n public val last: Char = getProgressionLastElement(start.code,\n endInclusive.code, step).toChar()\n\n /**\n * The step of the progression.\n */\n public val step: Int =\n step\n\n override fun iterator(): CharIterator = CharProgressionIterator(first, last, step)\n\n /**\n * Checks if\n the progression\n is empty.\n */\n * Progression with a positive step is empty if its first element is greater than the last element.\n\n * Progression with a negative step is empty if its first element is less than the last element.\n\n */\n public open\n fun isEmpty(): Boolean = if (step > 0) first > last else first < last\n\n override fun equals(other: Any?): Boolean =\n\n other is CharProgression && (isEmpty() && other.isEmpty()) ||\n first == other.first && last == other.last\n && step == other.step)\n\n override fun hashCode(): Int =\n if (isEmpty()) -1 else (31 * (31 * first.code +\n last.code) + step)\n\n override fun toString(): String = if (step > 0) "$first..$last step $step" else "$first downTo\n $last step ${-step}"\n\n companion object {\n /**\n * Creates CharProgression within the specified\n bounds of a closed range.\n */\n * The progression starts with the [rangeStart] value and goes toward the\n [rangeEnd] value not\n excluding it, with the specified [step].\n */\n * In order to go backwards the [step] must be negative.\n */\n * [step] must be greater than `Int.MIN_VALUE` and not equal to zero.\n */\n public fun\n fromClosedRange(rangeStart: Char, rangeEnd: Char, step: Int): CharProgression = CharProgression(rangeStart,\n rangeEnd, step)\n }\n}\n\n/**\n * A progression of values of type `Int`. \n */\npublic open class IntProgression\n internal constructor\n (\n start: Int,\n endInclusive: Int,\n step: Int\n) : Iterable<Int> {\n init {\n if (step == 0) throw kotlin.IllegalArgumentException("Step must be non-zero.")\n if (step ==\n Int.MIN_VALUE) throw kotlin.IllegalArgumentException("Step must be greater than Int.MIN_VALUE to avoid\n overflow on negation.")\n }\n\n /**\n * The first element in the progression.\n */\n public val first: Int =\n start\n\n /**\n * The last element in the progression.\n */\n * The step of the\n progression.\n */\n public val last: Int = getProgressionLastElement(start, endInclusive, step)\n\n /**\n * The step of the\n progression.\n */\n public val step: Int = step\n\n override fun iterator(): IntIterator =\n IntProgressionIterator(first, last, step)\n\n /**\n * Checks if the progression is empty.\n */\n * Progression

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with a positive step is empty if its first element is greater than the last element.\n * Progression with a negative
step is empty if its first element is less than the last element.\n */\n public open fun isEmpty(): Boolean = if
(step > 0) first > last else first < last\n\n override fun equals(other: Any?): Boolean =\n other is IntProgression\n && (isEmpty() && other.isEmpty()) ||\n first == other.first && last == other.last && step == other.step)\n\n override fun hashCode(): Int =\n if (isEmpty()) -1 else (31 * (31 * first + last) + step)\n\n override fun\n toString(): String = if (step > 0) \"$first..$last\n step $step\" else \"$first downTo $last step ${-step}\"\n\n companion object {\n /**\n * Creates\n IntProgression within the specified bounds of a closed range.\n *\n * The progression starts with the\n [rangeStart] value and goes toward the [rangeEnd] value not excluding it, with the specified [step].\n *\n In order\n to go backwards the [step] must be negative.\n *\n * [step] must be greater than `Int.MIN_VALUE` and\n not equal to zero.\n */\n public fun fromClosedRange(rangeStart: Int, rangeEnd: Int, step: Int):\n IntProgression = IntProgression(rangeStart, rangeEnd, step)\n }\n\n /**\n * A progression of values of type\n `Long`.\n */\n public open class LongProgression\n internal constructor(\n start: Long,\n endInclusive: Long,\n step: Long\n): Iterable<Long> {\n init {\n if (step == 0L) throw\n kotlin.IllegalArgumentException(\"Step must be non-zero.\")\n\n if (step == Long.MIN_VALUE) throw kotlin.IllegalArgumentException(\"Step must be greater than\n Long.MIN_VALUE to avoid overflow on negation.\")\n }\n\n /**\n * The first element in the progression.\n */\n public val first: Long = start\n\n /**\n * The last element in the progression.\n */\n public val last:\n Long = getProgressionLastElement(start, endInclusive, step)\n\n /**\n * The step of the progression.\n */\n public val step: Long = step\n\n override fun iterator(): LongIterator = LongProgressionIterator(first, last, step)\n\n /**\n * Checks if the progression is empty.\n *\n * Progression with a positive step is empty if its first\n element is greater than the last element.\n *\n Progression with a negative step is empty if its first element is less\n than the last element.\n */\n public open fun isEmpty(): Boolean = if (step > 0) first > last else first < last\n\n override fun equals(other: Any?):\n Boolean =\n other is LongProgression && (isEmpty() && other.isEmpty()) ||\n first == other.first && last\n == other.last && step == other.step)\n\n override fun hashCode(): Int =\n if (isEmpty()) -1 else (31 * (31 *\n (first xor (first ushr 32)) + (last xor (last ushr 32))) + (step xor (step ushr 32))).toInt()\n\n override fun toString():\n String = if (step > 0) \"$first..$last step $step\" else \"$first downTo $last step ${-step}\"\n\n companion object {\n /**\n * Creates LongProgression within the specified bounds of a closed range.\n *\n * The\n progression starts with the [rangeStart] value and goes toward the [rangeEnd] value not excluding it, with the\n specified [step].\n *\n In order to go backwards the [step] must be negative.\n *\n * [step] must be\n greater than `Long.MIN_VALUE` and not equal to zero.\n */\n public fun fromClosedRange(rangeStart:\n Long, rangeEnd: Long, step: Long): LongProgression\n = LongProgression(rangeStart, rangeEnd, step)\n }\n\n /**\n * Copyright 2010-2019 JetBrains s.r.o. and\n Kotlin Programming Language contributors.\n *\n Use of this source code is governed by the Apache 2.0 license that\n can be found in the license/LICENSE.txt file.\n */\n package kotlin.ranges\n\n /**\n * Represents a range of values\n (for example, numbers or characters).\n *\n See the [Kotlin language\n documentation](https://kotlinlang.org/docs/reference/ranges.html) for more information.\n */\n public interface\n ClosedRange<T: Comparable<T>> {\n /**\n * The minimum value in the range.\n */\n public val start:\n T\n\n /**\n * The maximum value in the range (inclusive).\n */\n public val endInclusive: T\n\n /**\n * Checks whether the specified [value] belongs to the range.\n */\n public operator fun contains(value: T):\n Boolean = value >= start && value <= endInclusive\n\n /**\n * Checks whether the range is empty.\n *\n * The range\n is empty if its start value is greater than the end value.\n */\n public fun isEmpty(): Boolean = start >\n endInclusive\n }\n\n /**\n * Copyright 2010-2015 JetBrains s.r.o.\n *\n Licensed under the Apache License,\n Version 2.0 (the \"License\");\n *\n you may not use this file except in compliance with the License.\n *\n You may\n obtain a copy of the License at\n *\n http://www.apache.org/licenses/LICENSE-2.0\n *\n Unless required by\n applicable law or agreed to in writing, software\n *\n distributed under the License is distributed on an \"AS IS\"

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BASIS, \n \* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. \n \* See the License for the specific language governing permissions and \n \* limitations under the License. \n \*/ \n \n package kotlin \n \n /\*\* \n \* The type with only one value: the `Unit` object. This type corresponds to the `void` type in Java. \n \* \n public object Unit { \n override fun toString() = \"kotlin.Unit\" \n } \n \* Copyright 2010-2015 JetBrains s.r.o. \n \* Licensed under the Apache License, Version 2.0 (the \"License\"); \n \* you may not use this file except in compliance with the License. \n \* You may obtain a copy of the License at \n \* \n http://www.apache.org/licenses/LICENSE-2.0 \n \* \n \* Unless required by applicable law or agreed to in writing, software \n \* distributed under the License is distributed on an \"AS IS\" BASIS, \n \* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. \n \* See the License for the specific language governing permissions and \n \* limitations under the License. \n \*/ \n \n package kotlin.annotation \n \n import kotlin.annotation.AnnotationTarget. \n \n /\*\* \n \* Contains the list of code elements which are the possible annotation targets \n \* \n public enum class AnnotationTarget { \n /\*\* Class, interface or object, annotation class is also included \n CLASS, \n /\*\* Annotation class only \n ANNOTATION\_CLASS, \n /\*\* Generic type parameter \n TYPE\_PARAMETER, \n /\*\* Property \n PROPERTY, \n /\*\* Field, including property's backing field \n FIELD, \n /\*\* Local variable \n LOCAL\_VARIABLE, \n /\*\* Value parameter of a function or a constructor \n VALUE\_PARAMETER, \n /\*\* Constructor only (primary or secondary) \n CONSTRUCTOR, \n /\*\* Function (constructors are not included) \n FUNCTION, \n /\*\* Property getter only \n PROPERTY\_GETTER, \n /\*\* Property setter only \n PROPERTY\_SETTER, \n /\*\* Type usage \n TYPE, \n /\*\* Any expression \n EXPRESSION, \n /\*\* File \n FILE, \n /\*\* Type alias \n @SinceKotlin(\"1.1\") \n TYPEALIAS \n } \n \n /\*\* \n \* Contains the list of possible annotation's retentions. \n \* \n \* Determines how an annotation is stored in binary output. \n \* \n public enum class AnnotationRetention { \n /\*\* Annotation isn't stored in binary output \n SOURCE, \n /\*\* Annotation is stored in binary output, but invisible for reflection \n BINARY, \n /\*\* Annotation is stored in binary output and visible for reflection (default retention) \n RUNTIME \n } \n \n /\*\* \n \* This meta-annotation indicates the kinds of code elements which are possible targets of an annotation. \n \* \n \* If the target meta-annotation is not present on an annotation declaration, the annotation is applicable to the following elements: \n \* [CLASS], [PROPERTY], [FIELD], [LOCAL\_VARIABLE], [VALUE\_PARAMETER], [CONSTRUCTOR], [FUNCTION], [PROPERTY\_GETTER], [PROPERTY\_SETTER]. \n \* \n \* @property allowedTargets list of allowed annotation targets \n \* \n @Target(AnnotationTarget.ANNOTATION\_CLASS) \n @MustBeDocumented \n public annotation class Target(vararg val allowedTargets: AnnotationTarget) \n \n /\*\* \n \* This meta-annotation determines whether an annotation is stored in binary output and visible for reflection. By default, both are true. \n \* \n \* @property value necessary annotation retention (RUNTIME, BINARY or SOURCE) \n \* \n @Target(AnnotationTarget.ANNOTATION\_CLASS) \n public annotation class Retention(val value: AnnotationRetention = AnnotationRetention.RUNTIME) \n \n /\*\* \n \* This meta-annotation determines that an annotation is applicable twice or more on a single code element \n \* \n @Target(AnnotationTarget.ANNOTATION\_CLASS) \n public annotation class Repeatable \n \n /\*\* \n \* This meta-annotation determines that an annotation is a part of public API and therefore should be included in the generated \n \* documentation for the element to which the annotation is applied. \n \* \n @Target(AnnotationTarget.ANNOTATION\_CLASS) \n public annotation class MustBeDocumented \n \" \n \* Copyright 2010-2016 JetBrains s.r.o. \n \* Licensed under the Apache License, Version 2.0 (the \"License\"); \n \* you may not use this file except in compliance with the License. \n \* You may obtain a copy of the License at \n \* \n http://www.apache.org/licenses/LICENSE-2.0 \n \* \n \* Unless required by applicable law or agreed to in writing, software \n \* distributed under the License is distributed on an \"AS IS\" BASIS, \n \* \n \* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. \n \* See the License for the specific language governing permissions and \n \* limitations under the License. \n \* \n \n package kotlin.internal \n \n /\*\* \n \* Specifies that the corresponding type parameter is not used for unsafe operations such as

casts or 'is' checks\n \* That means it's completely safe to use generic types as argument for such parameter.\n

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*\n@Target(AnnotationTarget.TYPE_PARAMETER)\n@Retention(AnnotationRetention.BINARY)\ninternal
annotation class PureReifiable\n\n/**\n * Specifies that the corresponding built-in method exists depending on
platform.\n * Current implementation for JVM looks whether method with same JVM descriptor exists in the
module JDK.\n * For example MutableMap.remove(K, V) available only if corresponding\n * method
'java/util/Map.remove(Ljava/lang/Object;Ljava/lang/Object;)Z' is defined in JDK (i.e. for major versions >= 8)\n
*\n@Target(AnnotationTarget.FUNCTION)\n@Retention(AnnotationRetention.BINARY)\ninternal
annotation class PlatformDependent\n\n/**\n * When applied to a function or property, enables a compiler
optimization that evaluates that function or property\n * at compile-time and replaces calls to it with the computed
result.\n *
*\n@Target(AnnotationTarget.CONSTRUCTOR, AnnotationTarget.FUNCTION,
AnnotationTarget.PROPERTY)\n@Retention(AnnotationRetention.BINARY)\n@SinceKotlin("1.7")\ninternal
annotation class IntrinsicConstEvaluation\n","/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\npackage kotlin.internal\n\n// a mod b (in arithmetical sense)\nprivate fun mod(a:
Int, b: Int): Int {\n val mod = a % b\n return if (mod >= 0) mod else mod + b\n}\n\nprivate fun mod(a: Long, b:
Long): Long {\n val mod = a % b\n return if (mod >= 0) mod else mod + b\n}\n\n// (a - b) mod
c\nprivate fun differenceModulo(a: Int, b: Int, c: Int): Int {\n return mod(mod(a, c) - mod(b, c), c)\n}\n\nprivate
fun differenceModulo(a: Long, b: Long, c: Long): Long {\n return mod(mod(a, c) - mod(b, c), c)\n}\n\n/**\n *
Calculates the final element of a bounded arithmetic progression, i.e. the last element of the progression which is in
the range\n * from [start] to [end] in case of a positive [step], or from [end] to [start] in case of a negative\n *
[step].\n *
*\n * No validation on passed parameters is performed. The given parameters should satisfy the
condition:\n *
*\n * - either `step > 0` and `start <= end`,\n * - or `step < 0` and `start >= end`.\n *
*\n * @param start first element of the progression\n * @param end ending bound for the progression\n * @param step increment, or
difference of successive elements in the progression\n * @return the final element of the progression\n *
*\n * @suppress\n */\n@PublishedApi\ninternal fun getProgressionLastElement(start: Int, end: Int,
step: Int): Int = when {\n step > 0 -> if (start >= end) end else end - differenceModulo(end, start, step)\n step < 0
-> if (start <= end) end else end + differenceModulo(start, end, -step)\n else -> throw
kotlin.IllegalArgumentException("Step is zero.")\n}\n\n/**\n * Calculates the final element of a bounded
arithmetic progression, i.e. the last element of the progression which is in the range\n * from [start] to [end] in case
of a positive [step], or from [end] to [start] in case of a negative\n * [step].\n *
*\n * No validation on passed parameters is performed. The given parameters should satisfy the condition:\n *
*\n * - either `step > 0` and `start <= end`,\n * - or `step < 0` and `start >= end`.\n *
*\n * @param start first element of the progression\n * @param end ending bound for the progression\n * @param step increment, or
difference of successive elements in the progression\n * @return the final element of the progression\n *
*\n * @suppress\n */\n@PublishedApi\ninternal fun
getProgressionLastElement(start: Long, end: Long, step: Long): Long = when {\n step > 0 -> if (start >= end) end
else end - differenceModulo(end, start, step)\n step < 0 -> if (start <= end) end else end + differenceModulo(start,
end, -step)\n else -> throw kotlin.IllegalArgumentException("Step is zero.")\n}\n\n","/*\n * Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n@JsName("arrayIterator")\ninternal
fun arrayIterator(array: dynamic, type: String?) = when (type) {\n null -> {\n val arr: Array<dynamic> =
array\n object : Iterator<dynamic> {\n var index = 0\n override fun hasNext() = index < arr.size\n
 override fun next() = if (index < arr.size) arr[index++] else throw NoSuchElementException("$index")\n }\n }\n "BooleanArray" -> booleanArrayIterator(array)\n "ByteArray" -> byteArrayIterator(array)\n "ShortArray" -> shortArrayIterator(array)\n "CharArray" -> charArrayIterator(array)\n "IntArray" -> intArrayIterator(array)\n "LongArray" -> longArrayIterator(array)\n "FloatArray" -> floatArrayIterator(array)\n "DoubleArray" -> doubleArrayIterator(array)\n else -> throw
IllegalStateException("Unsupported type argument for arrayIterator: $type")\n}\n\n@JsName("booleanArrayIterator")\ninternal fun booleanArrayIterator(array: BooleanArray) =

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object : BooleanIterator() {\n var index = 0\n override fun hasNext() = index < array.size\n override fun
nextBoolean() = if (index < array.size) array[index++] else throw
NoSuchElementException("\$index\").\n}\n\n@JsName("byteArrayIterator")\ninternal fun byteArrayIterator(array:
ByteArray) = object : ByteIterator() {\n var index = 0\n override fun hasNext() = index < array.size\n override
fun nextByte() = if (index < array.size) array[index++]
else throw NoSuchElementException("\$index\").\n}\n\n@JsName("shortArrayIterator")\ninternal fun
shortArrayIterator(array: ShortArray) = object : ShortIterator() {\n var index = 0\n override fun hasNext() =
index < array.size\n override fun nextShort() = if (index < array.size) array[index++] else throw
NoSuchElementException("\$index\").\n}\n\n@JsName("charArrayIterator")\ninternal fun charArrayIterator(array:
CharArray) = object : CharIterator() {\n var index = 0\n override fun hasNext() = index < array.size\n override
fun nextChar() = if (index < array.size) array[index++] else throw
NoSuchElementException("\$index\").\n}\n\n@JsName("intArrayIterator")\ninternal fun intArrayIterator(array:
IntArray) = object : IntIterator() {\n var index = 0\n override fun hasNext() = index < array.size\n override fun
nextInt() = if (index < array.size) array[index++] else throw
NoSuchElementException("\$index\").\n}\n\n@JsName("floatArrayIterator")\ninternal fun
floatArrayIterator(array: FloatArray) = object : FloatIterator() {\n var index = 0\n override fun hasNext() =
index < array.size\n override fun nextFloat() = if (index < array.size) array[index++] else throw
NoSuchElementException("\$index\").\n}\n\n@JsName("doubleArrayIterator")\ninternal fun
doubleArrayIterator(array: DoubleArray) = object : DoubleIterator() {\n var index = 0\n override fun hasNext()
= index < array.size\n override fun nextDouble() = if (index < array.size) array[index++] else throw
NoSuchElementException("\$index\").\n}\n\n@JsName("longArrayIterator")\ninternal fun longArrayIterator(array:
LongArray) = object : LongIterator() {\n var index = 0\n override fun hasNext() = index < array.size\n
override fun nextLong() = if (index < array.size) array[index++] else throw
NoSuchElementException("\$index\").\n}\n\n@JsName("PropertyMetadata")\ninternal class
PropertyMetadata(@JsName("callableName") val name:
String)\n\n@JsName("noWhenBranchMatched")\ninternal
fun noWhenBranchMatched(): Nothing = throw
NoWhenBranchMatchedException()\n\n@JsName("subSequence")\ninternal fun subSequence(c: CharSequence,
startIndex: Int, endIndex: Int): CharSequence {\n if (c is String) {\n return c.substring(startIndex, endIndex)\n
} else {\n return c.asDynamic().`subSequence_vux9f0` (startIndex, endIndex)\n
}\n}\n\n@JsName("captureStack")\ninternal fun captureStack(@Suppress("UNUSED_PARAMETER")
baseClass: JsClass<in Throwable>, instance: Throwable) {\n if (js("Error").captureStackTrace) {\n // Using
uncropped stack traces due to KT-37563.\n // Precise stack traces are implemented in JS IR compiler and
stdlib\n js("Error").captureStackTrace(instance);\n } else {\n instance.asDynamic().stack = js("new
Error()\").stack;\n }\n}\n\n@JsName("newThrowable")\ninternal fun newThrowable(message: String?, cause:
Throwable?): Throwable {\n val throwable = js("new Error()")\n
throwable.message = if (jsTypeOf(message) == "undefined") {\n if (cause != null) cause.toString() else
null\n } else {\n message\n }\n throwable.cause = cause\n throwable.name = "Throwable"\n return
throwable\n}\n\n@JsName("BoxedChar")\ninternal class BoxedChar(val c: Int) : Comparable<Int> {\n override
fun equals(other: Any?): Boolean {\n return other is BoxedChar && c == other.c\n }\n override fun
hashCode(): Int {\n return c\n }\n override fun toString(): String {\n return
js("this.c").unsafeCast<Char>().toString()\n }\n override fun compareTo(other: Int): Int {\n return
js("this.c - other").unsafeCast<Int>()\n }\n @JsName("valueOf")\n public fun valueOf(): Int {\n
return c\n }\n}\n\n@kotlin.internal.InlineOnly\ninternal inline fun <T> concat(args: Array<T>): T {\n val typed
= js("Array")(args.size)\n for (i in args.indices) {\n val arr = args[i]\n
if (arr !is Array<*>) {\n typed[i] = js("[]").slice.call(arr)\n } else {\n typed[i] = arr\n }\n
}\n return js("[]").concat.apply(js("[]"), typed);\n}\n\n/** Concat regular Array's and TypedArray's into an
Array.\n */\n\n@PublishedApi\n@JsName("arrayConcat")\n@Suppress("UNUSED_PARAMETER")\ninternal fun

```

```

<T> arrayConcat(a: T, b: T): T {
 return concat(js("arguments"))
}

/** Concat primitive arrays. Main use:
prepare vararg arguments.
 * For compatibility with 1.1.0 the arguments may be a mixture of Array's and
TypedArray's.
 * If the first argument is TypedArray (Byte-, Short-, Char-, Int-, Float-, and DoubleArray)
returns a TypedArray, otherwise an Array.
 * If the first argument has the $type$ property (Boolean-, Char-, and
LongArray) copy its value to result.$type$.
 * If the first argument is a regular Array without the $type$ property
default to arrayConcat.

*/
@PublishedApi
@JsName("primitiveArrayConcat")
@Suppress("UNUSED_PARAMETER")
internal fun <T> primitiveArrayConcat(a: T, b: T): T {
 val args: Array<T> = js("arguments")
 if (a is Array<*> &&
a.asDynamic().$type$ === undefined) {
 return concat(args)
 } else {
 var size = 0
 for (i in
args.indices) {
 size += args[i].asDynamic().length as Int
 }
 val result = js("new
a.constructor(size)")
 kotlin.copyArrayType(a, result)
 size = 0
 for (i in args.indices) {
 val
arr = args[i].asDynamic()
 for (j in 0 until arr.length) {
 result[size++] = arr[j]
 }
 }
 return result
 }
}

@JsName("booleanArrayOf")
internal fun booleanArrayOf() =
withType("BooleanArray", js("[].slice.call(arguments)"))

@JsName("charArrayOf")
internal fun
charArrayOf() = withType("CharArray", js("new
Uint16Array(arguments)"))

@JsName("longArrayOf")
internal fun longArrayOf()
= withType("LongArray",
js("[].slice.call(arguments)"))

@JsName("withType")
@kotlin.internal.InlineOnly
internal inline fun
withType(type: String, array: dynamic): dynamic {
 array.$type$ = type
 return array
}

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by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
package kotlin.js

/**
Function corresponding to JavaScript's `typeof` operator

*/
@kotlin.internal.InlineOnly
@Suppress("UNUSED_PARAMETER")
public inline fun jsTypeOf(a: Any?):
String = js("typeof a")

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license/LICENSE.txt file.
 */
@file:Suppress("UNUSED_PARAMETER",
"NOTHING_TO_INLINE")
package kotlin

/**
 * Returns an empty array
of the specified type [T].
 */
public inline fun <T> emptyArray(): Array<T> = js("[]")

@library
public fun <T> arrayOf(vararg elements: T): Array<T> = definedExternally

@library
public fun doubleArrayOf(vararg
elements: Double): DoubleArray = definedExternally

@library
public fun floatArrayOf(vararg
elements: Float): FloatArray = definedExternally

@library
public fun longArrayOf(vararg
elements: Long): LongArray =
definedExternally

@library
public fun intArrayOf(vararg
elements: Int): IntArray =
definedExternally

@library
public fun charArrayOf(vararg
elements: Char): CharArray =
definedExternally

@library
public fun shortArrayOf(vararg
elements: Short): ShortArray =
definedExternally

@library
public fun byteArrayOf(vararg
elements: Byte): ByteArray =
definedExternally

@library
public fun booleanArrayOf(vararg
elements: Boolean): BooleanArray =
definedExternally

/**
 * Creates a new instance of the [Lazy] that uses the specified initialization
function [initializer].
 */
public actual fun <T> lazy(initializer: () -> T): Lazy<T> =
UnsafeLazyImpl(initializer)

/**
 * Creates a new instance of the [Lazy] that uses the specified initialization
function [initializer].
 * The [mode] parameter is ignored.
 */
public actual fun <T> lazy(mode:
LazyThreadSafetyMode, initializer: () -> T): Lazy<T> =
UnsafeLazyImpl(initializer)

/**
 * Creates a new
instance of the [Lazy] that uses the specified initialization function [initializer].
 * The [lock] parameter is
ignored.
 */
public actual fun <T> lazy(lock: Any?, initializer: () -> T): Lazy<T> =
UnsafeLazyImpl(initializer)

internal fun fillFrom(src: dynamic, dst: dynamic): dynamic {
 val srcLen: Int =
src.length
 val dstLen: Int = dst.length
 var index: Int = 0
 while (index < srcLen && index < dstLen)
dst[index] = src[index++]
 return dst
}

internal fun arrayCopyResize(source: dynamic, newSize: Int,
defaultValue: Any?): dynamic {
}

```

```

 val result = source.slice(0, newSize)\n copyArrayType(source, result)\n var index: Int = source.length\n if (newSize > index) {\n result.length = newSize\n while (index < newSize) result[index++] = default\n }\n return result\n}\n\ninternal fun <T> arrayPlusCollection(array: dynamic, collection: Collection<T>): dynamic {\n val result = array.slice()\n result.length += collection.size\n copyArrayType(array, result)\n var index: Int = array.length\n for (element in collection) result[index++] = element\n return result\n}\n\ninternal fun <T> fillFromCollection(dst: dynamic, startIndex: Int, collection: Collection<T>): dynamic {\n var index = startIndex\n for (element in collection) dst[index++] = element\n return dst\n}\n\ninternal inline fun copyArrayType(from: dynamic, to: dynamic) {\n if (from.`$type$` !== undefined) {\n to.`$type$` = from.`$type$`\n }\n}\n\ninternal inline fun jsIsType(obj: dynamic, jsClass: dynamic) = js("\\Kotlin").isType(obj, jsClass)", "/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n * Creates a Char with the specified [code].\n *\n * @sample samples.text.Chars.charFromCode\n *\n */\n\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic actual inline fun Char(code: UShort): Char {\n return code.toInt().toChar()\n}\n\n", "/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.coroutines\n\nimport kotlin.coroutines.intrinsics.COROUTINE_SUSPENDED\n\n@SinceKotlin("1.3")\n@JsName("\\CoroutineImpl")\n\ninternal abstract class CoroutineImpl(private val resultContinuation: Continuation<Any?>) : Continuation<Any?> {\n protected var state = 0\n protected var exceptionState = 0\n protected var result: Any? = null\n protected var exception: Throwable? = null\n protected var finallyPath: Array<Int?> = null\n public override val context: CoroutineContext = resultContinuation.context\n private var intercepted_: Continuation<Any?>? = null\n public fun intercepted(): Continuation<Any?> =\n intercepted_ ?: (context[ContinuationInterceptor]?.interceptContinuation(this) ?: this)\n .also {\n intercepted_ = it\n }\n override fun resumeWith(result: Result<Any?>) {\n var current = this\n var currentResult: Any? = result.getOrNull()\n var currentException: Throwable? = result.exceptionOrNull()\n // This loop unrolls recursion in current.resumeWith(param) to make saner and shorter stack traces on resume\n while (true) {\n with(current) {\n val completion = resultContinuation\n // Set result and exception fields in the current continuation\n if (currentException == null) {\n this.result = currentResult\n } else {\n state = exceptionState\n exception = currentException\n }\n try {\n val outcome = doResume()\n if (outcome === COROUTINE_SUSPENDED) return\n currentResult = outcome\n currentException = null\n } catch (exception: dynamic) { // Catch all exceptions\n currentResult = null\n currentException = exception.unsafeCast<Throwable>()\n }\n releaseIntercepted() // this state machine instance is terminating\n if (completion is CoroutineImpl) {\n // unrolling recursion via loop\n current = completion\n } else {\n // top-level completion reached -- invoke and return\n currentException?.let {\n completion.resumeWithException(it)\n }?:\n completion.resume(currentResult)\n return\n }\n }\n }\n private fun releaseIntercepted() {\n val intercepted = intercepted_ if (intercepted != null && intercepted !== this) {\n context[ContinuationInterceptor]!!.releaseInterceptedContinuation(intercepted)\n }\n this.intercepted_ = CompletedContinuation // just in case\n }\n protected abstract fun doResume(): Any?\n }\n\n internal object CompletedContinuation : Continuation<Any?> {\n override val context: CoroutineContext\n get() = error("\\This continuation is already complete")\n override fun resumeWith(result: Result<Any?>) {\n error("\\This continuation is already complete")\n }\n override fun toString(): String = "\\This continuation is already complete"\n }\n\n /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */

```



```

*\n\n@file:Suppress(\\"UNCHECKED_CAST\", \\"RedundantVisibilityModifier\\")\n\npackage kotlin\n\nimport
kotlin.contracts.*\nimport kotlin.internal.InlineOnly\nimport kotlin.jvm.JvmField\nimport
kotlin.jvm.JvmInline\nimport kotlin.jvm.JvmName\n\n/**\n * A discriminated union that encapsulates a successful
outcome with a value of type [T]\n * or a failure with an arbitrary [Throwable] exception.\n
*\n\n@SinceKotlin(\\"1.3\\")\n@JvmInline\npublic value class Result<out T> @PublishedApi internal constructor(\n
@PublishedApi\n internal val value: Any?\n) : Serializable {\n // discovery\n /**\n * Returns `true` if this
instance represents a successful outcome.\n
 * In this case [isFailure] returns `false`.\n *\n public val isSuccess: Boolean get() = value !is Failure\n
\n /**\n * Returns `true` if this instance represents a failed outcome.\n * In this case [isSuccess] returns `false`.\n
 *\n public val isFailure: Boolean get() = value is Failure\n
\n // value & exception retrieval\n /**\n * Returns the encapsulated value if this instance represents [success][Result.isSuccess] or `null`\n * if it is
[failure][Result.isFailure].\n *\n * This function is a shorthand for `getOrElse { null }` (see [getOrElse]) or\n
 * `fold(onSuccess = { it }, onFailure = { null })` (see [fold]).\n *\n @InlineOnly\n public inline fun
getOrNull(): T? =\n when {\n isFailure -> null\n else -> value as T\n }\n /**\n * Returns the encapsulated [Throwable] exception if this instance represents [failure][isFailure] or `null`\n * if it is
[success][isSuccess].\n
 *\n * This function is a shorthand for `fold(onSuccess = { null }, onFailure = { it })` (see [fold]).\n *\n public fun exceptionOrNull(): Throwable? =\n when (value) {\n is Failure -> value.exception\n
 else -> null\n }\n /**\n * Returns a string `Success(v)` if this instance represents
[success][Result.isSuccess]\n * where `v` is a string representation of the value or a string `Failure(x)` if\n * it is [failure][isFailure] where `x` is a string representation of the exception.\n *\n public override fun toString():
String =\n when (value) {\n is Failure -> value.toString() // \"Failure($exception)\"\n else ->
\"Success($value)\"\n }\n // companion with constructors\n /**\n * Companion object for [Result]
class that contains its constructor functions\n * [success] and [failure].\n *\n @public companion object {\n
\n /**\n * Returns
 *\n an instance that encapsulates the given [value] as successful value.\n *\n @Suppress(\\"INAPPLICABLE_JVM_NAME\\")\n @InlineOnly\n @JvmName(\\"success\\")\n public
inline fun <T> success(value: T): Result<T> =\n Result(value)\n /**\n * Returns an instance that
encapsulates the given [Throwable] [exception] as failure.\n *\n @Suppress(\\"INAPPLICABLE_JVM_NAME\\")\n @InlineOnly\n @JvmName(\\"failure\\")\n public
inline fun <T> failure(exception: Throwable): Result<T> =\n Result(createFailure(exception))\n }\n\n internal class Failure(\n @JvmField\n val exception: Throwable\n) : Serializable {\n override fun
equals(other: Any?): Boolean = other is Failure && exception == other.exception\n override fun hashCode():
Int = exception.hashCode()\n override fun toString(): String = \"Failure($exception)\"\n }\n\n /**\n * Returns
 *\n Creates an instance of
 *\n internal marker [Result.Failure] class to\n * make sure that this class is not exposed in ABI.\n
 *\n @PublishedApi\n @SinceKotlin(\\"1.3\\")\n internal fun createFailure(exception: Throwable): Any =\n Result.Failure(exception)\n /**\n * Throws exception if the result is failure. This internal function minimizes\n * inlined bytecode for [getOrThrow] and makes sure that in the future we can\n * add some exception-augmenting
logic here (if needed).\n *\n @PublishedApi\n @SinceKotlin(\\"1.3\\")\n internal fun Result<*>.throwOnFailure() {\n
 if (value is Result.Failure) throw value.exception\n }\n /**\n * Calls the specified function [block] and returns its
encapsulated result if invocation was successful,\n * catching any [Throwable] exception that was thrown from the
[block] function execution and encapsulating it as a failure.\n *\n @InlineOnly\n @SinceKotlin(\\"1.3\\")\n public
inline fun <R> runCatching(block: () -> R): Result<R> {\n return try {\n Result.success(block())\n }
 catch (e: Throwable) {\n Result.failure(e)\n }\n }\n /**\n * Calls the specified function [block] with `this`
value as its receiver and returns its encapsulated result if invocation was successful,\n * catching any [Throwable]
exception that was thrown from the [block] function execution and encapsulating it as a failure.\n
 *\n @InlineOnly\n @SinceKotlin(\\"1.3\\")\n public inline fun <T, R> T.runCatching(block: T.() -> R): Result<R> {\n

```

```

return try {
 Result.success(block())
} catch (e: Throwable) {
 Result.failure(e)
}

// --
extensions ---
/**
 * Returns the encapsulated value if this instance represents [success][Result.isSuccess] or
 * throws the encapsulated [Throwable] exception
 * if it is [failure][Result.isFailure].
 * This function is a
 * shorthand for `getOrNull { throw it }` (see [getOrNull]).
 */
@InlineOnly
@SinceKotlin("1.3")
public inline
fun <T> Result<T>.getOrNull(): T {
 throwOnFailure()
 return value as T
}

/**
 * Returns the encapsulated value if this instance represents [success][Result.isSuccess] or the
 * result of
 * [onFailure] function for the encapsulated [Throwable] exception if it is [failure][Result.isFailure].
 * Note, that
 * this function rethrows any [Throwable] exception thrown by [onFailure] function.
 * This function is a
 * shorthand for `fold(onSuccess = { it }, onFailure = onFailure)` (see [fold]).
 */
@InlineOnly
@SinceKotlin("1.3")
public inline fun <R, T : R> Result<T>.getOrNull(onFailure: (exception:
Throwable) -> R): R {
 contract {
 callsInPlace(onFailure, InvocationKind.AT_MOST_ONCE)
 }
 return when (val exception = exceptionOrNull()) {
 null -> value as T
 else -> onFailure(exception)
 }
}

/**
 * Returns the encapsulated value if this instance represents [success][Result.isSuccess] or the
 * [defaultValue] if it is [failure][Result.isFailure].
 * This function is a shorthand for `getOrNull {
 * defaultValue
 * }` (see [getOrNull]).
 */
@InlineOnly
@SinceKotlin("1.3")
public inline fun <R, T : R>
Result<T>.getOrDefault(defaultValue: R): R {
 if (isFailure) return defaultValue
 return value as T
}

/**
 * Returns the result of [onSuccess] for the encapsulated value if this instance represents
 * [success][Result.isSuccess]
 * or the result of [onFailure] function for the encapsulated [Throwable] exception if it
 * is [failure][Result.isFailure].
 * Note, that this function rethrows any [Throwable] exception thrown by
 * [onSuccess] or by [onFailure] function.
 */
@InlineOnly
@SinceKotlin("1.3")
public inline fun <R, T>
Result<T>.fold(
 onSuccess: (value: T) -> R,
 onFailure: (exception: Throwable) -> R): R {
 contract {
 callsInPlace(onSuccess, InvocationKind.AT_MOST_ONCE)
 callsInPlace(onFailure,
 InvocationKind.AT_MOST_ONCE)
 }
 return when (val exception = exceptionOrNull()) {
 null ->
 onSuccess(value as T)
 else -> onFailure(exception)
 }
}

// transformation
/**
 * Returns the encapsulated result of the given
 * [transform] function applied to the encapsulated value
 * if this instance represents [success][Result.isSuccess] or
 * the
 * original encapsulated [Throwable] exception if it is [failure][Result.isFailure].
 * Note, that this function
 * rethrows any [Throwable] exception thrown by [transform] function.
 * See [mapCatching] for an alternative that
 * encapsulates exceptions.
 */
@InlineOnly
@SinceKotlin("1.3")
public inline fun <R, T>
Result<T>.map(transform: (value: T) -> R): Result<R> {
 contract {
 callsInPlace(transform,
 InvocationKind.AT_MOST_ONCE)
 }
 return when {
 isSuccess -> Result.success(transform(value as T))
 else -> Result(value)
 }
}

/**
 * Returns the encapsulated result of the given [transform] function
 * applied to the encapsulated value
 * if this instance represents [success][Result.isSuccess] or the
 * original encapsulated [Throwable] exception if it is [failure][Result.isFailure].
 * This function catches any
 * [Throwable] exception thrown by [transform] function and encapsulates it as a failure.
 * See [map] for an
 * alternative that rethrows exceptions from `transform` function.
 */
@InlineOnly
@SinceKotlin("1.3")
public inline fun <R, T> Result<T>.mapCatching(transform: (value: T) -> R): Result<R> {
 return when {
 isSuccess -> runCatching { transform(value as T) }
 else -> Result(value)
 }
}

/**
 * Returns the
 * encapsulated result of the given [transform] function applied to the encapsulated [Throwable] exception
 * if this
 * instance represents [failure][Result.isFailure] or the
 * original encapsulated value if it is
 * [success][Result.isSuccess].
 * Note, that this function rethrows any [Throwable] exception thrown by
 * [transform] function.
 * See [recoverCatching] for an alternative that encapsulates exceptions.
 */
@InlineOnly
@SinceKotlin("1.3")
public
inline fun <R, T : R> Result<T>.recover(transform: (exception: Throwable) -> R): Result<R> {
 contract {
 callsInPlace(transform, InvocationKind.AT_MOST_ONCE)
 }
 return when (val exception =
exceptionOrNull()) {
 null -> this
 else -> Result.success(transform(exception))
 }
}

/**
 * Returns the encapsulated result of the given [transform] function applied to the encapsulated [Throwable]
 * exception
 * if this instance represents [failure][Result.isFailure] or the
 * original encapsulated value if it is

```

```

[success][Result.isSuccess].\n *\n * This function catches any [Throwable] exception thrown by [transform]
function and encapsulates it as a failure.\n * See [recover] for an alternative that rethrows exceptions.\n
*\n@\n@InlineOnly\n@SinceKotlin("1.3")\npublic inline fun <R, T : R> Result<T>.recoverCatching(transform:
(exception: Throwable) -> R): Result<R> {\n return when (val exception = exceptionOrNull())
{\n null -> this\n else -> runCatching { transform(exception) }\n }\n}\n\n// "peek" onto value/exception
and pipe\n\n**\n * Performs the given [action] on the encapsulated [Throwable] exception if this instance
represents [failure][Result.isFailure].\n * Returns the original `Result` unchanged.\n
*\n@\n@InlineOnly\n@SinceKotlin("1.3")\npublic inline fun <T> Result<T>.onFailure(action: (exception:
Throwable) -> Unit): Result<T> {\n contract {\n callsInPlace(action, InvocationKind.AT_MOST_ONCE)\n
}\n exceptionOrNull()?.let { action(it) }\n return this\n}\n\n**\n * Performs the given [action] on the
encapsulated value if this instance represents [success][Result.isSuccess].\n * Returns the original `Result`
unchanged.\n *\n@\n@InlineOnly\n@SinceKotlin("1.3")\npublic inline fun <T> Result<T>.onSuccess(action: (value:
T) -> Unit): Result<T> {\n contract {\n callsInPlace(action, InvocationKind.AT_MOST_ONCE)\n
}\n if (isSuccess) action(value
as T)\n return this\n}\n\n// -----\n"/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n *\n*\npackage kotlin.coroutines\nimport kotlin.contracts.*\nimport
kotlin.coroutines.intrinsics.*\nimport kotlin.internal.InlineOnly\n/**\n * Interface representing a continuation after
a suspension point that returns a value of type `T`.\n *\n@\n@SinceKotlin("1.3")\npublic interface Continuation<in
T> {\n /**\n * The context of the coroutine that corresponds to this continuation.\n *\n public val context:
CoroutineContext\n\n /**\n * Resumes the execution of the corresponding coroutine passing a successful or
failed [result] as the\n * return value of the last suspension point.\n *\n public fun resumeWith(result:
Result<T>)\n}\n\n**\n * Classes and interfaces marked with this annotation
are restricted when used as receivers for extension\n * `suspend` functions. These `suspend` extensions can only
invoke other member or extension `suspend` functions on this particular\n * receiver and are restricted from calling
arbitrary suspension functions.\n
*\n@\n@SinceKotlin("1.3")\n@Target(AnnotationTarget.CLASS)\n@Retention(AnnotationRetention.BINARY)\npu
blic annotation class RestrictsSuspension\n\n**\n * Resumes the execution of the corresponding coroutine passing
[value] as the return value of the last suspension point.\n *\n@\n@SinceKotlin("1.3")\n@InlineOnly\npublic inline
fun <T> Continuation<T>.resume(value: T): Unit =\n resumeWith(Result.success(value))\n\n**\n * Resumes the
execution of the corresponding coroutine so that the [exception] is re-thrown right after the\n * last suspension
point.\n *\n@\n@SinceKotlin("1.3")\n@InlineOnly\npublic inline fun <T>
Continuation<T>.resumeWithException(exception: Throwable): Unit =\n resumeWith(Result.failure(exception))\n\n**\n
*\n * Creates a [Continuation] instance with the given [context] and implementation of [resumeWith] method.\n
*\n@\n@SinceKotlin("1.3")\n@InlineOnly\npublic inline fun <T> Continuation(\n context: CoroutineContext,\n
crossinline resumeWith: (Result<T>) -> Unit): Continuation<T> =\n object : Continuation<T> {\n override
val context: CoroutineContext\n get() = context\n override fun resumeWith(result: Result<T>) =\n
 resumeWith(result)\n }\n\n**\n * Creates a coroutine without a receiver and with result type [T].\n * This
function creates a new, fresh instance of suspendable computation every time it is invoked.\n *\n *\n * To start
executing the created coroutine, invoke `resume(Unit)` on the returned [Continuation] instance.\n * The
[completion] continuation is invoked when the coroutine completes with a result or an exception.\n * Subsequent
invocation of any resume function on the resulting continuation will produce an [IllegalStateException].\n
*\n@\n@SinceKotlin("1.3")\n@Suppress("UNCHECKED_CAST")\npublic fun <T> (suspend () ->
T).createCoroutine(\n completion: Continuation<T>): Continuation<Unit> =\n SafeContinuation(createCoroutineUnintercepted(completion).intercepted(), COROUTINE_SUSPENDED)\n\n**\n
*\n * Creates a coroutine with receiver type [R] and result type [T].\n * This function creates a new, fresh instance of
suspendable computation every time it is invoked.\n *\n *\n * To start executing the created coroutine, invoke

```

```

`resume(Unit)` on the returned [Continuation] instance.\n * The [completion] continuation is invoked when the
coroutine completes with a result or an exception.\n * Subsequent invocation of any resume function on the resulting
continuation will produce an [IllegalStateException].\n
*\n@SinceKotlin("1.3")\n@Suppress("UNCHECKED_CAST")\npublic fun <R, T> (suspend R.() ->
T).createCoroutine(\n receiver: R,\n completion: Continuation<T>)\n): Continuation<Unit> =\nSafeContinuation(createCoroutineUnintercepted(receiver,
completion).intercepted(), COROUTINE_SUSPENDED)\n\n/**\n * Starts a coroutine without a receiver and with
result type [T].\n * This function creates and starts a new, fresh instance of suspendable computation every time it is
invoked.\n * The [completion] continuation is invoked when the coroutine completes with a result or an exception.\n
*\n@SinceKotlin("1.3")\n@Suppress("UNCHECKED_CAST")\npublic fun <T> (suspend () ->
T).startCoroutine(\n completion: Continuation<T>)\n) {\n
createCoroutineUnintercepted(completion).intercepted().resume(Unit)\n}\n\n/**\n * Starts a coroutine with receiver
type [R] and result type [T].\n * This function creates and starts a new, fresh instance of suspendable computation
every time it is invoked.\n * The [completion] continuation is invoked when the coroutine completes with a result or
an exception.\n *\n@SinceKotlin("1.3")\n@Suppress("UNCHECKED_CAST")\npublic fun <R, T> (suspend
R.() ->
T).startCoroutine(\n receiver: R,\n completion: Continuation<T>)\n) {\n
createCoroutineUnintercepted(receiver, completion).intercepted().resume(Unit)\n}\n\n/**\n * Obtains the current
continuation instance inside suspend functions and suspends\n * the currently running coroutine.\n *\n * In this
function both [Continuation.resume] and [Continuation.resumeWithException] can be used either synchronously
in\n * the same stack-frame where the suspension function is run or asynchronously later in the same thread or\n *
from a different thread of execution. Subsequent invocation of any resume function will produce an
[IllegalStateException].\n *\n@SinceKotlin("1.3")\n@InlineOnly\npublic suspend inline fun <T>
suspendCoroutine(crossinline block: (Continuation<T>) -> Unit): T {\n contract { callsInPlace(block,
InvocationKind.EXACTLY_ONCE) }\n return suspendCoroutineUninterceptedOrReturn { c: Continuation<T> -
->\n val safe = SafeContinuation(c.intercepted())\n block(safe)\n
safe.getOrThrow()\n }\n}\n\n/**\n * Returns the context of the current coroutine.\n
*\n@SinceKotlin("1.3")\n@Suppress("WRONG_MODIFIER_TARGET")\n@InlineOnly\npublic suspend inline
val coroutineContext: CoroutineContext\n get() {\n throw NotImplementedError("\Implemented as
intrinsic")\n }\n}"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n
*\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
\n@npackage kotlin.coroutines.intrinsics\n\nimport kotlin.coroutines.\nimport kotlin.internal.InlineOnly\n\n/**\n *
Starts an unintercepted coroutine without a receiver and with result type [T] and executes it until its first
suspension.\n * Returns the result of the coroutine or throws its exception if it does not suspend or
[COROUTINE_SUSPENDED] if it suspends.\n * In the latter case, the [completion] continuation is invoked when
the coroutine completes
with a result or an exception.\n *\n * The coroutine is started directly in the invoker's thread without going through
the [ContinuationInterceptor] that might\n * be present in the completion's [CoroutineContext]. It is the invoker's
responsibility to ensure that a proper invocation\n * context is established.\n *\n * This function is designed to be
used from inside of [suspendCoroutineUninterceptedOrReturn] to resume the execution of the suspended\n *
coroutine using a reference to the suspending function.\n *\n@SinceKotlin("1.3")\n@InlineOnly\npublic actual
inline fun <T> (suspend () -> T).startCoroutineUninterceptedOrReturn(\n completion: Continuation<T>)\n): Any?
= this.asDynamic()(completion, false)\n\n/**\n * Starts an unintercepted coroutine with receiver type [R] and result
type [T] and executes it until its first suspension.\n * Returns the result of the coroutine or throws its exception if
it does not suspend or [COROUTINE_SUSPENDED] if it suspends.\n * In the latter
case, the [completion] continuation is invoked when the coroutine completes with a result or an exception.\n *\n *
The coroutine is started directly in the invoker's thread without going through the [ContinuationInterceptor] that
might\n * be present in the completion's [CoroutineContext]. It is the invoker's responsibility to ensure that a proper

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invocation\n \* context is established.\n \*\n \* This function is designed to be used from inside of [suspendCoroutineUninterceptedOrReturn] to resume the execution of the suspended\n \* coroutine using a reference to the suspending function.\n \*\n@SinceKotlin("1.3")\n@InlineOnly\npublic actual inline fun <R, T> (suspend R.() -> T).startCoroutineUninterceptedOrReturn(\n receiver: R,\n completion: Continuation<T>\n): Any? = this.asDynamic()(receiver, completion, false)\n\*\n@InlineOnly\ninternal actual inline fun <R, P, T> (suspend R.(P) -> T).startCoroutineUninterceptedOrReturn(\n receiver: R,\n param: P,\n completion: Continuation<T>\n): Any? = this.asDynamic()(receiver, param, completion, false)\n\*/\n \* Creates unintercepted coroutine without receiver and with result type [T].\n \* This function creates a new, fresh instance of suspendable computation every time it is invoked.\n \*\n \* To start executing the created coroutine, invoke `resume(Unit)` on the returned [Continuation] instance.\n \* The [completion] continuation is invoked when coroutine completes with result or exception.\n \*\n \* This function returns unintercepted continuation.\n \* Invocation of `resume(Unit)` starts coroutine immediately in the invoker's call stack without going through the\n \* [ContinuationInterceptor] that might be present in the completion's [CoroutineContext].\n \* It is the invoker's responsibility to ensure that a proper invocation context is established.\n \* Note that [completion] of this function may get invoked in an arbitrary context.\n \*\n \* [Continuation.intercepted] can be used to acquire the intercepted continuation.\n \* Invocation of `resume(Unit)` on intercepted continuation guarantees that execution of\n \* both the coroutine and [completion] happens in the invocation context established by\n \* [ContinuationInterceptor].\n \*\n \* Repeated invocation of any resume function on the resulting continuation corrupts the\n \* state machine of the coroutine and may result in arbitrary behaviour or exception.\n \*\n@SinceKotlin("1.3")\npublic actual fun <T> (suspend () -> T).createCoroutineUnintercepted(\n completion: Continuation<T>\n): Continuation<Unit> =\n // Kotlin/JS suspend lambdas have an extra parameter `suspended`\n if (this.asDynamic().length == 2) {\n // When `suspended` is true the continuation is created, but not executed\n this.asDynamic()(completion, true)\n } else {\n createCoroutineFromSuspendFunction(completion) {\n this.asDynamic()(completion)\n }\n }\n\*/\n \* Creates unintercepted coroutine with receiver type [R] and result type [T].\n \* This function creates a new, fresh instance of suspendable computation every time it is invoked.\n \*\n \* To start executing the created coroutine, invoke `resume(Unit)` on the returned [Continuation] instance.\n \* The [completion] continuation is invoked when coroutine completes with result or exception.\n \*\n \* This function returns unintercepted continuation.\n \* Invocation of `resume(Unit)` starts coroutine immediately in the invoker's call stack without going through the\n \* [ContinuationInterceptor] that might be present in the completion's [CoroutineContext].\n \* It is the invoker's responsibility to ensure that a proper invocation context is established.\n \*\n \* Note that [completion] of this function may get invoked in an arbitrary context.\n \*\n \* [Continuation.intercepted] can be used to acquire the intercepted continuation.\n \* Invocation of `resume(Unit)` on intercepted continuation guarantees that execution of\n \* both the coroutine and [completion] happens in the invocation context established by\n \* [ContinuationInterceptor].\n \*\n \* Repeated invocation of any resume function on the resulting continuation corrupts the\n \* state machine of the coroutine and may result in arbitrary behaviour or exception.\n \*\n@SinceKotlin("1.3")\npublic actual fun <R, T> (suspend R.() -> T).createCoroutineUnintercepted(\n receiver: R,\n completion: Continuation<T>\n): Continuation<Unit> =\n // Kotlin/JS suspend lambdas have an extra parameter `suspended`\n if (this.asDynamic().length == 3) {\n // When `suspended` is true the continuation is created, but not executed\n this.asDynamic()(receiver, completion, true)\n } else {\n createCoroutineFromSuspendFunction(completion) {\n this.asDynamic()(receiver, completion)\n }\n }\n\*/\n \* Intercepts this continuation with [ContinuationInterceptor].\n \*\n \* This function shall be used on the immediate result of [createCoroutineUnintercepted] or [suspendCoroutineUninterceptedOrReturn],\n \* in which case it checks for [ContinuationInterceptor] in the continuation's [context][Continuation.context],\n \* invokes [ContinuationInterceptor.interceptContinuation], caches and returns the result.\n \*\n \* If this function is invoked on other [Continuation] instances it returns `this` continuation unchanged.\n \*\n@SinceKotlin("1.3")\npublic actual fun <T> Continuation<T>.intercepted(): Continuation<T> =\n (this as? CoroutineImpl)?.intercepted() ?: this\n\nprivate inline fun <T> createCoroutineFromSuspendFunction(\n

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completion: Continuation<T>, \n crossinline block: () -> Any?\n): Continuation<Unit> {\n
@Suppress(\\"UNCHECKED_CAST\")\n return object : CoroutineImpl(completion as Continuation<Any?>) {\n
 override fun doResume(): Any? {\n exception?.let { throw it }\n return block()\n }\n
}\n}\n", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\npackage kotlin.js\n\n// Mirrors signature from JS IR BE\n// Used for
js.translator/testData/box/number/mulInt32.kt\n@library\n@jsName(\\"imulEmulated\")\n@Suppress(\\"UNUSED_P
ARAMETER\")\ninternal fun imul(x: Int, y: Int): Int =
definedExternally\n\n@Suppress(\\"NOTHING_TO_INLINE\")\ninternal inline fun isArrayish(o: dynamic) =
js(\\"Kotlin\").isArrayish(o)\n", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin\n\n// NOTE: Do not author your exceptions as they are written in
this file, instead use this template:\n\npublic open class MyException : Exception {\n constructor() : super()\n constructor(message: String?) : super(message)\n constructor(message: String?, cause: Throwable?) :
super(message,
 cause)\n constructor(cause: Throwable?) : super(cause)\n}\n\n\n// TODO: remove primary constructors, make
all secondary KT-22055\n\n@Suppress(\\"USELESS_ELVIS_RIGHT_IS_NULL\")\npublic actual open class Error
actual constructor(message: String?, cause: Throwable?) : Throwable(message, cause ?: null) {\n actual
constructor() : this(null, null)\n actual constructor(message: String?) : this(message, null)\n actual
constructor(cause: Throwable?) : this(undefin
ed,
 cause)\n}\n\n@Suppress(\\"USELESS_ELVIS_RIGHT_IS_NULL\")\npublic actual open class Exception actual
constructor(message: String?, cause: Throwable?) : Throwable(message, cause ?: null) {\n actual constructor() :
this(null, null)\n actual constructor(message: String?) : this(message, null)\n actual constructor(cause:
Throwable?) : this(undefin
ed, cause)\n}\n\n\npublic actual open class RuntimeException actual constructor(message:
String?, cause: Throwable?) : Exception(message, cause) {\n actual constructor()
: this(null, null)\n actual constructor(message: String?) : this(message, null)\n actual constructor(cause:
Throwable?) : this(undefin
ed, cause)\n}\n\n\npublic actual open class IllegalArgumentException actual
constructor(message: String?, cause: Throwable?) : RuntimeException(message, cause) {\n actual constructor() :
this(null, null)\n actual constructor(message: String?) : this(message, null)\n actual constructor(cause:
Throwable?) : this(undefin
ed, cause)\n}\n\n\npublic actual open class IllegalStateException actual
constructor(message: String?, cause: Throwable?) : RuntimeException(message, cause) {\n actual constructor() :
this(null, null)\n actual constructor(message: String?) : this(message, null)\n actual constructor(cause:
Throwable?) : this(undefin
ed, cause)\n}\n\n\npublic actual open class IndexOutOfBoundsException actual
constructor(message: String?) : RuntimeException(message) {\n actual constructor() : this(null)\n}\n\n\npublic
actual open class
ConcurrentModificationException actual constructor(message: String?, cause: Throwable?) :
RuntimeException(message, cause) {\n actual constructor() : this(null, null)\n actual constructor(message:
String?) : this(message, null)\n actual constructor(cause: Throwable?) : this(undefin
ed, cause)\n}\n\n\npublic actual
open class UnsupportedOperationException actual constructor(message: String?, cause: Throwable?) :
RuntimeException(message, cause) {\n actual constructor() : this(null, null)\n actual constructor(message:
String?) : this(message, null)\n actual constructor(cause: Throwable?) : this(undefin
ed, cause)\n}\n\n\npublic
actual open class NumberFormatException actual constructor(message: String?) :
IllegalArgumentException(message) {\n actual constructor() : this(null)\n}\n\n\n\npublic actual open class
NullPointerException actual constructor(message: String?) : RuntimeException(message) {\n actual constructor() :
this(null)\n}\n\n\npublic actual open class ClassCastException
actual constructor(message: String?) : RuntimeException(message) {\n actual constructor() :
this(null)\n}\n\n\n\npublic actual open class AssertionError\n@SinceKotlin(\\"1.4\")\nconstructor(message: String?,
cause: Throwable?) : Error(message, cause) {\n actual constructor() : this(null)\n constructor(message: String?) :

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this(message, null)\n actual constructor(message: Any?) : this(message.toString(), message as?
Throwable)\n}\n\npublic actual open class NoSuchElementException actual constructor(message: String?) :
RuntimeException(message) {\n actual constructor() : this(null)\n}\n\n@SinceKotlin("1.3")\npublic actual open
class ArithmeticException actual constructor(message: String?) : RuntimeException(message) {\n actual
constructor() : this(null)\n}\n\npublic actual open class NoWhenBranchMatchedException actual
constructor(message: String?, cause: Throwable?) : RuntimeException(message, cause) {\n actual constructor() :
this(null, null)\n actual
constructor(message: String?) : this(message, null)\n actual constructor(cause: Throwable?) : this(undefine
d,
cause)\n}\n\npublic actual open class UninitializedPropertyAccessException actual constructor(message: String?,
cause: Throwable?) : RuntimeException(message, cause) {\n actual constructor() : this(null, null)\n actual
constructor(message: String?) : this(message, null)\n actual constructor(cause: Throwable?) : this(undefine
d,
cause)\n}\n\n", /*\n * Copyright 2010-2019 JetBrains s.r.o. Use of this source code is governed by the Apache 2.0
license\n * that can be found in the license/LICENSE.txt file.\n
*\n\n@file:Suppress("UNUSED_PARAMETER")\n\npackage kotlin.js\n\n@kotlin.internal.InlineOnly\n\ninternal
inline fun jsDeleteProperty(obj: Any, property: Any) {\n js("delete
obj[property]")\n}\n\n@kotlin.internal.InlineOnly\n\ninternal inline fun jsBitwiseOr(lhs: Any?, rhs: Any?): Int =\n
js("lhs | rhs").unsafeCast<Int>()", /*\n * Copyright 2010-2018 JetBrains
s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.\n *\n\npackage kotlin.math\n\n/**\n * Returns this value
with the sign bit same as of the [sign] value.\n * If [sign] is `NaN` the sign of the result is undefined.\n
*\n\n@SinceKotlin("1.2")\n\npublic actual fun Double.withSign(sign: Double): Double {\n val thisSignBit =
js("Kotlin").doubleSignBit(this).unsafeCast<Int>()\n val newSignBit =
js("Kotlin").doubleSignBit(sign).unsafeCast<Int>()\n return if (thisSignBit == newSignBit) this else -
this\n}\n", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n\npackage kotlin\n\n/**\n * Returns a bit representation of the specified floating-point value as [Long]\n *
according to the IEEE 754 floating-point
"double format" bit layout.\n *\n\n@SinceKotlin("1.2")\n\n@library("doubleToBits")\n\npublic actual fun
Double.toBits(): Long = definedExternally\n\n/**\n * Returns a bit representation of the specified floating-point
value as [Long]\n * according to the IEEE 754 floating-point "double format" bit layout,\n * preserving `NaN`
values exact layout.\n *\n\n@SinceKotlin("1.2")\n\n@library("doubleToRawBits")\n\npublic actual fun
Double.toRawBits(): Long = definedExternally\n\n/**\n * Returns the [Double] value corresponding to a given bit
representation.\n *\n\n@SinceKotlin("1.2")\n\n@kotlin.internal.InlineOnly\n\npublic actual inline fun
Double.Companion.fromBits(bits: Long): Double =
js("Kotlin").doubleFromBits(bits).unsafeCast<Double>()\n\n/**\n * Returns a bit representation of the specified
floating-point value as [Int]\n * according to the IEEE 754 floating-point "single format" bit layout.\n *\n\nNote
that in Kotlin/JS [Float] range is wider than "single format" bit layout
can represent,\n * so some [Float] values may overflow, underflow or loose their accuracy after conversion to bits
and back.\n *\n\n@SinceKotlin("1.2")\n\n@library("floatToBits")\n\npublic actual fun Float.toBits(): Int =
definedExternally\n\n/**\n * Returns a bit representation of the specified floating-point value as [Int]\n *
according to the IEEE 754 floating-point "single format" bit layout,\n * preserving `NaN` values exact layout.\n
*\n\nNote that in Kotlin/JS [Float] range is wider than "single format" bit layout can represent,\n * so some
[Float] values may overflow, underflow or loose their accuracy after conversion to bits and back.\n
*\n\n@SinceKotlin("1.2")\n\n@library("floatToRawBits")\n\npublic actual fun Float.toRawBits(): Int =
definedExternally\n\n/**\n * Returns the [Float] value corresponding to a given bit representation.\n
*\n\n@SinceKotlin("1.2")\n\n@kotlin.internal.InlineOnly\n\npublic actual inline fun Float.Companion.fromBits(bits:
Int): Float =
js("Kotlin").floatFromBits(bits).unsafeCast<Float>()\n\n\n@Suppress("NOTHING_TO_INLINE")\n\ninternal

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Category {\n val decodedRangeStart: IntArray\n val decodedRangeCategory: IntArray\n \n init {\n val
toBase64 = \"ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/\n val
fromBase64 = IntArray(128)\n for (i in toBase64.indices) {\n fromBase64[toBase64[i].code] = i\n
}\n \n // rangeStartDiff.length = 1482\n val rangeStartDiff =
\"gBCFEDCKCDCaDDaDBhBCEEDDDDDDEDXBHYBH5BRwBGDCHDCIDFHDCHFDCDEIRTEE7BGHDDJI
CBbSEMOfGERwDEDDDDDECEFCRBjHbFDCYFFCzBvBjBBFC3B0hDBmBDGpBDDcBBJlBEECLGDFC
LDCgBBKVKEDiDDHCFECECKCEODBeBc5CLBOKhBJDDDDWEBHFCFCPBZDEL1BVBSLPBgBB2BDB
DICFBHKCKCPDBHEDWBHEDDDDEDEDIBDGDCCKCGDDDDCGECCWBFMDDCEDDDCHDDHKDDDBK
DBHFCWBFGBDDDFEDBPDDKCHBGDCHEDWBFGBDCEDEDBHDDGDCKCGJEGDBFDDFDDDDDDME
FDBFDCGBOKDFDFDCGFCXBQDDDDDBEGEDFDDKHBHDDGFCXBKBFCEFCFCHCHECKDNCCFC
oBEDECFFDDDDHDCKJBGDCSDYBJEHBFDDEBIGKDCMuBFHEBGBIBKCKbFBFBXEIFJDFDGCKCEgB
BDPEDGKKGECIBkBEObDFFLBkBBIBEFFECIBrBCEBEGDBKGGDDDDDDCHDENDCFEKDDIBDDFrBCD
pKBECGEECPBBEChBBECGEECPB5BBECjCCDJUDQKG2CCGDsTCRbaCDrCDDIHNBEDLSDCJSCMLFC
CM0BDHGLBFDKKGGEFDDDBKjBB1BHfChBDFmCKfDDDDDDCGDCFDKcFLsBEaGKBDiBXDDD1
BDGDEIGJEKGGHGBGCMF/BEBvBCEDDFHEKHkJJDDDeDDGDkSbFEDCIEkBIICCFDKDDKeGCJHrBCDI
IDBNBHEBEFDBfSb/BNBiBIB6BBF1EIiDJGCGCIIIIICGCGIIIOCIIIIIIDFEDDBFEDDDDEBDIFDDFEDBLF
GCEEICFBjCDEDCLDKBFBKCCGDDKDDNDgBQNEBDMPPFFDEDEBFFHECEBEEDFBEDDQjBCEDEFFC
CJHBeEEfsIIEUCHCxCBeZoBGICZLV8BuCW3FBjB2BiVDB4HOesBFcFKQgljEW/BEgBCiIwBVCGnBCgBBp
DvBBuBEDBHEFGCCjDCGEDCFCfIBDDF4BHCObXJHBHBHBHBHBHBHBHBgBCECGHGEDI FBKCEDM
EtBaB5CM2GaMEDDCKCGFCJEDFDDDC2CDDDB6CDCFrBB+CDEKgBkBMQfBKeIBPgBKnbPgKguGgC9
vUDVB3jBD3BJoBGCsIBDQKCUuBDDKcCCmCKCGIXJCNC/BBHGKDECEVFBEMCEEbqBDDGDGDFDXD
CEBDGEG0BEICyBQCICKGSGDEBKcICXLCLbDDBvBDECCDNCKEFCfJKFBpBFEDCJDBICCKCEQBG
DDByBEDCEFBYDCLLEDDCKGCGGJHBHBrBBEJDEwCjBIDCKGk9KMXExBEggCgoGuLcQDmBHMFFC
KBNBFBIsDQRrLCQgCC2BoBMCCQGEGQDCQDDDDDFDGDECEEFBnEEBFEDCKCDCaDDaDBfCKBtBCf
DGCGCFEDDDDDCECKDC\"
\n
 val diff = decodeVarLenBase64(rangeStartDiff, fromBase64, 1342)\n val start = IntArray(diff.size + 1)\n
 for (i in diff.indices) {\n start[i + 1] = start[i] + diff[i]\n }\n decodedRangeStart = start\n
\n // rangeCategory.length = 2033\n val rangeCategory =
\"PsY44a41W54UYJZYB14W7XC15WZPsYa84bl9Zw8b85Lr7C44brlerrYBZBCZCiBiBiBhCiiBhChiBhiCBhh
ChiCihBhChCChiBhChiCIBCFhjCiBiBihDhiBhCCihBiBBhCCFCEbEbEb7EbGhCk7BixRkiCi4BRbh4BhRhCBR
BCiiBBcIBChiZBCBCiBcGHhChCiBRBxxEYC40Rx8c6RGUm4GRFRFYRQZ44acG4wRYFEFGJYIIIGFIYGwc
GmkEmcGFJfI8cYxwFGFRFGFRJFGkkcYkxRm6aFGEgmmEmEGRYRFGxxYFRFRFRGQGIFmIFIGIooGF
GFGYJ4EFmoIRFlxRlxRFRFxlRxlFIIRxmFIGxxIoxRomFRIRxIFImGRJFaL86F4mRxmGoRFRFRFRFIIRxGIGR
xmGxmGmxRxGRFIRRjmmFIIGYRmmIRFIIRIRFRFIIRFxxGFIGmmRoxImxRFRlIGmxRJ4aRFGxmIoRFlxRlxR
FRFIIRFxxGIIImoGmmRxoIxoIGRmmIRxIFImGRJ8FLRxmFFRFIIRIIIRxxFIRlxRxlFRFRFRooGRlOOomRxFRIR
JLc8aRmoIoGFIIIRFRFRlmgmoIooRGRGRxmGFRlIGmxRJRYL8IGooYFIIRIRFRFRFRmlIIxGooRGRIRlxFG
RjxIFRGIFIIIRFlmGIGxIooRomF8xRxxFIILFGRJLcFxmIoRFRFRFxIRFRxxGxxIooGmmRRIRJxxIoYRFIIIG
RaFEGYJYRxlFRFRFIRFIIGlXRFxEGRJRFRFcY84c8mGcJL8G1WIFRFRGIGmmYFGRGRcGc88RYcYRFIGI
GmmIomGFJYFooGmlFIIGmmFIFIFGFmoIGIomFJIm8cBhRRxxBC4ECFRFRFIRFRFRFRFRFRFRFIRFRFRFRFR
FRGYLRFcRBRCxxUF8YFMF1WRFYKFRFRFRGFRGFRGFRFIIRIRGRFmmIGIooGGY44E46FmxRJRLRY44
U44GmmQRJREFRFGFGRFRFxmgmoIooGmoIoxRxxIoGIGRxxcx4YJFRFRFRFRJLRcFmmIomRx4YFoGG
mRomIGIGmxRJRJRyEYRGmmHRGIFmIGmIooGFRJYcGcRmmIFomGmmIomGmlFJfmoGooGGIRYFIgIG
RYJRfJFEYCRBRBYRGYgIGFGFIIGomGFRCECECEGRGHcCiBCBCRBRCBCBCRBRCxBCBCRCDCDCD
CiiRBj7CbCiiRBj7b7iCiiRxiCBRbCBbxxCiiRBj7bRMQUY9+V9+VYtOQMY9eY43X44Z1WY54XYMQRqER
LZ12ELZ12RERaRGHGHGR88B88BihBhiChhC8hcZBc8BB8CBCFi8cihBZBC8Z8CLKhCKr8cRZcZc88ZcZc85
Z8ZcZc1WcZc1WcZcZcZcRcRLcLcZcZcZcZc1WLcZ1WZ1WZcZ1WZ1WZ1WZcZcZcRcRcBRcixBBcIBihC
CEBhCCchCGhCRY44LCiRRxxCFRkYRGFRFRFRFRFRFRFRFRFRFRGY9eY49eY44U49e49e1WYeyUY04VY
48cRcRcRcRcRs4Y48EIK1Wc1W12U2cKGooUE88KqqEl4c8RFxxGm7bkkFUF4kEkFRFRFx8cLcFcRfRLcLc

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https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n/\n\n// 222 ranges totally\nprivate object Letter {\n
val decodedRangeStart: IntArray\n val decodedRangeLength: IntArray\n val decodedRangeCategory: IntArray\n
\n init {\n val toBase64 =
\n"ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/\n val fromBase64 =
IntArray(128)\n for (i in toBase64.indices) {\n fromBase64[toBase64[i].code] = i\n }\n \n //
rangeStartDiff.length = 356\n val rangeStartDiff =
\n"hCgBpCQGYHZH5BRpBPPPPPRMP5BPPICPP6BkEPPPPcXPzBvBrB3BOiDoBHwD+E3DauCnFmBmB2D
6E1BIBTiBmBIBP5BhBiBrBvBjBqBnBPRtBiCmCtBlB0BmB5BiB7BmBgEmChBzGCoEoGVpBsFrhBPqKQ2B
wBYoFgB4CJuTiEvBuCuDrF5DgEgFIJ1DgFmBQtBsBRGsB+BPiBID1EIjDPRPPPPPPPPGQSQS/DxENVNU+
B9zCwBwBPPCkDPNnBPqDYY1R8B7FkFgTgwGgwUwmBgKwBuBScmEP/BPPPPPRpP8B7F1B/ErBqC6B7B
iBmBfQsBUwCw/KwqIwLwETPcPjQgJxFgBIBsD"\n
val diff = decodeVarLenBase64(rangeStartDiff, fromBase64, 222)\n val start = IntArray(diff.size)\n
for (i in diff.indices) {\n if (i == 0) start[i] = diff[i]\n else start[i] = start[i - 1] + diff[i]\n }\n
decodedRangeStart = start\n \n // rangeLength.length = 328\n val rangeLength =
\n"aaMBXHYH5BRpBPPPPPRMP5BPPICPPzBDOOPPcXPzBvBjB3BOhDmBBpB7DoDYxB+EiBP1DoExBkB
QhBekBpMbgBhBctBiBMWOOXhCsBpBkBUV3Ba4BkB0DICgBXgBtD4FSdBfPhBpKP0BvBXjEQ2CGsT8Dh
BtCqDpFvD1D3E0IrD2EkBjRBDObS+BpIBIB1EIjDPPPPPPPPPPGPPMNLsBNPNPKCvBvBPPCkDPBmBPh
DXXgD4B6FzEgDguG9vUtkB9JcuBSckEP/BPPPPPPBpf4FrBjEhBpC3B5BKaWPrBOWck/KsCuLqDHPbPxPsFt
EaaqDL"\n decodedRangeLength = decodeVarLenBase64(rangeLength, fromBase64, 222)\n \n //
rangeCategory.length = 959\n val rangeCategory =
\n"GFjgggUHGFFZZZmzpz5qB6s6020B60ptltB6smt2sB60mz22B1+vv+8BZZ5s2850BW5q1ymtB506smzBF3q1
q1qB1q1q1+Bgi4wDTm74g3KigxqM60q1q1Bq1o1q1BF1qlrqrBZ2q5wprBGFZWWZGHFsjiioLowgmOowjkw
CkgoiIk7ligGogioBkwkiYkzj2oNoi+sbkwj04DghhkQ8wgiYkgoioDsgnkwC4gikQ//v+85BkwvoIsgoyI4ygu0whiw
Eowri4CoghsJowgqYowgm4DkwgsY/nwnzPowhmYkg6wI8yggZswikwHgxgmIoxgqYkkgk4DkxgmIkgoioBsgsso
BgzgyI8g9gL8g9kI0wgwJoxgkoC0wgioFkw/wI0w53iF4gioYowjmgBHGq1qkgwBF1q1q8qBHwghuIwghyKk0go
QkwgoQk3goQHGFHkyg0pBgxj6IoinkxDswno7Ikwhz9Bo0gioB8z48Rwli0xN0mpjoX8w78pDwltoqKHFGGwwg
siHFH3q1q16BFHWFZ1q10q1B2q1wq1B1q10q1B2q1yq1B6q1gq1Biq1qhxBir1qp1Bqt1q1qB1g1q1+B//3q16B//q
1qBH/qlq9Bholq9B1i00a1q10qD1op1HkwmigEigy6Cptogq1Bixo1kDq7/j00B2qgoBWGFm1lz50B6s5q1+BG
WhggzhwBFFhgk4//Bo2jigE8wguI8wguI8wguUog1qoB4qjmIwwi2KgkYHHH4IBgiFWkgIWoghssMmz5smrBZ
3q1y50B5sm7gzBtz1smzB5smz50BqzqtmzB5sgzqzBF2/9//5BowgoIwmnkzPkwgk4C8ys65BkgoqI0wgy6FghquZo
2giY0ghiIshg24B4ghsQ8QF/v1q1OFs008iCHHF1qggz/B8wg6Iznv+//B08QgohsjK0QGfK7hsQ4gB"\n
decodedRangeCategory = decodeVarLenBase64(rangeCategory,
fromBase64, 222)\n }\n\n/**\n * Returns `true` if this character is a letter.\n *\ninternal fun
Char.isLetterImpl(): Boolean {\n return getLetterType() != 0\n}\n\n/**\n * Returns `true` if this character is a
lower case letter, or it has contributory property `Other_Lowercase`.\n *\ninternal fun Char.isLowercaseImpl():
Boolean {\n return getLetterType() == 1 || code.isOtherLowercase()\n}\n\n/**\n * Returns `true` if this character is
an upper case letter, or it has contributory property `Other_Uppercase`.\n *\ninternal fun Char.isUppercaseImpl():
Boolean {\n return getLetterType() == 2 || code.isOtherUppercase()\n}\n\n/**\n * Returns\n * - `1` if the
character is a lower case letter,\n * - `2` if the character is an upper case letter,\n * - `3` if the character is a letter
but not a lower or upper case letter,\n * - `0` otherwise.\n *\nprivate fun Char.getLetterType(): Int {\n val ch =
this.code\n val index = binarySearchRange(Letter.decodedRangeStart,
ch)\n val rangeStart = Letter.decodedRangeStart[index]\n val rangeEnd = rangeStart +
Letter.decodedRangeLength[index] - 1\n val code = Letter.decodedRangeCategory[index]\n\n if (ch > rangeEnd)
{\n return 0\n }\n\n val lastTwoBits = code and 0x3\n if (lastTwoBits == 0) { // gap pattern\n var
shift = 2\n var threshold = rangeStart\n for (i in 0..1) {\n threshold += (code shr shift) and 0x7f\n
if (threshold > ch) {\n return 3\n }\n shift += 7\n threshold += (code shr shift) and
0x7f\n if (threshold > ch) {\n return 0\n }\n shift += 7\n }\n return 3\n }\n\n if (code <= 0x7) {\n
return lastTwoBits\n }\n\n val distance = (ch - rangeStart)\n val shift = if (code <=

```

```

0x1F) distance % 2 else distance\n return (code shr (2 * shift)) and 0x3\n}\n\n", "/*\n * Copyright 2010-2021
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.text\n\n/\n\n// NOTE:
THIS FILE IS AUTO-GENERATED by the GenerateUnicodeData.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n/\n\nprivate object OtherLowercase {\n internal
val otherLowerStart = intArrayOf(\n 0x00aa, 0x00ba, 0x02b0, 0x02c0, 0x02e0, 0x0345, 0x037a, 0x1d2c,
0x1d78, 0x1d9b, 0x2071, 0x207f, 0x2090, 0x2170, 0x24d0, 0x2c7c, 0xa69c, 0xa770, 0xa7f8, 0xab5c, \n)\n\n internal val otherLowerLength = intArrayOf(\n 1, 1, 9, 2, 5, 1, 1, 63, 1, 37, 1, 1, 13, 16, 26, 2, 2, 1, 2, 4, \n)\n}\n\ninternal fun Int.isOtherLowercase(): Boolean {\n val index =
binarySearchRange(OtherLowercase.otherLowerStart, this)\n return index >= 0 && this <
OtherLowercase.otherLowerStart[index] + OtherLowercase.otherLowerLength[index]\n}\n\n", "/*\n
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is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage
kotlin.text\n\n/\n\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateUnicodeData.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n/\n\ninternal fun Int.isOtherUppercase(): Boolean
{\n return this in 0x2160..0x216f\n || this in 0x24b6..0x24cf\n}\n\n", "/*\n * Copyright 2010-2022 JetBrains
s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.text\n\n/\n\n// NOTE: THIS FILE IS
AUTO-GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n/\n\nimport kotlin.js.*\n\n/**\n * Returns a
character at the given [index] or throws an [IndexOutOfBoundsException]
if the [index] is out of bounds of this char sequence.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n */\n\npublic actual fun CharSequence.elementAt(index: Int):
Char {\n return elementAtOrElse(index) { throw IndexOutOfBoundsException("\nindex: $index, length:
$length\n") }\n}\n\n", "/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.text\n\n/\n\n// NOTE: THIS FILE IS AUTO-GENERATED by the
GenerateUnicodeData.kt\n// See: https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n/\n\n// 4 ranges
totally\n\ninternal fun Char.titlecaseCharImpl(): Char {\n val code = this.code\n // Letters repeating <Lu, Lt, Ll>
sequence and code of the Lt is a multiple of 3, e.g. <\u01c4, \u01c5, \u01c6>\n if (code in 0x01c4..0x01cc || code
in 0x01f1..0x01f3) {\n return
(3 * ((code + 1) / 3)).toChar()\n }\n // Lower case letters whose title case mapping equivalent is equal to the
original letter\n if (code in 0x10d0..0x10fa || code in 0x10fd..0x10ff) {\n return this\n }\n return
uppercaseChar()\n}\n\n", "/*\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\n/\n\n// NOTE: THIS FILE IS AUTO-GENERATED
by the GenerateStandardLib.kt\n// See: https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n/\n\nimport
kotlin.js.*\nimport kotlin.ranges.contains\nimport kotlin.ranges.reversed\n\n/**\n * Returns an element at the given
[index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
actual fun UIntArray.elementAt(index: Int): UInt {\n return elementAtOrElse(index) { throw
IndexOutOfBoundsException("\nindex: $index, size: $size\n") }\n}\n\n/**\n * Returns an element at the given
[index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
actual fun ULongArray.elementAt(index: Int):
ULong {\n return elementAtOrElse(index) { throw IndexOutOfBoundsException("\nindex: $index, size: $size\n")
}\n}\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is

```

```

out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic actual fun UByteArray.elementAt(index: Int):
UByte {\n return elementAtOrElse(index) { throw IndexOutOfBoundsException("index: $index,
size: $size")} }\n}\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException]
if the [index] is out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic actual fun UShortArray.elementAt(index: Int):
UShort {\n return elementAtOrElse(index) { throw IndexOutOfBoundsException("index: $index, size: $size")} }\n
}\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic actual fun UIntArray.asList(): List<UInt> {\n
return object : AbstractList<UInt>(), RandomAccess {\n override val size: Int get() = this@asList.size\n
override fun isEmpty(): Boolean = this@asList.isEmpty()\n override fun contains(element: UInt): Boolean =
this@asList.contains(element)\n override fun get(index: Int): UInt {\n
AbstractList.checkNotNull(index, size)\n
return this@asList[index]\n }\n override fun indexOf(element: UInt): Int {\n
@Suppress("USELESS_CAST")\n if ((element as Any?) !is UInt) return -1\n return
this@asList.indexOf(element)\n }\n override fun lastIndexOf(element: UInt): Int {\n
@Suppress("USELESS_CAST")\n if ((element as Any?) !is UInt) return -1\n return
this@asList.lastIndexOf(element)\n }\n}\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic actual fun ULongArray.asList(): List<ULong>
{\n return object : AbstractList<ULong>(), RandomAccess {\n override val size: Int get() = this@asList.size\n
override fun isEmpty(): Boolean = this@asList.isEmpty()\n override fun contains(element: ULong):
Boolean = this@asList.contains(element)\n override fun get(index: Int): ULong {\n
AbstractList.checkNotNull(index,
size)\n return this@asList[index]\n }\n override fun indexOf(element: ULong): Int {\n
@Suppress("USELESS_CAST")\n if ((element as Any?) !is ULong) return -1\n return
this@asList.indexOf(element)\n }\n override fun lastIndexOf(element: ULong): Int {\n
@Suppress("USELESS_CAST")\n if ((element as Any?) !is ULong) return -1\n return
this@asList.lastIndexOf(element)\n }\n}\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic actual fun UByteArray.asList(): List<UByte>
{\n return object : AbstractList<UByte>(), RandomAccess {\n override val size: Int get() = this@asList.size\n
override fun isEmpty(): Boolean = this@asList.isEmpty()\n override fun contains(element: UByte): Boolean
= this@asList.contains(element)\n override fun get(index: Int): UByte {\n
AbstractList.checkNotNull(index, size)\n return this@asList[index]\n }\n override fun
indexOf(element: UByte): Int {\n @Suppress("USELESS_CAST")\n if ((element as Any?) !is
UByte) return -1\n return this@asList.indexOf(element)\n }\n override fun lastIndexOf(element:
UByte): Int {\n @Suppress("USELESS_CAST")\n if ((element as Any?) !is UByte) return -1\n
return this@asList.lastIndexOf(element)\n }\n}\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic actual fun UShortArray.asList(): List<UShort>
{\n return object : AbstractList<UShort>(), RandomAccess {\n override val size: Int get() = this@asList.size\n
override fun isEmpty(): Boolean = this@asList.isEmpty()\n override fun contains(element: UShort):
Boolean = this@asList.contains(element)\n override
fun get(index: Int): UShort {\n AbstractList.checkNotNull(index, size)\n return
this@asList[index]\n }\n override fun indexOf(element: UShort): Int {\n
@Suppress("USELESS_CAST")\n if ((element as Any?) !is UShort) return -1\n return
this@asList.indexOf(element)\n }\n override fun lastIndexOf(element: UShort): Int {\n
@Suppress("USELESS_CAST")\n if ((element as Any?) !is UShort) return -1\n return
this@asList.lastIndexOf(element)\n }\n}\n}\n\n}\n}\n\n/**\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be

```

found in the license/LICENSE.txt file.\n \*\n\npackage kotlin.text\n\n/\n\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateUnicodeData.kt\n\n// See:

[\n\nhttps://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n/\n\n// 9 ranges totally\n\n/\\*\\*\n](https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib)

```
* Returns `true` if this character is a whitespace.\n *\n\ninternal fun Char.isWhitespaceImpl(): Boolean {\n val ch = this.code\n return ch in 0x0009..0x000d\n || ch in 0x001c..0x0020\n || ch == 0x00a0\n || ch > 0x1000 && (\n ch == 0x1680\n || ch in 0x2000..0x200a\n || ch == 0x2028\n || ch == 0x2029\n || ch == 0x202f\n || ch == 0x205f\n || ch == 0x3000\n)\n}\n\n"/\n\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n\n *\n\npackage kotlin\n\n\npublic actual fun interface Comparator<T> {\n @JsName("compare")\n public actual fun compare(a: T, b: T): Int\n}\n\n"/\n\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code
```

is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n \*\n\npackage

```
kotlin.js\n\nimport kotlin.annotation.AnnotationTarget.*\n\n@Target(FUNCTION)\n@Deprecated("Use inline extension function with body using dynamic")\npublic annotation class
```

nativeGetter\n\n@Target(FUNCTION)\n@Deprecated("Use inline extension function with body using

dynamic")\n\npublic annotation class nativeSetter\n\n@Target(FUNCTION)\n@Deprecated("Use inline extension

function with body using dynamic")\n\npublic annotation class nativeInvoke\n\n@Target(CLASS, FUNCTION, PROPERTY)\n\ninternal annotation class library(public val name: String = "")\n\n@Target(CLASS)\n\ninternal

annotation class marker\n\n/\*\*\n \* Gives a declaration (a function, a property or a class) specific name in

JavaScript.\n \*\n \* This may be useful in the following cases:\n \*\n \* \* There are two functions for which the

compiler gives same name in JavaScript, you can\n \* mark one with `@JsName(...)` to prevent

the compiler from reporting error.\n \* \* You are writing a JavaScript library in Kotlin. The compiler produces

mangled names\n \* for functions with parameters, which is unnatural for usual JavaScript developer.\n \* You

can put `@JsName(...)` on functions you want to be available from JavaScript.\n \* \* For some reason you want to

rename declaration, e.g. there's common term in JavaScript\n \* for a concept provided by the declaration, which

in uncommon in Kotlin.\n \*\n \* Example:\n \*\n \* ``` kotlin\n \* class Person(val name: String) {\n \* fun hello()\n \* println("Hello \$name!")\n \* }\n \* @JsName("helloWithGreeting")\n \* fun hello(greeting: String) {\n \* println("\$greeting \$name!")\n \* }\n \* }\n \* ```\n \*\n \* @property name the name which

compiler uses both for declaration itself and for all references to the declaration.\n \* It's required to denote a

valid JavaScript identifier.\n \*\n \* @Retention(AnnotationRetention.BINARY)\n \* @Target(CLASS, FUNCTION, PROPERTY, CONSTRUCTOR, PROPERTY\_GETTER, PROPERTY\_SETTER)\n \* public actual

annotation class JsName(actual val name: String)\n\n/\*\*\n \* Denotes an `external` declaration that must be imported

from native JavaScript library.\n \*\n \* The compiler produces the code relevant for the target module system, for

example, in case of CommonJS,\n \* it will import the declaration via the `require(...)` function.\n \*\n \* The

annotation can be used on top-level external declarations (classes, properties, functions) and files.\n \*\n \* In case of file

(which can't be `external`) the following rule applies: all the declarations in\n \* the file must be `external`. By

applying `@JsModule(...)` on a file you tell the compiler to import a JavaScript object\n \* that contain all the

declarations from the file.\n \*\n \* Example:\n \*\n \* ``` kotlin\n \* @JsModule("jquery")\n \* external abstract class JQuery() {\n \* // some declarations here\n \* }\n \* @JsModule("jquery")\n \* external fun JQuery(element: Element): JQuery\n \* ```\n \*\n \* @property import name of a module to import

declaration from.\n \* It is not interpreted by the Kotlin compiler, it's passed as is directly to the target module

system.\n \*\n \* @see JsNonModule\n \*\n \* @Retention(AnnotationRetention.BINARY)\n \* @Target(CLASS, PROPERTY, FUNCTION, FILE)\n \* public annotation class JsModule(val import: String)\n\n/\*\*\n \* Denotes an

to accept both cases, you can augment [JsModule] with the `@JsNonModule` annotation. For example:

```

kotlin
@JsModule("jquery")
@JsNonModule
@JsName("$")
external abstract class
jQuery() {
 // some declarations here
}
@JsModule("jquery")
@JsNonModule
@JsName("$")
external fun jQuery(element: Element): jQuery
@see JsModule
@Retention(AnnotationRetention.BINARY)
@Target(CLASS, PROPERTY, FUNCTION, FILE)
public
annotation class JsNonModule

```

Adds prefix to `external` declarations in a source file. JavaScript does not have concept of packages (namespaces). They are usually emulated by nested objects. The compiler turns references to `external` declarations either to plain unprefix names (in case of `plain` modules) or to plain imports. However, if a JavaScript library provides its declarations in packages, you won't be satisfied with this. You can tell the compiler to generate additional prefix before references to `external` declarations using the `@JsQualifier(...)`

annotation. Note that a file marked with the `@JsQualifier(...)` annotation can't contain non-`external` declarations. Example:

```

kotlin
@file:JsQualifier("my.jsPackageName")
package
some.kotlinPackage
external fun foo(x: Int)
external fun bar(): String

```

property value the qualifier to add to the declarations in the generated code. It must be a sequence of valid JavaScript identifiers separated by the `.` character. Examples of valid qualifiers are: `foo`, `bar.Baz`, `_.$.f`.

```

@see JsModule
@Retention(AnnotationRetention.BINARY)
@Target(AnnotationTarget.FILE)
public
annotation class JsQualifier(val value: String)

```

Exports top-level declaration on JS platform. Compiled module exposes declarations that are marked with this annotation without name mangling. This annotation can be applied to either files or top-level declarations. It is currently prohibited to export the following kinds of declarations:

- `expect` declarations
- inline functions with reified type parameters
- suspend functions
- secondary constructors without `@JsName`
- extension properties
- enum classes
- annotation classes

Signatures of exported declarations must only contain "exportable" types: `dynamic`, `Any`, `String`, `Boolean`, `Byte`, `Short`, `Int`, `Float`, `Double`, `BooleanArray`, `ByteArray`, `ShortArray`, `IntArray`, `FloatArray`, `DoubleArray`, `Array<exportable-type>` Function types with exportable parameters and return types `external` or `@JsExport` classes and interfaces Nullable counterparts of types above Unit return type. Must not be nullable This annotation is experimental, meaning that restrictions mentioned above are subject to change.

```

@ExperimentalJsExport
@Retention(AnnotationRetention.BINARY)
@Target(CLASS,
PROPERTY, FUNCTION, FILE)
@SinceKotlin("1.3")
public actual annotation class JsExport

```

Forces a top-level property to be initialized eagerly, opposed to lazily on the first access to file and/or property.

```

@ExperimentalStdlibApi
@Retention(AnnotationRetention.BINARY)
@Target(AnnotationTarget.PROPER
TY)
@SinceKotlin("1.6")
@Deprecated("This annotation is a temporal migration assistance and may be
removed in the future releases, please consider filing an issue about the case where it is needed")
public annotation
class EagerInitialization

```

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package kotlin.jvm // these are used in common generated code in stdlib  
TODO: find how to deprecate these

```

@Target(AnnotationTarget.FIELD)
@Retention(AnnotationRetention.SOURCE)
public actual
annotation class Volatile
@Target(AnnotationTarget.FUNCTION, AnnotationTarget.PROPERTY_GETTER,
AnnotationTarget.PROPERTY_SETTER)
@Retention(AnnotationRetention.SOURCE)
public actual annotation
class Synchronized

```

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```

package kotlin.collections
Provides a skeletal implementation of the
[MutableCollection] interface.
@param E the type of elements contained in the collection. The collection is
invariant in its element type.
public actual abstract class AbstractMutableCollection<E> protected actual
constructor() : AbstractCollection<E>(), MutableCollection<E> {
 actual abstract override fun add(element: E):
Boolean
 actual override fun remove(element: E): Boolean
 checkIsMutable()
 val iterator =

```







```

AbstractMutableSet<E>() {\n final override fun contains(element: E): Boolean = containsEntry(element)\n
abstract fun containsEntry(element: Map.Entry<K, V>): Boolean\n final override fun remove(element: E):
Boolean = removeEntry(element)\n abstract fun removeEntry(element: Map.Entry<K, V>): Boolean\n }\n\nactual override fun clear() {\n entries.clear()\n }\n\nprivate var _keys: MutableSet<K>? = null\nactual
override val keys: MutableSet<K>\n get() {\n
 if (_keys == null) {\n _keys = object : AbstractMutableSet<K>() {\n override fun
add(element: K): Boolean = throw UnsupportedOperationException("Add is not supported on keys")\n
 override fun clear() {\n this@AbstractMutableMap.clear()\n }\n
 override
operator fun contains(element: K): Boolean = containsKey(element)\n\n override operator fun iterator():
MutableIterator<K> {\n val entryIterator = entries.iterator()\n return object :
MutableIterator<K> {\n override fun hasNext(): Boolean = entryIterator.hasNext()\n
 override fun next(): K = entryIterator.next().key\n override fun remove() =
entryIterator.remove()\n }\n }\n override fun remove(element: K): Boolean
{\n checkIsMutable()\n if (containsKey(element)) {\n
this@AbstractMutableMap.remove(element)\n return true\n }\n return
false\n }\n override val size: Int get() = this@AbstractMutableMap.size\n
 override fun checkIsMutable(): Unit = this@AbstractMutableMap.checkIsMutable()\n }\n
 }\n return _keys!!\n }\n\nactual abstract override fun put(key: K, value: V): V?\nactual override fun
putAll(from: Map<out K, V>) {\n checkIsMutable()\n for ((key, value) in from) {\n put(key,
value)\n }\n }\n\nprivate var _values: MutableCollection<V>? = null\nactual override val values:
MutableCollection<V>\n get() {\n if (_values == null) {\n _values = object :
AbstractMutableCollection<V>()
{\n override fun add(element: V): Boolean = throw UnsupportedOperationException("Add is not
supported on values")\n
 override fun clear() = this@AbstractMutableMap.clear()\n\n override operator fun contains(element: V): Boolean = containsValue(element)\n\n override operator fun
iterator(): MutableIterator<V> {\n val entryIterator = entries.iterator()\n return object :
MutableIterator<V> {\n override fun hasNext(): Boolean = entryIterator.hasNext()\n
 override fun next(): V = entryIterator.next().value\n override fun remove() =
entryIterator.remove()\n }\n }\n override val size: Int get() =
this@AbstractMutableMap.size\n\n override fun checkIsMutable(): Unit =
this@AbstractMutableMap.checkIsMutable()\n }\n }\n return _values!!\n }\n\nactual override fun remove(key: K): V? {\n
checkIsMutable()\n val iter = entries.iterator()\n while (iter.hasNext()) {\n val entry = iter.next()\n
 val k = entry.key\n if (key == k) {\n val value = entry.value\n iter.remove()\n
 return value\n }\n }\n return null\n }\n\n/**\n * This method is called every time when a
mutating method is called on this mutable map.\n * Mutable maps that are built (frozen) must throw
`UnsupportedOperationException`.\n */\n internal open fun checkIsMutable(): Unit {\n }\n\n"/\n * Copyright
2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed
by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\npackage
kotlin.collections\n\n/**\n *

```

Provides a skeletal implementation of the [MutableSet] interface.\n\n \* @param E the type of elements contained in the set. The set is invariant in its element type.\n\n \*/\npublic actual abstract class AbstractMutableSet<E>\nprotected actual constructor() : AbstractMutableCollection<E>(), MutableSet<E> {\n\n /\*\*\n \* Compares this set with another set instance with the unordered structural equality.\n \*\n \* @return `true`, if [other] instance is a [Set] of the same size, all elements of which are contained in this set.\n \*\n \*/\n override fun equals(other: Any?): Boolean {\n if (other === this) return true\n if (other !is Set<\*>) return false\n return\n AbstractSet.setEquals(this, other)\n }\n\n /\*\*\n \* Returns the hash code value for this set.\n \*\n \*/\n override fun hashCode(): Int = AbstractSet.unorderedHashCode(this)\n\n"/\n \* Copyright 2010-2018 JetBrains s.r.o. and



```

Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\ninternal
fun <T> sortArrayWith(array: Array<out T>, comparison: (T, T) -> Int) {\n if (getStableSortingIsSupported()) {\n
array.asDynamic().sort(comparison)\n } else {\n mergeSort(array.unsafeCast<Array<T>>(), 0,
array.lastIndex, Comparator(comparison))\n }\n}\n\ninternal fun <T> sortArrayWith(array: Array<out T>,
comparison: Comparator<in T>) {\n if (getStableSortingIsSupported()) {\n val comparison = { a: T, b: T ->
comparison.compare(a, b) }\n array.asDynamic().sort(comparison)\n } else {\n
mergeSort(array.unsafeCast<Array<T>>(), 0, array.lastIndex, comparator)\n }\n}\n\ninternal fun
<T> sortArrayWith(array: Array<out T>, fromIndex: Int, toIndex: Int, comparator: Comparator<in T>) {\n if
(fromIndex < toIndex - 1) {\n mergeSort(array.unsafeCast<Array<T>>(), fromIndex, toIndex - 1, comparator)\n
}\n}\n\ninternal fun <T : Comparable<T>> sortArray(array: Array<out T>) {\n if
(getStableSortingIsSupported()) {\n val comparison = { a: T, b: T -> a.compareTo(b) }\n
array.asDynamic().sort(comparison)\n } else {\n mergeSort(array.unsafeCast<Array<T>>(), 0,
array.lastIndex, naturalOrder())\n }\n}\n\nprivate var _stableSortingIsSupported: Boolean? = null\nprivate fun
getStableSortingIsSupported(): Boolean {\n _stableSortingIsSupported?.let { return it }\n
_stableSortingIsSupported = false\n val array = js("[]").unsafeCast<Array<Int>>()\n // known
implementations may use stable sort for arrays of up to 512 elements\n // so we create slightly more elements to
test stability\n for (index in 0 until 600) array.asDynamic().push(index)\n
val comparison = { a: Int, b: Int -> (a and 3) - (b and 3) }\n array.asDynamic().sort(comparison)\n for (index
in 1 until array.size) {\n val a = array[index - 1]\n val b = array[index]\n if ((a and 3) == (b and 3) &&
a >= b) return false\n }\n _stableSortingIsSupported = true\n return true\n}\n\nprivate fun <T>
mergeSort(array: Array<T>, start: Int, endInclusive: Int, comparator: Comparator<in T>) {\n val buffer =
arrayOfNulls<Any?>(array.size).unsafeCast<Array<T>>()\n val result = mergeSort(array, buffer, start,
endInclusive, comparator)\n if (result !== array) {\n for (i in start..endInclusive) array[i] = result[i]\n
}\n}\n\n// Both start and end are inclusive indices.\nprivate fun <T> mergeSort(array: Array<T>, buffer: Array<T>,
start: Int, end: Int, comparator: Comparator<in T>): Array<T> {\n if (start == end) {\n return array\n }\n
val median = (start + end) / 2\n val left = mergeSort(array,
buffer, start, median, comparator)\n val right = mergeSort(array, buffer, median + 1, end, comparator)\n val
target = if (left === buffer) array else buffer\n\n // Merge.\n var leftIndex = start\n var rightIndex = median +
1\n for (i in start..end) {\n when {\n leftIndex <= median && rightIndex <= end -> {\n val
leftValue = left[leftIndex]\n val rightValue = right[rightIndex]\n if
(comparator.compare(leftValue, rightValue) <= 0) {\n target[i] = leftValue\n leftIndex++\n
} else {\n target[i] = rightValue\n rightIndex++\n }\n }\n
leftIndex <= median -> {\n target[i] = left[leftIndex]\n leftIndex++\n }\n else /*
rightIndex <= end */ -> {\n target[i] = right[rightIndex]\n rightIndex++\n
}\n }\n\n Unit // TODO: Fix KT-31506\n }\n }\n }\n\n return target\n}", "/*\n * Copyright 2010-
2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage
kotlin.collections\n\n\n@OptIn(ExperimentalUnsignedTypes::class)\n@SinceKotlin("1.3")\n@kotlin.js.JsName("
contentDeepHashCodeImpl")\ninternal fun <T> Array<out T>?.contentDeepHashCodeImpl(): Int {\n if (this ==
null) return 0\n var result = 1\n for (element in this) {\n val elementHash = when {\n element == null
-> 0\n isArrayish(element) -> (element.unsafeCast<Array<*>>()).contentDeepHashCodeImpl()\n
element is UByteArray -> element.contentHashCode()\n element is UShortArray ->
element.contentHashCode()\n element is UIntArray -> element.contentHashCode()\n element is
ULongArray -> element.contentHashCode()\n else -> element.hashCode()\n }\n result = 31 *
result + elementHash\n }\n return result\n}", "/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\ninternal interface EqualityComparator

```

```

{\n /**\n * Subclasses must override to return a value indicating\
 * whether or not two keys or values are
equal.\n */\n abstract fun equals(value1: Any?, value2: Any?): Boolean\n\n /**\n * Subclasses must
override to return the hash code of a given key.\n */\n abstract fun getHashCode(value: Any?): Int\n\n object
HashCode : EqualityComparator {\n override fun equals(value1: Any?, value2: Any?): Boolean = value1 ==
value2\n\n override fun getHashCode(value: Any?): Int = value?.hashCode()
?: 0\n }\n }","/**\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n *
Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\n /**\n * Based on GWT AbstractHashMap\n * Copyright 2008 Google Inc.\n */\n\npackage
kotlin.collections\n\nimport kotlin.collections.MutableMap.MutableEntry\n\n/**\n * Hash table based
implementation of the [MutableMap] interface.\n */\n * This implementation makes no guarantees regarding the
order of enumeration of [keys], [values] and [entries] collections.\n */\n// Classes that extend HashMap and
implement `build()` (freezing) operation\n// have to make sure mutating methods check `checkIsMutable`.\n\npublic
actual open class HashMap<K, V> : AbstractMutableMap<K, V>, MutableMap<K, V> {\n\n private inner class
EntrySet : AbstractEntrySet<MutableEntry<K, V>, K, V>() {\n\n override fun add(element: MutableEntry<K,
V>): Boolean = throw UnsupportedOperationException("Add
is not supported on entries")\n\n override fun clear() {\n this@HashMap.clear()\n }\n\n override
fun containsEntry(element: Map.Entry<K, V>): Boolean = this@HashMap.containsEntry(element)\n\n override
operator fun iterator(): MutableIterator<MutableEntry<K, V>> = internalMap.iterator()\n\n override fun
removeEntry(element: Map.Entry<K, V>): Boolean {\n if (contains(element)) {\n
this@HashMap.remove(element.key)\n return true\n }\n return false\n }\n\n override
val size: Int get() = this@HashMap.size\n }\n\n /**\n * Internal implementation of the map: either string-
based or hashcode-based.\n */\n private val internalMap: InternalMap<K, V>\n\n private val equality:
EqualityComparator\n\n internal constructor(internalMap: InternalMap<K, V>) : super() {\n this.internalMap
= internalMap\n this.equality
= internalMap.equality\n }\n\n /**\n * Constructs an empty [HashMap] instance.\n */\n actual
constructor() : this(InternalHashCodeMap(EqualityComparator.HashCode))\n\n /**\n * Constructs an empty
[HashMap] instance.\n */\n * @param initialCapacity the initial capacity (ignored)\n * @param loadFactor
the load factor (ignored)\n */\n * @throws IllegalArgumentException if the initial capacity or load factor are
negative\n */\n actual constructor(initialCapacity: Int, loadFactor: Float) : this() {\n // This implementation
of HashMap has no need of load factors or capacities.\n require(initialCapacity >= 0) { "Negative initial
capacity: $initialCapacity" }\n require(loadFactor >= 0) { "Non-positive load factor: $loadFactor" }\n }\n\n
actual constructor(initialCapacity: Int) : this(initialCapacity, 0.0f)\n\n /**\n * Constructs an instance of
[HashMap] filled with the contents of the specified [original]
map.\n */\n actual constructor(original: Map<out K, V>) : this() {\n this.putAll(original)\n }\n\n actual
override fun clear() {\n internalMap.clear()\n// structureChanged(this)\n }\n\n actual override fun
containsKey(key: K): Boolean = internalMap.contains(key)\n\n actual override fun containsValue(value: V):
Boolean = internalMap.any { equality.equals(it.value, value) }\n\n private var _entries:
MutableSet<MutableMap.MutableEntry<K, V>>? = null\n\n actual override val entries:
MutableSet<MutableMap.MutableEntry<K, V>>\n get() {\n if (_entries == null) {\n _entries =
createEntrySet()\n }\n return _entries!!\n }\n\n internal open fun createEntrySet():
MutableSet<MutableMap.MutableEntry<K, V>> = EntrySet()\n\n actual override operator fun get(key: K): V? =
internalMap.get(key)\n\n actual override fun put(key: K, value: V): V? = internalMap.put(key, value)\n\n
actual override fun remove(key: K): V? = internalMap.remove(key)\n\n actual override val size: Int get() =
internalMap.size\n}\n\n\n/**\n * Constructs the specialized implementation of [HashMap] with [String] keys, which
stores the keys as properties of\n * JS object without hashing them.\n */\n\npublic fun <V> stringMapOf(vararg pairs:
Pair<String, V>): HashMap<String, V> {\n return HashMap<String, V>(\n V>(InternalStringMap(EqualityComparator.HashCode)).apply { putAll(pairs) }\n)\n\n}"/**\n * Copyright 2010-2018
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```

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Based on GWT HashSet

Copyright 2008 Google Inc.

The implementation of the [MutableSet] interface, backed by a [HashMap] instance.

Classes that extend HashSet and implement `build()` (freezing) operation

have to make sure mutating methods check `checkIsMutable`.

```

public actual open class HashSet<E> : AbstractMutableSet<E>, MutableSet<E> {
 internal val map: HashMap<E, Any>
 /** Constructs a new empty [HashSet].
 actual constructor() {
 map = HashMap<E, Any>()
 }
 /** Constructs a new [HashSet] filled with the elements of the specified collection.
 actual constructor(elements: Collection<E>) {
 map = HashMap<E, Any>(elements.size)
 addAll(elements)
 }
 /** Constructs a new empty [HashSet].
 * @param initialCapacity the initial capacity (ignored)
 * @param loadFactor the load factor (ignored)
 * @throws IllegalArgumentException if the initial capacity or load factor are negative
 actual constructor(initialCapacity: Int, loadFactor: Float) {
 map = HashMap<E, Any>(initialCapacity, loadFactor)
 }
 actual constructor(initialCapacity: Int) : this(initialCapacity, 0.0f)
 /** Protected constructor to specify the underlying map. This is used by
 * LinkedHashSet.
 * @param map underlying map to use.
 internal constructor(map: HashMap<E, Any>) {
 this.map = map
 }
 actual override fun add(element: E): Boolean {
 val old = map.put(element, this)
 return old == null
 }
 actual override fun clear() {
 map.clear()
 }
 public override fun clone(): Any {
 return HashSet<E>(this)
 }
 actual override operator fun contains(element: E): Boolean = map.containsKey(element)
 actual override fun isEmpty(): Boolean = map.isEmpty()
 actual override fun iterator(): MutableIterator<E> = map.keys.iterator()
 actual override fun remove(element: E): Boolean = map.remove(element) != null
 actual override val size: Int get() = map.size
}

```

Creates a new instance of the specialized implementation of [HashSet] with the specified [String] elements, which elements the keys as properties of JS object without hashing them.

```

public fun stringSetOf(vararg elements: String): HashSet<String> {
 return HashSet(stringMapOf<Any>()).apply { addAll(elements) }
}

```

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Based on GWT InternalHashMap

Copyright 2008 Google Inc.

```

package kotlin.collections
import kotlin.collections.MutableMap.MutableEntry
import kotlin.collections.AbstractMutableMap.SimpleEntry

```

A simple wrapper around JavaScriptObject to provide [java.util.Map]-like semantics for any key type.

Implementation notes:

- A key's hashCode is the index in backingMap which should contain that key. Since several keys may have the same hash, each value in hashCodeMap is actually an array containing all entries whose keys share the same hash.

```

internal class InternalHashMap<K, V>(override val equality: EqualityComparator) : InternalMap<K, V> {
 private var backingMap: dynamic = createJsMap()
 override var size: Int = 0
 private set
 override fun put(key: K, value: V): V? {
 val hashCode = equality.getHashCode(key)
 val chainOrEntry = getChainOrEntryOrNull(hashCode)
 if (chainOrEntry == null) {
 // This is a new chain, put it to the map.
 backingMap[hashCode] = SimpleEntry(key, value)
 } else {
 if (chainOrEntry !is Array<*>) {
 // It is an entry
 val entry: SimpleEntry<K, V> = chainOrEntry
 if (equality.equals(entry.key, key)) {
 return entry.setValue(value)
 } else {
 backingMap[hashCode] = arrayOf(entry, SimpleEntry(key, value))
 size++
 return null
 }
 } else {
 // Chain already exists, perhaps key also exists.
 val chain: Array<MutableEntry<K, V>> = chainOrEntry
 val entry = chain.findEntryInChain(key)
 if (entry != null) {
 return entry.setValue(value)
 }
 chain.asDynamic().push(SimpleEntry(key, value))
 size++
 }
 }
 structureChanged(host)
 return null
 }
 override fun remove(key: K): V? {
 val hashCode = equality.getHashCode(key)
 val chainOrEntry = getChainOrEntryOrNull(hashCode)
 return chainOrEntry?.let {
 if (chainOrEntry !is Array<*>) {
 val entry: MutableEntry<K, V> = chainOrEntry
 if

```

```

(equality.equals(entry.key, key)) {\n jsDeleteProperty(backingMap, hashCode)\n size--\nreturn entry.value\n } else {\n return null\n } } else {\n val chain: Array<MutableEntry<K, V>> =\nchainOrEntry\n for (index in chain.indices) {\n val entry = chain[index]\n if\n(equality.equals(key, entry.key)) {\n if (chain.size == 1) {\n chain.asDynamic().length =\n0\n // remove the whole array\n jsDeleteProperty(backingMap, hashCode)\n} else {\n // splice out the entry we're removing\n chain.asDynamic().splice(index, 1)\n }\n size--\n structureChanged(host)\n return entry.value\n }\n }\n return null\n }\n override fun clear() {\n backingMap = createJsMap()\n size =\n0\n }\n override fun contains(key: K):\nBoolean = getEntry(key) != null\n override fun get(key: K): V? = getEntry(key)?.value\n private fun\ngetEntry(key: K): MutableEntry<K, V>? {\n val chainOrEntry =\ngetChainOrEntryOrNull(equality.getHashCode(key))?: return null\n if (chainOrEntry !is Array<*>) {\nval entry: MutableEntry<K, V> = chainOrEntry\n if (equality.equals(entry.key, key)) {\n return\nentry\n } else {\n return null\n }\n } else {\n val chain: Array<MutableEntry<K,\nV>> = chainOrEntry\n return chain.findEntryInChain(key)\n }\n }\n private fun\nArray<MutableEntry<K, V>>.findEntryInChain(key: K): MutableEntry<K, V>? =\nfirstOrNull { entry ->\nequality.equals(entry.key, key) }\n override fun iterator(): MutableIterator<MutableEntry<K, V>> {\nreturn object : MutableIterator<MutableEntry<K, V>> {\n var state = -1 // -1 not ready, 0 - ready, 1 -\ndone\n\n val keys: Array<String> = js("Object").keys(backingMap)\n var keyIndex = -1\n var\nchainOrEntry: dynamic = null\n var isChain = false\n var itemIndex = -1\n var lastEntry:\nMutableEntry<K, V>? = null\n private fun computeNext(): Int {\n if (chainOrEntry != null &&\nisChain) {\n val chainSize: Int = chainOrEntry.unsafeCast<Array<MutableEntry<K, V>>>().size\n if (++itemIndex < chainSize)\n return 0\n }\n if (++keyIndex < keys.size)\n{\n chainOrEntry = backingMap[keys[keyIndex]]\n isChain = chainOrEntry is Array<*>\n itemIndex = 0\n return 0\n } else {\n chainOrEntry = null\nreturn 1\n }\n }\n override fun hasNext(): Boolean {\n if (state == -1)\n state = computeNext()\n return state == 0\n }\n }\n override fun next(): MutableEntry<K, V> {\n if (!hasNext()) throw NoSuchElementException\nval lastEntry = if (isChain) {\n chainOrEntry.unsafeCast<Array<MutableEntry<K, V>>>()[itemIndex]\n } else {\n chainOrEntry.unsafeCast<MutableEntry<K, V>>()\n }\nthis.lastEntry = lastEntry\n state = -1\n return lastEntry\n }\n override fun\nremove() {\n checkNotNull(lastEntry)\n this@InternalHashCodeMap.remove(lastEntry!!.key)\n lastEntry = null\n // the chain being iterated just got modified by InternalHashCodeMap.remove\nitemIndex--\n }\n private fun getChainOrEntryOrNull(hashCode: Int): dynamic\n{\n val chainOrEntry = backingMap[hashCode]\n return if (chainOrEntry === undefined) null else\nchainOrEntry\n }\n}

/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language\ncontributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the\nlicense/LICENSE.txt file.\n */\npackage kotlin.collections\n\n/**\n * The common interface of\n[InternalStringMap] and [InternalHashCodeMap].\n */\ninternal interface InternalMap<K, V> :
MutableIterable<MutableMap.MutableEntry<K, V>> {\n val equality: EqualityComparator\n val size: Int\n operator fun contains(key: K): Boolean\n operator fun get(key: K): V?\n fun put(key: K, value: V): V?\n fun\nremove(key: K): V?\n fun clear(): Unit\n fun createJsMap(): dynamic {\n val result =\njs("Object.create(null)")\n // force to switch object representation to dictionary mode\n result["foo"] =\n1\n jsDeleteProperty(result,\n\n "foo")\n return result\n }\n}

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```

```

license/LICENSE.txt file.\n */\n*\n * Based on GWT InternalStringMap\n * Copyright 2008 Google Inc.\n
*\npackage kotlin.collections\n\nimport kotlin.collections.MutableMap.MutableEntry\n\n/**\n * A simple wrapper
around JavaScript Map for key type is string.\n *\n * Though this map is instantiated only with K=String, the K type
is not fixed to String statically,\n * because we want to have it erased to Any? in order not to generate type-safe
override bridges for\n * [get], [contains], [remove] etc, if they ever are generated.\n */\ninternal class
InternalStringMap<K, V>(override val equality: EqualityComparator) : InternalMap<K, V> {\n\n private var
backingMap: dynamic = createJsMap()\n override var size: Int = 0\n private set\n\n /**\n\n * A mod count to track 'value' replacements in map to ensure that the 'value' that we have in the\n * iterator
entry is guaranteed to be still correct.\n * This is to optimize for the common scenario where the values are not
modified during\n * iterations where the entries are never stale.\n */\n private var valueMod: Int = 0\n\n override operator fun contains(key: K): Boolean {\n if (key !is String) return false\n return
backingMap[key] !== undefined\n }\n\n override operator fun get(key: K): V? {\n if (key !is String) return
null\n val value = backingMap[key]\n return if (value !== undefined) value.unsafeCast<V>() else null\n }\n\n override fun put(key: K, value: V): V? {\n require(key is String)\n val oldValue =
backingMap[key]\n backingMap[key] = value\n if (oldValue === undefined) {\n size++\n\n structureChanged(host)\n return null\n }\n else {\n valueMod++\n return oldValue.unsafeCast<V>()\n }\n }\n\n override fun
remove(key: K): V? {\n if (key !is String) return null\n val value = backingMap[key]\n if (value !==
undefined) {\n jsDeleteProperty(backingMap, key)\n size--\n\n structureChanged(host)\n return value.unsafeCast<V>()\n }\n else {\n valueMod++\n return null\n }\n }\n\n override fun clear() {\n backingMap = createJsMap()\n size = 0\n }\n\n override fun iterator():
MutableIterator<MutableEntry<K, V>> {\n return object : MutableIterator<MutableEntry<K, V>> {\n\n private val keys: Array<String> = js("Object").keys(backingMap)\n private val iterator = keys.iterator()\n\n private var lastKey: String? = null\n\n override fun hasNext(): Boolean = iterator.hasNext()\n\n override fun next():
MutableEntry<K, V> {\n val key = iterator.next()\n lastKey = key\n\n @Suppress("UNCHECKED_CAST")\n return newMapEntry(key as K)\n }\n\n override
fun remove() {\n @Suppress("UNCHECKED_CAST")\n this@InternalStringMap.remove(checkNotNull(lastKey) as K)\n }\n }\n }\n\n private fun
newMapEntry(key: K): MutableEntry<K, V> = object : MutableEntry<K, V> {\n override val key: K get() =
key\n override val value: V get() = this@InternalStringMap[key].unsafeCast<V>()\n\n override fun
setValue(newValue: V): V = this@InternalStringMap.put(key, newValue).unsafeCast<V>()\n\n override fun
hashCode(): Int = AbstractMap.entryHashCode(this)\n override fun toString(): String =
AbstractMap.entryToString(this)\n override fun equals(other: Any?): Boolean = AbstractMap.entryEquals(this,
other)\n }\n}\n", "*/\n * Copyright 2010-2020

```

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LinkedHashMap\n \* Copyright 2008 Google Inc.\n \*/\npackage kotlin.collections\n\nimport  
kotlin.collections.MutableMap.MutableEntry\n\n/\*\*\n \* Hash table based implementation of the [MutableMap]  
interface, which additionally preserves the insertion order\n \* of entries during the iteration.\n \*\n \* The insertion  
order is preserved by maintaining a doubly-linked list of all of its entries.\n \*/\npublic actual open class  
LinkedHashMap<K, V> : HashMap<K, V>, MutableMap<K, V> {\n\n /\*\*\n \* The entry we use includes  
next/prev pointers for a doubly-linked circular\n \* list with a head node. This reduces the special cases we have to  
deal with\n \* in the list operations.\n \* Note that we duplicate the key from the underlying hash map so we  
can find\n \* the eldest  
entry. The alternative would have been to modify HashMap so more\n \* of the code was directly usable here, but  
this would have added some\n \* overhead to HashMap, or to reimplement most of the HashMap code here with\n \* small modifications. Paying a small storage cost only if you use\n \* LinkedHashMap and minimizing code size



```

seemed like a better tradeoff\n */\n private inner class ChainEntry<K, V>(key: K, value: V) :
AbstractMutableMap.SimpleEntry<K, V>(key, value) {\n internal var next: ChainEntry<K, V>? = null\n
internal var prev: ChainEntry<K, V>? = null\n\n override fun setValue(newValue: V): V {\n
this@LinkedHashMap.checkIsMutable()\n return super.setValue(newValue)\n }\n }\n\n private inner
class EntrySet : AbstractEntrySet<MutableEntry<K, V>, K, V>() {\n\n private inner class EntryIterator :
MutableIterator<MutableEntry<K, V>> {\n // The last entry that was returned from this iterator.\n
 private var last: ChainEntry<K, V>? = null\n // The next entry to return from this iterator.\n
private var next: ChainEntry<K, V>? = null\n\n init {\n next = head\n
recordLastKnownStructure(map, this)\n }\n\n override fun hasNext(): Boolean {\n return
next != null\n }\n\n override fun next(): MutableEntry<K, V> {\n
checkStructuralChange(map, this)\n if (!hasNext()) throw NoSuchElementException()\n val
current = next!!\n last = current\n next = current.next.takeIf { it != head }\n return
current\n }\n\n override fun remove() {\n check(last != null)\n
this@EntrySet.checkIsMutable()\n checkStructuralChange(map, this)\n last!!.remove()\n
map.remove(last!!.key)\n\n recordLastKnownStructure(map, this)\n last = null\n }\n }\n\n override fun
add(element: MutableEntry<K, V>): Boolean = throw UnsupportedOperationException("Add is not supported on
entries")\n override fun clear() {\n this@LinkedHashMap.clear()\n }\n override fun
containsEntry(element: Map.Entry<K, V>): Boolean = this@LinkedHashMap.containsEntry(element)\n override operator fun iterator(): MutableIterator<MutableEntry<K, V>> = EntryIterator()\n override fun
removeEntry(element: Map.Entry<K, V>): Boolean {\n checkIsMutable()\n if (contains(element)) {\n
this@LinkedHashMap.remove(element.key)\n return true\n }\n return false\n }\n\n override val size: Int get() = this@LinkedHashMap.size\n override fun checkIsMutable(): Unit =
this@LinkedHashMap.checkIsMutable()\n }\n\n /*\n * The head of the insert order chain, which is a doubly-linked circular\n * list.\n * The most recently
inserted node is at the end of the chain, ie.\n * chain.prev.\n */\n private var head: ChainEntry<K, V>? =
null\n\n /**\n * Add this node to the end of the chain.\n */\n private fun ChainEntry<K, V>.addToEnd() {\n
// This entry is not in the list.\n check(next == null && prev == null)\n val _head = head\n if
(_head == null) {\n head = this\n next = this\n prev = this\n } else {\n // Chain is
valid.\n val _tail = checkNotNull(_head.prev)\n // Update me.\n prev = _tail\n next =
_head\n // Update my new siblings: current head and old tail\n _head.prev = this\n _tail.next =
this\n }\n }\n\n /**\n * Remove this node from the chain it is a part of.\n */\n private fun
ChainEntry<K,
V>.remove() {\n if (this.next === this) {\n // if this is single element, remove head\n head =
null\n } else {\n if (head === this) {\n // if this is first element, move head to next\n
head = next\n }\n next!!.prev = prev\n prev!!.next = next\n }\n next = null\n prev =
null\n }\n\n /*\n * The hashmap that keeps track of our entries and the chain. Note that we\n * duplicate the
key here to eliminate changes to HashMap and minimize the\n * code here, at the expense of additional space.\n */\n private val map: HashMap<K, ChainEntry<K, V>>\n private var isReadOnly: Boolean = false\n\n /**\n * Constructs an empty [LinkedHashMap] instance.\n */\n actual constructor(): super() {\n map =
HashMap<K, ChainEntry<K, V>>()\n }\n\n internal constructor(backingMap: HashMap<K, Any>): super() {\n
@Suppress("UNCHECKED_CAST")\n // expected to work due to erasure\n map = backingMap as HashMap<K, ChainEntry<K, V>>\n }\n\n /**\n * Constructs an empty [LinkedHashMap] instance.\n * @param initialCapacity the initial capacity
(ignored)\n * @param loadFactor the load factor (ignored)\n * @throws IllegalArgumentException if
the initial capacity or load factor are negative\n */\n actual constructor(initialCapacity: Int, loadFactor: Float) :
super(initialCapacity, loadFactor) {\n map = HashMap<K, ChainEntry<K, V>>()\n }\n\n actual
constructor(initialCapacity: Int) : this(initialCapacity, 0.0f)\n\n /**\n * Constructs an instance of

```



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```
file.\n *\n\npackage kotlin.io\n\ninternal abstract class BaseOutput {\n open fun println() {\n print("\\n")\n }\n\n open fun println(message: Any?) {\n print(message)\n println()\n }\n\n abstract fun print(message: Any?)\n\n open fun flush() {} }\n\n/** JsName used to make the declaration available outside of module to test it */\n\n@JsName("NodeJsOutput")\ninternal class NodeJsOutput(val outputStream: dynamic) : BaseOutput() {\n override fun print(message: Any?) {\n // TODO: Using local variable because of bug in block decomposition lowering in IR backend\n val messageString = String(message)\n outputStream.write(messageString)\n }\n}\n\n/** JsName used to make the declaration available outside of module to test it */\n\n@JsName("OutputToConsoleLog")\ninternal class OutputToConsoleLog : BaseOutput() {\n override fun print(message: Any?) {\n console.log(message)\n }\n\n override fun println(message: Any?) {\n console.log(message)\n }\n\n override fun println() {\n console.log("")\n }\n}\n\n/** JsName used to make the declaration available outside of module to test it and use at try.kotl.in */\n\n@JsName("BufferedOutput")\ninternal open class BufferedOutput : BaseOutput() {\n var buffer = ""\n\n override fun print(message: Any?) {\n buffer += String(message)\n }\n\n override fun flush() {\n buffer = ""\n }\n}\n\n/** JsName used to make the declaration available outside of module to test it */\n\n@JsName("BufferedOutputToConsoleLog")\ninternal class BufferedOutputToConsoleLog : BufferedOutput() {\n override fun print(message: Any?) {\n var s = String(message)\n val i = s.nativeLastIndexOf("\\n", 0)\n if (i >= 0) {\n buffer += s.substring(0, i)\n flush()\n s = s.substring(i + 1)\n }\n buffer += s\n }\n\n override fun flush() {\n console.log(buffer)\n buffer = ""\n }\n}\n\n/** JsName used to make the declaration available outside of module to test it and use at try.kotl.in */\n\n@JsName("output")\ninternal var output = run {\n val isNode: Boolean = js("typeof process !== 'undefined' && process.versions && !process.versions.node")\n if (isNode) NodeJsOutput(js("process.stdout")) else BufferedOutputToConsoleLog()\n}\n\n@kotlin.internal.InlineOnly\nprivate inline fun String(value: Any?): String = js("String")(value)\n\n/** Prints the line separator to the standard output stream. */\n\npublic actual fun println() {\n output.println()\n}\n\n/** Prints the given [message] and the line separator to the standard output stream. */\n\npublic actual fun println(message: Any?) {\n output.println(message)\n}\n\n/** Prints the given [message] to the standard output stream. */\n\npublic actual fun print(message: Any?) {\n output.print(message)\n}\n\n@SinceKotlin("1.6")\npublic actual fun readln(): String = throw UnsupportedOperationException("readln is not supported in Kotlin/JS")\n\n@SinceKotlin("1.6")\npublic actual fun readlnOrNull(): String? = throw UnsupportedOperationException("readlnOrNull is not supported in Kotlin/JS")\n\n/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\n\npackage kotlin.coroutines\n\nimport kotlin.coroutines.intrinsics.CoroutineSingletons\n\nimport kotlin.coroutines.intrinsics.COROUTINE_SUSPENDED\n\n@PublishedApi\n@SinceKotlin("1.3")\ninternal actual class SafeContinuation<in T>\ninternal actual constructor(\n private val delegate: Continuation<T>,\n initialResult: Any?) : Continuation<T> {\n @PublishedApi\n internal actual constructor(delegate: Continuation<T>) : this(delegate, UNDECIDED)\n\n public actual override val context: CoroutineContext\n get() = delegate.context\n\n private var result: Any? = initialResult\n\n public actual override fun resumeWith(result: Result<T>) {\n val cur = this.result\n when {\n cur === UNDECIDED -> {\n this.result = result.value\n }\n cur === COROUTINE_SUSPENDED -> {\n this.result = RESUMED\n }\n else -> throw IllegalStateException("Already resumed")\n }\n delegate.resumeWith(result)\n }\n\n @PublishedApi\n internal actual fun getOrThrow(): Any? {\n if (result === UNDECIDED) {\n result = COROUTINE_SUSPENDED\n return COROUTINE_SUSPENDED\n }\n val result = this.result\n return when {\n result === RESUMED -> COROUTINE_SUSPENDED // already called
```

```

continuation, indicate COROUTINE_SUSPENDED upstream\n result is Result.Failure -> throw
result.exception\n else -> result // either COROUTINE_SUSPENDED
or data\n }\n }\n }"/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.coroutines.cancellation\n\n@SinceKotlin("1.4")\npublic actual
open class CancellationException : IllegalStateException {\n actual constructor() : super()\n actual
constructor(message: String?) : super(message)\n constructor(message: String?, cause: Throwable?) :
super(message, cause)\n constructor(cause: Throwable?) : super(cause)\n}"/*\n * Copyright 2010-2018 JetBrains
s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.coroutines.js.internal\n\nimport
kotlin.coroutines.Continuation\nimport
kotlin.coroutines.EmptyCoroutineContext\n\n@PublishedApi\n@SinceKotlin("1.3")\ninternal
val EmptyContinuation = Continuation<Any?>(EmptyCoroutineContext) { result ->\n
result.getOrThrow()\n}"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.js\n\n/**\n * Exposes the [Date
API](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Date) to Kotlin.\n
*/\n\n@Suppress("NOT_DOCUMENTED")\npublic external class Date() {\n public constructor(milliseconds:
Number)\n\n public constructor(dateString: String)\n\n public constructor(year: Int, month: Int)\n\n public
constructor(year: Int, month: Int, day: Int)\n\n public constructor(year: Int, month: Int, day: Int, hour: Int)\n\n
public constructor(year: Int, month: Int, day: Int, hour: Int, minute: Int)\n\n public constructor(year: Int, month:
Int, day: Int, hour: Int, minute: Int, second: Int)\n\n
 public constructor(year: Int, month: Int, day: Int, hour: Int, minute: Int, second: Int, millisecond: Number)\n\n
 public fun getDate(): Int\n\n public fun getDay(): Int\n\n public fun getFullYear(): Int\n\n public fun
getHours(): Int\n\n public fun getMilliseconds(): Int\n\n public fun getMinutes(): Int\n\n public fun
getMonth(): Int\n\n public fun getSeconds(): Int\n\n public fun getTime(): Double\n\n public fun
getTimezoneOffset(): Int\n\n public fun getUTCDate(): Int\n\n public fun getUTCDay(): Int\n\n public fun
getUTCFullYear(): Int\n\n public fun getUTCHours(): Int\n\n public fun getUTCMilliseconds(): Int\n\n public
fun getUTCMinutes(): Int\n\n public fun getUTCMonth(): Int\n\n public fun getUTCSeconds(): Int\n\n public
fun toDateString(): String\n\n public fun toISOString(): String\n\n public fun toJSON(): Json\n\n public fun
toLocaleDateString(locales: Array<String> = definedExternally, options: LocaleOptions
= definedExternally): String\n\n public fun toLocaleDateString(locales: String, options: LocaleOptions =
definedExternally): String\n\n public fun toLocaleString(locales: Array<String> = definedExternally, options:
LocaleOptions = definedExternally): String\n\n public fun toLocaleString(locales: String, options: LocaleOptions
= definedExternally): String\n\n public fun toLocaleTimeString(locales: Array<String> = definedExternally,
options: LocaleOptions = definedExternally): String\n\n public fun toLocaleTimeString(locales: String, options:
LocaleOptions = definedExternally): String\n\n public fun toTimeString(): String\n\n public fun toUTCString():
String\n\n public companion object {\n public fun now(): Double\n\n public fun parse(dateString: String):
Double\n\n public fun UTC(year: Int, month: Int): Double\n\n public fun UTC(year: Int, month: Int, day:
Int): Double\n\n public fun UTC(year: Int, month: Int, day: Int, hour:
Int): Double\n\n public fun UTC(year: Int, month: Int, day: Int, hour: Int, minute: Int): Double\n\n public
fun UTC(year: Int, month: Int, day: Int, hour: Int, minute: Int, second: Int): Double\n\n public fun UTC(year:
Int, month: Int, day: Int, hour: Int, minute: Int, second: Int, millisecond: Number): Double\n }\n\n public
interface LocaleOptions {\n public var localeMatcher: String?\n\n public var timeZone: String?\n\n
 public var hour12: Boolean?\n\n public var formatMatcher: String?\n\n public var weekday: String?\n\n
 public var era: String?\n\n public var year: String?\n\n public var month: String?\n\n public
var day: String?\n\n public var hour: String?\n\n public var minute: String?\n\n public var second:
String?\n\n public var timeZoneName: String?\n }\n\n public inline fun dateLocaleOptions(init: Date.LocaleOptions.() ->

```

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Unit): Date.LocaleOptions {\n
 val result = js("new Object()").unsafeCast<Date.LocaleOptions>()\n init(result)\n return result\n}"/*\n *
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governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage
kotlin.dom\n\nimport org.w3c.dom.Document\n\nimport org.w3c.dom.Element\n\nimport
kotlin.internal.LowPriorityInOverloadResolution\n\nimport kotlinx.dom.appendElement as
newAppendElement\n\nimport kotlinx.dom.createElement as newCreateElement\n\n/**\n * Creates a new element
with the specified [name].\n *\n * The element is initialized with the specified [init] function.\n
*/\n\n@LowPriorityInOverloadResolution\n@Deprecated(\n message = "This API is moved to another package,
use 'kotlinx.dom.createElement' instead.",\n replaceWith = ReplaceWith("this.createElement(name, init)"),
 "kotlinx.dom.createElement")\n\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.6")\n\npublic inline fun Document.createElement(name: String, noinline init: Element.() -> Unit): Element =
this.newCreateElement(name, init)\n\n/**\n * Appends a newly created element with the specified [name] to this
element.\n *\n * The element is initialized with the specified [init] function.\n
*/\n\n@LowPriorityInOverloadResolution\n@Deprecated(\n message = "This API is moved to another package,
use 'kotlinx.dom.appendElement' instead.",\n replaceWith = ReplaceWith("this.appendElement(name, init)"),
 "kotlinx.dom.appendElement")\n\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.6")\n\npublic
inline fun Element.appendElement(name: String, noinline init: Element.() -> Unit): Element =
this.newAppendElement(name, init)\n\n"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage
kotlin.dom\n\nimport org.w3c.dom.Element\n\nimport kotlinx.internal.LowPriorityInOverloadResolution\n\nimport
kotlinx.dom.addClass as newAddClass\n\nimport kotlinx.dom.hasClass as newHasClass\n\nimport
kotlinx.dom.removeClass as newRemoveClass\n\n/**\n * Returns true if the element has the given CSS class style in its
'class' attribute\n */\n\n@LowPriorityInOverloadResolution\n@Deprecated(\n message = "This API is moved to
another package, use 'kotlinx.dom.hasClass' instead.",\n replaceWith = ReplaceWith("this.hasClass(cssClass)"),
 "kotlinx.dom.hasClass")\n\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.6")\n\ninline fun
Element.hasClass(cssClass: String): Boolean = this.newHasClass(cssClass)\n\n/**\n * Adds CSS class to element.
Has no effect if all specified classes are already in class attribute of the element\n *\n * @return true if at least one
class has been added\n */\n\n@LowPriorityInOverloadResolution\n@Deprecated(\n message = "This API is moved
to another package,
use 'kotlinx.dom.addClass' instead.",\n replaceWith = ReplaceWith("this.addClass(cssClasses)"),
 "kotlinx.dom.addClass")\n\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.6")\n\ninline fun
Element.addClass(vararg cssClasses: String): Boolean = this.newAddClass(*cssClasses)\n\n/**\n * Removes all
[cssClasses] from element. Has no effect if all specified classes are missing in class attribute of the element\n *\n *
@return true if at least one class has been removed\n */\n\n@LowPriorityInOverloadResolution\n@Deprecated(\n message = "This API is moved to another package,
use 'kotlinx.dom.removeClass' instead.",\n replaceWith =
ReplaceWith("this.removeClass(cssClasses)"),
 "kotlinx.dom.removeClass")\n\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.6")\n\ninline
fun Element.removeClass(vararg cssClasses: String): Boolean = this.newRemoveClass(*cssClasses)"/*\n *
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* Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\npackage
kotlin.dom\n\nimport org.w3c.dom.Element\n\nimport org.w3c.dom.Node\n\nimport
kotlin.internal.LowPriorityInOverloadResolution\n\nimport kotlinx.dom.isElement as newIsElement\n\nimport
kotlinx.dom.isText as newIsText\n\n/**\n * Gets a value indicating whether this node is a TEXT_NODE or a
CDATA_SECTION_NODE.\n */\n\n@LowPriorityInOverloadResolution\n@Deprecated(\n message = "This API
is moved to another package, use 'kotlinx.dom.isText' instead.",\n replaceWith = ReplaceWith("this.isText"),
 "kotlinx.dom.isText")\n\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.6")\n\npublic val

```

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Node.isText: Boolean\n inline get() = this.newIsText\n\n/**\n * Gets a value indicating whether this node is an
[Element].\n *\n@LowPriorityInOverloadResolution\n@Deprecated(\n message = \"This API is moved to
another package, use 'kotlinx.dom.isElement'
instead.\",\n replaceWith = ReplaceWith(\"this.isElement\",
\"kotlinx.dom.isElement\")\n)\n@DeprecatedSinceKotlin(warningSince = \"1.4\", errorSince = \"1.6\")\npublic val
Node.isElement: Boolean\n inline get() = this.newIsElement\n\n\",/>\n * Copyright 2010-2018 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n *\npackage org.w3c.dom.events\n\npublic fun
EventListener(handler: (Event) -> Unit): EventListener = EventListenerHandler(handler)\n\nprivate class
EventListenerHandler(private val handler: (Event) -> Unit) : EventListener {\n public override fun
handleEvent(event: Event) {\n handler(event)\n }\n\n public override fun toString(): String =
\"EventListenerHandler($handler)\"\n\n}\n\n\",/>\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache
2.0 license that can be found in the license/LICENSE.txt file.\n *\npackage org.w3c.dom\n\npublic external
interface ItemArrayLike<out T> {\n val length: Int\n fun item(index: Int): T?\n}\n\n/**\n * Returns the view of
this `ItemArrayLike<T>` collection as `List<T>`\n *\npackage org.w3c.dom\n\npublic fun <T> ItemArrayLike<T>.asList(): List<T> =
object : AbstractList<T>() {\n override val size: Int get() = this@asList.length\n override fun get(index: Int): T
= when (index) {\n in 0..lastIndex -> this@asList.item(index).unsafeCast<T>()\n else -> throw
IndexOutOfBoundsException(\"index $index is not in range [0..$lastIndex]\"\n)\n }\n\n}\n\n\",/>\n * Copyright 2010-
2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\npackage kotlin.dom\n\nimport
org.w3c.dom.Element\nimport org.w3c.dom.Node\nimport
kotlin.internal.LowPriorityInOverloadResolution\nimport
kotlinx.dom.appendText as newAppendText\nimport kotlinx.dom.clear as newClear\n\n/** Removes all the
children from this node. *\n@LowPriorityInOverloadResolution\n@Deprecated(\n message = \"This API is
moved to another package, use 'kotlinx.dom.clear' instead.\",\n replaceWith = ReplaceWith(\"this.clear()\",
\"kotlinx.dom.clear\")\n)\n@DeprecatedSinceKotlin(warningSince = \"1.4\", errorSince = \"1.6\")\npublic inline fun
Node.clear() = this.newClear()\n\n/**\n * Creates text node and append it to the element.\n *\n@return this
element\n *\n@LowPriorityInOverloadResolution\n@Deprecated(\n message = \"This API is moved to another
package, use 'kotlinx.dom.appendText' instead.\",\n replaceWith = ReplaceWith(\"this.appendText(text)\",
\"kotlinx.dom.appendText\")\n)\n@DeprecatedSinceKotlin(warningSince = \"1.4\", errorSince = \"1.6\")\ninline fun
Element.appendText(text: String): Element = this.newAppendText(text)\n\n\",/>\n * Copyright 2010-2018 JetBrains
s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n *\npackage kotlin.js\n\n/**\n * Reinterprets this value as a value
of the [dynamic type](/docs/reference/dynamic-type.html).\n *\n@kotlin.internal.InlineOnly\npublic inline fun
Any?.asDynamic(): dynamic = this\n\n/**\n * Reinterprets this value as a value of the specified type [T] without any
actual type checking.\n *\n@kotlin.internal.InlineOnly\npublic inline fun <T> Any?.unsafeCast():
@kotlin.internal.NoInfer T = this.asDynamic()\n\n/**\n * Reinterprets this `dynamic` value as a value of the
specified type [T] without any actual type checking.\n *\n@kotlin.internal.DynamicExtension\n@JsName(\"unsafeCastDynamic\")\n@kotlin.internal.InlineOnly\npublic
inline fun <T> dynamic.unsafeCast(): @kotlin.internal.NoInfer T = this\n\n/**\n * Allows to iterate this `dynamic`
object in the following cases:\n * - when it has an `iterator`
function,\n * - when it is an array\n * - when it is an instance of [kotlin.collections.Iterable]\n *\n@kotlin.internal.DynamicExtension\npublic operator fun dynamic.iterator(): Iterator<dynamic> {\n val r:
Any? = this\n\n return when {\n this[\"iterator\"] != null ->\n this[\"iterator\"]()\n isArrayish(r) ->\n r.unsafeCast<Array<*>>().iterator()\n else ->\n (r as Iterable<*>).iterator()\n }\n}\n\n\",/>\n *
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```

package is
omitted to get declarations directly under the module
throwNPE(message: String) {
 throw NullPointerException(message)
}
@JsName("throwCCE")
internal fun throwCCE() {
 throw ClassCastException("Illegal cast")
}
@JsName("throwISE")
internal fun throwISE(message: String) {
 throw
IllegalStateException(message)
}
@JsName("throwUPAE")
internal fun throwUPAE(propertyName: String) {
 throw UninitializedPropertyAccessException("lateinit property ${propertyName} has not been
initialized")
}
"/
* Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.
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*/
package kotlin.collections
/**
 * Groups elements from the [Grouping] source by key and counts elements
in each group.
 * @return a [Map] associating the key of each group with the count of elements in the group.
 */
 * @sample samples.collections.Grouping.groupingByEachCount
 */
@SinceKotlin("1.1")
public actual fun
<T, K> Grouping<T, K>.eachCount(): Map<K, Int> =
 fold(0) { acc, _ -> acc + 1 }
}
"/
/**
 * Groups
elements from the [Grouping] source by key and sums values provided by
the [valueSelector] function for elements in each group.
 * @return a [Map] associating the key of each group
with the count of element in the group.
 */
@SinceKotlin("1.1")
public inline fun <T, K> Grouping<T,
K>.eachSumOf(valueSelector: (T) -> Int): Map<K, Int> =
 fold(0) { acc, e -> acc + valueSelector(e)
}
"/
"/
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*/
@file:kotlin.jvm.JvmName("GroupingKt")
@file:kotlin.jvm.JvmMultifileClass
package
kotlin.collections
/**
 * Represents a source of elements with a [keyOf] function, which can be applied to each
element to get its key.
 * A [Grouping] structure serves as an intermediate step in group-and-fold operations:
 * they group elements by their keys and then fold each group with some aggregating operation.
 * It is created
by attaching
`keySelector: (T) -> K` function to a source of elements.
 * To get an instance of [Grouping] use one of
`groupingBy` extension functions:
 * - [Iterable.groupingBy]
 * - [Sequence.groupingBy]
 * -
[Array.groupingBy]
 * - [CharSequence.groupingBy]
 */
 * For the list of group-and-fold operations available,
see the [extension functions](#extension-functions) for `Grouping`.
 */
@SinceKotlin("1.1")
public interface
Grouping<T, out K> {
 /** Returns an [Iterator] over the elements of the source of this grouping. */
 fun
sourceIterator(): Iterator<T>
 /** Extracts the key of an [element]. */
 fun keyOf(element: T): K
}
"/
/**
 * Groups elements from the [Grouping] source by key and applies [operation] to the elements of each group
sequentially,
 * passing the previously accumulated value, and the current element as arguments, and stores the
results in a new map.
 * The key for each element is provided by the [Grouping.keyOf] function.
 */
 * @param operation
function is invoked on each element with the following parameters:
 * - `key`: the key of the group this element
belongs to;
 * - `accumulator`: the current value of the accumulator of the group, can be `null` if it's the first
`element`
encountered in the group;
 * - `element`: the element from the source being aggregated;
 * - `first`:
indicates whether it's the first `element` encountered in the group.
 * @return a [Map] associating the key of
each group with the result of aggregation of the group elements.
 * @sample
samples.collections.Grouping.aggregateByRadix
 */
@SinceKotlin("1.1")
public inline fun <T, K, R>
Grouping<T, K>.aggregate(
 operation: (key: K, accumulator: R?, element: T, first: Boolean) -> R
): Map<K,
R> {
 return aggregateTo(mutableMapOf<K, R>(), operation)
}
"/
/**
 * Groups elements from the
[Grouping] source by key and applies [operation] to the elements of each group sequentially,
 * passing the
previously accumulated value
and the current element as arguments,
 * and stores the results in the given [destination] map.
 * The key for
each element is provided by the [Grouping.keyOf] function.
 * @param operation a function that is invoked on
each element with the following parameters:
 * - `key`: the key of the group this element belongs to;
 * -
`accumulator`: the current value of the accumulator of the group, can be `null` if it's the first `element`
encountered

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in the group;\n \* - `element`: the element from the source being aggregated;\n \* - `first`: indicates whether it's the first `element` encountered in the group.\n \* \n \* If the [destination] map already has a value corresponding to some key,\n \* then the elements being aggregated for that key are never considered as `first`.\n \* \n \* @return the [destination] map associating the key of each group with the result of aggregation of the group elements.\n \* \n \* @sample samples.collections.Grouping.aggregateByRadixTo\n \* \n \* @SinceKotlin("1.1")\n \* \n \* public inline fun <T, K, R, M : MutableMap<in K, R>> Grouping<T, K>.aggregateTo(\n destination: M,\n operation: (key: K, accumulator: R?, element: T, first: Boolean) -> R)\n : M {\n for (e in this.sourceIterator()) {\n val key = keyOf(e)\n val accumulator = destination[key]\n destination[key] = operation(key, accumulator, e, accumulator == null && !destination.containsKey(key))\n }\n return destination}\n \* \n \* Groups elements from the [Grouping] source by key and applies [operation] to the elements of each group sequentially,\n \* passing the previously accumulated value and the current element as arguments, and stores the results in a new map.\n \* An initial value of accumulator is provided by [initialValueSelector] function.\n \* \n \* @param initialValueSelector a function that provides an initial value of accumulator for each group.\n \* It's invoked with parameters:\n \* - `key`: the key of the group;\n \* - `element`: the first element being encountered in that group.\n \* \n \* @param operation a function that is invoked on each element with the following parameters:\n \* - `key`: the key of the group this element belongs to;\n \* - `accumulator`: the current value of the accumulator of the group;\n \* - `element`: the element from the source being accumulated.\n \* \n \* @return a [Map] associating the key of each group with the result of accumulating the group elements.\n \* \n \* @sample samples.collections.Grouping.foldByEvenLengthWithComputedInitialValue\n \* \n \* @SinceKotlin("1.1")\n \* \n \* public inline fun <T, K, R> Grouping<T, K>.fold(\n initialValueSelector: (key: K, element: T) -> R,\n operation: (key: K, accumulator: R, element: T) -> R)\n : Map<K, R> =\n @Suppress("UNCHECKED\_CAST")\n aggregate { key, acc, e, first -> operation(key, if (first) initialValueSelector(key, e) else acc as R, e) }\n \* \n \* Groups elements from the [Grouping] source by key and applies [operation] to the elements of each group sequentially,\n \* passing the previously accumulated value and the current element as arguments,\n \* and stores the results in the given [destination] map.\n \* An initial value of accumulator is provided by [initialValueSelector] function.\n \* \n \* @param initialValueSelector a function that provides an initial value of accumulator for each group.\n \* It's invoked with parameters:\n \* - `key`: the key of the group;\n \* - `element`: the first element being encountered in that group.\n \* \n \* If the [destination] map already has a value corresponding to some key, that value is used as an initial value of\n \* the accumulator for that group and the [initialValueSelector] function is not called for that group.\n \* \n \* @param operation a function that is invoked on each element with the following parameters:\n \* - `key`: the key of the group this element belongs to;\n \* - `accumulator`: the current value of the accumulator of the group;\n \* - `element`: the element from the source being accumulated.\n \* \n \* @return the [destination] map associating the key of each group with the result of accumulating the group elements.\n \* \n \* @sample samples.collections.Grouping.foldByEvenLengthWithComputedInitialValueTo\n \* \n \* @SinceKotlin("1.1")\n \* \n \* public inline fun <T, K, R, M : MutableMap<in K, R>> Grouping<T, K>.foldTo(\n destination: M,\n initialValueSelector: (key: K, element: T) -> R,\n operation: (key: K, accumulator: R, element: T) -> R)\n : M =\n @Suppress("UNCHECKED\_CAST")\n aggregateTo(destination) { key, acc, e, first -> operation(key, if (first) initialValueSelector(key, e) else acc as R, e) }\n \* \n \* Groups elements from the [Grouping] source by key and applies [operation] to the elements of each group sequentially,\n \* passing the previously accumulated value and the current element as arguments, and stores the results in a new map.\n \* An initial value of accumulator is the same [initialValue] for each group.\n \* \n \* @param operation a function that is invoked on each element with the following parameters:\n \* - `accumulator`: the current value of the accumulator of the group;\n \* - `element`: the element from the source being accumulated.\n \* \n \* @return a [Map] associating the key of each group with the result of accumulating the group elements.\n \* \n \* @sample samples.collections.Grouping.foldByEvenLengthWithConstantInitialValue\n \* \n \* @SinceKotlin("1.1")\n \* \n \* public inline fun <T, K, R> Grouping<T, K>.fold(\n initialValue: R,\n operation: (accumulator: R, element: T) -> R)\n : Map<K, R> =\n @Suppress("UNCHECKED\_CAST")\n aggregate { \_, acc, e, first -> operation(if (first)



initialValue else acc as R, e) } \n\n/\*\* \n \* Groups elements from the [Grouping] source by key and applies [operation] to the elements of each group sequentially, \n \* passing the previously accumulated value and the current element as arguments, \n \* and stores the results in the given [destination] map. \n \* An initial value of accumulator is the same [initialValue]

for each group. \n \* \n \* If the [destination] map already has a value corresponding to the key of some group, \n \* that value is used as an initial value of the accumulator for that group. \n \* \n \* @param operation a function that is invoked on each element with the following parameters: \n \* - `accumulator`: the current value of the accumulator of the group; \n \* - `element`: the element from the source being accumulated. \n \* \n \* @return the [destination] map associating the key of each group with the result of accumulating the group elements. \n \* @sample

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samples.collections.Grouping.foldByEvenLengthWithConstantInitialValueTo \n * \n * \n * @SinceKotlin("1.1") \n * \n * public inline fun <T, K, R, M : MutableMap<in K, R>> Grouping<T, K>.foldTo(\n destination: M, \n initialValue: R, \n operation: (accumulator: R, element: T) -> R): M = \n @Suppress("UNCHECKED_CAST") \n aggregateTo(destination) { _, acc, e, first -> operation(if (first) initialValue else acc as R, e) } \n\n\n/** \n *
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Groups elements from the [Grouping] source by key and applies the reducing [operation] to the elements of each group \n \* sequentially starting from the second element of the group, \n \* passing the previously accumulated value and the current element as arguments, \n \* and stores the results in a new map. \n \* An initial value of accumulator is the first element of the group. \n \* \n \* @param operation a function that is invoked on each subsequent element of the group with the following parameters: \n \* - `key`: the key of the group this element belongs to; \n \* -

`accumulator`: the current value of the accumulator of the group; \n \* - `element`: the element from the source being accumulated. \n \* \n \* @return a [Map] associating the key of each group with the result of accumulating the group elements. \n \* @sample samples.collections.Grouping.reduceByMaxVowels \n \* \n \* \n \* @SinceKotlin("1.1") \n \* \n \* public inline fun <S, T : S, K> Grouping<T, K>.reduce(\n operation: (key: K, accumulator: S, element:

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T) -> S): Map<K, S> = \n aggregate { key, acc, e, first -> \n @Suppress("UNCHECKED_CAST") \n if (first) e else operation(key, acc as S, e) \n } \n\n\n/** \n *
```

Groups elements from the [Grouping] source by key and applies the reducing [operation] to the elements of each group \n \* sequentially starting from the second element of the group, \n \* passing the previously accumulated value and the current element as arguments, \n \* and stores the results in the given [destination] map. \n \* An initial value of accumulator is the first element of the group. \n \* \n \* If the [destination] map already has a value corresponding to the key of some group, \n \* that value is used as an initial value of the accumulator for that group and the first element of that group is also \n \* subjected to the [operation]. \n \* \n \* @param operation a function that is invoked on each subsequent element of the group with the following parameters: \n \* - `accumulator`: the current value of the accumulator of

the group; \n \* - `element`: the element from the source being folded; \n \* \n \* @return the [destination] map associating the key of each group with the result of accumulating the group elements. \n \* @sample samples.collections.Grouping.reduceByMaxVowelsTo \n \* \n \* \n \* @SinceKotlin("1.1") \n \* \n \* public inline fun <S, T : S, K, M : MutableMap<in K, S>> Grouping<T, K>.reduceTo(\n destination: M, \n operation: (key: K, accumulator: S, element: T) -> S): M = \n aggregateTo(destination) { key, acc, e, first -> \n

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@Suppress("UNCHECKED_CAST") \n if (first) e else operation(key, acc as S, e) \n } \n\n\n/** \n *
```

Groups elements from the [Grouping] source by key and counts elements in each group to the given [destination] map. \n \* \n \* If the [destination] map already has a value corresponding to the key of some group, \n \* that value is used as an initial value of the counter for that group. \n \* \n \* @return the [destination] map associating the key of each group with the count of elements in the group. \n \* \n \* @sample samples.collections.Grouping.groupingByEachCount \n \* \n \* \n \* @SinceKotlin("1.1") \n \* \n \* public fun <T, K, M : MutableMap<in K, Int>> Grouping<T,

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K>.eachCountTo(destination: M): M = \n foldTo(destination, 0) { acc, _ -> acc + 1 } \n\n\n/** \n *
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Groups elements from the [Grouping] source by key and sums values provided by the [valueSelector] function for elements in each group \n \* to the given [destination] map. \n \* \n \* If the [destination] map already has a value corresponding to the key of some group, \n \* that value is used as an initial value of the sum for that group. \n \* \n \* @return the [destination] map associating the key of each group with the sum of elements in the group. \n



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*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun sin(x: Double): Double =
nativeMath.sin(x)\n\n** Computes the cosine of the angle [x] given in radians.\n
*\n * Special cases:\n * - `cos(NaN|+Inf|-Inf)` is `NaN`\n *\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual
inline fun cos(x: Double): Double = nativeMath.cos(x)\n\n** Computes the tangent of the angle [x] given in
radians.\n *\n * Special cases:\n * - `tan(NaN|+Inf|-Inf)` is `NaN`\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun tan(x: Double): Double =
nativeMath.tan(x)\n\n**\n * Computes the arc sine of the value [x];\n * the returned value is an angle in the range
from `-PI/2` to `PI/2` radians.\n *\n * Special cases:\n * - `asin(x)` is `NaN`, when `abs(x) > 1` or x is `NaN`\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun asin(x: Double): Double =
nativeMath.asin(x)\n\n**\n * Computes the arc cosine of the value [x];\n * the returned value is an angle in the
range from `0.0` to `PI` radians.\n *\n * Special cases:\n * - `acos(x)` is `NaN`, when `abs(x) > 1` or x is `NaN`\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual
inline fun acos(x: Double): Double = nativeMath.acos(x)\n\n**\n * Computes the arc tangent of the value [x];\n *
the returned value is an angle in the range from `-PI/2` to `PI/2` radians.\n *\n * Special cases:\n * - `atan(NaN)` is
`NaN`\n *\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun atan(x: Double): Double =
nativeMath.atan(x)\n\n**\n * Returns the angle `theta` of the polar coordinates `(r, theta)` that correspond\n * to the
rectangular coordinates `(x, y)` by computing the arc tangent of the value [y] / [x];\n * the returned value is an angle
in the range from `-PI` to `PI` radians.\n *\n * Special cases:\n * - `atan2(0.0, 0.0)` is `0.0`\n * - `atan2(0.0, x)` is
`0.0` for `x > 0` and `PI` for `x < 0`\n * - `atan2(-0.0, x)` is `-0.0` for `x > 0` and `-PI` for `x < 0`\n * - `atan2(y,
+Inf)` is `0.0` for `0 < y < +Inf` and `-0.0` for `-Inf < y < 0`\n * - `atan2(y, -Inf)` is `PI` for `0 < y < +Inf` and
`-PI` for `-Inf < y < 0`\n * - `atan2(y, 0.0)`
is `PI/2` for `y > 0` and `-PI/2` for `y < 0`\n * - `atan2(+Inf, x)` is `PI/2` for finite `x`\n * - `atan2(-Inf, x)` is
`-PI/2` for finite `x`\n * - `atan2(NaN, x)` and `atan2(y, NaN)` is `NaN`\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun atan2(y: Double, x: Double): Double =
nativeMath.atan2(y, x)\n\n**\n * Computes the hyperbolic sine of the value [x].\n *\n * Special cases:\n * -
`sinh(NaN)` is `NaN`\n * - `sinh(+Inf)` is `+Inf`\n * - `sinh(-Inf)` is `-Inf`\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun sinh(x: Double): Double = nativeSinh(x)\n\n**\n
* Computes the hyperbolic cosine of the value [x].\n *\n * Special cases:\n * - `cosh(NaN)` is `NaN`\n * -
`cosh(+Inf|-Inf)` is `+Inf`\n *\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun cosh(x: Double):
Double = nativeCosh(x)\n\n**\n * Computes the hyperbolic tangent of the value [x].\n *\n * Special cases:\n * -
`tanh(NaN)` is `NaN`\n * - `tanh(+Inf)` is
`1.0`\n * - `tanh(-Inf)` is `-1.0`\n *\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun tanh(x:
Double): Double = nativeTanh(x)\n\n**\n * Computes the inverse hyperbolic sine of the value [x].\n *\n * The
returned value is `y` such that `sinh(y) == x`.\n *\n * Special cases:\n * - `asinh(NaN)` is `NaN`\n * -
`asinh(+Inf)` is `+Inf`\n * - `asinh(-Inf)` is `-Inf`\n *\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline
fun asinh(x: Double): Double = nativeAsinh(x)\n\n**\n * Computes the inverse hyperbolic cosine of the value
[x].\n *\n * The returned value is positive `y` such that `cosh(y) == x`.\n *\n * Special cases:\n * - `acosh(NaN)` is
`NaN`\n * - `acosh(x)` is `NaN` when `x < 1`\n * - `acosh(+Inf)` is `+Inf`\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun acosh(x: Double): Double =
nativeAcosh(x)\n\n**\n * Computes the inverse hyperbolic tangent of the value [x].\n *\n * The returned value is
`y` such that `tanh(y) == x`.\n
*\n * Special cases:\n * - `tanh(NaN)` is `NaN`\n * - `tanh(x)` is `NaN` when `x > 1` or `x < -1`\n * - `tanh(1.0)`
is `+Inf`\n * - `tanh(-1.0)` is `-Inf`\n *\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun atanh(x:
Double): Double = nativeAtanh(x)\n\n**\n * Computes `sqrt(x^2 + y^2)` without intermediate overflow or
underflow.\n *\n * Special cases:\n * - returns `+Inf` if any of arguments is infinite\n * - returns `NaN` if any of
arguments is `NaN` and the other is not infinite\n *\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun
hypot(x: Double, y: Double): Double = nativeHypot(x, y)\n\n**\n * Computes the positive square root of the value
[x].\n *\n * Special cases:\n * - `sqrt(x)` is `NaN` when `x < 0` or `x` is `NaN`\n

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*@SinceKotlin("1.2")@InlineOnlypublic actual inline fun sqrt(x: Double): Double =
nativeMath.sqrt(x)n/n/**n * Computes Euler's number `e` raised to the power of the value [x].n * Special
cases:n * - `exp(NaN)`
is `NaN`n * - `exp(+Inf)` is `+Inf`n * - `exp(-Inf)` is `0.0`n *@SinceKotlin("1.2")@InlineOnlypublic
actual inline fun exp(x: Double): Double = nativeMath.exp(x)n/n/**n * Computes `exp(x) - 1`.n * This
function can be implemented to produce more precise result for [x] near zero.n * Special cases:n * -
`expm1(NaN)` is `NaN`n * - `expm1(+Inf)` is `+Inf`n * - `expm1(-Inf)` is `-1.0`n * @see [exp] function.n
*@SinceKotlin("1.2")@InlineOnlypublic actual inline fun expm1(x: Double): Double =
nativeExpM1(x)n/n/**n * Computes the logarithm of the value [x] to the given [base].n * Special cases:n * -
`log(x, b)` is `NaN` if either `x` or `b` are `NaN`n * - `log(x, b)` is `NaN` when `x < 0` or `b <= 0` or `b == 1.0`n
* - `log(+Inf, +Inf)` is `NaN`n * - `log(+Inf, b)` is `+Inf` for `b > 1` and `-Inf` for `b < 1`n * - `log(0.0, b)` is `-
Inf` for `b > 1` and `+Inf` for `b > 1`n * See also logarithm functions for
common fixed bases: [ln], [log10] and [log2].n *@SinceKotlin("1.2")public actual fun log(x: Double, base:
Double): Double {n if (base <= 0.0 || base == 1.0) return Double.NaNn return nativeMath.log(x) /
nativeMath.log(base)}n/n/**n * Computes the natural logarithm (base `E`) of the value [x].n * Special
cases:n * - `ln(NaN)` is `NaN`n * - `ln(x)` is `NaN` when `x < 0.0`n * - `ln(+Inf)` is `+Inf`n * - `ln(0.0)` is `-
Inf`n *@SinceKotlin("1.2")@InlineOnlypublic actual inline fun ln(x: Double): Double =
nativeMath.log(x)n/n/**n * Computes the common logarithm (base 10) of the value [x].n * @see [ln] function
for special cases.n *@SinceKotlin("1.2")@InlineOnlypublic actual inline fun log10(x: Double): Double =
nativeLog10(x)n/n/**n * Computes the binary logarithm (base 2) of the value [x].n * @see [ln] function for
special cases.n *@SinceKotlin("1.2")@InlineOnlypublic actual inline fun log2(x: Double): Double
= nativeLog2(x)n/n/**n * Computes `ln(x + 1)`.n * This function can be implemented to produce more
precise result for [x] near zero.n * Special cases:n * - `ln1p(NaN)` is `NaN`n * - `ln1p(x)` is `NaN` where `x
< -1.0`n * - `ln1p(-1.0)` is `-Inf`n * - `ln1p(+Inf)` is `+Inf`n * @see [ln] functionn * @see [expm1]
functionn *@SinceKotlin("1.2")@InlineOnlypublic actual inline fun ln1p(x: Double): Double =
nativeLog1p(x)n/n/**n * Rounds the given value [x] to an integer towards positive infinity.n * @return the
smallest double value that is greater than or equal to the given value [x] and is a mathematical integer.n * n * Special cases:n * - `ceil(x)` is `x` where `x` is `NaN` or `+Inf` or `-Inf` or already a mathematical integer.n
*@SinceKotlin("1.2")@InlineOnlypublic actual inline fun ceil(x: Double): Double =
nativeMath.ceil(x)n/n/**n * Rounds the given value [x] to an integer towards negative infinity.n * @return the
largest
double value that is smaller than or equal to the given value [x] and is a mathematical integer.n * n * Special
cases:n * - `floor(x)` is `x` where `x` is `NaN` or `+Inf` or `-Inf` or already a mathematical integer.n
*@SinceKotlin("1.2")@InlineOnlypublic actual inline fun floor(x: Double): Double =
nativeMath.floor(x)n/n/**n * Rounds the given value [x] to an integer towards zero.n * @return the value [x]
having its fractional part truncated.n * n * Special cases:n * - `truncate(x)` is `x` where `x` is `NaN` or `+Inf` or `-
Inf` or already a mathematical integer.n *@SinceKotlin("1.2")@InlineOnlypublic actual inline fun
truncate(x: Double): Double = nativeTrunc(x)n/n/**n * Rounds the given value [x] towards the closest integer with
ties rounded towards even integer.n * n * Special cases:n * - `round(x)` is `x` where `x` is `NaN` or `+Inf` or `-
Inf` or already a mathematical integer.n *@SinceKotlin("1.2")public actual fun round(x: Double):
Double {n if (x % 0.5 != 0.0) {n return nativeMath.round(x)n }n val floor = floor(x)n return if (floor
% 2 == 0.0) floor else ceil(x)n}n/n/**n * Returns the absolute value of the given value [x].n * n * Special
cases:n * - `abs(NaN)` is `NaN`n * n * @see absoluteValue extension property for [Double]n
*@SinceKotlin("1.2")@InlineOnlypublic actual inline fun abs(x: Double): Double =
nativeMath.abs(x)n/n/**n * Returns the sign of the given value [x]:n * - `-1.0` if the value is negative,n * - zero
if the value is zero,n * - `1.0` if the value is positiven * n * Special case:n * - `sign(NaN)` is `NaN`n
*@SinceKotlin("1.2")@InlineOnlypublic actual inline fun sign(x: Double): Double =
nativeSign(x)n/n/**n * Returns the smaller of two values.n * n * If either value is `NaN`, then the result is

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`NaN`.n */n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun min(a: Double, b: Double): Double =
nativeMath.min(a, b)\n\n/**\n
 * Returns the greater of two values.\n * If either value is `NaN`, then the result is `NaN`.\n
*/n\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun max(a: Double, b: Double): Double =
nativeMath.max(a, b)\n\n// extensions\n\n/**\n
 * Raises this value to the power [x].\n * Special cases:\n * -
`b.pow(0.0)` is `1.0`\n * - `b.pow(1.0) == b`\n * - `b.pow(NaN)` is `NaN`\n * - `NaN.pow(x)` is `NaN` for `x !=
0.0`\n * - `b.pow(Inf)` is `NaN` for `abs(b) == 1.0`\n * - `b.pow(x)` is `NaN` for `b < 0` and `x` is finite and not
an integer\n */n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun Double.pow(x: Double): Double =
nativeMath.pow(this, x)\n\n/**\n
 * Raises this value to the integer power [n].\n * See the other overload of
[pow] for details.\n */n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun Double.pow(n: Int): Double
= nativeMath.pow(this, n.toDouble())\n\n/**\n
 * Returns the absolute value of this value.\n * Special
cases:\n * - `NaN.absoluteValue` is `NaN`\n * @see abs function\n
*/n\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline val Double.absoluteValue: Double get() =
nativeMath.abs(this)\n\n/**\n
 * Returns the sign of this value:\n * - `1.0` if the value is negative,\n * - zero if the
value is zero,\n * - `1.0` if the value is positive\n * Special case:\n * - `NaN.sign` is `NaN`\n
*/n\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline val Double.sign: Double get() =
nativeSign(this)\n\n/**\n
 * Returns this value with the sign bit same as of the [sign] value.\n
*/n\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun Double.withSign(sign: Int): Double =
this.withSign(sign.toDouble())\n\n/**\n
 * Returns the ulp (unit in the last place) of this value.\n * An ulp is a
positive distance between this value and the next nearest [Double] value larger in magnitude.\n * Special
Cases:\n * - `NaN.ulp` is `NaN`\n * - `x.ulp` is `+Inf` when `x`
is `+Inf` or `-Inf`\n * - `0.0.ulp` is `Double.MIN_VALUE`\n */n\n@SinceKotlin("1.2")\npublic actual val
Double.ulp: Double get() = when {\n
 this < 0 -> (-this).ulp\n
 this.isNaN() || this ==
Double.POSITIVE_INFINITY -> this\n
 this == Double.MAX_VALUE -> this - this.nextDown()\n
 else ->
this.nextUp() - this}\n\n/**\n
 * Returns the [Double] value nearest to this value in direction of positive infinity.\n
*/n\n@SinceKotlin("1.2")\npublic actual fun Double.nextUp(): Double = when {\n
 this.isNaN() || this ==
Double.POSITIVE_INFINITY -> this\n
 this == 0.0 -> Double.MIN_VALUE\n
 else ->
Double.fromBits(this.toRawBits() + if (this > 0) 1 else -1)\n}\n\n/**\n
 * Returns the [Double] value nearest to this
value in direction of negative infinity.\n */n\n@SinceKotlin("1.2")\npublic actual fun Double.nextDown(): Double =
when {\n
 this.isNaN() || this == Double.NEGATIVE_INFINITY -> this\n
 this == 0.0 ->
Double.MIN_VALUE\n
 else -> Double.fromBits(this.toRawBits() +
if (this > 0) -1 else 1)\n}\n\n/**\n
 * Returns the [Double] value nearest to this value in direction from this value
towards the value [to].\n * Special cases:\n * - `x.nextTowards(y)` is `NaN` if either `x` or `y` are `NaN`\n * -
`x.nextTowards(x) == x`\n */n\n@SinceKotlin("1.2")\npublic actual fun Double.nextTowards(to: Double):
Double = when {\n
 this.isNaN() || to.isNaN() -> Double.NaN\n
 to == this -> to\n
 to > this -> this.nextUp()\n
 else /* to < this */ -> this.nextDown()\n}\n\n/**\n
 * Rounds this [Double] value to the nearest integer and converts
the result to [Int].\n * Ties are rounded towards positive infinity.\n * Special cases:\n * - `x.roundToInt() ==
Int.MAX_VALUE` when `x > Int.MAX_VALUE`\n * - `x.roundToInt() == Int.MIN_VALUE` when `x <
Int.MIN_VALUE`\n * @throws IllegalArgumentException when this value is `NaN`\n
*/n\n@SinceKotlin("1.2")\npublic actual fun Double.roundToInt(): Int = when {\n
 isNaN() -> throw
IllegalArgumentException("Cannot
round NaN value.")\n
 this > Int.MAX_VALUE -> Int.MAX_VALUE\n
 this < Int.MIN_VALUE ->
Int.MIN_VALUE\n
 else -> nativeMath.round(this).toInt()\n}\n\n/**\n
 * Rounds this [Double] value to the nearest
integer and converts the result to [Long].\n * Ties are rounded towards positive infinity.\n * Special cases:\n * -
`x.roundToLong() == Long.MAX_VALUE` when `x > Long.MAX_VALUE`\n * - `x.roundToLong() ==
Long.MIN_VALUE` when `x < Long.MIN_VALUE`\n * @throws IllegalArgumentException when this value
is `NaN`\n */n\n@SinceKotlin("1.2")\npublic actual fun Double.roundToLong(): Long = when {\n
 isNaN() ->
throw IllegalArgumentException("Cannot round NaN value.")\n
 this > Long.MAX_VALUE ->

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Long.MAX_VALUE\n this < Long.MIN_VALUE -> Long.MIN_VALUE\n else ->
nativeMath.round(this).toLong()\n\n// endregion\n\n// region ===== Float Math
===== \n\n** Computes the sine of the angle [x] given in
radians.\n
*\n * Special cases:\n * - `sin(NaN|+Inf|-Inf)` is `NaN`\n *\n @SinceKotlin("1.2")\n @InlineOnly\n public actual
inline fun sin(x: Float): Float = nativeMath.sin(x.toDouble()).toFloat()\n\n** Computes the cosine of the angle [x]
given in radians.\n *\n * Special cases:\n * - `cos(NaN|+Inf|-Inf)` is `NaN`\n
*\n @SinceKotlin("1.2")\n @InlineOnly\n public actual inline fun cos(x: Float): Float =
nativeMath.cos(x.toDouble()).toFloat()\n\n** Computes the tangent of the angle [x] given in radians.\n *\n *
Special cases:\n * - `tan(NaN|+Inf|-Inf)` is `NaN`\n *\n @SinceKotlin("1.2")\n @InlineOnly\n public actual inline
fun tan(x: Float): Float = nativeMath.tan(x.toDouble()).toFloat()\n\n** Computes the arc sine of the value [x];\n
* the returned value is an angle in the range from $-\pi/2$ to $\pi/2$ radians.\n *\n * Special cases:\n * - `asin(x)` is
`NaN`, when $abs(x) > 1$ or x is `NaN`\n *\n @SinceKotlin("1.2")\n @InlineOnly\n public actual inline fun asin(x:
Float): Float
= nativeMath.asin(x.toDouble()).toFloat()\n\n**\n * Computes the arc cosine of the value [x];\n * the returned
value is an angle in the range from 0.0 to π radians.\n *\n * Special cases:\n * - `acos(x)` is `NaN`, when
 $abs(x) > 1$ or x is `NaN`\n *\n @SinceKotlin("1.2")\n @InlineOnly\n public actual inline fun acos(x: Float): Float
= nativeMath.acos(x.toDouble()).toFloat()\n\n**\n * Computes the arc tangent of the value [x];\n * the returned
value is an angle in the range from $-\pi/2$ to $\pi/2$ radians.\n *\n * Special cases:\n * - `atan(NaN)` is `NaN`\n
*\n @SinceKotlin("1.2")\n @InlineOnly\n public actual inline fun atan(x: Float): Float =
nativeMath.atan(x.toDouble()).toFloat()\n\n**\n * Returns the angle `theta` of the polar coordinates `(r, theta)` that
correspond\n * to the rectangular coordinates `(x, y)` by computing the arc tangent of the value y / x ;\n * the
returned value is an angle in the range from $-\pi$ to π radians.\n *\n * Special cases:\n *
- `atan2(0.0, 0.0)` is 0.0 \n * - `atan2(0.0, x)` is 0.0 for $x > 0$ and π for $x < 0$ \n * - `atan2(-0.0, x)` is -0.0
for $x > 0$ and $-\pi$ for $x < 0$ \n * - `atan2(y, +Inf)` is 0.0 for $0 < y < +Inf$ and -0.0 for $-Inf < y < 0$ \n *
- `atan2(y, -Inf)` is π for $0 < y < +Inf$ and $-\pi$ for $-Inf < y < 0$ \n * - `atan2(y, 0.0)` is $\pi/2$ for $y > 0$ and $-\pi/2$
for $y < 0$ \n * - `atan2(+Inf, x)` is $\pi/2$ for finite $x \neq 0$ \n * - `atan2(-Inf, x)` is $-\pi/2$ for finite x \n * -
`atan2(NaN, x)` and `atan2(y, NaN)` is `NaN`\n *\n @SinceKotlin("1.2")\n @InlineOnly\n public actual inline fun
atan2(y: Float, x: Float): Float = nativeMath.atan2(y.toDouble(), x.toDouble()).toFloat()\n\n**\n * Computes the
hyperbolic sine of the value [x].\n *\n * Special cases:\n * - `sinh(NaN)` is `NaN`\n * - `sinh(+Inf)` is $+Inf$ \n *
- `sinh(-Inf)` is $-Inf$ \n *\n @SinceKotlin("1.2")\n @InlineOnly\n public actual inline fun sinh(x: Float): Float =
nativeSinh(x.toDouble()).toFloat()\n\n**\n * Computes the hyperbolic cosine of the value [x].\n *\n * Special cases:\n * - `cosh(NaN)` is `NaN`\n * -
`cosh(+Inf|-Inf)` is $+Inf$ \n *\n @SinceKotlin("1.2")\n @InlineOnly\n public actual inline fun cosh(x: Float): Float
= nativeCosh(x.toDouble()).toFloat()\n\n**\n * Computes the hyperbolic tangent of the value [x].\n *\n * Special
cases:\n * - `tanh(NaN)` is `NaN`\n * - `tanh(+Inf)` is 1.0 \n * - `tanh(-Inf)` is -1.0 \n
*\n @SinceKotlin("1.2")\n @InlineOnly\n public actual inline fun tanh(x: Float): Float =
nativeTanh(x.toDouble()).toFloat()\n\n**\n * Computes the inverse hyperbolic sine of the value [x].\n *\n * The
returned value is `y` such that $\sinh(y) == x$.\n *\n * Special cases:\n * - `asinh(NaN)` is `NaN`\n * -
`asinh(+Inf)` is $+Inf$ \n * - `asinh(-Inf)` is $-Inf$ \n *\n @SinceKotlin("1.2")\n @InlineOnly\n public actual inline
fun asinh(x: Float): Float = nativeAsinh(x.toDouble()).toFloat()\n\n**\n * Computes the inverse hyperbolic cosine
of the value [x].\n *\n * The returned value is positive `y` such that $\cosh(y) == x$.\n *\n * Special cases:\n * -
`acosh(NaN)` is `NaN`\n * - `acosh(x)` is `NaN` when $x < 1$ \n * - `acosh(+Inf)` is $+Inf$ \n
*\n @SinceKotlin("1.2")\n @InlineOnly\n public actual inline fun acosh(x: Float): Float =
nativeAcosh(x.toDouble()).toFloat()\n\n**\n * Computes the inverse hyperbolic tangent of the value [x].\n *\n *
The returned value is `y` such that $\tanh(y) == x$.\n *\n * Special cases:\n * - `tanh(NaN)` is `NaN`\n * - `tanh(x)`
is `NaN` when $x > 1$ or $x < -1$ \n * - `tanh(1.0)` is $+Inf$ \n * - `tanh(-1.0)` is $-Inf$ \n
*\n @SinceKotlin("1.2")\n @InlineOnly\n public actual inline fun atanh(x: Float): Float =

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`nativeAtanh(x.toDouble()).toFloat()`\n\n\*\*\n \* Computes  $\sqrt{x^2 + y^2}$  without intermediate overflow or underflow.\n\n \* Special cases:\n \* - returns `+Inf` if any of arguments is infinite\n \* - returns `NaN` if any of arguments is `NaN` and the other is not infinite\n

`*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun hypot(x: Float, y: Float): Float =`  
`nativeHypot(x.toDouble(), y.toDouble()).toFloat()`\n\n\*\*\n \* Computes the positive square root of the value [x].\n\n \* Special cases:\n \* -  $\sqrt{x}$  is `NaN` when  $x < 0$  or  $x$  is `NaN`\n

`*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun sqrt(x: Float): Float =`  
`nativeMath.sqrt(x.toDouble()).toFloat()`\n\n\*\*\n \* Computes Euler's number `e` raised to the power of the value [x].\n\n \* Special cases:\n \* -  $\exp(\text{NaN})$  is `NaN`\n \* -  $\exp(+\text{Inf})$  is `+Inf`\n \* -  $\exp(-\text{Inf})$  is `0.0`\n

`*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun exp(x: Float): Float =`  
`nativeMath.exp(x.toDouble()).toFloat()`\n\n\*\*\n \* Computes  $\exp(x) - 1$ . \n\n \* This function can be implemented to produce more precise result for [x] near zero.\n\n \* Special cases:\n \* -  $\expm1(\text{NaN})$  is `NaN`\n \* -  $\expm1(+\text{Inf})$  is `+Inf`\n \* -  $\expm1(-\text{Inf})$  is `-1.0`\n\n \* @see [exp] function.\n

`*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun expm1(x: Float): Float =`  
`nativeExp1(x.toDouble()).toFloat()`\n\n\*\*\n \* Computes the logarithm of the value [x] to the given [base].\n\n \* Special cases:\n \* -  $\log(x, b)$  is `NaN` if either  $x$  or  $b$  are `NaN`\n \* -  $\log(x, b)$  is `NaN` when  $x < 0$  or  $b \leq 0$  or  $b == 1.0$ \n \* -  $\log(+\text{Inf}, +\text{Inf})$  is `NaN`\n \* -  $\log(+\text{Inf}, b)$  is `+Inf` for  $b > 1$  and `-Inf` for  $b < 1$ \n \* -  $\log(0.0, b)$  is `-Inf` for  $b > 1$  and `+Inf` for  $b > 1$ \n\n \* See also logarithm functions for common fixed bases: [ln], [log10] and [log2].\n

`*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun log(x: Float, base: Float): Float =`  
`log(x.toDouble(), base.toDouble()).toFloat()`\n\n\*\*\n \* Computes the natural logarithm (base `E`) of the value [x].\n\n \* Special cases:\n \* -  $\ln(\text{NaN})$  is `NaN`\n \* -  $\ln(x)$  is `NaN` when  $x < 0.0$ \n \* -  $\ln(+\text{Inf})$  is `+Inf`\n \* -  $\ln(0.0)$  is `-Inf`\n

`*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun ln(x: Float): Float =`  
`nativeMath.log(x.toDouble()).toFloat()`\n\n\*\*\n \* Computes the common logarithm (base 10) of the value [x].\n\n \* @see [ln] function for special cases.\n

`*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun log10(x: Float): Float =`  
`nativeLog10(x.toDouble()).toFloat()`\n\n\*\*\n \* Computes the binary logarithm (base 2) of the value [x].\n\n \* @see [ln] function for special cases.\n

`*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun log2(x: Float): Float =`  
`nativeLog2(x.toDouble()).toFloat()`\n\n\*\*\n \* Computes  $\ln(a + 1)$ . \n\n \* This function can be implemented to produce more precise result for [x] near zero.\n\n \* Special cases:\n \* -  $\ln1p(\text{NaN})$  is `NaN`\n \* -  $\ln1p(x)$  is `NaN` where  $x < -1.0$ \n \* -  $\ln1p(-1.0)$  is `-Inf`\n \* -  $\ln1p(+\text{Inf})$  is `+Inf`\n\n \* @see [ln] function\n \* @see [expm1] function\n

`*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun ln1p(x: Float): Float =`  
`nativeLog1p(x.toDouble()).toFloat()`\n\n\*\*\n \* Rounds the given value [x] to an integer towards positive infinity.\n\n \* @return the smallest Float value that is greater than or equal to the given value [x] and is a mathematical integer.\n\n \* Special cases:\n \* -  $\text{ceil}(x)$  is  $x$  where  $x$  is `NaN` or `+Inf` or `-Inf` or already a mathematical integer.\n

`*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun ceil(x: Float): Float =`  
`nativeMath.ceil(x.toDouble()).toFloat()`\n\n\*\*\n \* Rounds the given value [x] to an integer towards negative infinity.\n\n \* @return the largest Float value that is smaller than or equal to the given value [x] and is a mathematical integer.\n\n \* Special cases:\n \* -  $\text{floor}(x)$  is  $x$  where  $x$  is `NaN` or `+Inf` or `-Inf` or already a mathematical integer.\n

`*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun floor(x: Float): Float =`  
`nativeMath.floor(x.toDouble()).toFloat()`\n\n\*\*\n \* Rounds the given value [x] to an integer towards zero.\n\n \* @return the value [x] having its fractional part truncated.\n\n \* Special cases:\n \* -  $\text{truncate}(x)$  is  $x$  where  $x$  is `NaN` or `+Inf` or `-Inf` or already a mathematical integer.\n

`*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun truncate(x: Float): Float =`  
`truncate(x.toDouble()).toFloat()`\n\n\*\*\n \* Rounds the given value [x] towards the closest integer with ties rounded towards even integer.\n\n \* Special cases:\n \* -  $\text{round}(x)$  is  $x$  where  $x$  is `NaN` or `+Inf` or `-Inf` or already a mathematical integer.\n

`*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun round(x: Float): Float =`  
`round(x.toDouble()).toFloat()`\n\n\*\*\n \* Returns the absolute value of the given value [x].\n\n \* Special cases:\n \* -  $\text{abs}(\text{NaN})$  is `NaN`\n\n \* @see absoluteValue extension property for [Float]\n

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*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun abs(x: Float): Float =
nativeMath.abs(x.toDouble()).toFloat()\n\n/**\n * Returns the sign of the given value [x]:\n * - -1.0` if the value is negative,\n * - zero if the value is zero,\n * - 1.0` if the value is positive\n * \n * Special case:\n * - `sign(NaN)` is `NaN`\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun sign(x: Float): Float =
nativeSign(x.toDouble()).toFloat()\n\n/**\n * Returns the smaller of two values.\n * \n * If either value is `NaN`,
then the result is `NaN`.\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun min(a: Float, b: Float):
Float = nativeMath.min(a, b)\n\n/**\n * Returns the greater of two values.\n * \n * If either value is `NaN`, then the
result is `NaN`.\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun max(a: Float, b: Float): Float =
nativeMath.max(a, b)\n\n// extensions\n\n/**\n * Raises this value to the power [x].\n * \n * Special cases:\n * -
`b.pow(0.0)` is `1.0`\n * - `b.pow(1.0) == b`\n * - `b.pow(NaN)` is `NaN`\n *
- `NaN.pow(x)` is `NaN` for `x != 0.0`\n * - `b.pow(Inf)` is `NaN` for `abs(b) == 1.0`\n * - `b.pow(x)` is `NaN`
for `b < 0` and `x` is finite and not an integer\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun
Float.pow(x: Float): Float = nativeMath.pow(this.toDouble(), x.toDouble()).toFloat()\n\n/**\n * Raises this value to
the integer power [n].\n * \n * See the other overload of [pow] for details.\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun
Float.pow(n: Int): Float =
nativeMath.pow(this.toDouble(), n.toDouble()).toFloat()\n\n/**\n * Returns the absolute value of this value.\n * \n *
Special cases:\n * - `NaN.absoluteValue` is `NaN`\n * \n * @see abs function\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline val Float.absoluteValue: Float get() =
nativeMath.abs(this.toDouble()).toFloat()\n\n/**\n * Returns the sign of this value:\n * - -1.0` if the value is
negative,\n * - zero if the value is zero,\n * - 1.0` if the
value is positive\n * \n * Special case:\n * - `NaN.sign` is `NaN`\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline val Float.sign: Float get() =
nativeSign(this.toDouble()).toFloat()\n\n/**\n * Returns this value with the sign bit same as of the [sign] value.\n
*\n * If [sign] is `NaN` the sign of the result is undefined.\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual
inline fun Float.withSign(sign: Float): Float = this.toDouble().withSign(sign.toDouble()).toFloat()\n\n/**\n *
Returns this value with the sign bit same as of the [sign] value.\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic
actual inline fun Float.withSign(sign: Int): Float = this.toDouble().withSign(sign.toDouble()).toFloat()\n\n/**\n *
Rounds this [Float] value to the nearest integer and converts the result to [Int].\n * Ties are rounded towards positive
infinity.\n * \n * Special cases:\n * - `x.roundToInt() == Int.MAX_VALUE` when `x > Int.MAX_VALUE`\n * -
`x.roundToInt() == Int.MIN_VALUE`
when `x < Int.MIN_VALUE`\n * \n * @throws IllegalArgumentException when this value is `NaN`\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun Float.roundToInt(): Int =
toDouble().roundToInt()\n\n/**\n * Rounds this [Float] value to the nearest integer and converts the result to
[Long].\n * Ties are rounded towards positive infinity.\n * \n * Special cases:\n * - `x.roundToLong() ==
Long.MAX_VALUE` when `x > Long.MAX_VALUE`\n * - `x.roundToLong() == Long.MIN_VALUE` when `x
< Long.MIN_VALUE`\n * \n * @throws IllegalArgumentException when this value is `NaN`\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun Float.roundToLong(): Long =
toDouble().roundToLong()\n\n// endregion\n\n// region =====\n\n/**\n * Returns the absolute value of the given value
[n].\n * \n * Special cases:\n * - `abs(Int.MIN_VALUE)` is `Int.MIN_VALUE` due to an overflow\n * \n * @see
absoluteValue extension property\n
for [Int]\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual fun
abs(n: Int): Int = if (n < 0) (-n or 0) else n\n\n/**\n * Returns the smaller of two values.\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun min(a: Int, b: Int): Int = nativeMath.min(a,
b)\n\n/**\n * Returns the greater of two values.\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun
max(a: Int, b: Int): Int = nativeMath.max(a, b)\n\n/**\n * Returns the absolute value of this value.\n * \n * Special
cases:\n * - `Int.MIN_VALUE.absoluteValue` is `Int.MIN_VALUE` due to an overflow\n * \n * @see abs

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function\n *^\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline val Int.absoluteValue: Int get() =
abs(this)\n\n/**\n * Returns the sign of this value:\n * -`-1` if the value is negative,\n * -`0` if the value is zero,\n * -`1` if the value is positive\n *^\n@SinceKotlin("1.2")\npublic actual val Int.sign: Int get() = when {\n this < 0 -> -1\n this > 0 -> 1\n else -> 0\n}\n\n\n/**\n * Returns the absolute value of the given value [n].\n * Special cases:\n * -`abs(Long.MIN_VALUE)` is `Long.MIN_VALUE` due to an overflow\n * @see
absoluteValue extension property for [Long]\n *^\n@SinceKotlin("1.2")\npublic actual fun abs(n: Long): Long = if
(n < 0) -n else n\n\n/**\n * Returns the smaller of two values.\n *^\n@SinceKotlin("1.2")\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline fun min(a: Long, b:
Long): Long = if (a <= b) a else b\n\n/**\n * Returns the greater of two values.\n *^\n@SinceKotlin("1.2")\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline fun max(a: Long, b:
Long): Long = if (a >= b) a else b\n\n/**\n * Returns the absolute value of this value.\n * Special cases:\n * -
`Long.MIN_VALUE.absoluteValue` is `Long.MIN_VALUE` due to an overflow\n * @see abs function\n *^\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline val Long.absoluteValue: Long
get() = abs(this)\n\n/**\n * Returns the sign of this value:\n * -`-1` if the value is negative,\n * -`0` if the value
is zero,\n * -`1` if the value is positive\n *^\n@SinceKotlin("1.2")\npublic actual val Long.sign: Int get() = when
{\n this < 0 -> -1\n this > 0 -> 1\n else -> 0\n}\n\n\n// endregion\n","/*\n * Copyright 2010-2021 JetBrains
s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.\n *^\n\npackage kotlin\n\n/**\n * Returns `true` if the
specified number is a\n * Not-a-Number (NaN) value, `false` otherwise.\n *^\npublic actual fun Double.isNaN():
Boolean = this != this\n\n/**\n * Returns `true` if the specified number is a\n * Not-a-Number (NaN) value, `false`
otherwise.\n *^\npublic actual fun Float.isNaN(): Boolean = this != this\n\n/**\n * Returns `true` if this value is
infinitely large in magnitude.\n *^\npublic actual fun Double.isInfinite():
Boolean = this == Double.POSITIVE_INFINITY || this == Double.NEGATIVE_INFINITY\n\n/**\n * Returns
`true` if this value is infinitely large in magnitude.\n *^\npublic actual fun Float.isInfinite(): Boolean = this ==
Float.POSITIVE_INFINITY || this == Float.NEGATIVE_INFINITY\n\n/**\n * Returns `true` if the argument is a
finite floating-point value; returns `false` otherwise (for `NaN` and infinity arguments).\n *^\npublic actual fun
Double.isFinite(): Boolean = !isInfinite() && !isNaN()\n\n/**\n * Returns `true` if the argument is a finite floating-
point value; returns `false` otherwise (for `NaN` and infinity arguments).\n *^\npublic actual fun Float.isFinite():
Boolean = !isInfinite() && !isNaN()\n\n\n/**\n * Counts the number of set bits in the binary representation of this
[Int] number.\n *^\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Int.countOneBits(): Int {\n // Hacker's Delight 5-1 algorithm\n var v = this\n v =
(v and 0x55555555) + (v.ushr(1) and 0x55555555)\n v = (v and 0x33333333) + (v.ushr(2) and 0x33333333)\n v
= (v and 0x0F0F0F0F) + (v.ushr(4) and 0x0F0F0F0F)\n v = (v and 0x00FF00FF) + (v.ushr(8) and 0x00FF00FF)\n v
= (v and 0x0000FFFF) + (v.ushr(16))\n return v\n}\n\n/**\n * Counts the number of consecutive most
significant bits that are zero in the binary representation of this [Int] number.\n *^\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c actual inline fun Int.countLeadingZeroBits(): Int = nativeClz32(this)\n\n/**\n * Counts the number of consecutive
least significant bits that are zero in the binary representation of this [Int] number.\n *^\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Int.countTrailingZeroBits(): Int =\n // Hacker's Delight 5-4 algorithm for expressing countTrailingZeroBits with
countLeadingZeroBits\n Int.SIZE_BITS - (this or -this).inv().countLeadingZeroBits()\n\n/**\n * Returns a number having a single bit set in the position of the most significant set bit of this [Int] number,\n * or
zero, if this number is zero.\n *^\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Int.takeHighestOneBit(): Int =\n if (this == 0) 0 else 1.shl(Int.SIZE_BITS - 1 - countLeadingZeroBits())\n\n/**\n * Returns a number having a single bit set in the position of the least significant set bit of this [Int] number,\n * or
zero, if this number is zero.\n *^\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun

```

```

Int.takeLowestOneBit(): Int =\n // Hacker's Delight 2-1 algorithm for isolating rightmost 1-bit\n this and -
this\n\n/**\n * Rotates the binary representation of this [Int] number left by the specified [bitCount] number of
bits.\n * The most significant bits pushed out from the left side reenter the number as the least significant bits on the
right side.\n
*\n * Rotating the number left by a negative bit count is the same as rotating it right by the negated bit count:\n *
`number.rotateLeft(-n) == number.rotateRight(n)`\n *\n * Rotating by a multiple of [Int.SIZE_BITS] (32) returns
the same number, or more generally\n * `number.rotateLeft(n) == number.rotateLeft(n % 32)`\n
*/\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Int.rotateLeft(bitCount: Int): Int =\n shl(bitCount) or ushr(Int.SIZE_BITS - bitCount)\n\n/**\n * Rotates the
binary representation of this [Int] number right by the specified [bitCount] number of bits.\n * The least significant
bits pushed out from the right side reenter the number as the most significant bits on the left side.\n *\n * Rotating
the number right by a negative bit count is the same as rotating it left by the negated bit count:\n *
`number.rotateRight(-n) == number.rotateLeft(n)`\n *\n * Rotating by a multiple of [Int.SIZE_BITS] (32) returns
the same number,
or more generally\n * `number.rotateRight(n) == number.rotateRight(n % 32)`\n
*/\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Int.rotateRight(bitCount: Int): Int =\n shl(Int.SIZE_BITS - bitCount) or ushr(bitCount)\n\n/**\n * Counts the
number of set bits in the binary representation of this [Long] number.\n
*/\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Long.countOneBits(): Int =\n high.countOneBits() + low.countOneBits()\n\n/**\n * Counts the number of
consecutive most significant bits that are zero in the binary representation of this [Long] number.\n
*/\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Long.countLeadingZeroBits(): Int =\n when (val high = this.high) {\n 0 -> Int.SIZE_BITS +
low.countLeadingZeroBits()\n } else -> high.countLeadingZeroBits()\n }\n\n/**\n * Counts the number of
consecutive least significant bits
that are zero in the binary representation of this [Long] number.\n
*/\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Long.countTrailingZeroBits(): Int =\n when (val low = this.low) {\n 0 -> Int.SIZE_BITS +
high.countTrailingZeroBits()\n } else -> low.countTrailingZeroBits()\n }\n\n/**\n * Returns a number having a
single bit set in the position of the most significant set bit of this [Long] number,\n * or zero, if this number is
zero.\n */\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Long.takeHighestOneBit(): Long =\n when (val high = this.high) {\n 0 -> Long(low.takeHighestOneBit(),
0)\n } else -> Long(0, high.takeHighestOneBit())\n }\n\n/**\n * Returns a number having a single bit set in the
position of the least significant set bit of this [Long] number,\n * or zero, if this number is zero.\n
*/\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic
actual fun Long.takeLowestOneBit(): Long =\n when (val low = this.low) {\n 0 -> Long(0,
high.takeLowestOneBit())\n } else -> Long(low.takeLowestOneBit(), 0)\n }\n\n/**\n * Rotates the binary
representation of this [Long] number left by the specified [bitCount] number of bits.\n * The most significant bits
pushed out from the left side reenter the number as the least significant bits on the right side.\n *\n * Rotating the
number left by a negative bit count is the same as rotating it right by the negated bit count:\n *
`number.rotateLeft(-n) == number.rotateRight(n)`\n *\n * Rotating by a multiple of [Long.SIZE_BITS] (64) returns the same number, or
more generally\n * `number.rotateLeft(n) == number.rotateLeft(n % 64)`\n
*/\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Long.rotateLeft(bitCount: Int): Long {\n if ((bitCount and 31) != 0) {\n val low = this.low\n val high =
this.high\n
val newLow = low.shl(bitCount) or high.ushr(-bitCount)\n val newHigh = high.shl(bitCount) or low.ushr(-
bitCount)\n return if ((bitCount and 32) == 0) Long(newLow, newHigh) else Long(newHigh, newLow)\n }
else {\n return if ((bitCount and 32) == 0) this else Long(high, low)\n }\n }\n\n/**\n * Rotates the binary

```

representation of this [Long] number right by the specified [bitCount] number of bits.\n \* The least significant bits pushed out from the right side reenter the number as the most significant bits on the left side.\n \* Rotating the number right by a negative bit count is the same as rotating it left by the negated bit count:\n \*`number.rotateRight(-n) == number.rotateLeft(n)`\n \* Rotating by a multiple of [Long.SIZE\_BITS] (64) returns the same number, or more generally\n \* `number.rotateRight(n) == number.rotateRight(n % 64)`\n \*\n @SinceKotlin("1.6")\n @WasExperimental(ExperimentalStdlibApi::class)\n @kotlin.internal.InlineOnly\n public actual

```

inline fun Long.rotateRight(bitCount: Int): Long = rotateLeft(-bitCount)\n", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n @n\npackage kotlin.js\n\nimport kotlin.internal.LowPriorityInOverloadResolution\n\n/**\n * Exposes the JavaScript [Promise object](https://developer.mozilla.org/en/docs/Web/JavaScript/Reference/Global_Objects/Promise) to Kotlin.\n */\n @Suppress("NOT_DOCUMENTED")\n public open external class Promise<out T>(executor: (resolve: (T) -> Unit, reject: (Throwable) -> Unit) -> Unit) {\n @LowPriorityInOverloadResolution\n public open fun <S> then(onFulfilled: ((T) -> S)?): Promise<S>\n @LowPriorityInOverloadResolution\n public open fun <S> then(onFulfilled: ((T) -> S)?, onRejected: ((Throwable) -> S)?): Promise<S>\n public open fun <S> catch(onRejected: (Throwable) -> S): Promise<S>\n public open fun finally(onFinally: () -> Unit): Promise<T>\n companion object {\n public fun <S> all(promise: Array<out Promise<S>>): Promise<Array<out S>>\n public fun <S> race(promise: Array<out Promise<S>>): Promise<S>\n public fun reject(e: Throwable): Promise<Nothing>\n public fun <S> resolve(e: S): Promise<S>\n public fun <S> resolve(e: Promise<S>): Promise<S>\n }\n }\n\n// It's workaround for KT-19672 since we can fix it properly until KT-11265 isn't fixed.\n\ninline fun <T, S> Promise<Promise<T>>.then(\n noinline onFulfilled: ((T) -> S)?\n): Promise<S> {\n return this.unsafeCast<Promise<T>>().then(onFulfilled)\n }\n\ninline fun <T, S> Promise<Promise<T>>.then(\n noinline onFulfilled: ((T) -> S)?,\n noinline onRejected: ((Throwable) -> S)?\n): Promise<S> {\n return this.unsafeCast<Promise<T>>().then(onFulfilled, onRejected)\n }\n", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n @n\npackage kotlin.random\n\nimport kotlin.math.pow\n\ninternal actual fun defaultPlatformRandom(): Random =\n Random(js("Math.random() * Math.pow(2, 32) | 0").unsafeCast<Int>())\n\nprivate val INV_2_26: Double = 2.0.pow(-26)\nprivate val INV_2_53: Double = 2.0.pow(-53)\n\ninternal actual fun doubleFromParts(hi26: Int, low27: Int): Double =\n hi26 * INV_2_26 + low27 * INV_2_53", /*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n @n\npackage kotlin.reflect\n\nimport findAssociatedObject\n\n/**\n * The experimental marker for associated objects API.\n */\n * Any usage of a declaration annotated with `@ExperimentalAssociatedObjects` must be accepted either by\n * annotating that usage with the [OptIn] annotation, e.g. `@OptIn(ExperimentalAssociatedObjects::class)`,\n * or by using the compiler argument `-opt-in=kotlin.reflect.ExperimentalAssociatedObjects`.\n */\n @RequiresOptIn(level = RequiresOptIn.Level.ERROR)\n @Retention(value = AnnotationRetention.BINARY)\n public annotation class ExperimentalAssociatedObjects\n\n/**\n * Makes the annotated annotation class an associated object key.\n */\n * An associated object key annotation should have single [KClass] parameter.\n * When applied to a class with reference to an object declaration as an argument, it binds\n * the object to the class, making this binding discoverable at runtime using [findAssociatedObject].\n */\n @ExperimentalAssociatedObjects\n @Retention(AnnotationRetention.BINARY)\n @Target(AnnotationTarget.ANNOTATION_CLASS)\n public annotation class AssociatedObjectKey\n\n/**\n * If [T] is an @[AssociatedObjectKey]-annotated annotation class and [this] class is annotated with @[T](`S::class`),\n * returns object `S`.\n */\n * Otherwise

```

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returns `null`.n */n@ExperimentalAssociatedObjects\npublic inline fun <reified T : Annotation>
KClass<*>.findAssociatedObject(): Any? =\n this.findAssociatedObject(T::class)", /*\n * Copyright 2010-2020
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */n\npackage kotlin.js\n\nimport
getKClass\nimport kotlin.reflect.KClass\nimport kotlin.reflect.js.internal.KClassImpl\n\n/**\n * Represents the
constructor of a class. Instances of `JsClass` can be passed to JavaScript APIs that expect a constructor reference.\n
*/n\nexternal interface JsClass<T : Any> {\n /**\n * Returns the unqualified name of the class represented by
this instance.\n */\n val name: String\n}\n\n/**\n * Obtains a constructor reference for the given `KClass`. \n
*/n\nval <T : Any> KClass<T>.js: JsClass<T>\n get() = (this as KClassImpl<T>).jClass\n\n/**\n * Obtains a
`KClass` instance for the given constructor reference.\n */n\nval <T : Any> JsClass<T>.kotlin: KClass<T>\n get()
= getKClass(this)\n", /*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */n\npackage kotlin.reflect.js.internal\n\nimport kotlin.reflect.*\n\ninternal abstract
class KClassImpl<T : Any>(\n internal open val jClass: JsClass<T>\n) : KClass<T> {\n\n override val
qualifiedName: String?\n get() = TODO()\n\n override fun equals(other: Any?): Boolean {\n return other
is KClassImpl<*> && jClass == other.jClass\n }\n\n // TODO: use FQN\n override fun hashCode(): Int =
simpleName?.hashCode() ?: 0\n\n override fun toString(): String {\n // TODO: use FQN\n return "\"class
$simpleName\"\n }\n}\n\ninternal class SimpleKClassImpl<T : Any>(jClass: JsClass<T>) :
KClassImpl<T>(jClass)
{\n override val simpleName: String? =
jClass.asDynamic().$metadata$.simpleName.unsafeCast<String?>()\n\n override fun isInstance(value: Any?):
Boolean {\n return jsIsType(value, jClass)\n }\n}\n\ninternal class PrimitiveKClassImpl<T : Any>(\n
jClass: JsClass<T>,\n private val givenSimpleName: String,\n private val isInstanceFunction: (Any?) ->
Boolean\n) : KClassImpl<T>(jClass) {\n override fun equals(other: Any?): Boolean {\n if (other lis
PrimitiveKClassImpl<*>) return false\n return super.equals(other) && givenSimpleName ==
other.givenSimpleName\n }\n\n override val simpleName: String? get() = givenSimpleName\n\n override fun
isInstance(value: Any?): Boolean {\n return isInstanceFunction(value)\n }\n}\n\ninternal object
NothingKClassImpl : KClassImpl<Nothing>(js("Object")) {\n override val simpleName: String =
\"Nothing\"\n\n override fun isInstance(value: Any?): Boolean = false\n\n override val jClass:
JsClass<Nothing>\n
get() = throw UnsupportedOperationException("There's no native JS class for Nothing type")\n\n override
fun equals(other: Any?): Boolean = other === this\n\n override fun hashCode(): Int = 0\n}\n\ninternal class
ErrorKClass : KClass<Nothing> {\n override val simpleName: String? get() = error("Unknown simpleName for
ErrorKClass")\n\n override val qualifiedName: String? get() = error("Unknown qualifiedName for
ErrorKClass")\n\n override fun isInstance(value: Any?): Boolean = error("Can's check isInstance on
ErrorKClass")\n\n override fun equals(other: Any?): Boolean = other === this\n\n override fun hashCode(): Int
= 0\n}", /*\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
/n\npackage kotlin.reflect\n\ninternal actual inline val KClass<>.qualifiedOrSimpleName: String? \n get()
= simpleName", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n *
Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/n\n// a package is omitted to get declarations directly under the module\n\n// TODO: Remove once
JsReflectionAPICallChecker supports more reflection types\n@file:Suppress("Unsupported")\n\nimport
kotlin.reflect.*\nimport kotlin.reflect.js.internal.*\n\n@JsName("createKType")\n\ninternal fun createKType(\n
classifier: KClassifier,\n arguments: Array<KTypeProjection>,\n isMarkedNullable: Boolean\n) =\n
KTypeImpl(classifier, arguments.asList(), isMarkedNullable)\n\n@JsName("createDynamicKType")\n\ninternal fun
createDynamicKType(): KType = DynamicKType\n\n@JsName("markKTypeNullable")\n\ninternal fun
markKTypeNullable(kType: KType) = KTypeImpl(kType.classifier!!, kType.arguments,

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true)\n\n@JsName("createKTypeParameter")\ninternal fun createKTypeParameter(\n
 name: String,\n upperBounds: Array<KType>,\n variance: String): KTypeParameter {\n val kVariance =
when (variance) {\n "in" -> KVariance.IN\n "out" -> KVariance.OUT\n else ->
KVariance.INVARIANT\n }\n\n return KTypeParameterImpl(name, upperBounds.asList(), kVariance,
false)\n}\n\n@JsName("getStarKTypeProjection")\ninternal fun getStarKTypeProjection(): KTypeProjection =\nKTypeProjection.STAR\n\n@JsName("createCovariantKTypeProjection")\ninternal fun
createCovariantKTypeProjection(type: KType): KTypeProjection =\nKTypeProjection.covariant(type)\n\n@JsName("createInvariantKTypeProjection")\ninternal fun
createInvariantKTypeProjection(type: KType): KTypeProjection =\nKTypeProjection.invariant(type)\n\n@JsName("createContravariantKTypeProjection")\ninternal fun
createContravariantKTypeProjection(type: KType): KTypeProjection =\nKTypeProjection.contravariant(type)\n\n"/*\n * Copyright 2010-2019 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.reflect.js.internal\n\nimport
kotlin.reflect.*\n\ninternal class KTypeImpl(\n override val classifier: KClassifier,\n override val arguments:
List<KTypeProjection>,\n override val isMarkedNullable: Boolean): KType {\n override fun equals(other:
Any?): Boolean =\n other is KTypeImpl &&\n classifier == other.classifier && arguments ==
other.arguments && isMarkedNullable == other.isMarkedNullable\n\n override fun hashCode(): Int =\n (classifier.hashCode() * 31 + arguments.hashCode()) * 31 + isMarkedNullable.hashCode()\n\n override fun
toString(): String {\n val kClass = (classifier as? KClass<*>)\n val classifierName = when {\n kClass
== null -> classifier.toString()\n kClass.simpleName != null -> kClass.simpleName\n else -> "(non-denotable type)"\n }\n\n val args =\n if (arguments.isEmpty()) ""\n else
arguments.joinToString(", ", "<", ">")\n\n val nullable = if (isMarkedNullable) "?" else ""\n\n return
classifierName + args + nullable\n }\n}\n\ninternal object DynamicKType : KType {\n override val classifier:
KClassifier? = null\n override val arguments: List<KTypeProjection> = emptyList()\n override val
isMarkedNullable: Boolean = false\n override fun toString(): String = "dynamic"\n}\n\n"/*\n * Copyright 2010-
2019 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage
kotlin.reflect.js.internal\n\nimport kotlin.reflect.*\n\ninternal data class KTypeParameterImpl(\n override val
name: String,\n override val upperBounds: List<KType>,\n override val variance: KVariance,\n override val
isReified: Boolean): KTypeParameter {\n override fun toString(): String = name\n}\n\n"/*\n * Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache
2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage
kotlin.reflect.js.internal\n\nimport kotlin.js.JsClass\n\n@JsName("PrimitiveClasses")\ninternal object
PrimitiveClasses {\n @JsName("anyClass")\n val anyClass =
PrimitiveKClassImpl(js("Object").unsafeCast<JsClass<Any>>(), "Any", { it is Any })\n\n @JsName("numberClass")\n val numberClass =
PrimitiveKClassImpl(js("Number").unsafeCast<JsClass<Number>>(), "Number", { it is Number })\n\n @JsName("nothingClass")\n val nothingClass = NothingKClassImpl\n\n @JsName("booleanClass")\n val
booleanClass = PrimitiveKClassImpl(js("Boolean").unsafeCast<JsClass<Boolean>>(), "Boolean", { it is Boolean
})\n\n @JsName("byteClass")\n val byteClass = PrimitiveKClassImpl(js("Number").unsafeCast<JsClass<Byte>>(), "Byte", { it is Byte })\n\n @JsName("shortClass")\n val shortClass = PrimitiveKClassImpl(js("Number").unsafeCast<JsClass<Short>>(),
"Short", { it is Short })\n\n @JsName("intClass")\n val intClass =
PrimitiveKClassImpl(js("Number").unsafeCast<JsClass<Int>>(), "Int", { it is Int })\n\n @JsName("floatClass")\n val floatClass = PrimitiveKClassImpl(js("Number").unsafeCast<JsClass<Float>>(),
"Float", { it is Float })\n\n @JsName("doubleClass")\n val doubleClass =
PrimitiveKClassImpl(js("Number").unsafeCast<JsClass<Double>>(), "Double", { it is Double })\n}

```



```

 e is KClass<*> -> KClass::class\n e is Array<*> -> PrimitiveClasses.arrayClass\n else -
> {\n val constructor = js("Object").getPrototypeOf(e).constructor\n when {\n
constructor === js("Object") -> PrimitiveClasses.anyClass\n constructor === js("Error") ->
PrimitiveClasses.throwableClass\n else -> {\n val jsClass: JsClass<T> =
constructor\n getKClass1(jsClass)\n }\n }\n }\n }\n
}\n }.\unsafeCast<KClass<T>>()\n\n@JsName("getKClass1")\n\ninternal fun <T : Any> getKClass1(jClass:
JsClass<T>): KClass<T> {\n if (jClass === js("String")) return
PrimitiveClasses.stringClass.\unsafeCast<KClass<T>>()\n\n val metadata = jClass.asDynamic().`$metadata$\n\n
return if (metadata
!= null) {\n if (metadata.`$kClass$` == null) {\n val kClass = SimpleKClassImpl(jClass)\n
metadata.`$kClass$` = kClass\n kClass\n } else {\n metadata.`$kClass$`\n }\n } else {\n
SimpleKClassImpl(jClass)\n }\n }", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\npackage kotlin.js\n\n/**\n * Exposes the JavaScript [RegExp
object](https://developer.mozilla.org/en/docs/Web/JavaScript/Reference/Global_Objects/RegExp) to Kotlin.\n
*/\n@Suppress("NOT_DOCUMENTED")\n\npublic external class RegExp(pattern: String, flags: String? =
definedExternally) {\n\n public fun test(str: String): Boolean\n\n public fun exec(str: String): RegExpMatch?\n\n
public override fun toString(): String\n\n /**\n * The lastIndex is a read/write integer property
of regular expressions that specifies the index at which to start the next match.\n */\n public var lastIndex:
Int\n\n public val global: Boolean\n public val ignoreCase: Boolean\n public val multiline:
Boolean\n}\n\n/**\n * Resets the regular expression so that subsequent [RegExp.test] and [RegExp.exec] calls will
match starting with the beginning of the input string.\n */\n\npublic fun RegExp.reset() {\n lastIndex = 0\n}\n\n//
TODO: Inherit from array or introduce asArray() extension\n\n/**\n * Represents the return value of
[RegExp.exec].\n */\n@Suppress("NOT_DOCUMENTED")\n\npublic external interface RegExpMatch {\n public
val index: Int\n public val input: String\n public val length: Int\n}\n\n/**\n * Returns the entire text matched by
[RegExp.exec] if the [index] parameter is 0, or the text matched by the capturing parenthesis\n * at the given
index.\n */\n\npublic inline operator fun RegExpMatch.get(index: Int): String? = asDynamic()[index]\n\n/**\n *
Converts
the result of [RegExp.exec] to an array where the first element contains the entire matched text and each
subsequent\n * element is the text matched by each capturing parenthesis.\n */\n\npublic inline fun
RegExpMatch.asArray(): Array<out String?> = unsafeCast<Array<out String?>>()\n", /*\n * Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\npackage kotlin.sequences\n\ninternal
actual class ConstrainedOnceSequence<T> actual constructor(sequence: Sequence<T>) : Sequence<T> {\n private
var sequenceRef: Sequence<T>? = sequence\n\n actual override fun iterator(): Iterator<T> {\n val sequence =
sequenceRef ?: throw IllegalStateException("This sequence can be consumed only once.")\n sequenceRef =
null\n return sequence.iterator()\n }\n}\n", /*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin
Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\npackage kotlin.text\n\n@SinceKotlin("1.5")\n\npublic actual enum class
CharCategory(internal val value: Int, public actual val code: String) {\n /**\n * General category "Cn" in the
Unicode specification.\n */\n UNASSIGNED(0, "Cn"),\n\n /**\n * General category "Lu" in the Unicode
specification.\n */\n UPPERCASE_LETTER(1, "Lu"),\n\n /**\n * General category "Ll" in the Unicode
specification.\n */\n LOWERCASE_LETTER(2, "Ll"),\n\n /**\n * General category "Lt" in the Unicode
specification.\n */\n TITLECASE_LETTER(3, "Lt"),\n\n /**\n * General category "Lm" in the Unicode
specification.\n */\n MODIFIER_LETTER(4, "Lm"),\n\n /**\n * General category "Lo" in the Unicode
specification.\n */\n OTHER_LETTER(5, "Lo"),\n\n /**\n * General

```





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override fun subSequence(startIndex: Int, endIndex: Int): CharSequence = string.substring(startIndex, endIndex)\n\n
actual override fun append(value: Char): StringBuilder {\n string += value\n return this\n }\n\n actual
override fun append(value: CharSequence?): StringBuilder {\n string += value.toString()\n return this\n
}\n\n actual override fun append(value: CharSequence?, startIndex: Int, endIndex: Int): StringBuilder =\n
this.appendRange(value ?: \"null\", startIndex, endIndex)\n\n /**\n * Reverses the contents of this string builder
and returns this instance.\n * \n * Surrogate pairs included in this string builder are treated as single
characters.\n * Therefore, the order of the high-low
surrogates is never reversed.\n * \n * Note that the reverse operation may produce new surrogate pairs that were
unpaired low-surrogates and high-surrogates before the operation.\n * For example, reversing
`\"\\uDC00\\uD800\"` produces `\"\\uD800\\uDC00\"` which is a valid surrogate pair.\n * \n actual fun
reverse(): StringBuilder {\n var reversed = \"\"\n var index = string.length - 1\n while (index >= 0) {\n
 val low = string[index--]\n if (low.isLowSurrogate() && index >= 0) {\n val high =
string[index--]\n if (high.isHighSurrogate()) {\n reversed = reversed + high + low\n }
else {\n reversed = reversed + low + high\n }\n } else {\n reversed += low\n
 }\n }\n string = reversed\n return this\n }\n\n /**\n * Appends the string representation of the
specified object
[value] to this string builder and returns this instance.\n * \n * The overall effect is exactly as if the [value] were
converted to a string by the `value.toString()` method,\n * and then that string was appended to this string
builder.\n * \n actual fun append(value: Any?): StringBuilder {\n string += value.toString()\n return
this\n }\n\n /**\n * Appends the string representation of the specified boolean [value] to this string builder and
returns this instance.\n * \n * The overall effect is exactly as if the [value] were converted to a string by the
`value.toString()` method,\n * and then that string was appended to this string builder.\n * \n
@SinceKotlin(\"1.3\")\n actual fun append(value: Boolean): StringBuilder {\n string += value\n return
this\n }\n\n /**\n * Appends characters in the specified character array [value] to this string builder and
returns this instance.\n * \n * Characters
are appended in order, starting at the index 0.\n * \n @SinceKotlin(\"1.4\")\n
@WasExperimental(ExperimentalStdlibApi::class)\n actual fun append(value: CharArray): StringBuilder {\n
string += value.concatToString()\n return this\n }\n\n @Deprecated(\"Provided for binary compatibility.\",
level = DeprecationLevel.HIDDEN)\n fun append(value: String): StringBuilder = append(value)\n\n /**\n *
Appends the specified string [value] to this string builder and returns this instance.\n * \n * If [value] is `null`,
then the four characters `\"null\"` are appended.\n * \n @SinceKotlin(\"1.3\")\n actual fun append(value:
String?): StringBuilder {\n this.string += value ?: \"null\"\n return this\n }\n\n /**\n * Returns the
current capacity of this string builder.\n * \n * The capacity is the maximum length this string builder can have
before an allocation occurs.\n * \n * In Kotlin/JS implementation
of StringBuilder the value returned from this method may not indicate the actual size of the backing storage.\n
*\n @SinceKotlin(\"1.3\")\n// @ExperimentalStdlibApi\n @Deprecated(\"Obtaining StringBuilder capacity is
not supported in JS and common code.\", level = DeprecationLevel.ERROR)\n actual fun capacity(): Int =
length\n\n /**\n * Ensures that the capacity of this string builder is at least equal to the specified
[minimumCapacity].\n * \n * If the current capacity is less than the [minimumCapacity], a new backing storage
is allocated with greater capacity.\n * Otherwise, this method takes no action and simply returns.\n * \n * In
Kotlin/JS implementation of StringBuilder the size of the backing storage is not extended to comply the given
[minimumCapacity],\n * thus calling this method has no effect on the further performance of operations.\n * \n
@SinceKotlin(\"1.4\")\n @WasExperimental(ExperimentalStdlibApi::class)\n
actual fun ensureCapacity(minimumCapacity: Int) {\n }\n\n /**\n * Returns the index within this string
builder of the first occurrence of the specified [string].\n * \n * Returns `-1` if the specified [string] does not
occur in this string builder.\n * \n @SinceKotlin(\"1.4\")\n
@WasExperimental(ExperimentalStdlibApi::class)\n actual fun indexOf(string: String): Int =
this.string.asDynamic().indexOf(string)\n\n /**\n * Returns the index within this string builder of the first

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occurrence of the specified [string].\n * starting at the specified [startIndex].\n *\n * Returns -1 if the
specified [string] does not occur in this string builder starting at the specified [startIndex].\n *\n
@SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n actual fun indexOf(string: String,
startIndex: Int): Int = this.string.asDynamic().indexOf(string, startIndex)\n\n /**\n * Returns the index within
this string
builder of the last occurrence of the specified [string].\n * The last occurrence of empty string ``""` is considered
to be at the index equal to `this.length`.\n *\n * Returns -1 if the specified [string] does not occur in this string
builder.\n *\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n actual fun
lastIndexOf(string: String): Int = this.string.asDynamic().lastIndexOf(string)\n\n /**\n * Returns the index
within this string builder of the last occurrence of the specified [string],\n * starting from the specified [startIndex]
toward the beginning.\n *\n * Returns -1 if the specified [string] does not occur in this string builder starting
at the specified [startIndex].\n *\n @SinceKotlin("1.4")\n
@WasExperimental(ExperimentalStdlibApi::class)\n actual fun lastIndexOf(string: String, startIndex: Int): Int {\n
if (string.isEmpty() && startIndex < 0) return -1\n return this.string.asDynamic().lastIndexOf(string,
startIndex)\n }\n\n /**\n * Inserts the string representation of the specified boolean [value] into this string
builder at the specified [index] and returns this instance.\n *\n * The overall effect is exactly as if the [value]
were converted to a string by the `value.toString()` method,\n * and then that string was inserted into this string
builder at the specified [index].\n *\n * @throws IndexOutOfBoundsException if [index] is less than zero or
greater than the length of this string builder.\n *\n @SinceKotlin("1.4")\n
@WasExperimental(ExperimentalStdlibApi::class)\n actual fun insert(index: Int, value: Boolean): StringBuilder
{\n AbstractList.checkPositionIndex(index, length)\n\n string = string.substring(0, index) + value +
string.substring(index)\n return this\n }\n\n /**\n * Inserts the specified character [value] into this string
builder at the specified [index] and
returns this instance.\n *\n * @throws IndexOutOfBoundsException if [index] is less than zero or greater than
the length of this string builder.\n *\n @SinceKotlin("1.4")\n
@WasExperimental(ExperimentalStdlibApi::class)\n actual fun insert(index: Int, value: Char): StringBuilder {\n
AbstractList.checkPositionIndex(index, length)\n\n string = string.substring(0, index) + value +
string.substring(index)\n return this\n }\n\n /**\n * Inserts characters in the specified character array
[value] into this string builder at the specified [index] and returns this instance.\n *\n * The inserted characters
go in same order as in the [value] character array, starting at [index].\n *\n * @throws
IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.\n *\n
@SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n actual fun insert(index: Int, value:
CharArray): StringBuilder {\n AbstractList.checkPositionIndex(index, length)\n\n string =
string.substring(0, index) + value.concatToString() + string.substring(index)\n return this\n }\n\n /**\n *
Inserts characters in the specified character sequence [value] into this string builder at the specified [index] and
returns this instance.\n *\n * The inserted characters go in the same order as in the [value] character sequence,
starting at [index].\n *\n * @param index the position in this string builder to insert at.\n * @param value the
character sequence from which characters are inserted. If [value] is `null`, then the four characters `"\null"` are
inserted.\n *\n * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of
this string builder.\n *\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n
actual fun insert(index: Int, value: CharSequence?): StringBuilder
{\n AbstractList.checkPositionIndex(index, length)\n\n string = string.substring(0, index) +
value.toString() + string.substring(index)\n return this\n }\n\n /**\n * Inserts the string representation of
the specified object [value] into this string builder at the specified [index] and returns this instance.\n *\n * The
overall effect is exactly as if the [value] were converted to a string by the `value.toString()` method,\n * and then
that string was inserted into this string builder at the specified [index].\n *\n * @throws
IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.\n *\n
@SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n actual fun insert(index: Int, value:

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Any?): StringBuilder {
 AbstractList.checkPositionIndex(index, length)
 string = string.substring(0, index) + value.toString() + string.substring(index)
 return this
}

@Deprecated("Provided for binary compatibility.", level = DeprecationLevel.HIDDEN)
fun insert(index: Int, value: String): StringBuilder = insert(index, value)

/**
 * Inserts the string [value] into this string builder at the specified [index] and returns this instance.
 * If [value] is `null`, then the four characters `"\u0000"` are inserted.
 * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.
 */
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
actual fun insert(index: Int, value: String?): StringBuilder {
 AbstractList.checkPositionIndex(index, length)
 val toInsert = value ?: "\u0000"
 this.string = this.string.substring(0, index) + toInsert + this.string.substring(index)
 return this
}

/**
 * Sets the length of this string builder to the specified [newLength].
 * If the [newLength] is less than the current length, it is changed to the specified [newLength].
 * Otherwise, null characters '\u0000' are appended to this string builder until its length is less than the [newLength].
 * Note that in Kotlin/JS [set] operator function has non-constant execution time complexity.
 * Therefore, increasing length of this string builder and then updating each character by index may slow down your program.
 * @throws IndexOutOfBoundsException or [IllegalArgumentException] if [newLength] is less than zero.
 */
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
actual fun setLength(newLength: Int) {
 if (newLength < 0) {
 throw IllegalArgumentException("Negative new length: $newLength.")
 }
 if (newLength <= length) {
 string = string.substring(0, newLength)
 } else {
 for (i in length until newLength) {
 string += "\u0000"
 }
 }
}

/**
 * Returns a new [String] that contains characters in this string builder at [startIndex] (inclusive) and up to the [length] (exclusive).
 * @throws IndexOutOfBoundsException if [startIndex] is less than zero or greater than the length of this string builder.
 */
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
actual fun substring(startIndex: Int): String {
 AbstractList.checkPositionIndex(startIndex, length)
 return string.substring(startIndex)
}

/**
 * Returns a new [String] that contains characters in this string builder at [startIndex] (inclusive) and up to the [endIndex] (exclusive).
 * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this string builder indices or when `startIndex > endIndex`.
 */
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
actual fun substring(startIndex: Int, endIndex: Int): String {
 AbstractList.checkBoundsIndexes(startIndex, endIndex, length)
 return string.substring(startIndex, endIndex)
}

/**
 * Attempts to reduce storage used for this string builder.
 * If the backing storage of this string builder is larger than necessary to hold its current contents, then it may be resized to become more space efficient.
 * Calling this method may, but is not required to, affect the value of the [capacity] property.
 * In Kotlin/JS implementation of StringBuilder the size of the backing storage is always equal to the length of the string builder.
 */
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
actual fun trimToSize() {}

override fun toString(): String = string

/**
 * Clears the content of this string builder making it empty and returns this instance.
 * @sample samples.text.Strings.clearStringBuilder
 */
@SinceKotlin("1.3")
public fun clear(): StringBuilder {
 string = ""
 return this
}

/**
 * Sets the character at the specified [index] to the specified [value].
 * @throws IndexOutOfBoundsException if [index] is out of bounds of this string builder.
 */
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public operator fun set(index: Int, value: Char) {
 AbstractList.checkElementIndex(index, length)
 string = string.substring(0, index) + value + string.substring(index + 1)
}

/**
 * Replaces characters in the specified range of this string builder with characters in the specified string [value] and returns this instance.
 * @param startIndex the beginning (inclusive) of the range to replace.
 * @param endIndex

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the end (exclusive) of the range to replace.\n * @param value the string to replace with.\n *\n * @throws
IndexOutOfBoundsException or [IllegalArgumentException] if [startIndex] is less than zero, greater than the length
of this string builder, or `startIndex > endIndex`.\n *\n @SinceKotlin("1.4")\n
@WasExperimental(ExperimentalStdlibApi::class)\n public fun setRange(startIndex: Int, endIndex: Int, value:
String): StringBuilder {\n checkReplaceRange(startIndex, endIndex, length)\n this.string =
this.string.substring(0, startIndex) + value + this.string.substring(endIndex)\n return this\n }\n\n private fun
checkReplaceRange(startIndex: Int, endIndex: Int, length: Int) {\n if (startIndex < 0 || startIndex > length) {\n
 throw IndexOutOfBoundsException("`startIndex: $startIndex, length: $length`")\n }\n if (startIndex >
endIndex) {\n throw IllegalArgumentException("`startIndex($startIndex) >
endIndex($endIndex)`")\n }\n }\n\n /**\n * Removes the character at the specified [index] from this
string builder and returns this instance.\n *\n * If the `Char` at the specified [index] is part of a supplementary
code point, this method does not remove the entire supplementary character.\n *\n * @param index the index of
`Char` to remove.\n *\n * @throws IndexOutOfBoundsException if [index] is out of bounds of this string
builder.\n *\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public fun
deleteAt(index: Int): StringBuilder {\n AbstractList.checkElementIndex(index, length)\n string =
string.substring(0, index) + string.substring(index + 1)\n return this\n }\n\n /**\n * Removes characters in
the specified range from this string builder and returns this instance.\n *\n * @param startIndex the beginning
(inclusive) of the range to remove.\n * @param endIndex
the end (exclusive) of the range to remove.\n *\n * @throws IndexOutOfBoundsException or
[IllegalArgumentException] when [startIndex] is out of range of this string builder indices or when `startIndex >
endIndex`.\n *\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public fun
deleteRange(startIndex: Int, endIndex: Int): StringBuilder {\n checkReplaceRange(startIndex, endIndex,
length)\n string = string.substring(0, startIndex) + string.substring(endIndex)\n return this\n }\n\n
/**\n * Copies characters from this string builder into the [destination] character array.\n *\n * @param
destination the array to copy to.\n * @param destinationOffset the position in the array to copy to, 0 by default.\n
* @param startIndex the beginning (inclusive) of the range to copy, 0 by default.\n * @param endIndex the end
(exclusive) of the range to copy, length of this string builder by default.\n
*\n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is
out of range of this string builder indices or when `startIndex > endIndex`.\n * @throws
IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified
[destinationOffset],\n * or when that index is out of the [destination] array indices range.\n *\n
@SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public fun
toCharArray(destination: CharArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = this.length) {\n
 AbstractList.checkBoundsIndexes(startIndex, endIndex, length)\n
AbstractList.checkBoundsIndexes(destinationOffset, destinationOffset + endIndex - startIndex, destination.size)\n
 var dstIndex = destinationOffset\n for (index in startIndex until endIndex) {\n destination[dstIndex++]
= string[index]\n }\n }\n\n /**\n
* Appends characters in a subarray of the specified character array [value] to this string builder and returns this
instance.\n *\n * Characters are appended in order, starting at specified [startIndex].\n *\n * @param value
the array from which characters are appended.\n * @param startIndex the beginning (inclusive) of the subarray to
append.\n * @param endIndex the end (exclusive) of the subarray to append.\n *\n * @throws
IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of the
[value] array indices or when `startIndex > endIndex`.\n *\n @SinceKotlin("1.4")\n
@WasExperimental(ExperimentalStdlibApi::class)\n public fun appendRange(value: CharArray, startIndex: Int,
endIndex: Int): StringBuilder {\n string += value.concatToString(startIndex, endIndex)\n return this\n
}\n\n /**\n * Appends a subsequence of the specified character sequence [value] to this
string builder and returns this instance.\n *\n * @param value the character sequence from which a
subsequence is appended.\n * @param startIndex the beginning (inclusive) of the subsequence to append.\n *

```



```

DOWED_BY_MEMBER",
\("NOTHING_TO_INLINE")\npublic actual inline fun StringBuilder.setRange(startIndex: Int, endIndex: Int, value:
String): StringBuilder =\n this.setRange(startIndex, endIndex, value)\n\n/**\n * Removes the character at the
specified [index] from this string builder and returns this instance.\n *\n * If the `Char` at the specified [index] is
part of a supplementary code point, this method does not remove the entire supplementary character.\n *\n *
@param index the index of `Char` to remove.\n *\n * @throws IndexOutOfBoundsException if [index] is out of
bounds of this string builder.\n
*/\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("EXTENSION_SHA
DOWED_BY_MEMBER", "NOTHING_TO_INLINE")\npublic actual inline fun StringBuilder.deleteAt(index:
Int): StringBuilder = this.deleteAt(index)\n\n/**\n * Removes characters in the specified range from this string
builder and returns this instance.\n *\n * @param startIndex the
beginning (inclusive) of the range to remove.\n * @param endIndex the end (exclusive) of the range to remove.\n
*\n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] is out of range of
this string builder indices or when `startIndex > endIndex`.\n
*/\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("EXTENSION_SHA
DOWED_BY_MEMBER", "NOTHING_TO_INLINE")\npublic actual inline fun
StringBuilder.deleteRange(startIndex: Int, endIndex: Int): StringBuilder = this.deleteRange(startIndex,
endIndex)\n\n/**\n * Copies characters from this string builder into the [destination] character array.\n *\n *
@param destination the array to copy to.\n * @param destinationOffset the position in the array to copy to, 0 by
default.\n * @param startIndex the beginning (inclusive) of the range to copy, 0 by default.\n * @param endIndex
the end (exclusive) of the range to copy, length of this string builder by default.\n *\n * @throws
IndexOutOfBoundsException
or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this string builder indices or when
`startIndex > endIndex`.\n *\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the
[destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination]
array indices range.\n
*/\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("EXTENSION_SHA
DOWED_BY_MEMBER", "NOTHING_TO_INLINE",
"ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual inline fun
StringBuilder.toCharArray(destination: CharArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int =
this.length) =\n this.toCharArray(destination, destinationOffset, startIndex, endIndex)\n\n/**\n * Appends
characters in a subarray of the specified character array [value] to this string builder and returns this instance.\n
*\n * Characters are appended in order, starting at specified [startIndex].\n
*\n * @param value the array from which characters are appended.\n * @param startIndex the beginning
(inclusive) of the subarray to append.\n * @param endIndex the end (exclusive) of the subarray to append.\n *\n *
@throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of
range of the [value] array indices or when `startIndex > endIndex`.\n
*/\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("EXTENSION_SHA
DOWED_BY_MEMBER", "NOTHING_TO_INLINE")\npublic actual inline fun
StringBuilder.appendRange(value: CharArray, startIndex: Int, endIndex: Int): StringBuilder =\n this.appendRange(value, startIndex, endIndex)\n\n/**\n * Appends a subsequence of the specified character
sequence [value] to this string builder and returns this instance.\n *\n * @param value the character sequence from
which a subsequence is appended.\n * @param startIndex the beginning (inclusive) of the subsequence to append.\n
* @param endIndex the end (exclusive) of the subsequence to append.\n *\n * @throws
IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of the
[value] character sequence indices or when `startIndex > endIndex`.\n
*/\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("EXTENSION_SHA
DOWED_BY_MEMBER", "NOTHING_TO_INLINE")\npublic actual inline fun

```



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NumberFormatException if the string is not a valid representation of a number.\n */\npublic actual fun
String.toInt(): Int = toIntOrNull() ?: numberFormatError(this)\n\n/**\n * Parses the string as an [Int] number and
returns the result.\n * @throws NumberFormatException if the string is not a valid representation of a number.\n *
@throws IllegalArgumentException when [radix] is not a valid radix for string to number conversion.\n */\npublic
actual fun String.toInt(radix: Int): Int = toIntOrNull(radix) ?: numberFormatError(this)\n\n/**\n * Parses the string
as a [Long] number and returns the result.\n * @throws NumberFormatException if the string is not a valid
representation
of a number.\n */\npublic actual fun String.toLong(): Long = toLongOrNull() ?: numberFormatError(this)\n\n/**\n
* Parses the string as a [Long] number and returns the result.\n * @throws NumberFormatException if the string is
not a valid representation of a number.\n * @throws IllegalArgumentException when [radix] is not a valid radix for
string to number conversion.\n */\npublic actual fun String.toLong(radix: Int): Long = toLongOrNull(radix) ?:
numberFormatError(this)\n\n/**\n * Parses the string as a [Double] number and returns the result.\n * @throws
NumberFormatException if the string is not a valid representation of a number.\n */\npublic actual fun
String.toDouble(): Double = (+this.asDynamic()).unsafeCast<Double>().also {\n if (it.isNaN() && !this.isNaN())
|| it == 0.0 && this.isBlank())\n numberFormatError(this)\n}\n\n/**\n * Parses the string as a [Float] number
and returns the result.\n * @throws NumberFormatException if the string is not a valid representation
of a number.\n */\n@kotlin.internal.InlineOnly\npublic actual inline fun String.toFloat(): Float =
toDouble().unsafeCast<Float>()\n\n/**\n * Parses the string as a [Double] number and returns the result\n * or `null`
if the string is not a valid representation of a number.\n */\npublic actual fun String.toDoubleOrNull(): Double? =
(+this.asDynamic()).unsafeCast<Double>().takeIf {\n !(it.isNaN() && !this.isNaN()) || it == 0.0 &&
this.isBlank()\n}\n\n/**\n * Parses the string as a [Float] number and returns the result\n * or `null` if the string
is not a valid representation of a number.\n */\n@kotlin.internal.InlineOnly\npublic actual inline fun
String.toFloatOrNull(): Float? = toDoubleOrNull().unsafeCast<Float?>()\n\n/**\n * Returns a string representation
of this [Byte] value in the specified [radix].\n * @throws IllegalArgumentException when [radix] is not a valid
radix for number to string conversion.\n */\n@SinceKotlin("1.2")\n@kotlin.internal.InlineOnly\npublic
actual inline fun Byte.toString(radix: Int): String = this.toInt().toString(radix)\n\n/**\n * Returns a string
representation of this [Short] value in the specified [radix].\n * @throws IllegalArgumentException when [radix]
is not a valid radix for number to string conversion.\n */\n@SinceKotlin("1.2")\n@kotlin.internal.InlineOnly\npublic
actual inline fun Short.toString(radix: Int): String =
this.toInt().toString(radix)\n\n/**\n * Returns a string representation of this [Int] value in the specified [radix].\n *
@throws IllegalArgumentException when [radix] is not a valid radix for number to string conversion.\n */\n@SinceKotlin("1.2")\npublic actual fun Int.toString(radix: Int): String =
asDynamic().toString(checkRadix(radix))\n\nprivate fun String.isNaN(): Boolean = when (this.lowercase()) {\n
"nan", "+nan", "-nan" -> true\n else -> false\n}\n\n/**\n * Checks whether the given [radix] is valid radix for
string to number and number to string conversion.\n */\n@PublishedApi\ninternal
actual fun checkRadix(radix: Int): Int {\n if (radix !in 2..36) {\n throw IllegalArgumentException("radix
$radix was not in valid range 2..36")\n }\n return radix\n}\n\ninternal actual fun digitOf(char: Char, radix: Int):
Int = when {\n char >= '0' && char <= '9' -> char - '0'\n char >= 'A' && char <= 'Z' -> char - 'A' + 10\n char >=
'a' && char <= 'z' -> char - 'a' + 10\n char < "\u0080" -> -1\n char >= "\uFF21" && char <= "\uFF3A" -> char -
"\uFF21" + 10 // full-width latin capital letter\n char >= "\uFF41" && char <= "\uFF5A" -> char - "\uFF41" + 10 //
full-width latin small letter\n else -> char.digitToIntImpl()\n}.let { if (it >= radix) -1 else it }\n\n", "/*\n * Copyright
2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed
by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.text\nimport
kotlin.js.RegExp\n\n/**\n * Provides enumeration values to use to set regular expression options.\n */\npublic actual enum class
RegexOption(val value: String) {\n /** Enables case-insensitive matching. */\n IGNORE_CASE("i"),\n /**
Enables multiline mode.\n * @n * In multiline mode the expressions `^` and `$` match just after or just before,\n
* respectively, a line terminator or the end of the input sequence. */\n MULTILINE("m")\n}\n\nprivate fun

```





```

IndexOutOfBoundsException if [startIndex] is less than zero or greater than the length of the [input] char
sequence.\n * @sample samples.text.Regexps.find\n */\n
@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\n public actual fun find(input:
CharSequence, startIndex: Int = 0): MatchResult? {\n if (startIndex < 0 || startIndex > input.length) {\n
throw IndexOutOfBoundsException("Start index out of bounds: $startIndex, input length: ${input.length}")\n
}\n return nativePattern.findNext(input.toString(),
startIndex, nativePattern)\n }\n\n /**\n * Returns a sequence of all occurrences of a regular expression within
the [input] string, beginning at the specified [startIndex].\n *\n * @throws IndexOutOfBoundsException if
[startIndex] is less than zero or greater than the length of the [input] char sequence.\n *\n * @sample
samples.text.Regexps.findAll\n */\n
@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\n public actual fun findAll(input:
CharSequence, startIndex: Int = 0): Sequence<MatchResult> {\n if (startIndex < 0 || startIndex > input.length)
{\n throw IndexOutOfBoundsException("Start index out of bounds: $startIndex, input length:
${input.length}")\n }\n return generateSequence({ find(input, startIndex) }, { match -> match.next() })\n
}\n\n /**\n * Attempts to match the entire [input] CharSequence against the pattern.\n *\n * @return An
instance of [MatchResult] if the
entire input matches or `null` otherwise.\n */\n public actual fun matchEntire(input: CharSequence):
MatchResult? =\n initMatchesEntirePattern().findNext(input.toString(), 0, nativePattern)\n\n
@SinceKotlin("1.7")\n @WasExperimental(ExperimentalStdlibApi::class)\n public actual fun matchAt(input:
CharSequence, index: Int): MatchResult? {\n if (index < 0 || index > input.length) {\n throw
IndexOutOfBoundsException("index out of bounds: $index, input length: ${input.length}")\n }\n return
initStickyPattern().findNext(input.toString(), index, nativePattern)\n }\n\n\n /**\n * Replaces all occurrences
of this regular expression in the specified [input] string with specified [replacement] expression.\n *\n * The
replacement string may contain references to the captured groups during a match. Occurrences of `${name}` or
`$index`\n * in the replacement string will be substituted with the subsequences corresponding
to the captured groups with the specified name or index.\n * In case of `$index`, the first digit after '$' is always
treated as a part of group reference. Subsequent digits are incorporated\n * into `index` only if they would form a
valid group reference. Only the digits '0'..'9' are considered as potential components\n * of the group reference.
Note that indexes of captured groups start from 1, and the group with index 0 is the whole match.\n * In case of
`${name}`, the `name` can consist of latin letters 'a'..'z' and 'A'..'Z', or digits '0'..'9'. The first character must be\n *
a letter.\n *\n * Backslash character '\\' can be used to include the succeeding character as a literal in the
replacement string, e.g. `\\$` or `\\|`.\n * [Regex.escapeReplacement] can be used if [replacement] have to be
treated as a literal string.\n *\n * @param input the char sequence to find matches of this regular expression
in\n *\n * @param replacement the expression
to replace found matches with\n *\n * @return the result of replacing each occurrence of this regular expression in
[input] with the result of evaluating the [replacement] expression\n *\n * @throws RuntimeException if
[replacement] expression is malformed, or capturing group with specified `name` or `index` does not exist\n */\n
public actual fun replace(input: CharSequence, replacement: String): String {\n if (!replacement.contains("\\|")
&& !replacement.contains("$")) {\n return input.toString().nativeReplace(nativePattern, replacement)\n
}\n return replace(input) { substituteGroupRefs(it, replacement) }\n }\n\n\n /**\n * Replaces all
occurrences of this regular expression in the specified [input] string with the result of\n * the given function
[transform] that takes [MatchResult] and returns a string to be used as a\n * replacement for that match.\n */\n
public actual fun replace(input: CharSequence, transform:
(MatchResult) -> CharSequence): String {\n var match = find(input)\n if (match == null) return
input.toString()\n var lastStart = 0\n val length = input.length\n val sb = StringBuilder(length)\n
do {\n val foundMatch = match!!\n sb.append(input, lastStart, foundMatch.range.start)\n
sb.append(transform(foundMatch))\n lastStart = foundMatch.range.endInclusive + 1\n match =
foundMatch.next()\n } while (lastStart < length && match != null)\n if (lastStart < length) {\n

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sb.append(input, lastStart, length))\n }\n\n return sb.toString()\n }\n\n /**\n * Replaces the first
occurrence of this regular expression in the specified [input] string with specified [replacement] expression.\n *\n * The replacement string may contain references to the captured groups during a match. Occurrences of `${name}`
or `${index}` * in the replacement string
will be substituted with the subsequences corresponding to the captured groups with the specified name or index.\n *
In case of `${index}`, the first digit after '$' is always treated as a part of group reference. Subsequent digits are
incorporated * into `index` only if they would form a valid group reference. Only the digits '0'..'9' are considered
as potential components * of the group reference. Note that indexes of captured groups start from 1, and the
group with index 0 is the whole match.\n * In case of `${name}`, the `name` can consist of latin letters 'a'..'z' and
'A'..'Z', or digits '0'..'9'. The first character must be * a letter.\n *\n * Backslash character '\\' can be used to
include the succeeding character as a literal in the replacement string, e.g, `\\$` or `\\\\`.\n *
[Regex.escapeReplacement] can be used if [replacement] have to be treated as a literal string.\n *\n * @param
input the char sequence to find a match of
this regular expression in * @param replacement the expression to replace the found match with * @return
the result of replacing the first occurrence of this regular expression in [input] with the result of evaluating the
[replacement] expression * @throws RuntimeException if [replacement] expression is malformed, or capturing
group with specified `name` or `index` does not exist */\n public actual fun replaceFirst(input: CharSequence,
replacement: String): String {\n if (!replacement.contains("\\\\") && !replacement.contains('$')) {\n val
nonGlobalOptions = options.toFlags("\\u")\n return input.toString().nativeReplace(RegExp(pattern,
nonGlobalOptions), replacement)\n }\n\n val match = find(input) ?: return input.toString()\n\n return
buildString {\n append(input.substring(0, match.range.first))\n append(substituteGroupRefs(match,
replacement))\n append(input.substring(match.range.last
+ 1, input.length))\n }\n }\n\n /**\n * Splits the [input] CharSequence to a list of strings around matches
of this regular expression.\n *\n * @param limit Non-negative value specifying the maximum number of
substrings the string can be split to.\n * Zero by default means no limit is set.\n */\n @Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\n public actual fun split(input:
CharSequence, limit: Int = 0): List<String> {\n requireNonNegativeLimit(limit)\n val matches =
findAll(input).let { if (limit == 0) it else it.take(limit - 1) }\n val result = mutableListOf<String>()\n var
lastStart = 0\n for (match in matches) {\n result.add(input.subSequence(lastStart,
match.range.start).toString())\n lastStart = match.range.endInclusive + 1\n }\n result.add(input.subSequence(lastStart, input.length).toString())\n return result\n }\n\n /**\n * Splits the
[input] CharSequence to a sequence of strings around matches of this regular expression.\n *\n * @param limit
Non-negative value specifying the maximum number of substrings the string can be split to.\n * Zero by default
means no limit is set.\n * @sample samples.text.Regexps.splitToSequence */\n @SinceKotlin("1.6")\n @WasExperimental(ExperimentalStdlibApi::class)\n @Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\n public actual fun
splitToSequence(input: CharSequence, limit: Int = 0): Sequence<String> {\n requireNonNegativeLimit(limit)\n\n return sequence {\n var match = find(input)\n if (match ==
null || limit == 1) {\n yield(input.toString())\n return@sequence\n }\n var
nextStart = 0\n var splitCount = 0\n do {\n val foundMatch = match!!\n yield(input.substring(nextStart, foundMatch.range.first))\n nextStart = foundMatch.range.endInclusive + 1\n match = foundMatch.next()\n } while
(++splitCount != limit - 1 && match != null)\n yield(input.substring(nextStart, input.length))\n }\n }\n\n /**\n * Returns the string representation of this regular expression, namely the [pattern] of this regular
expression.\n *\n * Note that another regular expression constructed from the same pattern string may have
different [options]\n * and may match strings differently.\n */\n public override fun toString(): String =
nativePattern.toString()\n\n actual companion object {\n /**\n * Returns a regular expression that
matches the specified [literal] string literally.\n * No characters of that string will have special meaning when

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searching for an occurrence of the regular expression.\n */\n public actual fun fromLiteral(literal: String):
Regex = Regex(escape(literal))\n\n
 /**\n * Returns a regular expression pattern string that matches the specified [literal] string literally.\n
 * No characters of that string will have special meaning when searching for an occurrence of the regular
expression.\n */\n public actual fun escape(literal: String): String = literal.nativeReplace(patternEscape,
"\\\\\\\$&\\")\n\n /**\n * Returns a literal replacement expression for the specified [literal] string.\n * No
characters of that string will have special meaning when it is used as a replacement string in [Regex.replace]
function.\n */\n public actual fun escapeReplacement(literal: String): String =
literal.nativeReplace(replacementEscape, "\\\\\\\\$&\\")\n\n private val patternEscape =
RegExp("\\\\\\""\[\[\]^*+?.()\[\]\{\}\|\\""\", \"g\")\n private val replacementEscape = RegExp("\\\\\\""\[\[\]^*+?.()\[\]\{\}\|\\""\",
\"g\")\n\n internal fun nativeEscapeReplacement(literal: String): String =
literal.nativeReplace(nativeReplacementEscape,
"$$$\\")\n private val nativeReplacementEscape = RegExp("\\\\\\""\[\[\]^*+?.()\[\]\{\}\|\\""\", \"g\")\n }\n}\n\n\nprivate fun
RegExp.findNext(input: String, from: Int, nextPattern: RegExp): MatchResult? {\n this.lastIndex = from\n val
match = exec(input)\n if (match == null) return null\n val range = match.index..lastIndex - 1\n return object :
MatchResult {\n override val range: IntRange = range\n override val value: String\n get() =
match[0]!\n override val groups: MatchGroupCollection = object : MatchNamedGroupCollection,
AbstractCollection<MatchGroup?>() {\n override val size: Int get() = match.length\n override fun
iterator(): Iterator<MatchGroup?> = indices.asSequence().map { this[it] }.iterator()\n override fun get(index:
Int): MatchGroup? = match[index]?.let { MatchGroup(it) }\n override fun get(name: String): MatchGroup?
{\n // An object
of named capturing groups whose keys are the names and values are the capturing groups\n // or undefined
if no named capturing groups were defined.\n val groups = match.asDynamic().groups\n ?:
throw IllegalArgumentException("\Capturing group with name { $name } does not exist. No named capturing group
was defined in Regex")\n // If the match was successful but the group specified failed to match any part
of the input sequence,\n // the associated value is 'undefined'. Value for a non-existent key is also
'undefined'. Thus, explicitly check if the key exists.\n if (!hasOwnProperty(groups, name))\n throw IllegalArgumentException("\Capturing group with name { $name } does not exist")\n val
value = groups[name]\n return if (value == undefined) null else MatchGroup(value as String)\n }\n }\n private fun hasOwnProperty(o:
Any?, name: String): Boolean {\n return js("Object").prototype.hasOwnProperty.call(o,
name).unsafeCast<Boolean>()\n }\n private var groupValues_: List<String>? = null\n override
val groupValues: List<String>\n get() {\n if (groupValues_ == null) {\n groupValues_ =
object : AbstractList<String>() {\n override val size: Int get() = match.length\n override
fun get(index: Int): String = match[index] ?: ""\n }\n return groupValues_!!\n }\n override fun next(): MatchResult? =\n nextPattern.findNext(input, if (range.isEmpty())
advanceToNextCharacter(range.start) else range.endInclusive + 1, nextPattern)\n }\n private fun
advanceToNextCharacter(index: Int): Int {\n if (index < input.lastIndex) {\n val code1 =
input.asDynamic().charCodeAt(index).unsafeCast<Int>()\n if (code1 in 0xD800..0xDBFF) {\n val code2 = input.asDynamic().charCodeAt(index +
1).unsafeCast<Int>()\n if (code2 in 0xDC00..0xDFFF) {\n return index + 2\n }\n }\n return index + 1\n }\n }\n }\n }\n}\n\n\nprivate fun substituteGroupRefs(match: MatchResult, replacement: String): String {\n var index = 0\n val result = StringBuilder()\n while (index < replacement.length) {\n val char = replacement[index++]\n if (char == "\\") {\n if (index == replacement.length)\n throw IllegalArgumentException("\The Char
to be escaped is missing")\n result.append(replacement[index++])\n } else if (char == '$') {\n if
(index == replacement.length)\n throw IllegalArgumentException("\Capturing group index

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that string was appended to this string builder.\n *\n @SinceKotlin("1.3")\n fun append(value: Boolean):
StringBuilder\n\n /**\n * Appends characters in the specified character array [value] to this string builder and
returns this instance.\n *\n * Characters are appended in order, starting at the index 0.\n *\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun append(value: CharArray):
StringBuilder\n\n /**\n * Appends the specified string [value] to this string builder and returns this instance.\n *\n * If [value] is `null`, then the four characters `\\null`
are appended.\n *\n @SinceKotlin("1.3")\n fun append(value: String?): StringBuilder\n\n /**\n *
Returns the current capacity of this string builder.\n *\n * The capacity is the maximum length this string
builder can have before an allocation occurs.\n *\n @SinceKotlin("1.3")\n @ExperimentalStdlibApi\n @Deprecated("Obtaining StringBuilder capacity is not supported in JS and common code.", level =
DeprecationLevel.ERROR)\n fun capacity(): Int\n\n /**\n * Ensures that the capacity of this string builder is
at least equal to the specified [minimumCapacity].\n *\n * If the current capacity is less than the
[minimumCapacity], a new backing storage is allocated with greater capacity.\n * Otherwise, this method takes
no action and simply returns.\n *\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun ensureCapacity(minimumCapacity: Int)\n\n /**\n *
Returns the index
within this string builder of the first occurrence of the specified [string].\n *\n * Returns `-1` if the specified
[string] does not occur in this string builder.\n *\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun indexOf(string: String): Int\n\n /**\n * Returns the
index within this string builder of the first occurrence of the specified [string],\n * starting at the specified
[startIndex].\n *\n * Returns `-1` if the specified [string] does not occur in this string builder starting at the
specified [startIndex].\n *\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun indexOf(string: String, startIndex: Int): Int\n\n /**\n * Returns the index within this string builder of the last
occurrence of the specified [string].\n * The last occurrence of empty string `""` is considered to be at the index
equal to `this.length`.\n *\n * Returns `-1` if the specified
[string] does not occur in this string builder.\n *\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun lastIndexOf(string: String): Int\n\n /**\n * Returns
the index within this string builder of the last occurrence of the specified [string],\n * starting from the specified
[startIndex] toward the beginning.\n *\n * Returns `-1` if the specified [string] does not occur in this string
builder starting at the specified [startIndex].\n *\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun lastIndexOf(string: String, startIndex: Int): Int\n\n /**\n * Inserts the string representation of the specified boolean [value] into this string builder at the specified
[index] and returns this instance.\n *\n * The overall effect is exactly as if the [value] were converted to a string
by the `value.toString()` method,\n * and then that string was inserted into this string builder
at the specified [index].\n *\n * @throws IndexOutOfBoundsException if [index] is less than zero or greater
than the length of this string builder.\n *\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun insert(index: Int, value: Boolean): StringBuilder\n\n /**\n * Inserts the specified character [value] into this string builder at the specified [index] and returns this
instance.\n *\n * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of
this string builder.\n *\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun insert(index: Int, value: Char): StringBuilder\n\n /**\n * Inserts characters in the specified character array
[value] into this string builder at the specified [index] and returns this instance.\n *\n * The inserted characters
go in same order as in the [value] character array, starting at [index].\n *\n *
@throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.\n *\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun insert(index: Int,
value: CharArray): StringBuilder\n\n /**\n * Inserts characters in the specified character sequence [value] into
this string builder at the specified [index] and returns this instance.\n *\n * The inserted characters go in the
same order as in the [value] character sequence, starting at [index].\n *\n * @param index the position in this

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string builder to insert at.\n * @param value the character sequence from which characters are inserted. If [value]
is `null`, then the four characters `"\null"` are inserted.\n *\n * @throws IndexOutOfBoundsException if
[index] is less than zero or greater than the length of this string builder.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun
insert(index: Int, value: CharSequence?): StringBuilder\n\n /**\n * Inserts the string representation of the
specified object [value] into this string builder at the specified [index] and returns this instance.\n *\n * The
overall effect is exactly as if the [value] were converted to a string by the `value.toString()` method,\n * and then
that string was inserted into this string builder at the specified [index].\n *\n * @throws
IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun insert(index: Int, value:
Any?): StringBuilder\n\n /**\n * Inserts the string [value] into this string builder at the specified [index] and
returns this instance.\n *\n * If [value] is `null`, then the four characters `"\null"` are inserted.\n *\n *
@throws IndexOutOfBoundsException if [index] is less than zero
or greater than the length of this string builder.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun insert(index: Int, value: String?): StringBuilder\n\n /**\n * Sets the length of this string builder to the specified [newLength].\n *\n * If the [newLength] is less
than the current length, it is changed to the specified [newLength].\n * Otherwise, null characters `'\u0000'` are
appended to this string builder until its length is less than the [newLength].\n *\n * Note that in Kotlin/JS [set]
operator function has non-constant execution time complexity.\n * Therefore, increasing length of this string
builder and then updating each character by index may slow down your program.\n *\n * @throws
IndexOutOfBoundsException or [IllegalArgumentException] if [newLength] is less than zero.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun setLength(newLength:
Int)\n\n /**\n * Returns a new [String] that contains characters in this string builder at [startIndex] (inclusive)
and up to the [length] (exclusive).\n *\n * @throws IndexOutOfBoundsException if [startIndex] is less than
zero or greater than the length of this string builder.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun substring(startIndex: Int): String\n\n /**\n * Returns
a new [String] that contains characters in this string builder at [startIndex] (inclusive) and up to the [endIndex]
(exclusive).\n *\n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex]
or [endIndex] is out of range of this string builder indices or when `startIndex > endIndex`.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun substring(startIndex: Int,
endIndex: Int): String\n\n /**\n * Attempts to reduce storage used for this string builder.\n *\n * If the backing storage of this string builder is larger than necessary to hold its current contents,\n *
then it may be resized to become more space efficient.\n * Calling this method may, but is not required to, affect
the value of the [capacity] property.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun trimToSize()\n\n /**\n * Clears the content of this
string builder making it empty and returns this instance.\n */\n @sample samples.text.Strings.clearStringBuilder\n */\n @SinceKotlin("1.3")\n public expect fun StringBuilder.clear(): StringBuilder\n\n /**\n * Sets the character at
the specified [index] to the specified [value].\n *\n * @throws IndexOutOfBoundsException if [index] is out of
bounds of this string builder.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public expect operator fun
StringBuilder.set(index: Int, value: Char)\n\n /**\n * Replaces characters in the specified
range of this string builder with characters in the specified string [value] and returns this instance.\n *\n * @param
startIndex the beginning (inclusive) of the range to replace.\n * @param endIndex the end (exclusive) of the range to
replace.\n * @param value the string to replace with.\n *\n * @throws IndexOutOfBoundsException or
[IllegalArgumentException] if [startIndex] is less than zero, greater than the length of this string builder, or
`startIndex > endIndex`.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public expect fun StringBuilder.setRange(startIndex: Int, endIndex: Int, value: String): StringBuilder\n\n /**\n * Removes
the character at the specified [index] from this string builder and returns this instance.\n *\n * If the `Char` at the

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specified [index] is part of a supplementary code point, this method does not remove the entire supplementary character.\n \* @param index the index of `Char` to remove.\n \* @throws IndexOutOfBoundsException if [index] is out of bounds of this string builder.\n

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*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun
StringBuilder.deleteAt(index: Int): StringBuilder\n\n/**\n * Removes characters in the specified range from this
string builder and returns this instance.\n * @param startIndex the beginning (inclusive) of the range to
remove.\n * @param endIndex the end (exclusive) of the range to remove.\n * @throws
IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] is out of range of this string builder
indices or when `startIndex > endIndex`.\n
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*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun
StringBuilder.deleteRange(startIndex: Int, endIndex: Int): StringBuilder\n\n/**\n * Copies characters from this
string builder into the [destination] character array.\n * @param destination the array to copy to.\n * @param
destinationOffset the position in the array to copy to,
0 by default.\n * @param startIndex the beginning (inclusive) of the range to copy, 0 by default.\n * @param
endIndex the end (exclusive) of the range to copy, length of this string builder by default.\n * @throws
IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this
string builder indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the
subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is
out of the [destination] array indices range.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun
StringBuilder.toCharArray(destination: CharArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int =
this.length)\n\n/**\n * Appends characters in a subarray of the specified character array [value] to this string builder
and returns this instance.\n * Characters are appended in order,
starting at specified [startIndex].\n * @param value the array from which characters are appended.\n * @param
startIndex the beginning (inclusive) of the subarray to append.\n * @param endIndex the end (exclusive) of the
subarray to append.\n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when
[startIndex] or [endIndex] is out of range of the [value] array indices or when `startIndex > endIndex`.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun
StringBuilder.appendRange(value: CharArray, startIndex: Int, endIndex: Int): StringBuilder\n\n/**\n * Appends a
subsequence of the specified character sequence [value] to this string builder and returns this instance.\n * @param value the character sequence from which a subsequence is appended.\n * @param startIndex the beginning
(inclusive) of the subsequence to append.\n * @param endIndex the end (exclusive) of the subsequence to append.\n * @throws IndexOutOfBoundsException
or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of the [value] character sequence
indices or when `startIndex > endIndex`.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun
StringBuilder.appendRange(value: CharSequence, startIndex: Int, endIndex: Int): StringBuilder\n\n/**\n * Inserts
characters in a subarray of the specified character array [value] into this string builder at the specified [index] and
returns this instance.\n * The inserted characters go in same order as in the [value] array, starting at [index].\n * @param index the position in this string builder to insert at.\n * @param value the array from which characters
are inserted.\n * @param startIndex the beginning (inclusive) of the subarray to insert.\n * @param endIndex the
end (exclusive) of the subarray to insert.\n * @throws IndexOutOfBoundsException or
[IllegalArgumentException] when [startIndex] or [endIndex] is out
of range of the [value] array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException if
[index] is less than zero or greater than the length of this string builder.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun
StringBuilder.insertRange(index: Int, value: CharArray, startIndex: Int, endIndex: Int): StringBuilder\n\n/**\n * Inserts characters in a subsequence of the specified character sequence [value] into this string builder at the specified
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[index] and returns this instance.  
The inserted characters go in the same order as in the [value] character sequence, starting at [index].  
@param index the position in this string builder to insert at.  
@param value the character sequence from which a subsequence is inserted.  
@param startIndex the beginning (inclusive) of the subsequence to insert.  
@param endIndex the end (exclusive) of the subsequence to insert.  
@throws IndexOutOfBoundsException

or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of the [value] character sequence indices or when `startIndex > endIndex`.  
@throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun
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StringBuilder.insertRange(index: Int, value: CharSequence, startIndex: Int, endIndex: Int):
```

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StringBuilder\n\n@Suppress("EXTENSION_SHADOWED_BY_MEMBER")\n@Deprecated("Use append(value: Any?) instead", ReplaceWith("append(value = obj)"),
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```
DeprecationLevel.WARNING)\n@kotlin.internal.InlineOnly\npublic inline fun StringBuilder.append(obj: Any?):
```

```
StringBuilder = this.append(obj)\n\n/**\n * Builds new string by populating newly created [StringBuilder] using provided [builderAction]\n * and then converting it to [String].\n */\n@kotlin.internal.InlineOnly\npublic inline fun
```

```
buildString(builderAction: StringBuilder.() -> Unit):
```

```
String {\n contract { callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE) }\n return
```

```
StringBuilder().apply(builderAction).toString()\n}\n\n/**\n * Builds new string by populating newly created
```

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[StringBuilder] initialized with the given [capacity]\n * using provided [builderAction] and then converting it to
```

```
[String].\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline fun buildString(capacity: Int,
```

```
builderAction: StringBuilder.() -> Unit): String {\n contract { callsInPlace(builderAction,
```

```
InvocationKind.EXACTLY_ONCE) }\n return
```

```
StringBuilder(capacity).apply(builderAction).toString()\n}\n\n/**\n * Appends all arguments to the given
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```
StringBuilder.\n */\npublic fun StringBuilder.append(vararg value: String?): StringBuilder {\n for (item in
```

```
value)\n append(item)\n return this\n}\n\n/**\n * Appends all arguments to the given StringBuilder.\n */\npublic fun StringBuilder.append(vararg value: Any?): StringBuilder {\n for (item in value)\n
```

```
append(item)\n return this\n}\n\n/**\n * Appends a line feed character (`\n`) to this StringBuilder.
```

```
 */\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun StringBuilder.appendLine():
```

```
StringBuilder = append("\n")\n\n/**\n * Appends [value] to this [StringBuilder], followed by a line feed character
```

```
(`\n`).\n */\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun StringBuilder.appendLine(value:
```

```
CharSequence?): StringBuilder = append(value).appendLine()\n\n/**\n * Appends [value] to this [StringBuilder],
```

```
followed by a line feed character (`\n`).\n */\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
```

```
StringBuilder.appendLine(value: String?): StringBuilder = append(value).appendLine()\n\n/**\n * Appends [value] to
```

```
this [StringBuilder], followed by a line feed character (`\n`).\n */\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun StringBuilder.appendLine(value: Any?):
```

```
StringBuilder = append(value).appendLine()\n\n/**\n * Appends [value] to this [StringBuilder], followed by a line feed character (`\n`).\n */\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun StringBuilder.appendLine(value:
```

```
CharArray): StringBuilder = append(value).appendLine()\n\n/**\n * Appends [value] to this [StringBuilder], followed
```

```
by a line feed character (`\n`).\n */\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
```

```
StringBuilder.appendLine(value: Char): StringBuilder = append(value).appendLine()\n\n/**\n * Appends [value] to this
```

```
[StringBuilder], followed by a line feed character (`\n`).\n */\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun StringBuilder.appendLine(value:
```

```
Boolean): StringBuilder = append(value).appendLine()\n\n"/\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
```

```
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
```

```
found in the license/LICENSE.txt file.\n */\n\npackage kotlin.text\n\nimport
```

```
kotlin.js.RegExp\n\n@kotlin.internal.InlineOnly\ninternal
```

```

actual inline fun String.nativeIndexOf(ch: Char, fromIndex: Int): Int = nativeIndexOf(ch.toString(),
fromIndex)\n\n@kotlin.internal.InlineOnly\ninternal actual inline fun String.nativeLastIndexOf(ch: Char,
fromIndex: Int): Int = nativeLastIndexOf(ch.toString(), fromIndex)\n\n/**\n * Returns `true` if this string starts with
the specified prefix.\n */\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun String.startsWith(prefix: String, ignoreCase: Boolean = false): Boolean {\n if (!ignoreCase)\n return
nativeStartsWith(prefix, 0)\n else\n return regionMatches(0, prefix, 0, prefix.length, ignoreCase)\n}\n\n/**\n *
Returns `true` if a substring of this string starting at the specified offset [startIndex] starts with the specified prefix.\n
*/\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual fun
String.startsWith(prefix: String, startIndex: Int, ignoreCase: Boolean = false): Boolean
{\n if (!ignoreCase)\n return nativeStartsWith(prefix, startIndex)\n else\n return
regionMatches(startIndex, prefix, 0, prefix.length, ignoreCase)\n}\n\n/**\n * Returns `true` if this string ends with
the specified suffix.\n */\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun String.endsWith(suffix: String, ignoreCase: Boolean = false): Boolean {\n if (!ignoreCase)\n return
nativeEndsWith(suffix)\n else\n return regionMatches(length - suffix.length, suffix, 0, suffix.length,
ignoreCase)\n}\n\n@Deprecated("Use Regex.matches() instead",
ReplaceWith("regex.toRegex().matches(this)"))\n@DeprecatedSinceKotlin(warningSince = "1.6")\npublic fun
String.matches(regex: String): Boolean {\n @Suppress("DEPRECATION")\n val result = this.match(regex)\n return
result != null && result.size != 0\n}\n\n/**\n * Returns `true` if this string is empty or consists solely of
whitespace characters.\n */\n * @sample samples.text.Strings.stringIsBlank\n
*/\npublic actual fun CharSequence.isBlank(): Boolean = length == 0 || indices.all { this[it].isWhitespace()
}\n\n/**\n * Returns `true` if this string is equal to [other], optionally ignoring character case.\n */\n * Two strings
are considered to be equal if they have the same length and the same character at the same index.\n * If [ignoreCase]
is true, the result of `Char.uppercaseChar().lowercaseChar()` on each character is compared.\n */\n * @param
ignoreCase `true` to ignore character case when comparing strings. By default `false`.\n
*/\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual fun
String?.equals(other: String?, ignoreCase: Boolean = false): Boolean {\n if (this == null) return other == null\n if
(other == null) return false\n if (!ignoreCase) return this == other\n if (this.length != other.length) return
false\n\n for (index in 0 until this.length) {\n val thisChar = this[index]\n val otherChar
= other[index]\n if (!thisChar.equals(otherChar, ignoreCase)) {\n return false\n }\n }\n\n return
true\n}\n\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual fun
CharSequence.regionMatches(thisOffset: Int, other: CharSequence, otherOffset: Int, length: Int, ignoreCase:
Boolean = false): Boolean =\n regionMatchesImpl(thisOffset, other, otherOffset, length, ignoreCase)\n}\n\n/**\n *
Returns a copy of this string having its first letter titlecased using the rules of the default locale,\n * or the original
string if it's empty or already starts with a title case letter.\n */\n * The title case of a character is usually the same as
its upper case with several exceptions.\n * The particular list of characters with the special title case form depends
on the underlying platform.\n */\n * @sample samples.text.Strings.capitalize\n */\n@Deprecated("Use
replaceFirstChar instead.", ReplaceWith("replaceFirstChar { if (it.isLowerCase()) it.titlecase()
else it.toString() }"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic actual fun String.capitalize():
String {\n return if (isEmpty()) substring(0, 1).uppercase() + substring(1) else this\n}\n\n/**\n * Returns a
copy of this string having its first letter lowercased using the rules of the default locale,\n * or the original string if
it's empty or already starts with a lower case letter.\n */\n * @sample samples.text.Strings.decapitalize\n
*/\n@Deprecated("Use replaceFirstChar instead.", ReplaceWith("replaceFirstChar { it.lowercase()
}"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic actual fun String.decapitalize(): String {\n return
if (isEmpty()) substring(0, 1).lowercase() + substring(1) else this\n}\n\n/**\n * Returns a string containing this
char sequence repeated [n] times.\n * @throws [IllegalArgumentException] when n < 0.\n * @sample
samples.text.Strings.repeat\n */\npublic actual fun CharSequence.repeat(n: Int): String {\n require(n
>= 0) {\n "Count 'n' must be non-negative, but was $n." }\n return when (n) {\n 0 -> ""\n 1 ->
this.toString()\n else -> {\n var result = ""\n if (!isEmpty()) {\n var s = this.toString()\n

```

```

var count = n\n while (true) {\n if ((count and 1) == 1) {\n result += s\n }\n count = count ushr 1\n if (count == 0) {\n break\n }\n s += s\n }\n return result\n }\n}\n\n/**\n * Returns a new string\n * obtained by replacing all occurrences of the [oldValue] substring in this string\n * with the specified [newValue]\n * string.\n * @sample samples.text.Strings.replace\n */\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual fun\nString.replace(oldValue: String, newValue: String,\n ignoreCase: Boolean = false): String =\n nativeReplace(Regex.escape(oldValue), if (ignoreCase) \"gui\"\n else \"gu\"), Regex.nativeEscapeReplacement(newValue))\n\n/**\n * Returns a new string with all occurrences of\n * [oldChar] replaced with [newChar].\n * @sample samples.text.Strings.replace\n */\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual fun\nString.replace(oldChar: Char, newChar: Char, ignoreCase: Boolean = false): String =\n nativeReplace(Regex.escape(oldChar.toString()), if (ignoreCase) \"gui\" else \"gu\"),\n newChar.toString())\n\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual\nfun String.replaceFirst(oldValue: String, newValue: String, ignoreCase: Boolean = false): String =\n nativeReplace(Regex.escape(oldValue), if (ignoreCase) \"ui\" else \"u\"),\n Regex.nativeEscapeReplacement(newValue))\n\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGU\nMENTS")\npublic actual fun String.replaceFirst(oldChar: Char, newChar:\n Char, ignoreCase: Boolean = false): String =\n nativeReplace(Regex.escape(oldChar.toString()), if\n (ignoreCase) \"ui\" else \"u\"), newChar.toString())\n\n/*\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin\n * Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be\n * found in the license/LICENSE.txt file.\n */\npackage kotlin.text\n\n/**\n * Returns the negative [size] if\n * [throwOnMalformed] is false, throws [CharacterCodingException] otherwise.\n */\nprivate fun malformed(size: Int,\n index: Int, throwOnMalformed: Boolean): Int {\n if (throwOnMalformed) throw\n CharacterCodingException(\"Malformed sequence starting at ${index - 1}\")\n return -size\n}\n\n/**\n * Returns\n * code point corresponding to UTF-16 surrogate pair,\n * where the first of the pair is the [high] and the second is in\n * the [string] at the [index].\n * Returns zero if the pair is malformed and [throwOnMalformed] is false.\n */\n@throws CharacterCodingException\nif the pair is malformed and [throwOnMalformed] is true.\nprivate fun codePointFromSurrogate(string: String,\n high: Int, index: Int, endIndex: Int, throwOnMalformed: Boolean): Int {\n if (high !in 0xD800..0xDBFF || index\n >= endIndex) {\n return malformed(0, index, throwOnMalformed)\n }\n val low = string[index].code\n if (low !in 0xDC00..0xDFFF) {\n return malformed(0, index, throwOnMalformed)\n }\n return 0x10000 +\n ((high and 0x3FF) shl 10) or (low and 0x3FF)\n}\n\n/**\n * Returns code point corresponding to UTF-8 sequence of\n * two bytes,\n * where the first byte of the sequence is the [byte1] and the second byte is in the [bytes] array at the\n * [index].\n * Returns zero if the sequence is malformed and [throwOnMalformed] is false.\n */\n@throws\nCharacterCodingException if the sequence of two bytes is malformed and [throwOnMalformed] is true.\nprivate fun codePointFrom2(bytes: ByteArray, byte1: Int, index: Int, endIndex: Int, throwOnMalformed:\n Boolean): Int {\n if (byte1 and 0x1E == 0 || index >= endIndex) {\n return malformed(0, index,\n throwOnMalformed)\n }\n val byte2 = bytes[index].toInt()\n if (byte2 and 0xC0 != 0x80) {\n return\n malformed(0, index, throwOnMalformed)\n }\n return (byte1 shl 6) xor byte2 xor 0xF8\n}\n\n/**\n * Returns\n * code point corresponding to UTF-8 sequence of three bytes,\n * where the first byte of the sequence is the [byte1]\n * and the others are in the [bytes] array starting from the [index].\n * Returns a non-positive value indicating number\n * of bytes from [bytes] included in malformed sequence\n * if the sequence is malformed and [throwOnMalformed] is\n * false.\n */\n@throws CharacterCodingException if the sequence of three bytes is malformed and\n[throwOnMalformed] is true.\nprivate fun codePointFrom3(bytes: ByteArray, byte1: Int, index: Int, endIndex:\n Int, throwOnMalformed: Boolean): Int {\n if (index >= endIndex) {\n return malformed(0, index,\n throwOnMalformed)\n }\n}

```

```

 }
 val byte2 = bytes[index].toInt()
 if (byte1 and 0xF == 0) {
 if (byte2 and 0xE0 != 0xA0) {
 // Non-shortest form
 return malformed(0, index, throwOnMalformed)
 } else if (byte1 and 0xF == 0xD) {
 if (byte2 and 0xE0 != 0x80) {
 // Surrogate code point
 return malformed(0, index, throwOnMalformed)
 } else if (byte2 and 0xC0 != 0x80) {
 return malformed(0, index, throwOnMalformed)
 }
 }
 if (index + 1 == endIndex) {
 return malformed(1, index, throwOnMalformed)
 }
 val byte3 = bytes[index + 1].toInt()
 if (byte3 and 0xC0 != 0x80) {
 return malformed(1, index, throwOnMalformed)
 }
 return (byte1 shl 12) xor (byte2 shl 6) xor byte3 xor 0x1E080
 }
}

/**
 * Returns code point corresponding to UTF-8 sequence of four bytes,
 * where the first byte of the sequence is the [byte1] and the others are in the [bytes]
 * array starting from the [index].
 * Returns a non-positive value indicating number of bytes from [bytes] included in
 * malformed sequence
 * if the sequence is malformed and [throwOnMalformed] is false.
 * @throws CharacterCodingException if the sequence of four bytes is malformed and [throwOnMalformed] is true.
 */
private fun codePointFrom4(bytes: ByteArray, byte1: Int, index: Int, endIndex: Int, throwOnMalformed: Boolean): Int {
 if (index >= endIndex) {
 malformed(0, index, throwOnMalformed)
 }
 val byte2 = bytes[index].toInt()
 if (byte1 and 0xF == 0x0) {
 if (byte2 and 0xF0 <= 0x80) {
 // Non-shortest form
 return malformed(0, index, throwOnMalformed)
 } else if (byte1 and 0xF == 0x4) {
 if (byte2 and 0xF0 != 0x80) {
 // Out of Unicode code points domain (larger than U+10FFFF)
 return malformed(0, index, throwOnMalformed)
 } else if (byte1 and 0xF > 0x4) {
 return malformed(0, index, throwOnMalformed)
 } else if (byte2 and 0xC0 != 0x80) {
 return malformed(0, index, throwOnMalformed)
 }
 }
 if (index + 1 == endIndex) {
 return malformed(1, index, throwOnMalformed)
 }
 val byte3 = bytes[index + 1].toInt()
 if (byte3 and 0xC0 != 0x80) {
 return malformed(1, index, throwOnMalformed)
 }
 if (index + 2 == endIndex) {
 return malformed(2, index, throwOnMalformed)
 }
 val byte4 = bytes[index + 2].toInt()
 if (byte4 and 0xC0 != 0x80) {
 return malformed(2, index, throwOnMalformed)
 }
 return (byte1 shl 18) xor (byte2 shl 12) xor (byte3 shl 6) xor byte4 xor 0x381F80
 }
}

/**
 * Maximum number of bytes needed to encode a single char.
 * Code points in `0..0x7F` are encoded in a single byte.
 * Code points in `0x80..0x7FF` are encoded in two bytes.
 * Code points in `0x800..0xD7FF` or in `0xE000..0xFFFF` are encoded in three bytes.
 * Surrogate code points in `0xD800..0xDFFF` are not Unicode scalar values, therefore aren't encoded.
 * Code points in `0x10000..0x10FFFF` are represented by a pair of surrogate `Char`s and are encoded in four bytes.
 */
private const val MAX_BYTES_PER_CHAR = 3

/**
 * The byte sequence a malformed UTF-16 char sequence is replaced by.
 */
private val REPLACEMENT_BYTE_SEQUENCE: ByteArray = byteArrayOf(0xEF.toByte(), 0xBF.toByte(), 0xBD.toByte())

/**
 * Encodes the [string] using UTF-8 and returns the resulting [ByteArray].
 * @param string the string to encode.
 * @param startIndex the start offset (inclusive) of the substring to encode.
 * @param endIndex the end offset (exclusive) of the substring to encode.
 * @param throwOnMalformed whether to throw on malformed char sequence or replace by the [REPLACEMENT_BYTE_SEQUENCE].
 * @throws CharacterCodingException if the char sequence is malformed and [throwOnMalformed] is true.
 */
internal fun encodeUtf8(string: String, startIndex: Int, endIndex: Int, throwOnMalformed: Boolean): ByteArray {
 require(startIndex >= 0 && endIndex <= string.length && startIndex <= endIndex)
 val bytes = ByteArray((endIndex - startIndex) * MAX_BYTES_PER_CHAR)
 var byteIndex = 0
 var charIndex = startIndex
 while (charIndex < endIndex) {
 val code = string[charIndex++].code
 when {
 code < 0x80 -> bytes[byteIndex++] = code.toByte()
 code < 0x800 -> bytes[byteIndex++] = ((code shr 6) or 0xC0).toByte()
 bytes[byteIndex++] = ((code and 0x3F) or 0x80).toByte()
 code < 0xD800 || code >= 0xE000 -> bytes[byteIndex++] = ((code shr 12) or 0xE0).toByte()
 bytes[byteIndex++] = (((code shr 6) and 0x3F) or 0x80).toByte()
 bytes[byteIndex++] = ((code and 0x3F) or 0x80).toByte()
 else -> { // Surrogate char value
 val codePoint = codePointFromSurrogate(string, code, charIndex, endIndex, throwOnMalformed)
 if (codePoint <= 0) {
 bytes[byteIndex++] = REPLACEMENT_BYTE_SEQUENCE[0]
 }
 }
 }
 }
}

```



```

emptyList()\n }\n\nprivate class ExceptionTraceBuilder {\n private val target = StringBuilder()\n private val
visited = arrayOf<Throwable>()\n private var topStack: String = ""\n private var topStackStart: Int = 0\n
fun buildFor(exception: Throwable): String {\n exception.dumpFullTrace("\n", "\n")\n return
target.toString()\n }\n\n private fun hasSeen(exception: Throwable): Boolean = visited.any { it === exception
}\n\n private fun Throwable.dumpFullTrace(indent:
String, qualifier: String) {\n this.dumpSelfTrace(indent, qualifier) || return\n\n var cause = this.cause\n
while (cause != null) {\n cause.dumpSelfTrace(indent, "Caused by: ") || return\n cause =
cause.cause\n }\n }\n\n private fun Throwable.dumpSelfTrace(indent: String, qualifier: String): Boolean {\n
target.append(indent).append(qualifier)\n val shortInfo = this.toString()\n if (hasSeen(this)) {\n
target.append("[CIRCULAR REFERENCE, SEE ABOVE: ").append(shortInfo).append("\n")\n return
false\n }\n visited.asDynamic().push(this)\n var stack = this.asDynamic().stack as String?\n if
(stack != null) {\n val stackStart = stack.indexOf(shortInfo).let { if (it < 0) 0 else it + shortInfo.length }\n
if (stackStart == 0) target.append(shortInfo).append("\n")\n if (topStack.isEmpty()) {\n topStack
= stack\n
topStackStart = stackStart\n } else {\n stack = dropCommonFrames(stack, stackStart)\n
}\n if (indent.isNotEmpty()) {\n // indent stack, but avoid indenting exception message lines\n
val messageLines = if (stackStart == 0) 0 else 1 + shortInfo.count { c -> c == '\n' }\n
stack.lineSequence().forEachIndexed { index: Int, line: String ->}\n if (index >= messageLines)
target.append(indent)\n target.append(line).append("\n")\n }\n } else {\n
target.append(stack).append("\n")\n }\n } else {\n target.append(shortInfo).append("\n")\n
}\n\n val suppressed = suppressedExceptions\n if (suppressed.isNotEmpty()) {\n val
suppressedIndent = indent + " \n" for (s in suppressed) {\n s.dumpFullTrace(suppressedIndent,
"\nSuppressed:
\n")\n }\n }\n return true\n }\n\n private fun dropCommonFrames(stack: String, stackStart: Int):
String {\n var commonFrames: Int = 0\n var lastBreak: Int = 0\n var preLastBreak: Int = 0\n for
(pos in 0 until minOf(topStack.length - topStackStart, stack.length - stackStart)) {\n val c =
stack[stack.lastIndex - pos]\n if (c != topStack[topStack.lastIndex - pos]) break\n if (c == '\n') {\n
commonFrames += 1\n preLastBreak = lastBreak\n lastBreak = pos\n }\n }\n
if (commonFrames <= 1) return stack\n while (preLastBreak > 0 && stack[stack.lastIndex - (preLastBreak - 1)]
== '\n')\n preLastBreak -= 1\n // leave 1 common frame to ease matching with the top exception stack\n
return stack.dropLast(preLastBreak) + "... and ${commonFrames - 1} more common stack frames skipped"\n
}\n }", "/*\n
* Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code
is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage
kotlin.time\nimport kotlin.js.json\nimport kotlin.math.*\n\ninternal actual inline val durationAssertionsEnabled:
Boolean get() = true\n\ninternal actual fun formatToExactDecimals(value: Double, decimals: Int): String {\n val
rounded = if (decimals == 0) {\n value\n } else {\n val pow = 10.0.pow(decimals)\n
JsMath.round(abs(value) * pow) / pow * sign(value)\n }\n return if (abs(rounded) < 1e21) {\n // toFixed
switches to scientific format after 1e21\n rounded.asDynamic().toFixed(decimals).unsafeCast<String>()\n }
else {\n // toPrecision outputs the specified number of digits, but only for positive numbers\n val positive =
abs(rounded)\n val positiveString = positive.asDynamic().toPrecision(ceil(log10(positive))
+ decimals).unsafeCast<String>()\n if (rounded < 0) "-" + positiveString\n else positiveString\n
}\n }\n\ninternal actual fun formatUpToDecimals(value: Double, decimals: Int): String {\n return
value.asDynamic().toLocaleString("en-us", json("\nmaximumFractionDigits"\n to
decimals)).unsafeCast<String>()\n }\n }", "/*\n
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Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage
kotlin.time\n\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalTime::class)\n\npublic actual enum class

```

```

DurationUnit(internal val scale: Double) {
 * Time unit representing one nanosecond, which is 1/1000 of a microsecond.
 NANOSECONDS(1e0),
 * Time unit representing one microsecond, which is 1/1000 of a millisecond.
 MICROSECONDS(1e3),
 * Time unit representing one millisecond, which is 1/1000 of a second.
 MILLISECONDS(1e6),
 * Time unit representing one second.
 SECONDS(1e9),
 * Time unit representing one minute.
 MINUTES(60e9),
 * Time unit representing one hour.
 HOURS(3600e9),
 * Time unit representing one day, which is always equal to 24 hours.
 DAYS(86400e9);
}

@SinceKotlin("1.3")
internal actual fun convertDurationUnit(value: Double, sourceUnit: DurationUnit, targetUnit: DurationUnit): Double {
 val sourceCompareTarget = sourceUnit.scale.compareTo(targetUnit.scale)
 return when {
 sourceCompareTarget > 0 -> value * (sourceUnit.scale / targetUnit.scale)
 sourceCompareTarget < 0 -> value / (targetUnit.scale / sourceUnit.scale)
 else -> value
 }
}

@SinceKotlin("1.5")
internal actual fun convertDurationUnitOverflow(value: Long, sourceUnit: DurationUnit, targetUnit: DurationUnit): Long {
 val sourceCompareTarget = sourceUnit.scale.compareTo(targetUnit.scale)
 return when {
 sourceCompareTarget > 0 -> value * (sourceUnit.scale / targetUnit.scale).toLong()
 sourceCompareTarget < 0 -> value / (targetUnit.scale / sourceUnit.scale).toLong()
 else -> value
 }
}

@SinceKotlin("1.5")
internal actual fun convertDurationUnit(value: Long, sourceUnit: DurationUnit, targetUnit: DurationUnit): Long {
 val sourceCompareTarget = sourceUnit.scale.compareTo(targetUnit.scale)
 return when {
 sourceCompareTarget > 0 -> {
 val scale = (sourceUnit.scale / targetUnit.scale).toLong()
 val result = value * scale
 when {
 result / scale == value -> result
 value > 0 -> Long.MAX_VALUE
 else -> Long.MIN_VALUE
 }
 }
 sourceCompareTarget < 0 -> value / (targetUnit.scale / sourceUnit.scale).toLong()
 else -> value
 }
}

}

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 */
package kotlin.time
import org.w3c.performance.GlobalPerformance
import org.w3c.performance.Performance
import kotlin.math.truncate
import kotlin.time.Duration.Companion.milliseconds
import kotlin.time.TimeSource.Monotonic.ValueTimeMark

@Suppress("ACTUAL_WITHOUT_EXPECT") // visibility
internal typealias ValueTimeMarkReading = Any

@ExperimentalTime
internal interface DefaultTimeSource : TimeSource {
 override fun markNow(): ValueTimeMark
 fun elapsedFrom(timeMark: ValueTimeMark): Duration
 fun adjustReading(timeMark: ValueTimeMark, duration: Duration): ValueTimeMark
}

@SinceKotlin("1.3")
@ExperimentalTime
internal actual object MonotonicTimeSource : DefaultTimeSource, TimeSource {
 // TODO: interface should not be required here
 private val actualSource: DefaultTimeSource = run {
 val isNode: Boolean = js("typeof process !== 'undefined' && process.versions && !!process.versions.node")
 if (isNode)
 HrTimeSource(js("process").unsafeCast<Process>())
 else
 js("self").unsafeCast<GlobalPerformance?>()?.performance?.let(::PerformanceTimeSource)
 }

 DateNowTimeSource

 actual override fun markNow(): ValueTimeMark = actualSource.markNow()
 actual override fun elapsedFrom(timeMark: ValueTimeMark): Duration = actualSource.elapsedFrom(timeMark)
 actual override fun adjustReading(timeMark: ValueTimeMark, duration: Duration): ValueTimeMark =
 actualSource.adjustReading(timeMark, duration)
}

internal external interface Process {
 fun hrtime(time: Array<Double> = definedExternally): Array<Double>
}

@SinceKotlin("1.3")
@ExperimentalTime
internal class HrTimeSource(private val process: Process) : DefaultTimeSource {
 override fun markNow(): ValueTimeMark = ValueTimeMark(process.hrtime())
 override fun elapsedFrom(timeMark: ValueTimeMark): Duration =
 @Suppress("UNCHECKED_CAST")
 process.hrtime(timeMark.reading as Array<Double>)
 .let { (seconds, nanos) ->
 seconds.toDuration(DurationUnit.SECONDS) + nanos.toDuration(DurationUnit.NANOSECONDS)
 }
 override fun adjustReading(timeMark: ValueTimeMark, duration: Duration): ValueTimeMark =
 @Suppress("UNCHECKED_CAST")
 (timeMark.reading as Array<Double>).let { (seconds, nanos) ->

```

```

 duration.toComponents { _, addNanos ->\n arrayOf<Double>(sumCheckNaN(seconds +
truncate(duration.toDouble(DurationUnit.SECONDS))), nanos + addNanos)\n }\n
}.let(TimeSource.Monotonic::ValueTimeMark)\n\n\n override fun toString(): String =
\n\"TimeSource(process.hrtime())\"}\n\n\n@SinceKotlin(\"1.3\")\n@ExperimentalTime\ninternal class
PerformanceTimeSource(val
 performance: Performance) : \n DefaultTimeSource { // AbstractDoubleTimeSource(unit =
DurationUnit.MILLISECONDS) {\n private fun read(): Double = performance.now()\n\n override fun
markNow(): ValueTimeMark = ValueTimeMark(read())\n override fun elapsedFrom(timeMark:
ValueTimeMark): Duration = (read() - timeMark.reading as Double).milliseconds\n override fun
adjustReading(timeMark: ValueTimeMark, duration: Duration): ValueTimeMark =\n ValueTimeMark(sumCheckNaN(timeMark.reading as Double +
duration.toDouble(DurationUnit.MILLISECONDS)))\n\n override fun toString(): String =
\n\"TimeSource(self.performance.now())\"}\n\n\n@SinceKotlin(\"1.3\")\n@ExperimentalTime\ninternal object
DateNowTimeSource : DefaultTimeSource {\n private fun read(): Double = kotlin.js.Date.now()\n\n override
fun markNow(): ValueTimeMark = ValueTimeMark(read())\n override fun elapsedFrom(timeMark:
ValueTimeMark): Duration = (read() - timeMark.reading as Double).milliseconds\n
 override fun adjustReading(timeMark: ValueTimeMark, duration: Duration): ValueTimeMark =\n ValueTimeMark(sumCheckNaN(timeMark.reading as Double +
duration.toDouble(DurationUnit.MILLISECONDS)))\n\n override fun toString(): String =
\n\"TimeSource(Date.now())\"}\n\n\nprivate fun sumCheckNaN(value: Double): Double = value.also { if (it.isNaN())
throw IllegalArgumentException(\"Summing infinities of different signs\") } ,\"/>\n * Copyright 2010-2020
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n * \n\npackage kotlinx.dom\n\nimport
org.w3c.dom.*\nimport kotlin.contracts.*\n\n/**\n * Creates a new element with the specified [name].\n * \n * The
element is initialized with the specified [init] function.\n * \n * \n@SinceKotlin(\"1.4\")\n\npublic fun
Document.createElement(name: String, init: Element.() -> Unit): Element {\n contract { callsInPlace(init,
InvocationKind.EXACTLY_ONCE) }\n return createElement(name).apply(init)\n}\n\n\n/**\n * Appends a newly
created element with the specified [name] to this element.\n * \n * The element is initialized with the specified [init]
function.\n * \n * \n@SinceKotlin(\"1.4\")\n\npublic fun Element.appendChild(name: String, init: Element.() -> Unit):
Element {\n contract { callsInPlace(init, InvocationKind.EXACTLY_ONCE) }\n return
ownerDocument!!.createElement(name, init).also { appendChild(it) }\n}\n\n\n\"/>\n * Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n * \n\npackage kotlinx.dom\n\nimport
org.w3c.dom.*\n\n/**\n * Returns true if the element has the given CSS class style in its 'class' attribute
*\n * \n@SinceKotlin(\"1.4\")\n\nfun Element.hasClass(cssClass: String): Boolean =
className.matches(\"\\\"(\\\"|^).*\\$cssClass(\\$\\$s+.*\\\"\\\".toRegex())\n\n\n/**\n * Adds CSS class to element. Has no effect if all specified classes are already in class attribute of the element\n * \n *
@return true if at least one class has been added\n * \n@SinceKotlin(\"1.4\")\n\nfun Element.addClass(vararg
cssClasses: String): Boolean {\n val missingClasses = cssClasses.filterNot { hasClass(it) }\n if
(missingClasses.isNotEmpty()) {\n val presentClasses = className.trim()\n className = buildString {\n
append(presentClasses)\n if (!presentClasses.isEmpty()) {\n append(\" \")\n }\n
missingClasses.joinTo(this, \" \")\n }\n return true\n }\n return false\n}\n\n\n/**\n * Removes all
[cssClasses] from element. Has no effect if all specified classes are missing in class attribute of the element\n * \n *
@return true if at least one class has been removed\n * \n@SinceKotlin(\"1.4\")\n\nfun Element.removeClass(vararg
cssClasses: String): Boolean {\n if (cssClasses.any
{ hasClass(it) }) {\n val toBeRemoved = cssClasses.toSet()\n className =
className.trim().split(\"\\\\\\\\s+\".toRegex()).filter { it !in toBeRemoved }.joinToString(\" \")\n return true\n
}\n return false\n}\n\n\n\"/>\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language

```



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```

*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("StringsKt")\n\npackage
kotlin.text\n\n/**\n * Converts the string into a regular expression [Regex] with the default options.\n
*\n\n@kotlin.internal.InlineOnly\npublic inline fun String.toRegex(): Regex = Regex(this)\n\n/**\n * Converts the
string into a regular expression [Regex] with the specified single [option].\n *\n\n@kotlin.internal.InlineOnly\npublic
inline fun String.toRegex(option: RegexOption): Regex = Regex(this, option)\n\n/**\n * Converts the string into a
regular
expression [Regex] with the specified set of [options].\n *\n\n@kotlin.internal.InlineOnly\npublic inline fun
String.toRegex(options: Set<RegexOption>): Regex = Regex(this, options)\n", /*\n * Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\n\npackage kotlinx.dom\n\nimport
org.w3c.dom.*\n\n/**\n * Gets a value indicating whether this node is a TEXT_NODE or a
CDATA_SECTION_NODE.\n *\n\n@SinceKotlin("1.4")\npublic val Node.isText: Boolean\n get() = nodeType
== Node.TEXT_NODE || nodeType == Node.CDATA_SECTION_NODE\n\n/**\n * Gets a value indicating
whether this node is an [Element].\n *\n\n@SinceKotlin("1.4")\npublic val Node.isElement: Boolean\n get() =
nodeType == Node.ELEMENT_NODE\n", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache
2.0 license that can be found in the license/LICENSE.txt file.\n *\n\npackage
kotlinx.dom\n\nimport
org.w3c.dom.*\n\n/**\n * Removes all the children from this node.\n *\n\n@SinceKotlin("1.4")\npublic fun Node.clear()
{\n while (hasChildNodes()) {\n removeChild(firstChild!!)\n }\n}\n\n/**\n * Creates text node and append it
to the element.\n *\n * @return this element\n *\n\n@SinceKotlin("1.4")\nfun Element.appendText(text: String):
Element {\n appendChild(ownerDocument!!.createTextNode(text))\n return this\n}\n", /*\n * Copyright 2010-
2019 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\n\npackage
org.w3c.dom\n\n@Deprecated("Use UnionMessagePortOrWindowProxy instead.")
ReplaceWith("UnionMessagePortOrWindowProxy")\ntypealias UnionMessagePortOrWindow =
UnionMessagePortOrWindowProxy\n\n@Deprecated("Use `as` instead.", ReplaceWith("`as`"))\nvar
HTMLLinkElement.as_\n get() = `as`\n set(value) {\n `as` = value\n }\n\n@Deprecated("Use `is`
instead.", ReplaceWith("`is`"))\nvar ElementCreationOptions.is_\n get() = `is`\n set(value) {\n `is` =
value\n }\n", /*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use
of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT EDIT!\n// See github.com/kotlin/dukat for
details\n\npackage org.khronos.webgl\n\nimport kotlin.js.*\nimport org.w3c.dom.*\nimport
org.w3c.dom.events.*\n\npublic external interface WebGLContextAttributes {\n var alpha: Boolean? /* = true *\n
 get() = definedExternally\n set(value) = definedExternally\n var depth: Boolean? /* = true *\n
 get() = definedExternally\n set(value) = definedExternally\n var stencil: Boolean? /* = false *\n
 get() = definedExternally\n set(value) = definedExternally\n var antialias: Boolean? /* = true *\n
 get() = definedExternally\n set(value) = definedExternally\n var premultipliedAlpha: Boolean? /* = true *\n
 get() = definedExternally\n set(value) = definedExternally\n var preserveDrawingBuffer: Boolean? /* =
false *\n
 get() = definedExternally\n set(value) = definedExternally\n var
preferLowPowerToHighPerformance: Boolean? /* = false *\n
 get() = definedExternally\n set(value) = definedExternally\n var
failIfMajorPerformanceCaveat: Boolean? /* = false *\n
 get() = definedExternally\n set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\npublic inline fun WebGLContextAttributes(alpha:
Boolean? = true, depth: Boolean? = true, stencil: Boolean? = false, antialias: Boolean? = true, premultipliedAlpha:
Boolean? = true, preserveDrawingBuffer:

```



```

fun createProgram(): WebGLProgram?\n fun createRenderbuffer(): WebGLRenderbuffer?\n fun
createShader(type: Int): WebGLShader?\n fun createTexture(): WebGLTexture?\n fun cullFace(mode: Int)\n
fun
deleteBuffer(buffer: WebGLBuffer?)\n fun deleteFramebuffer(framebuffer: WebGLFramebuffer?)\n fun
deleteProgram(program: WebGLProgram?)\n fun deleteRenderbuffer(renderbuffer: WebGLRenderbuffer?)\n
fun deleteShader(shader: WebGLShader?)\n fun deleteTexture(texture: WebGLTexture?)\n fun depthFunc(func:
Int)\n fun depthMask(flag: Boolean)\n fun depthRange(zNear: Float, zFar: Float)\n fun detachShader(program:
WebGLProgram?, shader: WebGLShader?)\n fun disable(cap: Int)\n fun disableVertexArray(index: Int)\n
fun drawArrays(mode: Int, first: Int, count: Int)\n fun drawElements(mode: Int, count: Int, type: Int, offset: Int)\n
fun enable(cap: Int)\n fun enableVertexArray(index: Int)\n fun finish()\n fun flush()\n fun
framebufferRenderbuffer(target: Int, attachment: Int, renderbuffertarget: Int, renderbuffer: WebGLRenderbuffer?)\n
fun framebufferTexture2D(target: Int, attachment: Int, textarget: Int, texture: WebGLTexture?, level:
Int)\n fun frontFace(mode: Int)\n fun generateMipmap(target: Int)\n fun getActiveAttrib(program:
WebGLProgram?, index: Int): WebGLActiveInfo?\n fun getActiveUniform(program: WebGLProgram?, index:
Int): WebGLActiveInfo?\n fun getAttachedShaders(program: WebGLProgram?): Array<WebGLShader>?\n fun
getAttribLocation(program: WebGLProgram?, name: String): Int\n fun getBufferParameter(target: Int, pname:
Int): Any?\n fun getParameter(pname: Int): Any?\n fun getError(): Int\n fun
getFramebufferAttachmentParameter(target: Int, attachment: Int, pname: Int): Any?\n fun
getProgramParameter(program: WebGLProgram?, pname: Int): Any?\n fun getProgramInfoLog(program:
WebGLProgram?): String?\n fun getRenderbufferParameter(target: Int, pname: Int): Any?\n fun
getShaderParameter(shader: WebGLShader?, pname: Int): Any?\n fun getShaderPrecisionFormat(shaderType: Int,
precisionType: Int): WebGLShaderPrecisionFormat?\n fun getShaderInfoLog(shader: WebGLShader?):
String?\n fun getShaderSource(shader: WebGLShader?): String?\n fun getTexParameter(target: Int, pname: Int):
Any?\n fun getUniform(program: WebGLProgram?, location: WebGLUniformLocation?): Any?\n fun
getUniformLocation(program: WebGLProgram?, name: String): WebGLUniformLocation?\n fun
getVertexAttrib(index: Int, pname: Int): Any?\n fun getVertexAttribOffset(index: Int, pname: Int): Int\n fun
hint(target: Int, mode: Int)\n fun isBuffer(buffer: WebGLBuffer?): Boolean\n fun isEnabled(cap: Int): Boolean\n
fun isFramebuffer(framebuffer: WebGLFramebuffer?): Boolean\n fun isProgram(program: WebGLProgram?):
Boolean\n fun isRenderbuffer(renderbuffer: WebGLRenderbuffer?): Boolean\n fun isShader(shader:
WebGLShader?): Boolean\n fun isTexture(texture: WebGLTexture?): Boolean\n fun lineWidth(width: Float)\n
fun linkProgram(program: WebGLProgram?)\n fun pixelStorei(pname: Int, param: Int)\n fun
polygonOffset(factor: Float, units: Float)\n
fun readPixels(x: Int, y: Int, width: Int, height: Int, format: Int, type: Int, pixels: ArrayBufferView?)\n fun
renderbufferStorage(target: Int, internalformat: Int, width: Int, height: Int)\n fun sampleCoverage(value: Float,
invert: Boolean)\n fun scissor(x: Int, y: Int, width: Int, height: Int)\n fun shaderSource(shader: WebGLShader?,
source: String)\n fun stencilFunc(func: Int, ref: Int, mask: Int)\n fun stencilFuncSeparate(face: Int, func: Int, ref:
Int, mask: Int)\n fun stencilMask(mask: Int)\n fun stencilMaskSeparate(face: Int, mask: Int)\n fun
stencilOp(fail: Int, zfail: Int, zpass: Int)\n fun stencilOpSeparate(face: Int, fail: Int, zfail: Int, zpass: Int)\n fun
texImage2D(target: Int, level: Int, internalformat: Int, width: Int, height: Int, border: Int, format: Int, type: Int, pixels:
ArrayBufferView?)\n fun texImage2D(target: Int, level: Int, internalformat: Int, format: Int, type: Int, source:
TexImageSource?)\n fun texParameterf(target:
Int, pname: Int, param: Float)\n fun texParameteri(target: Int, pname: Int, param: Int)\n fun
texSubImage2D(target: Int, level: Int, xoffset: Int, yoffset: Int, width: Int, height: Int, format: Int, type: Int, pixels:
ArrayBufferView?)\n fun texSubImage2D(target: Int, level: Int, xoffset: Int, yoffset: Int, format: Int, type: Int,
source: TexImageSource?)\n fun uniform1f(location: WebGLUniformLocation?, x: Float)\n fun
uniform1fv(location: WebGLUniformLocation?, v: Float32Array)\n fun uniform1fv(location:
WebGLUniformLocation?, v: Array<Float>)\n fun uniform1i(location: WebGLUniformLocation?, x: Int)\n fun
uniform1iv(location: WebGLUniformLocation?, v: Int32Array)\n fun uniform1iv(location:

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WebGLUniformLocation?, v: Array<Int>)\n fun uniform2f(location: WebGLUniformLocation?, x: Float, y:
Float)\n fun uniform2fv(location: WebGLUniformLocation?, v: Float32Array)\n fun uniform2fv(location:
WebGLUniformLocation?, v: Array<Float>)\n fun uniform2i(location:
WebGLUniformLocation?, x: Int, y: Int)\n fun uniform2iv(location: WebGLUniformLocation?, v: Int32Array)\n
fun uniform2iv(location: WebGLUniformLocation?, v: Array<Int>)\n fun uniform3f(location:
WebGLUniformLocation?, x: Float, y: Float, z: Float)\n fun uniform3fv(location: WebGLUniformLocation?, v:
Float32Array)\n fun uniform3fv(location: WebGLUniformLocation?, v: Array<Float>)\n fun
uniform3i(location: WebGLUniformLocation?, x: Int, y: Int, z: Int)\n fun uniform3iv(location:
WebGLUniformLocation?, v: Int32Array)\n fun uniform3iv(location: WebGLUniformLocation?, v: Array<Int>)\n
fun uniform4f(location: WebGLUniformLocation?, x: Float, y: Float, z: Float, w: Float)\n fun
uniform4fv(location: WebGLUniformLocation?, v: Float32Array)\n fun uniform4fv(location:
WebGLUniformLocation?, v: Array<Float>)\n fun uniform4i(location: WebGLUniformLocation?, x: Int, y: Int, z:
Int, w: Int)\n fun uniform4iv(location: WebGLUniformLocation?, v: Int32Array)\n
fun uniform4iv(location: WebGLUniformLocation?, v: Array<Int>)\n fun uniformMatrix2fv(location:
WebGLUniformLocation?, transpose: Boolean, value: Float32Array)\n fun uniformMatrix2fv(location:
WebGLUniformLocation?, transpose: Boolean, value: Array<Float>)\n fun uniformMatrix3fv(location:
WebGLUniformLocation?, transpose: Boolean, value: Float32Array)\n fun uniformMatrix3fv(location:
WebGLUniformLocation?, transpose: Boolean, value: Array<Float>)\n fun uniformMatrix4fv(location:
WebGLUniformLocation?, transpose: Boolean, value: Float32Array)\n fun uniformMatrix4fv(location:
WebGLUniformLocation?, transpose: Boolean, value: Array<Float>)\n fun useProgram(program:
WebGLProgram?)\n fun validateProgram(program: WebGLProgram?)\n fun vertexAttrib1f(index: Int, x:
Float)\n fun vertexAttrib1fv(index: Int, values: dynamic)\n fun vertexAttrib2f(index: Int, x: Float, y: Float)\n
fun vertexAttrib2fv(index: Int, values: dynamic)\n fun vertexAttrib3f(index:
Int, x: Float, y: Float, z: Float)\n fun vertexAttrib3fv(index: Int, values: dynamic)\n fun vertexAttrib4f(index:
Int, x: Float, y: Float, z: Float, w: Float)\n fun vertexAttrib4fv(index: Int, values: dynamic)\n fun
vertexAttribPointer(index: Int, size: Int, type: Int, normalized: Boolean, stride: Int, offset: Int)\n fun viewport(x:
Int, y: Int, width: Int, height: Int)\n\n companion object {\n val DEPTH_BUFFER_BIT: Int\n val
STENCIL_BUFFER_BIT: Int\n val COLOR_BUFFER_BIT: Int\n val POINTS: Int\n val LINES: Int\n
val LINE_LOOP: Int\n val LINE_STRIP: Int\n val TRIANGLES: Int\n val TRIANGLE_STRIP:
Int\n val TRIANGLE_FAN: Int\n val ZERO: Int\n val ONE: Int\n val SRC_COLOR: Int\n val
ONE_MINUS_SRC_COLOR: Int\n val SRC_ALPHA: Int\n val ONE_MINUS_SRC_ALPHA: Int\n
val DST_ALPHA: Int\n val ONE_MINUS_DST_ALPHA: Int\n val DST_COLOR: Int\n
val ONE_MINUS_DST_COLOR: Int\n val SRC_ALPHA_SATURATE: Int\n val FUNC_ADD: Int\n
val BLEND_EQUATION: Int\n val BLEND_EQUATION_RGB: Int\n val
BLEND_EQUATION_ALPHA: Int\n val FUNC_SUBTRACT: Int\n val FUNC_REVERSE_SUBTRACT:
Int\n val BLEND_DST_RGB: Int\n val BLEND_SRC_RGB: Int\n val BLEND_DST_ALPHA: Int\n
val BLEND_SRC_ALPHA: Int\n val CONSTANT_COLOR: Int\n val
ONE_MINUS_CONSTANT_COLOR: Int\n val CONSTANT_ALPHA: Int\n val
ONE_MINUS_CONSTANT_ALPHA: Int\n val BLEND_COLOR: Int\n val ARRAY_BUFFER: Int\n
val ELEMENT_ARRAY_BUFFER: Int\n val ARRAY_BUFFER_BINDING: Int\n val
ELEMENT_ARRAY_BUFFER_BINDING: Int\n val STREAM_DRAW: Int\n val STATIC_DRAW: Int\n
val DYNAMIC_DRAW: Int\n val BUFFER_SIZE: Int\n val BUFFER_USAGE: Int\n val
CURRENT_VERTEX_ATTRIB: Int\n val FRONT: Int\n val BACK: Int\n val
FRONT_AND_BACK: Int\n val CULL_FACE: Int\n val BLEND: Int\n val DITHER: Int\n val
STENCIL_TEST: Int\n val DEPTH_TEST: Int\n val SCISSOR_TEST: Int\n val
POLYGON_OFFSET_FILL: Int\n val SAMPLE_ALPHA_TO_COVERAGE: Int\n val
SAMPLE_COVERAGE: Int\n val NO_ERROR: Int\n val INVALID_ENUM: Int\n val
INVALID_VALUE: Int\n val INVALID_OPERATION: Int\n val OUT_OF_MEMORY: Int\n val CW:

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Int\n val CCW: Int\n val LINE\_WIDTH: Int\n val ALIASED\_POINT\_SIZE\_RANGE: Int\n val  
 ALIASED\_LINE\_WIDTH\_RANGE: Int\n val CULL\_FACE\_MODE: Int\n val FRONT\_FACE: Int\n  
 val DEPTH\_RANGE: Int\n val DEPTH\_WRITEMASK: Int\n val DEPTH\_CLEAR\_VALUE: Int\n val  
 DEPTH\_FUNC: Int\n val STENCIL\_CLEAR\_VALUE: Int\n val STENCIL\_FUNC: Int\n val  
 STENCIL\_FAIL: Int\n val STENCIL\_PASS\_DEPTH\_FAIL: Int\n val STENCIL\_PASS\_DEPTH\_PASS:  
 Int\n  
 val STENCIL\_REF: Int\n val STENCIL\_VALUE\_MASK: Int\n val STENCIL\_WRITEMASK: Int\n  
 val STENCIL\_BACK\_FUNC: Int\n val STENCIL\_BACK\_FAIL: Int\n val  
 STENCIL\_BACK\_PASS\_DEPTH\_FAIL: Int\n val STENCIL\_BACK\_PASS\_DEPTH\_PASS: Int\n val  
 STENCIL\_BACK\_REF: Int\n val STENCIL\_BACK\_VALUE\_MASK: Int\n val  
 STENCIL\_BACK\_WRITEMASK: Int\n val VIEWPORT: Int\n val SCISSOR\_BOX: Int\n val  
 COLOR\_CLEAR\_VALUE: Int\n val COLOR\_WRITEMASK: Int\n val UNPACK\_ALIGNMENT: Int\n  
 val PACK\_ALIGNMENT: Int\n val MAX\_TEXTURE\_SIZE: Int\n val MAX\_VIEWPORT\_DIMS: Int\n  
 val SUBPIXEL\_BITS: Int\n val RED\_BITS: Int\n val GREEN\_BITS: Int\n val BLUE\_BITS: Int\n  
 val ALPHA\_BITS: Int\n val DEPTH\_BITS: Int\n val STENCIL\_BITS: Int\n val  
 POLYGON\_OFFSET\_UNITS: Int\n val POLYGON\_OFFSET\_FACTOR: Int\n val  
 TEXTURE\_BINDING\_2D: Int\n val SAMPLE\_BUFFERS: Int\n  
 val SAMPLES: Int\n val SAMPLE\_COVERAGE\_VALUE: Int\n val  
 SAMPLE\_COVERAGE\_INVERT: Int\n val COMPRESSED\_TEXTURE\_FORMATS: Int\n val  
 DONT\_CARE: Int\n val FASTEST: Int\n val NICEST: Int\n val GENERATE\_MIPMAP\_HINT: Int\n  
 val BYTE: Int\n val UNSIGNED\_BYTE: Int\n val SHORT: Int\n val UNSIGNED\_SHORT: Int\n  
 val INT: Int\n val UNSIGNED\_INT: Int\n val FLOAT: Int\n val DEPTH\_COMPONENT: Int\n  
 val ALPHA: Int\n val RGB: Int\n val RGBA: Int\n val LUMINANCE: Int\n val  
 LUMINANCE\_ALPHA: Int\n val UNSIGNED\_SHORT\_4\_4\_4\_4: Int\n val  
 UNSIGNED\_SHORT\_5\_5\_5\_1: Int\n val UNSIGNED\_SHORT\_5\_6\_5: Int\n val  
 FRAGMENT\_SHADER: Int\n val VERTEX\_SHADER: Int\n val MAX\_VERTEX\_ATTRIBS: Int\n  
 val MAX\_VERTEX\_UNIFORM\_VECTORS: Int\n val MAX\_VARYING\_VECTORS: Int\n val  
 MAX\_COMBINED\_TEXTURE\_IMAGE\_UNITS: Int\n val MAX\_VERTEX\_TEXTURE\_IMAGE\_UNITS:  
 Int\n val MAX\_TEXTURE\_IMAGE\_UNITS: Int\n val MAX\_FRAGMENT\_UNIFORM\_VECTORS:  
 Int\n val SHADER\_TYPE: Int\n val DELETE\_STATUS: Int\n val LINK\_STATUS: Int\n val  
 VALIDATE\_STATUS: Int\n val ATTACHED\_SHADERS: Int\n val ACTIVE\_UNIFORMS: Int\n val  
 ACTIVE\_ATTRIBUTES: Int\n val SHADING\_LANGUAGE\_VERSION: Int\n val  
 CURRENT\_PROGRAM: Int\n val NEVER: Int\n val LESS: Int\n val EQUAL: Int\n val  
 LEQUAL: Int\n val GREATER: Int\n val NOTEQUAL: Int\n val GEQUAL: Int\n val ALWAYS:  
 Int\n val KEEP: Int\n val REPLACE: Int\n val INCR: Int\n val DECR: Int\n val INVERT:  
 Int\n val INCR\_WRAP: Int\n val DECR\_WRAP: Int\n val VENDOR: Int\n val RENDERER: Int\n  
 val VERSION: Int\n val NEAREST: Int\n val LINEAR: Int\n val  
 NEAREST\_MIPMAP\_NEAREST: Int\n val LINEAR\_MIPMAP\_NEAREST:  
 Int\n val NEAREST\_MIPMAP\_LINEAR: Int\n val LINEAR\_MIPMAP\_LINEAR: Int\n val  
 TEXTURE\_MAG\_FILTER: Int\n val TEXTURE\_MIN\_FILTER: Int\n val TEXTURE\_WRAP\_S: Int\n  
 val TEXTURE\_WRAP\_T: Int\n val TEXTURE\_2D: Int\n val TEXTURE: Int\n val  
 TEXTURE\_CUBE\_MAP: Int\n val TEXTURE\_BINDING\_CUBE\_MAP: Int\n val  
 TEXTURE\_CUBE\_MAP\_POSITIVE\_X: Int\n val TEXTURE\_CUBE\_MAP\_NEGATIVE\_X: Int\n val  
 TEXTURE\_CUBE\_MAP\_POSITIVE\_Y: Int\n val TEXTURE\_CUBE\_MAP\_NEGATIVE\_Y: Int\n val  
 TEXTURE\_CUBE\_MAP\_POSITIVE\_Z: Int\n val TEXTURE\_CUBE\_MAP\_NEGATIVE\_Z: Int\n val  
 MAX\_CUBE\_MAP\_TEXTURE\_SIZE: Int\n val TEXTURE0: Int\n val TEXTURE1: Int\n val  
 TEXTURE2: Int\n val TEXTURE3: Int\n val TEXTURE4: Int\n val TEXTURE5: Int\n val  
 TEXTURE6: Int\n val TEXTURE7: Int\n val TEXTURE8: Int\n val TEXTURE9: Int\n val

```

TEXTURE10: Int\n val TEXTURE11:
Int\n val TEXTURE12: Int\n val TEXTURE13: Int\n val TEXTURE14: Int\n val TEXTURE15:
Int\n val TEXTURE16: Int\n val TEXTURE17: Int\n val TEXTURE18: Int\n val TEXTURE19:
Int\n val TEXTURE20: Int\n val TEXTURE21: Int\n val TEXTURE22: Int\n val TEXTURE23:
Int\n val TEXTURE24: Int\n val TEXTURE25: Int\n val TEXTURE26: Int\n val TEXTURE27:
Int\n val TEXTURE28: Int\n val TEXTURE29: Int\n val TEXTURE30: Int\n val TEXTURE31:
Int\n val ACTIVE_TEXTURE: Int\n val REPEAT: Int\n val CLAMP_TO_EDGE: Int\n val
MIRRORED_REPEAT: Int\n val FLOAT_VEC2: Int\n val FLOAT_VEC3: Int\n val FLOAT_VEC4:
Int\n val INT_VEC2: Int\n val INT_VEC3: Int\n val INT_VEC4: Int\n val BOOL: Int\n val
BOOL_VEC2: Int\n val BOOL_VEC3: Int\n val BOOL_VEC4: Int\n val FLOAT_MAT2: Int\n
 val FLOAT_MAT3: Int\n val FLOAT_MAT4: Int\n val SAMPLER_2D: Int\n val
SAMPLER_CUBE: Int\n val VERTEX_ATTRIB_ARRAY_ENABLED: Int\n val
VERTEX_ATTRIB_ARRAY_SIZE: Int\n val VERTEX_ATTRIB_ARRAY_STRIDE: Int\n val
VERTEX_ATTRIB_ARRAY_TYPE: Int\n val VERTEX_ATTRIB_ARRAY_NORMALIZED: Int\n val
VERTEX_ATTRIB_ARRAY_POINTER: Int\n val VERTEX_ATTRIB_ARRAY_BUFFER_BINDING: Int\n
 val IMPLEMENTATION_COLOR_READ_TYPE: Int\n val
IMPLEMENTATION_COLOR_READ_FORMAT: Int\n val COMPILE_STATUS: Int\n val
LOW_FLOAT: Int\n val MEDIUM_FLOAT: Int\n val HIGH_FLOAT: Int\n val LOW_INT: Int\n
val MEDIUM_INT: Int\n val HIGH_INT: Int\n val FRAMEBUFFER: Int\n val RENDERBUFFER:
Int\n val RGBA4: Int\n val RGB5_A1: Int\n val RGB565: Int\n val DEPTH_COMPONENT16:
Int\n val STENCIL_INDEX: Int\n val STENCIL_INDEX8: Int\n val DEPTH_STENCIL:
Int\n val RENDERBUFFER_WIDTH: Int\n val RENDERBUFFER_HEIGHT: Int\n val
RENDERBUFFER_INTERNAL_FORMAT: Int\n val RENDERBUFFER_RED_SIZE: Int\n val
RENDERBUFFER_GREEN_SIZE: Int\n val RENDERBUFFER_BLUE_SIZE: Int\n val
RENDERBUFFER_ALPHA_SIZE: Int\n val RENDERBUFFER_DEPTH_SIZE: Int\n val
RENDERBUFFER_STENCIL_SIZE: Int\n val FRAMEBUFFER_ATTACHMENT_OBJECT_TYPE: Int\n
val FRAMEBUFFER_ATTACHMENT_OBJECT_NAME: Int\n val
FRAMEBUFFER_ATTACHMENT_TEXTURE_LEVEL: Int\n val
FRAMEBUFFER_ATTACHMENT_TEXTURE_CUBE_MAP_FACE: Int\n val COLOR_ATTACHMENT0:
Int\n val DEPTH_ATTACHMENT: Int\n val STENCIL_ATTACHMENT: Int\n val
DEPTH_STENCIL_ATTACHMENT: Int\n val NONE: Int\n val FRAMEBUFFER_COMPLETE: Int\n
val FRAMEBUFFER_INCOMPLETE_ATTACHMENT: Int\n val
FRAMEBUFFER_INCOMPLETE_MISSING_ATTACHMENT: Int\n val
FRAMEBUFFER_INCOMPLETE_DIMENSIONS: Int\n
 val FRAMEBUFFER_UNSUPPORTED: Int\n val FRAMEBUFFER_BINDING: Int\n val
RENDERBUFFER_BINDING: Int\n val MAX_RENDERBUFFER_SIZE: Int\n val
INVALID_FRAMEBUFFER_OPERATION: Int\n val UNPACK_FLIP_Y_WEBGL: Int\n val
UNPACK_PREMULTIPLY_ALPHA_WEBGL: Int\n val CONTEXT_LOST_WEBGL: Int\n val
UNPACK_COLORSPACE_CONVERSION_WEBGL: Int\n val BROWSER_DEFAULT_WEBGL: Int\n
}\n}\n\n/*\n * Exposes the JavaScript
[WebGLRenderingContext](https://developer.mozilla.org/en/docs/Web/API/WebGLRenderingContext) to Kotlin\n
*/\n\npublic external abstract class WebGLRenderingContext : WebGLRenderingContextBase, RenderingContext {\n
 companion object {\n val DEPTH_BUFFER_BIT: Int\n val STENCIL_BUFFER_BIT: Int\n val
COLOR_BUFFER_BIT: Int\n val POINTS: Int\n val LINES: Int\n val LINE_LOOP: Int\n val
LINE_STRIP: Int\n val TRIANGLES: Int\n val TRIANGLE_STRIP: Int\n val TRIANGLE_FAN:
Int\n
 val ZERO: Int\n val ONE: Int\n val SRC_COLOR: Int\n val ONE_MINUS_SRC_COLOR: Int\n
 val SRC_ALPHA: Int\n val ONE_MINUS_SRC_ALPHA: Int\n val DST_ALPHA: Int\n val

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ONE\_MINUS\_DST\_ALPHA: Int\n val DST\_COLOR: Int\n val ONE\_MINUS\_DST\_COLOR: Int\n  
 val SRC\_ALPHA\_SATURATE: Int\n val FUNC\_ADD: Int\n val BLEND\_EQUATION: Int\n val  
 BLEND\_EQUATION\_RGB: Int\n val BLEND\_EQUATION\_ALPHA: Int\n val FUNC\_SUBTRACT:  
 Int\n val FUNC\_REVERSE\_SUBTRACT: Int\n val BLEND\_DST\_RGB: Int\n val  
 BLEND\_SRC\_RGB: Int\n val BLEND\_DST\_ALPHA: Int\n val BLEND\_SRC\_ALPHA: Int\n val  
 CONSTANT\_COLOR: Int\n val ONE\_MINUS\_CONSTANT\_COLOR: Int\n val CONSTANT\_ALPHA:  
 Int\n val ONE\_MINUS\_CONSTANT\_ALPHA: Int\n val BLEND\_COLOR: Int\n val  
 ARRAY\_BUFFER: Int\n val ELEMENT\_ARRAY\_BUFFER: Int\n val ARRAY\_BUFFER\_BINDING:  
 Int\n val ELEMENT\_ARRAY\_BUFFER\_BINDING:  
 Int\n val STREAM\_DRAW: Int\n val STATIC\_DRAW: Int\n val DYNAMIC\_DRAW: Int\n val  
 BUFFER\_SIZE: Int\n val BUFFER\_USAGE: Int\n val CURRENT\_VERTEX\_ATTRIB: Int\n val  
 FRONT: Int\n val BACK: Int\n val FRONT\_AND\_BACK: Int\n val CULL\_FACE: Int\n val  
 BLEND: Int\n val DITHER: Int\n val STENCIL\_TEST: Int\n val DEPTH\_TEST: Int\n val  
 SCISSOR\_TEST: Int\n val POLYGON\_OFFSET\_FILL: Int\n val SAMPLE\_ALPHA\_TO\_COVERAGE:  
 Int\n val SAMPLE\_COVERAGE: Int\n val NO\_ERROR: Int\n val INVALID\_ENUM: Int\n val  
 INVALID\_VALUE: Int\n val INVALID\_OPERATION: Int\n val OUT\_OF\_MEMORY: Int\n val CW:  
 Int\n val CCW: Int\n val LINE\_WIDTH: Int\n val ALIASED\_POINT\_SIZE\_RANGE: Int\n val  
 ALIASED\_LINE\_WIDTH\_RANGE: Int\n val CULL\_FACE\_MODE: Int\n val FRONT\_FACE: Int\n  
 val DEPTH\_RANGE: Int\n val DEPTH\_WRITEMASK:  
 Int\n val DEPTH\_CLEAR\_VALUE: Int\n val DEPTH\_FUNC: Int\n val STENCIL\_CLEAR\_VALUE:  
 Int\n val STENCIL\_FUNC: Int\n val STENCIL\_FAIL: Int\n val STENCIL\_PASS\_DEPTH\_FAIL:  
 Int\n val STENCIL\_PASS\_DEPTH\_PASS: Int\n val STENCIL\_REF: Int\n val  
 STENCIL\_VALUE\_MASK: Int\n val STENCIL\_WRITEMASK: Int\n val STENCIL\_BACK\_FUNC:  
 Int\n val STENCIL\_BACK\_FAIL: Int\n val STENCIL\_BACK\_PASS\_DEPTH\_FAIL: Int\n val  
 STENCIL\_BACK\_PASS\_DEPTH\_PASS: Int\n val STENCIL\_BACK\_REF: Int\n val  
 STENCIL\_BACK\_VALUE\_MASK: Int\n val STENCIL\_BACK\_WRITEMASK: Int\n val VIEWPORT:  
 Int\n val SCISSOR\_BOX: Int\n val COLOR\_CLEAR\_VALUE: Int\n val COLOR\_WRITEMASK:  
 Int\n val UNPACK\_ALIGNMENT: Int\n val PACK\_ALIGNMENT: Int\n val  
 MAX\_TEXTURE\_SIZE: Int\n val MAX\_VIEWPORT\_DIMS: Int\n val SUBPIXEL\_BITS: Int\n val  
 RED\_BITS: Int\n val GREEN\_BITS:  
 Int\n val BLUE\_BITS: Int\n val ALPHA\_BITS: Int\n val DEPTH\_BITS: Int\n val  
 STENCIL\_BITS: Int\n val POLYGON\_OFFSET\_UNITS: Int\n val POLYGON\_OFFSET\_FACTOR: Int\n  
 val TEXTURE\_BINDING\_2D: Int\n val SAMPLE\_BUFFERS: Int\n val SAMPLES: Int\n val  
 SAMPLE\_COVERAGE\_VALUE: Int\n val SAMPLE\_COVERAGE\_INVERT: Int\n val  
 COMPRESSED\_TEXTURE\_FORMATS: Int\n val DONT\_CARE: Int\n val FASTEST: Int\n val  
 NICEST: Int\n val GENERATE\_MIPMAP\_HINT: Int\n val BYTE: Int\n val UNSIGNED\_BYTE:  
 Int\n val SHORT: Int\n val UNSIGNED\_SHORT: Int\n val INT: Int\n val UNSIGNED\_INT: Int\n  
 val FLOAT: Int\n val DEPTH\_COMPONENT: Int\n val ALPHA: Int\n val RGB: Int\n val  
 RGBA: Int\n val LUMINANCE: Int\n val LUMINANCE\_ALPHA: Int\n val  
 UNSIGNED\_SHORT\_4\_4\_4\_4: Int\n val UNSIGNED\_SHORT\_5\_5\_5\_1: Int\n val  
 UNSIGNED\_SHORT\_5\_6\_5:  
 Int\n val FRAGMENT\_SHADER: Int\n val VERTEX\_SHADER: Int\n val  
 MAX\_VERTEX\_ATTRIBS: Int\n val MAX\_VERTEX\_UNIFORM\_VECTORS: Int\n val  
 MAX\_VARYING\_VECTORS: Int\n val MAX\_COMBINED\_TEXTURE\_IMAGE\_UNITS: Int\n val  
 MAX\_VERTEX\_TEXTURE\_IMAGE\_UNITS: Int\n val MAX\_TEXTURE\_IMAGE\_UNITS: Int\n val  
 MAX\_FRAGMENT\_UNIFORM\_VECTORS: Int\n val SHADER\_TYPE: Int\n val DELETE\_STATUS:  
 Int\n val LINK\_STATUS: Int\n val VALIDATE\_STATUS: Int\n val ATTACHED\_SHADERS: Int\n  
 val ACTIVE\_UNIFORMS: Int\n val ACTIVE\_ATTRIBUTES: Int\n val

SHADING\_LANGUAGE\_VERSION: Int\n val CURRENT\_PROGRAM: Int\n val NEVER: Int\n val  
 LESS: Int\n val EQUAL: Int\n val LEQUAL: Int\n val GREATER: Int\n val NOTEQUAL: Int\n  
 val GEQUAL: Int\n val ALWAYS: Int\n val KEEP: Int\n val REPLACE: Int\n val INCR: Int\n  
 val DECR: Int\n  
 val INVERT: Int\n val INCR\_WRAP: Int\n val DECR\_WRAP: Int\n val VENDOR: Int\n val  
 RENDERER: Int\n val VERSION: Int\n val NEAREST: Int\n val LINEAR: Int\n val  
 NEAREST\_MIPMAP\_NEAREST: Int\n val LINEAR\_MIPMAP\_NEAREST: Int\n val  
 NEAREST\_MIPMAP\_LINEAR: Int\n val LINEAR\_MIPMAP\_LINEAR: Int\n val  
 TEXTURE\_MAG\_FILTER: Int\n val TEXTURE\_MIN\_FILTER: Int\n val TEXTURE\_WRAP\_S: Int\n  
 val TEXTURE\_WRAP\_T: Int\n val TEXTURE\_2D: Int\n val TEXTURE: Int\n val  
 TEXTURE\_CUBE\_MAP: Int\n val TEXTURE\_BINDING\_CUBE\_MAP: Int\n val  
 TEXTURE\_CUBE\_MAP\_POSITIVE\_X: Int\n val TEXTURE\_CUBE\_MAP\_NEGATIVE\_X: Int\n val  
 TEXTURE\_CUBE\_MAP\_POSITIVE\_Y: Int\n val TEXTURE\_CUBE\_MAP\_NEGATIVE\_Y: Int\n val  
 TEXTURE\_CUBE\_MAP\_POSITIVE\_Z: Int\n val TEXTURE\_CUBE\_MAP\_NEGATIVE\_Z: Int\n val  
 MAX\_CUBE\_MAP\_TEXTURE\_SIZE: Int\n val TEXTURE0: Int\n val  
 TEXTURE1: Int\n val TEXTURE2: Int\n val TEXTURE3: Int\n val TEXTURE4: Int\n val  
 TEXTURE5: Int\n val TEXTURE6: Int\n val TEXTURE7: Int\n val TEXTURE8: Int\n val  
 TEXTURE9: Int\n val TEXTURE10: Int\n val TEXTURE11: Int\n val TEXTURE12: Int\n val  
 TEXTURE13: Int\n val TEXTURE14: Int\n val TEXTURE15: Int\n val TEXTURE16: Int\n val  
 TEXTURE17: Int\n val TEXTURE18: Int\n val TEXTURE19: Int\n val TEXTURE20: Int\n val  
 TEXTURE21: Int\n val TEXTURE22: Int\n val TEXTURE23: Int\n val TEXTURE24: Int\n val  
 TEXTURE25: Int\n val TEXTURE26: Int\n val TEXTURE27: Int\n val TEXTURE28: Int\n val  
 TEXTURE29: Int\n val TEXTURE30: Int\n val TEXTURE31: Int\n val ACTIVE\_TEXTURE: Int\n  
 val REPEAT: Int\n val CLAMP\_TO\_EDGE: Int\n val MIRRORED\_REPEAT: Int\n val  
 FLOAT\_VEC2: Int\n  
 val FLOAT\_VEC3: Int\n val FLOAT\_VEC4: Int\n val INT\_VEC2: Int\n val INT\_VEC3: Int\n  
 val INT\_VEC4: Int\n val BOOL: Int\n val BOOL\_VEC2: Int\n val BOOL\_VEC3: Int\n val  
 BOOL\_VEC4: Int\n val FLOAT\_MAT2: Int\n val FLOAT\_MAT3: Int\n val FLOAT\_MAT4: Int\n  
 val SAMPLER\_2D: Int\n val SAMPLER\_CUBE: Int\n val VERTEX\_ATTRIB\_ARRAY\_ENABLED:  
 Int\n val VERTEX\_ATTRIB\_ARRAY\_SIZE: Int\n val VERTEX\_ATTRIB\_ARRAY\_STRIDE: Int\n  
 val VERTEX\_ATTRIB\_ARRAY\_TYPE: Int\n val VERTEX\_ATTRIB\_ARRAY\_NORMALIZED: Int\n  
 val VERTEX\_ATTRIB\_ARRAY\_POINTER: Int\n val VERTEX\_ATTRIB\_ARRAY\_BUFFER\_BINDING:  
 Int\n val IMPLEMENTATION\_COLOR\_READ\_TYPE: Int\n val  
 IMPLEMENTATION\_COLOR\_READ\_FORMAT: Int\n val COMPILE\_STATUS: Int\n val  
 LOW\_FLOAT: Int\n val MEDIUM\_FLOAT: Int\n val HIGH\_FLOAT: Int\n val LOW\_INT: Int\n  
 val MEDIUM\_INT: Int\n  
 val HIGH\_INT: Int\n val FRAMEBUFFER: Int\n val RENDERBUFFER: Int\n val RGBA4: Int\n  
 val RGB5\_A1: Int\n val RGB565: Int\n val DEPTH\_COMPONENT16: Int\n val STENCIL\_INDEX:  
 Int\n val STENCIL\_INDEX8: Int\n val DEPTH\_STENCIL: Int\n val RENDERBUFFER\_WIDTH:  
 Int\n val RENDERBUFFER\_HEIGHT: Int\n val RENDERBUFFER\_INTERNAL\_FORMAT: Int\n  
 val RENDERBUFFER\_RED\_SIZE: Int\n val RENDERBUFFER\_GREEN\_SIZE: Int\n val  
 RENDERBUFFER\_BLUE\_SIZE: Int\n val RENDERBUFFER\_ALPHA\_SIZE: Int\n val  
 RENDERBUFFER\_DEPTH\_SIZE: Int\n val RENDERBUFFER\_STENCIL\_SIZE: Int\n val  
 FRAMEBUFFER\_ATTACHMENT\_OBJECT\_TYPE: Int\n val  
 FRAMEBUFFER\_ATTACHMENT\_OBJECT\_NAME: Int\n val  
 FRAMEBUFFER\_ATTACHMENT\_TEXTURE\_LEVEL: Int\n val  
 FRAMEBUFFER\_ATTACHMENT\_TEXTURE\_CUBE\_MAP\_FACE: Int\n val COLOR\_ATTACHMENT0:  
 Int\n val DEPTH\_ATTACHMENT: Int\n val STENCIL\_ATTACHMENT: Int\n





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\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Uint8Array.get(index: Int):
Byte = asDynamic()[index]\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Uint8Array.set(index: Int,
value: Byte) { asDynamic()[index] = value }\n\n/**\n * Exposes the JavaScript
[Uint8ClampedArray](https://developer.mozilla.org/en/docs/Web/API/Uint8ClampedArray) to Kotlin\n *\npublic
external open class Uint8ClampedArray : ArrayBufferView {\n constructor(length: Int)\n constructor(array:
Uint8ClampedArray)\n constructor(array:
Array<Byte>)\n constructor(buffer: ArrayBuffer, byteOffset: Int = definedExternally, length: Int =
definedExternally)\n open val length: Int\n override val buffer: ArrayBuffer\n override val byteOffset: Int\n
override val byteLength: Int\n fun set(array: Uint8ClampedArray, offset: Int = definedExternally)\n fun
set(array: Array<Byte>, offset: Int = definedExternally)\n fun subarray(start: Int, end: Int):
Uint8ClampedArray\n\n companion object {\n val BYTES_PER_ELEMENT: Int\n
}\n}\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun
Uint8ClampedArray.get(index: Int): Byte = asDynamic()[index]\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun
Uint8ClampedArray.set(index: Int, value: Byte) { asDynamic()[index] = value }\n\n/**\n * Exposes the JavaScript
[Int16Array](https://developer.mozilla.org/en/docs/Web/API/Int16Array)
to Kotlin\n *\npublic external open class Int16Array : ArrayBufferView {\n constructor(length: Int)\n
constructor(array: Int16Array)\n constructor(array: Array<Short>)\n constructor(buffer: ArrayBuffer,
byteOffset: Int = definedExternally, length: Int = definedExternally)\n open val length: Int\n override val buffer:
ArrayBuffer\n override val byteOffset: Int\n override val byteLength: Int\n fun set(array: Int16Array, offset:
Int = definedExternally)\n fun set(array: Array<Short>, offset: Int = definedExternally)\n fun subarray(start: Int,
end: Int): Int16Array\n\n companion object {\n val BYTES_PER_ELEMENT: Int\n
}\n}\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Int16Array.get(index: Int):
Short = asDynamic()[index]\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Int16Array.set(index: Int,
value:
Short) { asDynamic()[index] = value }\n\n/**\n * Exposes the JavaScript
[Uint16Array](https://developer.mozilla.org/en/docs/Web/API/Uint16Array) to Kotlin\n *\npublic external open
class Uint16Array : ArrayBufferView {\n constructor(length: Int)\n constructor(array: Uint16Array)\n
constructor(array: Array<Short>)\n constructor(buffer: ArrayBuffer, byteOffset: Int = definedExternally, length:
Int = definedExternally)\n open val length: Int\n override val buffer: ArrayBuffer\n override val byteOffset:
Int\n override val byteLength: Int\n fun set(array: Uint16Array, offset: Int = definedExternally)\n fun set(array:
Array<Short>, offset: Int = definedExternally)\n fun subarray(start: Int, end: Int): Uint16Array\n\n companion
object {\n val BYTES_PER_ELEMENT: Int\n
}\n}\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Uint16Array.get(index: Int):
Short = asDynamic()[index]\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Uint16Array.set(index: Int,
value: Short) { asDynamic()[index] = value }\n\n/**\n * Exposes the JavaScript
[Int32Array](https://developer.mozilla.org/en/docs/Web/API/Int32Array) to Kotlin\n *\npublic external open class
Int32Array : ArrayBufferView {\n constructor(length: Int)\n constructor(array: Int32Array)\n
constructor(array: Array<Int>)\n constructor(buffer: ArrayBuffer, byteOffset: Int = definedExternally, length: Int
= definedExternally)\n open val length: Int\n override val buffer: ArrayBuffer\n override val byteOffset: Int\n
override val byteLength: Int\n fun set(array: Int32Array, offset: Int = definedExternally)\n fun set(array:
Array<Int>, offset: Int = definedExternally)\n fun subarray(start: Int, end: Int): Int32Array\n\n companion object
{\n val BYTES_PER_ELEMENT: Int\n
}\n}\n\n@Suppress(\ "INVISIBLE_REFERENCE"),

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\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Int32Array.get(index: Int):
Int = asDynamic()[index]\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Int32Array.set(index: Int,
value: Int) { asDynamic()[index] = value }\n\n/**\n * Exposes the JavaScript
[Uint32Array](https://developer.mozilla.org/en/docs/Web/API/Uint32Array) to Kotlin\n *\npublic external open
class Uint32Array : ArrayBufferView {\n constructor(length: Int)\n constructor(array: Uint32Array)\n
constructor(array: Array<Int>)\n constructor(buffer: ArrayBuffer, byteOffset: Int = definedExternally, length: Int
= definedExternally)\n open val length: Int\n override val buffer: ArrayBuffer\n override val byteOffset: Int\n
override val byteLength: Int\n fun set(array: Uint32Array, offset: Int = definedExternally)\n fun set(array:
Array<Int>, offset: Int = definedExternally)\n fun subarray(start:
Int, end: Int): Uint32Array\n\n companion object {\n val BYTES_PER_ELEMENT: Int\n
}\n}\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Uint32Array.get(index: Int):
Int = asDynamic()[index]\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Uint32Array.set(index: Int,
value: Int) { asDynamic()[index] = value }\n\n/**\n * Exposes the JavaScript
[Float32Array](https://developer.mozilla.org/en/docs/Web/API/Float32Array) to Kotlin\n *\npublic external open
class Float32Array : ArrayBufferView {\n constructor(length: Int)\n constructor(array: Float32Array)\n
constructor(array: Array<Float>)\n constructor(buffer: ArrayBuffer, byteOffset: Int = definedExternally, length:
Int = definedExternally)\n open val length: Int\n override val buffer: ArrayBuffer\n override val byteOffset:
Int\n override val byteLength: Int\n fun
set(array: Float32Array, offset: Int = definedExternally)\n fun set(array: Array<Float>, offset: Int =
definedExternally)\n fun subarray(start: Int, end: Int): Float32Array\n\n companion object {\n val
BYTES_PER_ELEMENT: Int\n }\n}\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Float32Array.get(index: Int):
Float = asDynamic()[index]\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Float32Array.set(index: Int,
value: Float) { asDynamic()[index] = value }\n\n/**\n * Exposes the JavaScript
[Float64Array](https://developer.mozilla.org/en/docs/Web/API/Float64Array) to Kotlin\n *\npublic external open
class Float64Array : ArrayBufferView {\n constructor(length: Int)\n constructor(array: Float64Array)\n
constructor(array: Array<Double>)\n constructor(buffer: ArrayBuffer, byteOffset: Int = definedExternally, length:
Int = definedExternally)\n
open val length: Int\n override val buffer: ArrayBuffer\n override val byteOffset: Int\n override val
byteLength: Int\n fun set(array: Float64Array, offset: Int = definedExternally)\n fun set(array: Array<Double>,
offset: Int = definedExternally)\n fun subarray(start: Int, end: Int): Float64Array\n\n companion object {\n
val BYTES_PER_ELEMENT: Int\n }\n}\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Float64Array.get(index: Int):
Double = asDynamic()[index]\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Float64Array.set(index: Int,
value: Double) { asDynamic()[index] = value }\n\n/**\n * Exposes the JavaScript
[DataView](https://developer.mozilla.org/en/docs/Web/API/DataView) to Kotlin\n *\npublic external open class
DataView(buffer: ArrayBuffer, byteOffset: Int = definedExternally, byteLength:
Int = definedExternally) : ArrayBufferView {\n override val buffer: ArrayBuffer\n override val byteOffset: Int\n
override val byteLength: Int\n fun getInt8(byteOffset: Int): Byte\n fun getUint8(byteOffset: Int): Byte\n fun
getInt16(byteOffset: Int, littleEndian: Boolean = definedExternally): Short\n fun getUint16(byteOffset: Int,
littleEndian: Boolean = definedExternally): Short\n fun getInt32(byteOffset: Int, littleEndian: Boolean =
definedExternally): Int\n fun getUint32(byteOffset: Int, littleEndian: Boolean = definedExternally): Int\n fun
getFloat32(byteOffset: Int, littleEndian: Boolean = definedExternally): Float\n fun getFloat64(byteOffset: Int,

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littleEndian: Boolean = definedExternally): Double\n fun setInt8(byteOffset: Int, value: Byte)\n fun
setUInt8(byteOffset: Int, value: Byte)\n fun setInt16(byteOffset: Int, value: Short, littleEndian: Boolean =
definedExternally)\n fun setUInt16(byteOffset: Int, value: Short, littleEndian: Boolean
= definedExternally)\n fun setInt32(byteOffset: Int, value: Int, littleEndian: Boolean = definedExternally)\n fun
setUInt32(byteOffset: Int, value: Int, littleEndian: Boolean = definedExternally)\n fun setFloat32(byteOffset: Int,
value: Float, littleEndian: Boolean = definedExternally)\n fun setFloat64(byteOffset: Int, value: Double,
littleEndian: Boolean = definedExternally)\n\n\npublic external interface BufferDataSource\n\n\npublic external
interface TexImageSource", "/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT EDIT!\n// See
github.com/kotlin/dukat for details\n\npackage org.w3c.dom.clipboard\n\nimport kotlin.js.*\nimport
org.khronos.webgl.*\nimport org.w3c.dom.*\nimport org.w3c.dom.events.*\n\npublic external interface
ClipboardEventInit : EventInit {\n
 var clipboardData: DataTransfer? /* = null */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun ClipboardEventInit(clipboardData:
DataTransfer? = null, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false):
ClipboardEventInit {\n val o = js("{}")\n o["clipboardData"] = clipboardData\n o["bubbles"] = bubbles\n
 o["cancelable"] = cancelable\n o["composed"] = composed\n return o\n}\n\n/**\n * Exposes the JavaScript
[ClipboardEvent](https://developer.mozilla.org/en/docs/Web/API/ClipboardEvent) to Kotlin\n */\n\npublic external
open class ClipboardEvent(type: String, eventInitDict: ClipboardEventInit = definedExternally) : Event {\n open
val clipboardData: DataTransfer?\n\n companion object {\n val NONE: Short\n val
CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val
BUBBLING_PHASE: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[Clipboard](https://developer.mozilla.org/en/docs/Web/API/Clipboard) to Kotlin\n */\n\npublic external abstract class
Clipboard : EventTarget {\n fun read(): Promise<DataTransfer>\n fun readText(): Promise<String>\n fun
write(data: DataTransfer): Promise<Unit>\n fun writeText(data: String): Promise<Unit>\n}\n\n\npublic external
interface ClipboardPermissionDescriptor {\n var allowWithoutGesture: Boolean? /* = false */\n get() =
definedExternally\n set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun
ClipboardPermissionDescriptor(allowWithoutGesture: Boolean? = false): ClipboardPermissionDescriptor {\n val
o = js("{}")\n o["allowWithoutGesture"] = allowWithoutGesture\n return o\n}", "/*\n * Copyright 2010-
2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source
code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n// NOTE:
THIS FILE IS AUTO-GENERATED, DO NOT EDIT!\n// See github.com/kotlin/dukat for details\n\npackage
org.w3c.dom.css\n\nimport kotlin.js.*\nimport org.khronos.webgl.*\nimport org.w3c.dom.*\n\npublic external
abstract class MediaList : ItemArrayLike<String> {\n open var mediaText: String\n fun
appendMedium(medium: String)\n fun deleteMedium(medium: String)\n override fun item(index: Int):
String?\n}\n\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun MediaList.get(index: Int):
String? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[StyleSheet](https://developer.mozilla.org/en/docs/Web/API/StyleSheet) to Kotlin\n */\n\npublic external abstract
class StyleSheet {\n open val type: String\n open val href: String?\n open val ownerNode:
UnionElementOrProcessingInstruction?\n open val parentStyleSheet:
StyleSheet?\n open val title: String?\n open val media: MediaList\n open var disabled: Boolean\n}\n\n\n/**\n *
Exposes the JavaScript [CSSStyleSheet](https://developer.mozilla.org/en/docs/Web/API/CSSStyleSheet) to Kotlin\n
*/\n\npublic external abstract class CSSStyleSheet : StyleSheet {\n open val ownerRule: CSSRule?\n open val
cssRules: CSSRuleList\n fun insertRule(rule: String, index: Int): Int\n fun deleteRule(index: Int)\n}\n\n\n/**

```

Exposes the JavaScript [StyleSheetList](https://developer.mozilla.org/en/docs/Web/API/StyleSheetList) to Kotlin

```

*\npublic external abstract class StyleSheetList : ItemArrayLike<StyleSheet> {\n override fun item(index: Int):
StyleSheet?\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun StyleSheetList.get(index: Int):
StyleSheet? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[LinkStyle](https://developer.mozilla.org/en/docs/Web/API/LinkStyle)
to Kotlin
*\npublic external interface LinkStyle {\n val sheet: StyleSheet?\n get() =
definedExternally\n}\n\n/**\n * Exposes the JavaScript
[CSSRuleList](https://developer.mozilla.org/en/docs/Web/API/CSSRuleList) to Kotlin
*\npublic external abstract
class CSSRuleList : ItemArrayLike<CSSRule> {\n override fun item(index: Int):
CSSRule?\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun CSSRuleList.get(index: Int):
CSSRule? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[CSSRule](https://developer.mozilla.org/en/docs/Web/API/CSSRule) to Kotlin
*\npublic external abstract class
CSSRule {\n open val type: Short\n open var cssText: String\n open val parentRule: CSSRule?\n open val
parentStyleSheet: CSSStyleSheet?\n\n companion object {\n val STYLE_RULE: Short\n val
CHARSET_RULE: Short\n val IMPORT_RULE: Short\n val MEDIA_RULE: Short\n val
FONT_FACE_RULE:
Short\n val PAGE_RULE: Short\n val MARGIN_RULE: Short\n val NAMESPACE_RULE: Short\n
}\n}\n\n/**\n * Exposes the JavaScript
[CSSStyleRule](https://developer.mozilla.org/en/docs/Web/API/CSSStyleRule) to Kotlin
*\npublic external
abstract class CSSStyleRule : CSSRule {\n open var selectorText: String\n open val style:
CSSStyleDeclaration\n\n companion object {\n val STYLE_RULE: Short\n val CHARSET_RULE:
Short\n val IMPORT_RULE: Short\n val MEDIA_RULE: Short\n val FONT_FACE_RULE: Short\n
 val PAGE_RULE: Short\n val MARGIN_RULE: Short\n val NAMESPACE_RULE: Short\n
}\n}\n\npublic external abstract class CSSImportRule : CSSRule {\n open val href: String\n open val media:
MediaList\n open val styleSheet: CSSStyleSheet\n\n companion object {\n val STYLE_RULE: Short\n
 val CHARSET_RULE: Short\n val IMPORT_RULE: Short\n val MEDIA_RULE: Short\n val
FONT_FACE_RULE: Short\n val PAGE_RULE: Short\n val MARGIN_RULE: Short\n val
NAMESPACE_RULE: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[CSSGroupingRule](https://developer.mozilla.org/en/docs/Web/API/CSSGroupingRule) to Kotlin
*\npublic
external abstract class CSSGroupingRule : CSSRule {\n open val cssRules: CSSRuleList\n fun insertRule(rule:
String, index: Int): Int\n fun deleteRule(index: Int)\n\n companion object {\n val STYLE_RULE: Short\n
 val CHARSET_RULE: Short\n val IMPORT_RULE: Short\n val MEDIA_RULE: Short\n val
FONT_FACE_RULE: Short\n val PAGE_RULE: Short\n val MARGIN_RULE: Short\n val
NAMESPACE_RULE: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[CSSMediaRule](https://developer.mozilla.org/en/docs/Web/API/CSSMediaRule) to Kotlin
*\npublic external
abstract class CSSMediaRule : CSSGroupingRule {\n open val media: MediaList\n\n companion object {\n
 val STYLE_RULE:
Short\n val CHARSET_RULE: Short\n val IMPORT_RULE: Short\n val MEDIA_RULE: Short\n
 val FONT_FACE_RULE: Short\n val PAGE_RULE: Short\n val MARGIN_RULE: Short\n val
NAMESPACE_RULE: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[CSSPageRule](https://developer.mozilla.org/en/docs/Web/API/CSSPageRule) to Kotlin
*\npublic external
abstract class CSSPageRule : CSSGroupingRule {\n open var selectorText: String\n open val style:
CSSStyleDeclaration\n\n companion object {\n val STYLE_RULE: Short\n val CHARSET_RULE:
Short\n val IMPORT_RULE: Short\n val MEDIA_RULE: Short\n val FONT_FACE_RULE: Short\n
 val PAGE_RULE: Short\n val MARGIN_RULE: Short\n val NAMESPACE_RULE: Short\n
}\n}\n\npublic external abstract class CSSMarginRule : CSSRule {\n open val name: String\n open val style:

```



```

fontWeight: String\n open var hangingPunctuation: String\n open var height: String\n open var hyphens:
String\n open var imageOrientation: String\n open var imageRendering: String\n open var imageResolution:
String\n open var imeMode: String\n open var justifyContent: String\n open var left: String\n open var
letterSpacing: String\n open var lineBreak: String\n open var lineHeight: String\n open var listStyle: String\n
open var listStyleImage: String\n open var listStylePosition: String\n open var listStyleType: String\n open var
margin: String\n open var marginBottom: String\n open var marginLeft: String\n open var marginRight:
String\n open var marginTop: String\n open var mark: String\n open var markAfter: String\n open var
markBefore: String\n open var marks: String\n open var marqueeDirection: String\n open var
marqueePlayCount: String\n open var marqueeSpeed: String\n open var marqueeStyle:
String\n open var mask: String\n open var maskType: String\n open var maxHeight: String\n open var
maxWidth: String\n open var minHeight: String\n open var minWidth: String\n open var navDown: String\n
open var navIndex: String\n open var navLeft: String\n open var navRight: String\n open var navUp: String\n
open var objectFit: String\n open var objectPosition: String\n open var opacity: String\n open var order:
String\n open var orphans: String\n open var outline: String\n open var outlineColor: String\n open var
outlineOffset: String\n open var outlineStyle: String\n open var outlineWidth: String\n open var
overflowWrap: String\n open var overflowX: String\n open var overflowY: String\n open var padding:
String\n open var paddingBottom: String\n open var paddingLeft: String\n open var paddingRight: String\n
open var paddingTop: String\n open var pageBreakAfter: String\n open var pageBreakBefore:
String\n open var pageBreakInside: String\n open var perspective: String\n open var perspectiveOrigin:
String\n open var phonemes: String\n open var position: String\n open var quotes: String\n open var resize:
String\n open var rest: String\n open var restAfter: String\n open var restBefore: String\n open var right:
String\n open var tabSize: String\n open var tableLayout: String\n open var textAlign: String\n open var
textAlignLast: String\n open var textCombineUpright: String\n open var textDecoration: String\n open var
textDecorationColor: String\n open var textDecorationLine: String\n open var textDecorationStyle: String\n
open var textIndent: String\n open var textJustify: String\n open var textOrientation: String\n open var
textOverflow: String\n open var textShadow: String\n open var textTransform: String\n open var
textUnderlinePosition: String\n open var top: String\n open var transform:
String\n open var transformOrigin: String\n open var transformStyle: String\n open var transition: String\n
open var transitionDelay: String\n open var transitionDuration: String\n open var transitionProperty: String\n
open var transitionTimingFunction: String\n open var unicodeBidi: String\n open var verticalAlign: String\n
open var visibility: String\n open var voiceBalance: String\n open var voiceDuration: String\n open var
voicePitch: String\n open var voicePitchRange: String\n open var voiceRate: String\n open var voiceStress:
String\n open var voiceVolume: String\n open var whiteSpace: String\n open var widows: String\n open var
width: String\n open var wordBreak: String\n open var wordSpacing: String\n open var wordWrap: String\n
open var writingMode: String\n open var zIndex: String\n open var _dashed_attribute: String\n open var
_camel_cased_attribute: String\n open var _webkit_cased_attribute:
String\n fun getPropertyValue(property: String): String\n fun getPropertyPriority(property: String): String\n
fun setProperty(property: String, value: String, priority: String = definedExternally)\n fun
setPropertyValue(property: String, value: String)\n fun setPropertyPriority(property: String, priority: String)\n
fun removeProperty(property: String): String\n override fun item(index: Int):
String\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun
CSSStyleDeclaration.get(index: Int): String? = asDynamic()[index]\n\npublic external interface
ElementCSSInlineStyle {\n val style: CSSStyleDeclaration\n}\n\n/**\n * Exposes the JavaScript
[CSS](https://developer.mozilla.org/en/docs/Web/API/CSS) to Kotlin\n *\n\npublic external abstract class CSS {\n
companion object {\n fun escape(ident: String): String\n }\n}\n\npublic external interface
UnionElementOrProcessingInstruction\", /*\n * Copyright

```

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```

package
org.w3c.dom.encryptedmedia
import kotlin.js.*
import org.khronos.webgl.*
import org.w3c.dom.*
import org.w3c.dom.events.*
 * Exposes the JavaScript
[MediaKeySystemConfiguration](https://developer.mozilla.org/en/docs/Web/API/MediaKeySystemConfiguration)
to Kotlin
 * public external interface MediaKeySystemConfiguration {
 var label: String? /* = "" */
 get() = definedExternally
 set(value) = definedExternally
 var initDataTypes: Array<String>? /* = arrayOf() */
 get() = definedExternally
 set(value) = definedExternally
 var audioCapabilities:
Array<MediaKeySystemMediaCapability>? /* = arrayOf() */
 get() = definedExternally
 set(value) = definedExternally
 var videoCapabilities: Array<MediaKeySystemMediaCapability>? /* =
arrayOf() */
 get() = definedExternally
 set(value) = definedExternally
 var distinctiveIdentifier:
MediaKeysRequirement? /* = MediaKeysRequirement.OPTIONAL */
 get() = definedExternally
 set(value) = definedExternally
 var persistentState: MediaKeysRequirement? /* =
MediaKeysRequirement.OPTIONAL */
 get() = definedExternally
 set(value) = definedExternally
 var sessionTypes: Array<String>?
 get() = definedExternally
 set(value) =
definedExternally
}
@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
public inline fun MediaKeySystemConfiguration(label:
String? = "", initDataTypes: Array<String>? = arrayOf(), audioCapabilities:
Array<MediaKeySystemMediaCapability>? = arrayOf(), videoCapabilities:
Array<MediaKeySystemMediaCapability>? = arrayOf(),
distinctiveIdentifier: MediaKeysRequirement? = MediaKeysRequirement.OPTIONAL, persistentState:
MediaKeysRequirement? = MediaKeysRequirement.OPTIONAL, sessionTypes: Array<String>? = undefined):
MediaKeySystemConfiguration {
 val o = js("{}")
 o["label"] = label
 o["initDataTypes"] =
initDataTypes
 o["audioCapabilities"] = audioCapabilities
 o["videoCapabilities"] = videoCapabilities
 o["distinctiveIdentifier"] = distinctiveIdentifier
 o["persistentState"] = persistentState
 o["sessionTypes"] =
sessionTypes
 return o
}
 * public external interface MediaKeySystemMediaCapability {
 var
contentType: String? /* = "" */
 get() = definedExternally
 set(value) = definedExternally
 var
robustness: String? /* = "" */
 get() = definedExternally
 set(value) =
definedExternally
}
@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
public inline fun
MediaKeySystemMediaCapability(contentType:
String? = "", robustness: String? = ""): MediaKeySystemMediaCapability {
 val o = js("{}")
 o["contentType"] = contentType
 o["robustness"] = robustness
 return o
}
 * Exposes the
JavaScript [MediaKeySystemAccess](https://developer.mozilla.org/en/docs/Web/API/MediaKeySystemAccess) to
Kotlin
 * public external abstract class MediaKeySystemAccess {
 open val keySystem: String
 fun
getConfiguration(): MediaKeySystemConfiguration
 fun createMediaKeys(): Promise<MediaKeys>
}
 * Exposes the
JavaScript [MediaKeys](https://developer.mozilla.org/en/docs/Web/API/MediaKeys) to Kotlin
 * public external abstract class MediaKeys {
 fun createSession(sessionType: MediaKeySessionType =
definedExternally): MediaKeySession
 fun setServerCertificate(serverCertificate: dynamic):
Promise<Boolean>
}
 * Exposes the
JavaScript
[MediaKeySession](https://developer.mozilla.org/en/docs/Web/API/MediaKeySession)
to Kotlin
 * public external abstract class MediaKeySession : EventTarget {
 open val sessionId: String
 open val expiration: Double
 open val closed: Promise<Unit>
 open val keyStatuses: MediaKeyStatusMap
 open var onkeystatuschange: ((Event) -> dynamic)?
 open var onmessage: ((MessageEvent) -> dynamic)?
 fun generateRequest(initDataType: String, initData: dynamic): Promise<Unit>
 fun load(sessionId: String):
Promise<Boolean>
 fun update(response: dynamic): Promise<Unit>
 fun close(): Promise<Unit>
 fun
remove(): Promise<Unit>
}
 * Exposes the
JavaScript

```



```

[MediaKeyStatusMap](https://developer.mozilla.org/en/docs/Web/API/MediaKeyStatusMap) to Kotlin
external abstract class MediaKeyStatusMap {
 open val size: Int
 fun has(keyId: dynamic): Boolean
 fun get(keyId: dynamic): Any?
}
// Exposes the JavaScript
[MediaKeyMessageEvent](https://developer.mozilla.org/en/docs/Web/API/MediaKeyMessageEvent)
to Kotlin
external open class MediaKeyMessageEvent(type: String, eventInitDict:
MediaKeyMessageEventInit) : Event {
 open val messageType: MediaKeyMessageType
 open val message:
 ArrayBuffer
 companion object {
 val NONE: Short
 val CAPTURING_PHASE: Short
 val AT_TARGET: Short
 val BUBBLING_PHASE: Short
 }
}
// public external interface
MediaKeyMessageEventInit : EventInit {
 var messageType: MediaKeyMessageType?
 var message:
 ArrayBuffer?
}
@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
public inline fun
MediaKeyMessageEventInit(messageType: MediaKeyMessageType?, message: ArrayBuffer?, bubbles: Boolean? =
false, cancelable: Boolean? = false, composed: Boolean? = false): MediaKeyMessageEventInit {
 val o =
 js("{}")
 o["messageType"] = messageType
 o["message"] = message
 o["bubbles"] = bubbles
 o["cancelable"] = cancelable
 o["composed"] =
 composed
 return o
}
// public external open class MediaEncryptedEvent(type: String, eventInitDict:
MediaEncryptedEventInit = definedExternally) : Event {
 open val initDataType: String
 open val initData:
 ArrayBuffer?
 companion object {
 val NONE: Short
 val CAPTURING_PHASE: Short
 val AT_TARGET: Short
 val BUBBLING_PHASE: Short
 }
}
// public external interface
MediaEncryptedEventInit : EventInit {
 var initDataType: String? /* = "" */
 get() = definedExternally
 set(value) = definedExternally
 var initData: ArrayBuffer? /* = null */
 get() = definedExternally
 set(value) = definedExternally
}
@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
public inline fun
MediaEncryptedEventInit(initDataType: String? = "", initData: ArrayBuffer? = null, bubbles: Boolean? = false,
cancelable: Boolean? = false, composed: Boolean? = false): MediaEncryptedEventInit
{
 val o = js("{}")
 o["initDataType"] = initData
 o["initData"] = initData
 o["bubbles"] =
 bubbles
 o["cancelable"] = cancelable
 o["composed"] =
 composed
 return o
}
// please, don't
implement this interface!
*/
@JsName("null")
@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")
public external
interface MediaKeysRequirement {
 companion object
}
// public inline val
MediaKeysRequirement.Companion.REQUIRED: MediaKeysRequirement get() =
"required".asDynamic().unsafeCast<MediaKeysRequirement>()
// public inline val
MediaKeysRequirement.Companion.OPTIONAL: MediaKeysRequirement get() =
"optional".asDynamic().unsafeCast<MediaKeysRequirement>()
// public inline val
MediaKeysRequirement.Companion.NOT_ALLOWED: MediaKeysRequirement get() = "not-
allowed".asDynamic().unsafeCast<MediaKeysRequirement>()
// please, don't implement this interface!
*/
@JsName("null")
@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")
public
external interface MediaKeySessionType {
 companion object
}
// public inline val
MediaKeySessionType.Companion.TEMPORARY: MediaKeySessionType get() =
"temporary".asDynamic().unsafeCast<MediaKeySessionType>()
// public inline val
MediaKeySessionType.Companion.PERSISTENT_LICENSE: MediaKeySessionType get() = "persistent-
license".asDynamic().unsafeCast<MediaKeySessionType>()
// please, don't implement this interface!
*/
@JsName("null")
@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")
public external
interface MediaKeyStatus {
 companion object
}
// public inline val
MediaKeyStatus.Companion.USABLE:
MediaKeyStatus get() = "usable".asDynamic().unsafeCast<MediaKeyStatus>()
// public inline val
MediaKeyStatus.Companion.EXPIRED: MediaKeyStatus get() =
"expired".asDynamic().unsafeCast<MediaKeyStatus>()
// public inline val
MediaKeyStatus.Companion.RELEASED: MediaKeyStatus get() =

```



```

[MouseEvent](https://developer.mozilla.org/en/docs/Web/API/MouseEvent) to Kotlin\n *\npublic external open
class MouseEvent(type: String, eventInitDict: MouseEventInit = definedExternally) : UIEvent,
UnionElementOrMouseEvent {\n open val screenX: Int\n open val screenY: Int\n open val clientX: Int\n
open val clientY: Int\n open val ctrlKey: Boolean\n open val shiftKey: Boolean\n open val altKey: Boolean\n
open val metaKey: Boolean\n open val button: Short\n open val buttons: Short\n open val relatedTarget:
EventTarget?\n open val region: String?\n open val pageX: Double\n open val pageY: Double\n open val x:
Double\n open val y: Double\n open val offsetX: Double\n open val offsetY: Double\n fun
getModifierState(keyArg: String):
Boolean\n\n companion object {\n val NONE: Short\n val CAPTURING_PHASE: Short\n val
AT_TARGET: Short\n val BUBBLING_PHASE: Short\n }\n}\n\npublic external interface MouseEventInit :
EventModifierInit {\n var screenX: Int? /* = 0 */\n get() = definedExternally\n set(value) =
definedExternally\n var screenY: Int? /* = 0 */\n get() = definedExternally\n set(value) =
definedExternally\n var clientX: Int? /* = 0 */\n get() = definedExternally\n set(value) =
definedExternally\n var clientY: Int? /* = 0 */\n get() = definedExternally\n set(value) =
definedExternally\n var button: Short? /* = 0 */\n get() = definedExternally\n set(value) =
definedExternally\n var buttons: Short? /* = 0 */\n get() = definedExternally\n set(value) =
definedExternally\n var relatedTarget: EventTarget? /* = null */\n get() = definedExternally\n set(value)
= definedExternally\n
 var region: String? /* = null */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\n "INVISIBLE_REFERENCE",
 "INVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\n\npublic inline fun MouseEventInit(screenX: Int? = 0,
screenY: Int? = 0, clientX: Int? = 0, clientY: Int? = 0, button: Short? = 0, buttons: Short? = 0, relatedTarget:
EventTarget? = null, region: String? = null, ctrlKey: Boolean? = false, shiftKey: Boolean? = false, altKey: Boolean?
= false, metaKey: Boolean? = false, modifierAltGraph: Boolean? = false, modifierCapsLock: Boolean? = false,
modifierFn: Boolean? = false, modifierFnLock: Boolean? = false, modifierHyper: Boolean? = false,
modifierNumLock: Boolean? = false, modifierScrollLock: Boolean? = false, modifierSuper: Boolean? = false,
modifierSymbol: Boolean? = false, modifierSymbolLock: Boolean? = false, view: Window? = null, detail: Int? = 0,
bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean?
= false): MouseEventInit {\n val o = js("{}")\n o["screenX"] = screenX\n o["screenY"] = screenY\n
o["clientX"] = clientX\n o["clientY"] = clientY\n o["button"] = button\n o["buttons"] = buttons\n
o["relatedTarget"] = relatedTarget\n o["region"] = region\n o["ctrlKey"] = ctrlKey\n o["shiftKey"] =
shiftKey\n o["altKey"] = altKey\n o["metaKey"] = metaKey\n o["modifierAltGraph"] =
modifierAltGraph\n o["modifierCapsLock"] = modifierCapsLock\n o["modifierFn"] = modifierFn\n
o["modifierFnLock"] = modifierFnLock\n o["modifierHyper"] = modifierHyper\n o["modifierNumLock"] =
modifierNumLock\n o["modifierScrollLock"] = modifierScrollLock\n o["modifierSuper"] = modifierSuper\n
o["modifierSymbol"] = modifierSymbol\n o["modifierSymbolLock"] = modifierSymbolLock\n o["view"] =
view\n o["detail"] = detail\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n
o["composed"] = composed\n return o}\n\npublic external interface EventModifierInit : UIEventInit {\n var
ctrlKey: Boolean? /* = false */\n get() = definedExternally\n set(value) = definedExternally\n var
shiftKey: Boolean? /* = false */\n get() = definedExternally\n set(value) = definedExternally\n var
altKey: Boolean? /* = false */\n get() = definedExternally\n set(value) = definedExternally\n var
metaKey: Boolean? /* = false */\n get() = definedExternally\n set(value) = definedExternally\n var
modifierAltGraph: Boolean? /* = false */\n get() = definedExternally\n set(value) = definedExternally\n
var modifierCapsLock: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n var modifierFn: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n var modifierFnLock: Boolean? /* = false */\n get()
= definedExternally\n set(value) = definedExternally\n var modifierHyper: Boolean? /* = false */\n get()
= definedExternally\n set(value) = definedExternally\n var modifierNumLock: Boolean? /* = false */\n

```

```

get() = definedExternally\n set(value) = definedExternally\n var modifierScrollLock: Boolean? /* = false */\n
 get() = definedExternally\n set(value) = definedExternally\n var modifierSuper: Boolean? /* = false */\n
 get() = definedExternally\n set(value) = definedExternally\n var modifierSymbol: Boolean? /* = false */\n
 get() = definedExternally\n set(value) = definedExternally\n var modifierSymbolLock: Boolean? /* = false
*/\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n\n@kotlin.internal.InlineOnly\n\npublic inline fun EventModifierInit(ctrlKey: Boolean? =
false, shiftKey: Boolean? = false, altKey:
Boolean? = false, metaKey: Boolean? = false, modifierAltGraph: Boolean? = false, modifierCapsLock: Boolean? =
false, modifierFn: Boolean? = false, modifierFnLock: Boolean? = false, modifierHyper: Boolean? = false,
modifierNumLock: Boolean? = false, modifierScrollLock: Boolean? = false, modifierSuper: Boolean? = false,
modifierSymbol: Boolean? = false, modifierSymbolLock: Boolean? = false, view: Window? = null, detail: Int? = 0,
bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): EventModifierInit {\n val o
= js(\"({})\")\n o[\"ctrlKey\"] = ctrlKey\n o[\"shiftKey\"] = shiftKey\n o[\"altKey\"] = altKey\n
o[\"metaKey\"] = metaKey\n o[\"modifierAltGraph\"] = modifierAltGraph\n o[\"modifierCapsLock\"] =
modifierCapsLock\n o[\"modifierFn\"] = modifierFn\n o[\"modifierFnLock\"] = modifierFnLock\n
o[\"modifierHyper\"] = modifierHyper\n o[\"modifierNumLock\"] = modifierNumLock\n
o[\"modifierScrollLock\"] = modifierScrollLock\n
 o[\"modifierSuper\"] = modifierSuper\n o[\"modifierSymbol\"] = modifierSymbol\n
o[\"modifierSymbolLock\"] = modifierSymbolLock\n o[\"view\"] = view\n o[\"detail\"] = detail\n
o[\"bubbles\"] = bubbles\n o[\"cancelable\"] = cancelable\n o[\"composed\"] = composed\n return
o\n}\n\n/**\n * Exposes the JavaScript [WheelEvent](https://developer.mozilla.org/en/docs/Web/API/WheelEvent)
to Kotlin\n */\n\npublic external open class WheelEvent(type: String, eventInitDict: WheelEventInit =
definedExternally) : MouseEvent {\n open val deltaX: Double\n open val deltaY: Double\n open val deltaZ:
Double\n open val deltaMode: Int\n\n companion object {\n val DOM_DELTA_PIXEL: Int\n val
DOM_DELTA_LINE: Int\n val DOM_DELTA_PAGE: Int\n val NONE: Short\n val
CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n
 }\n}\n\npublic external interface WheelEventInit : MouseEventInit {\n var deltaX:
Double? /* = 0.0 */\n get() = definedExternally\n set(value) = definedExternally\n var deltaY: Double? /*
= 0.0 */\n get() = definedExternally\n set(value) = definedExternally\n var deltaZ: Double? /* = 0.0 */\n
 get() = definedExternally\n set(value) = definedExternally\n var deltaMode: Int? /* = 0 */\n get() =
definedExternally\n set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n\n@kotlin.internal.InlineOnly\n\npublic inline fun WheelEventInit(deltaX: Double? = 0.0,
deltaY: Double? = 0.0, deltaZ: Double? = 0.0, deltaMode: Int? = 0, screenX: Int? = 0, screenY: Int? = 0, clientX:
Int? = 0, clientY: Int? = 0, button: Short? = 0, buttons: Short? = 0, relatedTarget: EventTarget? = null, region:
String? = null, ctrlKey: Boolean? = false, shiftKey: Boolean? = false, altKey: Boolean? = false, metaKey: Boolean?
= false, modifierAltGraph: Boolean? = false, modifierCapsLock: Boolean? = false,
modifierFn: Boolean? = false, modifierFnLock: Boolean? = false, modifierHyper: Boolean? = false,
modifierNumLock: Boolean? = false, modifierScrollLock: Boolean? = false, modifierSuper: Boolean? = false,
modifierSymbol: Boolean? = false, modifierSymbolLock: Boolean? = false, view: Window? = null, detail: Int? = 0,
bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): WheelEventInit {\n val o =
js(\"({})\")\n o[\"deltaX\"] = deltaX\n o[\"deltaY\"] = deltaY\n o[\"deltaZ\"] = deltaZ\n o[\"deltaMode\"] =
deltaMode\n o[\"screenX\"] = screenX\n o[\"screenY\"] = screenY\n o[\"clientX\"] = clientX\n o[\"clientY\"]
= clientY\n o[\"button\"] = button\n o[\"buttons\"] = buttons\n o[\"relatedTarget\"] = relatedTarget\n
o[\"region\"] = region\n o[\"ctrlKey\"] = ctrlKey\n o[\"shiftKey\"] = shiftKey\n o[\"altKey\"] = altKey\n
o[\"metaKey\"] = metaKey\n o[\"modifierAltGraph\"] = modifierAltGraph\n o[\"modifierCapsLock\"]
= modifierCapsLock\n o[\"modifierFn\"] = modifierFn\n o[\"modifierFnLock\"] = modifierFnLock\n
o[\"modifierHyper\"] = modifierHyper\n o[\"modifierNumLock\"] = modifierNumLock\n

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o["modifierScrollLock"] = modifierScrollLock\n o["modifierSuper"] = modifierSuper\n
o["modifierSymbol"] = modifierSymbol\n o["modifierSymbolLock"] = modifierSymbolLock\n o["view"] =
view\n o["detail"] = detail\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] =
composed\n return o\n}\n\n/**\n * Exposes the JavaScript
[InputEvent](https://developer.mozilla.org/en/docs/Web/API/InputEvent) to Kotlin\n *^n\npublic external open class
InputEvent(type: String, eventInitDict: InputEventInit = definedExternally) : UIEvent {\n open val data: String\n
open val isComposing: Boolean\n\n companion object {\n val NONE: Short\n val
CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n
 }\n}\n\npublic external interface InputEventInit : UIEventInit {\n var data: String? /* = "" */\n get() =
definedExternally\n set(value) = definedExternally\n var isComposing: Boolean? /* = false */\n get() =
definedExternally\n set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun InputEventInit(data: String? = "",
isComposing: Boolean? = false, view: Window? = null, detail: Int? = 0, bubbles: Boolean? = false, cancelable:
Boolean? = false, composed: Boolean? = false): InputEventInit {\n val o = js("{}")\n o["data"] = data\n
o["isComposing"] = isComposing\n o["view"] = view\n o["detail"] = detail\n o["bubbles"] = bubbles\n
o["cancelable"] = cancelable\n o["composed"] = composed\n return o\n}\n\n/**\n * Exposes the JavaScript
[KeyboardEvent](https://developer.mozilla.org/en/docs/Web/API/KeyboardEvent) to Kotlin\n
*^n\npublic external open class KeyboardEvent(type: String, eventInitDict: KeyboardEventInit = definedExternally) :
UIEvent {\n open val key: String\n open val code: String\n open val location: Int\n open val ctrlKey:
Boolean\n open val shiftKey: Boolean\n open val altKey: Boolean\n open val metaKey: Boolean\n open val
repeat: Boolean\n open val isComposing: Boolean\n open val charCode: Int\n open val keyCode: Int\n open
val which: Int\n fun getModifierState(keyArg: String): Boolean\n\n companion object {\n val
DOM_KEY_LOCATION_STANDARD: Int\n val DOM_KEY_LOCATION_LEFT: Int\n val
DOM_KEY_LOCATION_RIGHT: Int\n val DOM_KEY_LOCATION_NUMPAD: Int\n val NONE:
Short\n val CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE:
Short\n }\n}\n\npublic external interface KeyboardEventInit : EventModifierInit {\n var key: String? /* = "" */
*^n get() = definedExternally\n
set(value) = definedExternally\n var code: String? /* = "" */\n get() = definedExternally\n
set(value) = definedExternally\n var location: Int? /* = 0 */\n get() = definedExternally\n set(value) =
definedExternally\n var repeat: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n var isComposing: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun KeyboardEventInit(key: String? = "",
code: String? = "", location: Int? = 0, repeat: Boolean? = false, isComposing: Boolean? = false, ctrlKey: Boolean?
= false, shiftKey: Boolean? = false, altKey: Boolean? = false, metaKey: Boolean? = false, modifierAltGraph:
Boolean? = false, modifierCapsLock: Boolean? = false, modifierFn: Boolean? = false, modifierFnLock: Boolean? =
false, modifierHyper:
Boolean? = false, modifierNumLock: Boolean? = false, modifierScrollLock: Boolean? = false, modifierSuper:
Boolean? = false, modifierSymbol: Boolean? = false, modifierSymbolLock: Boolean? = false, view: Window? =
null, detail: Int? = 0, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false):
KeyboardEventInit {\n val o = js("{}")\n o["key"] = key\n o["code"] = code\n o["location"] =
location\n o["repeat"] = repeat\n o["isComposing"] = isComposing\n o["ctrlKey"] = ctrlKey\n
o["shiftKey"] = shiftKey\n o["altKey"] = altKey\n o["metaKey"] = metaKey\n o["modifierAltGraph"] =
modifierAltGraph\n o["modifierCapsLock"] = modifierCapsLock\n o["modifierFn"] = modifierFn\n
o["modifierFnLock"] = modifierFnLock\n o["modifierHyper"] = modifierHyper\n o["modifierNumLock"] =
modifierNumLock\n o["modifierScrollLock"] = modifierScrollLock\n o["modifierSuper"] = modifierSuper\n
o["modifierSymbol"] =

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= modifierSymbol\n o["modifierSymbolLock"] = modifierSymbolLock\n o["view"] = view\n o["detail"]
= detail\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] = composed\n return
o\n}\n\n/**\n * Exposes the JavaScript
[CompositionEvent](https://developer.mozilla.org/en/docs/Web/API/CompositionEvent) to Kotlin\n *\npublic
external open class CompositionEvent(type: String, eventInitDict: CompositionEventInit = definedExternally) :
UIEvent {\n open val data: String\n companion object {\n val NONE: Short\n val
CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n
}\n}\n\npublic external interface CompositionEventInit : UIEventInit {\n var data: String? /* = "" */\n get() =
definedExternally\n set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun CompositionEventInit(data:
String? = "", view: Window? = null, detail: Int? = 0, bubbles: Boolean? = false, cancelable: Boolean? = false,
composed: Boolean? = false): CompositionEventInit {\n val o = js("{}")\n o["data"] = data\n o["view"] =
view\n o["detail"] = detail\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] =
composed\n return o\n}\n\n/**\n * Exposes the JavaScript
[Event](https://developer.mozilla.org/en/docs/Web/API/Event) to Kotlin\n *\npublic external open class
Event(type: String, eventInitDict: EventInit = definedExternally) {\n open val type: String\n open val target:
EventTarget?\n open val currentTarget: EventTarget?\n open val eventPhase: Short\n open val bubbles:
Boolean\n open val cancelable: Boolean\n open val defaultPrevented: Boolean\n open val composed:
Boolean\n open val isTrusted: Boolean\n open val timeStamp: Number\n fun composedPath():
Array<EventTarget>\n fun stopPropagation()\n
fun stopImmediatePropagation()\n fun preventDefault()\n fun initEvent(type: String, bubbles: Boolean,
cancelable: Boolean)\n companion object {\n val NONE: Short\n val CAPTURING_PHASE: Short\n
val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[EventTarget](https://developer.mozilla.org/en/docs/Web/API/EventTarget) to Kotlin\n *\npublic external abstract
class EventTarget {\n fun addEventListener(type: String, callback: EventListener?, options: dynamic =
definedExternally)\n fun addEventListener(type: String, callback: ((Event) -> Unit)?, options: dynamic =
definedExternally)\n fun removeEventListener(type: String, callback: EventListener?, options: dynamic =
definedExternally)\n fun removeEventListener(type: String, callback: ((Event) -> Unit)?, options: dynamic =
definedExternally)\n fun dispatchEvent(event: Event): Boolean\n}\n\n/**\n * Exposes the JavaScript
[EventListener](https://developer.mozilla.org/en/docs/Web/API/EventListener)
to Kotlin\n *\npublic external interface EventListener {\n fun handleEvent(event: Event)\n}", "/*\n * Copyright
2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed
by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\n\n// NOTE: THIS FILE IS
AUTO-GENERATED, DO NOT EDIT!\n// See github.com/kotlin/dukat for details\n\npackage
org.w3c.dom\nimport kotlin.js.*\nimport org.khronos.webgl.*\nimport org.w3c.dom.clipboard.*\nimport
org.w3c.dom.css.*\nimport org.w3c.dom.encryptedmedia.*\nimport org.w3c.dom.events.*\nimport
org.w3c.dom.mediacapture.*\nimport org.w3c.dom.mediasource.*\nimport org.w3c.dom.pointerevents.*\nimport
org.w3c.dom.svg.*\nimport org.w3c.fetch.*\nimport org.w3c.files.*\nimport org.w3c.performance.*\nimport
org.w3c.workers.*\nimport org.w3c.xhr.*\n\npublic external abstract class HTMLAllCollection {\n open val
length: Int\n fun item(nameOrIndex: String = definedExternally): UnionElementOrHTMLCollection?\n fun
namedItem(name: String): UnionElementOrHTMLCollection?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun
HTMLAllCollection.get(index: Int): Element? =
asDynamic()[index]\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun
HTMLAllCollection.get(name: String): UnionElementOrHTMLCollection? = asDynamic()[name]\n\n/**\n *
Exposes the JavaScript
[HTMLFormControlsCollection](https://developer.mozilla.org/en/docs/Web/API/HTMLFormControlsCollection)

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to Kotlin\n *\/\npublic external abstract class HTMLFormControlsCollection : HTMLCollection\n\n**\n * Exposes
the JavaScript [RadioNodeList](https://developer.mozilla.org/en/docs/Web/API/RadioNodeList) to Kotlin\n
*\/\npublic external abstract class RadioNodeList : NodeList, UnionElementOrRadioNodeList {\n open
var value: String\n}\n\n**\n * Exposes the JavaScript
[HTMLOptionsCollection](https://developer.mozilla.org/en/docs/Web/API/HTMLOptionsCollection) to Kotlin\n
*\/\npublic external abstract class HTMLOptionsCollection : HTMLCollection {\n override var length: Int\n open
var selectedIndex: Int\n fun add(element: UnionHTMLOptGroupElementOrHTMLOptionElement, before:
dynamic = definedExternally)\n fun remove(index: Int)\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun
HTMLOptionsCollection.set(index: Int, option: HTMLOptionElement?) { asDynamic()[index] = option }\n\n**\n *
Exposes the JavaScript [HTMLInputElement](https://developer.mozilla.org/en/docs/Web/API/HTMLInputElement) to
Kotlin\n *\/\npublic external abstract class HTMLInputElement : Element, GlobalEventHandlers,
DocumentAndElementEventHandlers, ElementContentEditable, ElementCSSInlineStyle {\n open var title:
String\n open var lang: String\n open var
translate: Boolean\n open var dir: String\n open val dataset: DOMStringMap\n open var hidden: Boolean\n
open var tabIndex: Int\n open var accessKey: String\n open val accessKeyLabel: String\n open var draggable:
Boolean\n open val dropzone: DOMTokenList\n open var contextMenu: HTMLMenuElement?\n open var
spellcheck: Boolean\n open var innerText: String\n open val offsetParent: Element?\n open val offsetTop: Int\n
open val offsetLeft: Int\n open val offsetWidth: Int\n open val offsetHeight: Int\n fun click()\n fun focus()\n
fun blur()\n fun forceSpellCheck()\n\n companion object {\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE:
Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n**\n * Exposes the JavaScript
[HTMLUnknownElement](https://developer.mozilla.org/en/docs/Web/API/HTMLUnknownElement) to Kotlin\n
*\/\npublic external abstract class HTMLUnknownElement : HTMLInputElement {\n companion object {\n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n**\n * Exposes the JavaScript
[DOMStringMap](https://developer.mozilla.org/en/docs/Web/API/DOMStringMap) to Kotlin\n *\/\npublic external
abstract class DOMStringMap\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun DOMStringMap.get(name:
String): String? = asDynamic()[name]\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun DOMStringMap.set(name:
String, value: String) { asDynamic()[name] = value }\n\n**\n * Exposes the JavaScript
[HTMLHtmlElement](https://developer.mozilla.org/en/docs/Web/API/HTMLHtmlElement)

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to Kotlin\n */\npublic external abstract class HTMLHtmlElement : HTMLInputElement {\n open var version: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [HTMLHeadElement](https://developer.mozilla.org/en/docs/Web/API/HTMLHeadElement)
to Kotlin\n */\npublic external abstract class HTMLHeadElement : HTMLInputElement {\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [HTMLTitleElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTitleElement)
to Kotlin\n */\npublic external abstract class HTMLTitleElement : HTMLInputElement {\n open var text: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [HTMLBaseElement](https://developer.mozilla.org/en/docs/Web/API/HTMLBaseElement)
to Kotlin\n */\npublic external abstract class HTMLBaseElement : HTMLInputElement {\n open var href: String\n open var target: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [HTMLLinkElement](https://developer.mozilla.org/en/docs/Web/API/HTMLLinkElement)
to Kotlin\n */\npublic external abstract class HTMLLinkElement : HTMLInputElement, LinkStyle {\n open var href: String\n open var crossOrigin: String?\n open var rel: String\n open var `as`: RequestDestination\n open var relList: DOMTokenList\n open var media: String\n open var nonce: String\n open var hreflang: String

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open var type: String\n open val sizes: DOMTokenList\n open var referrerPolicy: String\n open var charset:
String\n open var rev: String\n open var target: String\n open var scope: String\n open var workerType:
WorkerType\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE:
Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE:
Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n
val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val
DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n
val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes
the JavaScript [HTMLMetaElement](https://developer.mozilla.org/en/docs/Web/API/HTMLMetaElement) to
Kotlin\n */\npublic external abstract class HTMLMetaElement : HTMLElement {\n open var name: String\n
open var httpEquiv: String\n open var content: String\n open var scheme: String\n\n companion object {\n
val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n
val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLStyleElement](https://developer.mozilla.org/en/docs/Web/API/HTMLStyleElement) to Kotlin\n */\npublic
external abstract class HTMLStyleElement : HTMLElement, LinkStyle {\n open var media: String\n open var
nonce: String\n open var type: String\n\n companion object {\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n
val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLBodyElement](https://developer.mozilla.org/en/docs/Web/API/HTMLBodyElement) to Kotlin\n */\npublic
external abstract class HTMLBodyElement : HTMLElement, WindowEventHandlers {\n open var text: String\n
open var link: String\n open var vLink: String\n open var aLink: String\n open var bgColor: String\n open
var background:
String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n
val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n

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 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLHeadingElement](https://developer.mozilla.org/en/docs/Web/API/HTMLHeadingElement) to Kotlin\n
*\n\npublic external abstract class HTMLHeadingElement : HTMLElement
{\n open var align: String\n\n companion object {\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLParagraphElement](https://developer.mozilla.org/en/docs/Web/API/HTMLParagraphElement) to Kotlin\n
*\n\npublic external abstract class HTMLParagraphElement
: HTMLElement {\n open var align: String\n\n companion object {\n val ELEMENT_NODE: Short\n
val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n
val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLHRElement](https://developer.mozilla.org/en/docs/Web/API/HTMLHRElement) to Kotlin\n
*\n\npublic external abstract class HTMLHRElement
: HTMLElement {\n open var align: String\n open var color: String\n open var noShade: Boolean\n open var
size: String\n open var width: String\n\n companion object {\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLPreElement](https://developer.mozilla.org/en/docs/Web/API/HTMLPreElement)
to Kotlin\n
*\n\npublic external abstract class HTMLPreElement : HTMLElement {\n open var width: Int\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val
TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n

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val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLQuoteElement](https://developer.mozilla.org/en/docs/Web/API/HTMLQuoteElement)
to Kotlin\n */\npublic external abstract class HTMLQuoteElement : HTMLInputElement {\n open var cite: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val
TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLListElement](https://developer.mozilla.org/en/docs/Web/API/HTMLListElement)
to Kotlin\n */\npublic external abstract class HTMLListElement : HTMLInputElement {\n open var reversed:
Boolean\n open var start: Int\n open var type: String\n open var compact: Boolean\n\n companion object {\n
 val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLListElement](https://developer.mozilla.org/en/docs/Web/API/HTMLListElement)
to Kotlin\n */\npublic external abstract class HTMLListElement : HTMLInputElement {\n open var compact: Boolean\n open var type:
String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n
 val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes
the JavaScript [HTMLLIElement](https://developer.mozilla.org/en/docs/Web/API/HTMLLIElement) to Kotlin\n
*/\npublic external abstract class HTMLLIElement : HTMLInputElement {\n open var value: Int\n open var type:
String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n
 val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLDLListElement](https://developer.mozilla.org/en/docs/Web/API/HTMLDLListElement) to Kotlin\n
*/\npublic

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external abstract class HTMLTimeElement : HTMLInputElement {\n open var dateTime: String\n\n companion
object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE:
Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n
 val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLSpanElement](https://developer.mozilla.org/en/docs/Web/API/HTMLSpanElement) to Kotlin\n */\npublic
external abstract class HTMLSpanElement : HTMLInputElement {\n companion object {\n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLBRElement](https://developer.mozilla.org/en/docs/Web/API/HTMLBRElement) to Kotlin\n */\npublic
external abstract class HTMLBRElement : HTMLInputElement {\n open var clear: String\n\n companion object {\n
 val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLHyperlinkElementUtils](https://developer.mozilla.org/en/docs/Web/API/HTMLHyperlinkElementUtils) to
Kotlin\n */\npublic external interface HTMLHyperlinkElementUtils {\n var href: String\n val origin: String\n
var protocol: String\n var username: String\n var password: String\n var host: String\n var hostname:
String\n var port: String\n var pathname: String\n var search:
String\n var hash: String\n}\n\n/**\n * Exposes the JavaScript
[HTMLModElement](https://developer.mozilla.org/en/docs/Web/API/HTMLModElement) to Kotlin\n */\npublic
external abstract class HTMLModElement : HTMLInputElement {\n open var cite: String\n open var dateTime:
String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n
 val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n

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val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the
JavaScript [HTMLPictureElement](https://developer.mozilla.org/en/docs/Web/API/HTMLPictureElement) to
Kotlin\n */\npublic external abstract class HTMLPictureElement : HTMLInputElement {\n companion object {\n
val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC:
Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLSourceElement](https://developer.mozilla.org/en/docs/Web/API/HTMLSourceElement) to Kotlin\n
*/\npublic external abstract class HTMLSourceElement : HTMLInputElement {\n open var src: String\n open var
type: String\n open var srcset: String\n open var sizes: String\n open var media: String\n\n companion object
{\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n
val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING:
Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val
DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLImageElement](https://developer.mozilla.org/en/docs/Web/API/HTMLImageElement) to Kotlin\n
*/\npublic external abstract class HTMLImageElement : HTMLInputElement, HTMLCanvasImageElement,
TexImageSource {\n open var alt: String\n open var src: String\n open var srcset: String\n open var sizes:
String\n open var crossOrigin: String?\n open var useMap: String\n open var isMap: Boolean\n open var
width: Int\n open var height: Int\n open val naturalWidth: Int\n open val naturalHeight: Int\n open val
complete: Boolean\n open val currentSrc: String\n open var referrerPolicy: String\n open var name: String\n
open var lowsrc: String\n open var align: String\n open var hspace: Int\n open var vspace: Int\n open var
longDesc: String\n
open var border: String\n open val x: Int\n open val y: Int\n\n companion object {\n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLIFrameElement](https://developer.mozilla.org/en/docs/Web/API/HTMLIFrameElement) to Kotlin\n
*/\npublic external
abstract class HTMLIFrameElement : HTMLInputElement {\n open var src: String\n open var srcdoc: String\n
open var name: String\n open val sandbox: DOMTokenList\n open var allowFullscreen: Boolean\n open var

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allowUserMedia: Boolean\n open var width: String\n open var height: String\n open var referrerPolicy:
String\n open val contentDocument: Document?\n open val contentWindow: Window?\n open var align:
String\n open var scrolling: String\n open var frameBorder: String\n open var longDesc: String\n open var
marginHeight: String\n open var marginWidth: String\n fun getSVGDocument(): Document?\n\n companion
object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE:
Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n
val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val
NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val
DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n
val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n\n\n * Exposes
the JavaScript [HTMLEmbedElement](https://developer.mozilla.org/en/docs/Web/API/HTMLEmbedElement) to
Kotlin\n *

public external abstract class HTMLEmbedElement : HTMLElement {\n open var src: String\n
open var type: String\n open var width: String\n open var height: String\n open var align: String\n open var
name: String\n fun getSVGDocument(): Document?\n\n companion object {\n val ELEMENT_NODE:
Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE:
Short\n
val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n\n\n * Exposes the JavaScript
[HTMLObjectElement](https://developer.mozilla.org/en/docs/Web/API/HTMLObjectElement) to Kotlin\n
*

public external abstract class HTMLObjectElement : HTMLElement {\n open var data: String\n open var
type: String\n open var typeMustMatch: Boolean\n open var name: String\n open var useMap: String\n open
val form: HTMLFormElement?\n
open var width: String\n open var height: String\n open val contentDocument: Document?\n open val
contentWindow: Window?\n open val willValidate: Boolean\n open val validity: ValidityState\n open val
validationMessage: String\n open var align: String\n open var archive: String\n open var code: String\n open
var declare: Boolean\n open var hspace: Int\n open var standby: String\n open var vspace: Int\n open var
codeBase: String\n open var codeType: String\n open var border: String\n fun getSVGDocument():
Document?\n fun checkValidity(): Boolean\n fun reportValidity(): Boolean\n fun setCustomValidity(error:
String)\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n
val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n\n\n * Exposes the JavaScript
[HTMLParamElement](https://developer.mozilla.org/en/docs/Web/API/HTMLParamElement) to Kotlin\n

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*public external abstract class HTMLParamElement : HTMLInputElement {
 open var name: String
 open var value: String
 open var type: String
 open var valueType: String
 companion object {
 val ELEMENT_NODE: Short
 val ATTRIBUTE_NODE: Short
 val TEXT_NODE: Short
 val CDATA_SECTION_NODE: Short
 val ENTITY_REFERENCE_NODE: Short
 val ENTITY_NODE: Short
 val PROCESSING_INSTRUCTION_NODE: Short
 val COMMENT_NODE: Short
 val DOCUMENT_NODE: Short
 val DOCUMENT_TYPE_NODE: Short
 val DOCUMENT_FRAGMENT_NODE: Short
 val NOTATION_NODE: Short
 val DOCUMENT_POSITION_DISCONNECTED: Short
 val DOCUMENT_POSITION_PRECEDING: Short
 val DOCUMENT_POSITION_FOLLOWING: Short
 val DOCUMENT_POSITION_CONTAINS: Short
 val DOCUMENT_POSITION_CONTAINED_BY: Short
 val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short
 }
}

/** Exposes the JavaScript [HTMLVideoElement](https://developer.mozilla.org/en/docs/Web/API/HTMLVideoElement) to Kotlin */
*public external abstract class HTMLVideoElement : HTMLMediaElement, CanvasImageSource, TexImageSource {
 open var width: Int
 open var height: Int
 open val videoWidth: Int
 open val videoHeight: Int
 open var poster: String
 open var playsInline: Boolean
 companion object {
 val NETWORK_EMPTY: Short
 val NETWORK_IDLE: Short
 val NETWORK_LOADING: Short
 val NETWORK_NO_SOURCE: Short
 val HAVE_NOTHING: Short
 val HAVE_METADATA: Short
 val HAVE_CURRENT_DATA: Short
 val HAVE_FUTURE_DATA: Short
 val HAVE_ENOUGH_DATA: Short
 val ELEMENT_NODE: Short
 val ATTRIBUTE_NODE: Short
 val TEXT_NODE: Short
 val CDATA_SECTION_NODE: Short
 val ENTITY_REFERENCE_NODE: Short
 val ENTITY_NODE: Short
 val PROCESSING_INSTRUCTION_NODE: Short
 val COMMENT_NODE: Short
 val DOCUMENT_NODE: Short
 val DOCUMENT_TYPE_NODE: Short
 val DOCUMENT_FRAGMENT_NODE: Short
 val NOTATION_NODE: Short
 val DOCUMENT_POSITION_DISCONNECTED: Short
 val DOCUMENT_POSITION_PRECEDING: Short
 val DOCUMENT_POSITION_FOLLOWING: Short
 val DOCUMENT_POSITION_CONTAINS: Short
 val DOCUMENT_POSITION_CONTAINED_BY: Short
 val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short
 }
}

/** Exposes the JavaScript [HTMLAudioElement](https://developer.mozilla.org/en/docs/Web/API/HTMLAudioElement) to Kotlin */
*public external abstract class HTMLAudioElement : HTMLMediaElement {
 companion object {
 val NETWORK_EMPTY: Short
 val NETWORK_IDLE: Short
 val NETWORK_LOADING: Short
 val NETWORK_NO_SOURCE: Short
 val HAVE_NOTHING: Short
 val HAVE_METADATA: Short
 val HAVE_CURRENT_DATA: Short
 val HAVE_FUTURE_DATA: Short
 val HAVE_ENOUGH_DATA: Short
 val ELEMENT_NODE: Short
 val ATTRIBUTE_NODE: Short
 val TEXT_NODE: Short
 val CDATA_SECTION_NODE: Short
 val ENTITY_REFERENCE_NODE: Short
 val ENTITY_NODE: Short
 val PROCESSING_INSTRUCTION_NODE: Short
 val COMMENT_NODE: Short
 val DOCUMENT_NODE: Short
 val DOCUMENT_TYPE_NODE: Short
 val DOCUMENT_FRAGMENT_NODE: Short
 val NOTATION_NODE: Short
 val DOCUMENT_POSITION_DISCONNECTED: Short
 val DOCUMENT_POSITION_PRECEDING: Short
 val DOCUMENT_POSITION_FOLLOWING: Short
 val DOCUMENT_POSITION_CONTAINS: Short
 val DOCUMENT_POSITION_CONTAINED_BY: Short
 val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short
 }
}

/** Exposes the JavaScript [HTMLTrackElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTrackElement) to Kotlin */
*public external abstract class HTMLTrackElement : HTMLInputElement {
 open var kind: String
 open var src: String
 open var srclang: String
 open var label: String
 open var default: Boolean
 open val readyState: Short
 open val track: TextTrack
 companion object {
 val NONE: Short
 val LOADING: Short
 val LOADED: Short
 val ERROR: Short
 val ELEMENT_NODE: Short
 val ATTRIBUTE_NODE: Short
 }
}

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 val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n \n /** \n * Exposes the JavaScript
[HTMLMediaElement](https://developer.mozilla.org/en/docs/Web/API/HTMLMediaElement) to Kotlin \n
*/ \n public external abstract class HTMLMediaElement : HTMLElement { \n open val error: MediaError? \n open
var src: String \n open var srcObject: MediaProvider? \n open val currentSrc:
String \n open var crossOrigin: String? \n open val networkState: Short \n open var preload: String \n open val
buffered: TimeRanges \n open val readyState: Short \n open val seeking: Boolean \n open var currentTime:
Double \n open val duration: Double \n open val paused: Boolean \n open var defaultPlaybackRate: Double \n
open var playbackRate: Double \n open val played: TimeRanges \n open val seekable: TimeRanges \n open val
ended: Boolean \n open var autoplay: Boolean \n open var loop: Boolean \n open var controls: Boolean \n open
var volume: Double \n open var muted: Boolean \n open var defaultMuted: Boolean \n open val audioTracks:
AudioTrackList \n open val videoTracks: VideoTrackList \n open val textTracks: TextTrackList \n open val
mediaKeys: MediaKeys? \n open var onencrypted: ((Event) -> dynamic)? \n open var onwaitingforkey: ((Event) -
> dynamic)? \n fun load() \n fun canPlayType(type: String): CanPlayTypeResult \n
 fun fastSeek(time: Double) \n fun getStartDate(): dynamic \n fun play(): Promise<Unit> \n fun pause() \n fun
addTextTrack(kind: TextTrackKind, label: String = definedExternally, language: String = definedExternally):
TextTrack \n fun setMediaKeys(mediaKeys: MediaKeys?): Promise<Unit> \n \n companion object { \n val
NETWORK_EMPTY: Short \n val NETWORK_IDLE: Short \n val NETWORK_LOADING: Short \n
val NETWORK_NO_SOURCE: Short \n val HAVE_NOTHING: Short \n val HAVE_METADATA:
Short \n val HAVE_CURRENT_DATA: Short \n val HAVE_FUTURE_DATA: Short \n val
HAVE_ENOUGH_DATA: Short \n val ELEMENT_NODE: Short \n val ATTRIBUTE_NODE: Short \n
val TEXT_NODE: Short \n val CDATA_SECTION_NODE: Short \n val ENTITY_REFERENCE_NODE:
Short \n val ENTITY_NODE: Short \n val PROCESSING_INSTRUCTION_NODE: Short \n val
COMMENT_NODE: Short \n val DOCUMENT_NODE: Short \n val DOCUMENT_TYPE_NODE:
Short \n val DOCUMENT_FRAGMENT_NODE: Short \n val NOTATION_NODE: Short \n val
DOCUMENT_POSITION_DISCONNECTED: Short \n val DOCUMENT_POSITION_PRECEDING: Short \n
 val DOCUMENT_POSITION_FOLLOWING: Short \n val DOCUMENT_POSITION_CONTAINS: Short \n
 val DOCUMENT_POSITION_CONTAINED_BY: Short \n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short \n } \n} \n \n /** \n * Exposes the JavaScript
[MediaError](https://developer.mozilla.org/en/docs/Web/API/MediaError) to Kotlin \n
*/ \n public external abstract
class MediaError { \n open val code: Short \n \n companion object { \n val MEDIA_ERR_ABORTED: Short \n
val MEDIA_ERR_NETWORK: Short \n val MEDIA_ERR_DECODE: Short \n val
MEDIA_ERR_SRC_NOT_SUPPORTED: Short \n } \n} \n \n /** \n * Exposes the JavaScript
[AudioTrackList](https://developer.mozilla.org/en/docs/Web/API/AudioTrackList) to Kotlin \n
*/ \n public external
abstract class AudioTrackList : EventTarget { \n open val
length: Int \n open var onchange: ((Event) -> dynamic)? \n open var onaddtrack: ((TrackEvent) -> dynamic)? \n
open var onremovetrack: ((TrackEvent) -> dynamic)? \n fun getTrackById(id: String):
AudioTrack? \n} \n \n @Suppress(\ "INVISIBLE_REFERENCE",
\ "INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun AudioTrackList.get(index:
Int): AudioTrack? = asDynamic()[index] \n \n /** \n * Exposes the JavaScript
[AudioTrack](https://developer.mozilla.org/en/docs/Web/API/AudioTrack) to Kotlin \n
*/ \n public external abstract

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class AudioTrack : UnionAudioTrackOrTextTrackOrVideoTrack {\n open val id: String\n open val kind:
String\n open val label: String\n open val language: String\n open var enabled: Boolean\n open val
sourceBuffer: SourceBuffer?\n}\n\n/**\n * Exposes the JavaScript
[VideoTrackList](https://developer.mozilla.org/en/docs/Web/API/VideoTrackList) to Kotlin\n *\npublic external
abstract class VideoTrackList : EventTarget {\n open val length:
Int\n open val selectedIndex: Int\n open var onchange: ((Event) -> dynamic)?\n open var onaddtrack:
((TrackEvent) -> dynamic)?\n open var onremovetrack: ((TrackEvent) -> dynamic)?\n fun getTrackById(id:
String): VideoTrack?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun VideoTrackList.get(index:
Int): VideoTrack? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[VideoTrack](https://developer.mozilla.org/en/docs/Web/API/VideoTrack) to Kotlin\n *\npublic external abstract
class VideoTrack : UnionAudioTrackOrTextTrackOrVideoTrack {\n open val id: String\n open val kind:
String\n open val label: String\n open val language: String\n open var selected: Boolean\n open val
sourceBuffer: SourceBuffer?\n}\n\npublic external abstract class TextTrackList : EventTarget {\n open val length:
Int\n open var onchange: ((Event) -> dynamic)?\n open var onaddtrack: ((TrackEvent) ->
dynamic)?\n open var onremovetrack: ((TrackEvent) -> dynamic)?\n fun getTrackById(id: String):
TextTrack?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun TextTrackList.get(index: Int):
TextTrack? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[TextTrack](https://developer.mozilla.org/en/docs/Web/API/TextTrack) to Kotlin\n *\npublic external abstract
class TextTrack : EventTarget, UnionAudioTrackOrTextTrackOrVideoTrack {\n open val kind: TextTrackKind\n
open val label: String\n open val language: String\n open val id: String\n open val
inBandMetadataTrackDispatchType: String\n open var mode: TextTrackMode\n open val cues:
TextTrackCueList?\n open val activeCues: TextTrackCueList?\n open var oncuechange: ((Event) ->
dynamic)?\n open val sourceBuffer: SourceBuffer?\n fun addCue(cue: TextTrackCue)\n fun removeCue(cue:
TextTrackCue)\n}\n\npublic external abstract class
TextTrackCueList {\n open val length: Int\n fun getCueById(id: String):
TextTrackCue?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun TextTrackCueList.get(index:
Int): TextTrackCue? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[TextTrackCue](https://developer.mozilla.org/en/docs/Web/API/TextTrackCue) to Kotlin\n *\npublic external
abstract class TextTrackCue : EventTarget {\n open val track: TextTrack?\n open var id: String\n open var
startTime: Double\n open var endTime: Double\n open var pauseOnExit: Boolean\n open var onenter: ((Event)
-> dynamic)?\n open var onexit: ((Event) -> dynamic)?\n}\n\n/**\n * Exposes the JavaScript
[TimeRanges](https://developer.mozilla.org/en/docs/Web/API/TimeRanges) to Kotlin\n *\npublic external abstract
class TimeRanges {\n open val length: Int\n fun start(index: Int): Double\n fun end(index: Int):
Double\n}\n\n/**\n * Exposes the JavaScript
[TrackEvent](https://developer.mozilla.org/en/docs/Web/API/TrackEvent) to Kotlin\n *\npublic external open
class TrackEvent(type: String, eventInitDict: TrackEventInit = definedExternally) : Event {\n open val track:
UnionAudioTrackOrTextTrackOrVideoTrack?\n\n companion object {\n val NONE: Short\n val
CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n
}\n}\n\npublic external interface TrackEventInit : EventInit {\n var track:
UnionAudioTrackOrTextTrackOrVideoTrack? /* = null *\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun TrackEventInit(track:
UnionAudioTrackOrTextTrackOrVideoTrack? = null, bubbles: Boolean? = false, cancelable: Boolean? = false,
composed: Boolean? = false): TrackEventInit {\n val o = js("{}")\n o["track"] = track\n o["bubbles"] =
bubbles\n

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o["cancelable"] = cancelable\n o["composed"] = composed\n return o\n}\n\n/**\n * Exposes the JavaScript
[HTMLMapElement](https://developer.mozilla.org/en/docs/Web/API/HTMLMapElement) to Kotlin\n *\npublic
external abstract class HTMLMapElement : HTMLElement {\n open var name: String\n open val areas:
HTMLCollection\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE:
Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLAreaElement](https://developer.mozilla.org/en/docs/Web/API/HTMLAreaElement) to Kotlin\n *\npublic
external abstract class HTMLAreaElement : HTMLElement, HTMLHyperlinkElementUtils {\n open var alt:
String\n open var coords: String\n open var shape: String\n open var target: String\n open var download:
String\n open var ping: String\n open var rel: String\n open val relList: DOMTokenList\n open var
referrerPolicy: String\n open var noHref: Boolean\n\n companion object {\n val ELEMENT_NODE:
Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE:
Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n
 val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val
NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val
DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n
 val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes
the JavaScript [HTMLTableElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTableElement) to
Kotlin\n *\npublic external abstract class HTMLTableElement : HTMLElement {\n open var caption:
HTMLTableCaptionElement?\n open var tHead: HTMLTableSectionElement?\n open var tFoot:
HTMLTableSectionElement?\n open val tBodies: HTMLCollection\n open val rows: HTMLCollection\n open
var align: String\n open var border: String\n open var frame: String\n open var rules: String\n open var
summary: String\n open var width:
String\n open var bgColor: String\n open var cellPadding: String\n open var cellSpacing: String\n fun
createCaption(): HTMLTableCaptionElement\n fun deleteCaption()\n fun createTHead():
HTMLTableSectionElement\n fun deleteTHead()\n fun createTFoot(): HTMLTableSectionElement\n fun
deleteTFoot()\n fun createTBody(): HTMLTableSectionElement\n fun insertRow(index: Int =
definedExternally): HTMLTableRowElement\n fun deleteRow(index: Int)\n\n companion object {\n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n
 val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING:
Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val
DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript

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[HTMLTableCaptionElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTableCaptionElement) to Kotlin  
`*\npublic external abstract class HTMLTableCaptionElement : HTMLInputElement {\n open var align: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [HTMLTableColElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTableColElement) to Kotlin  
*\npublic external abstract class HTMLTableColElement : HTMLInputElement {\n open var span: Int\n open var align: String\n open var ch: String\n open var chOff: String\n open var vAlign: String\n open var width: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [HTMLTableSectionElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTableSectionElement) to Kotlin  
*\npublic external abstract class HTMLTableSectionElement : HTMLInputElement {\n open val rows: HTMLCollection\n\n open var align: String\n open var ch: String\n open var chOff: String\n open var vAlign: String\n\n fun insertRow(index: Int = definedExternally): HTMLInputElement\n fun deleteRow(index: Int)\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [HTMLTableRowElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTableRowElement) to Kotlin  
*\npublic external abstract class HTMLTableRowElement : HTMLInputElement {\n open val rowIndex: Int\n open val sectionRowIndex: Int\n\n open var align: String\n open var ch: String\n open var chOff: String\n open var vAlign: String\n open var bgColor: String\n\n fun insertCell(index: Int = definedExternally): HTMLInputElement\n fun deleteCell(index: Int)\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n`

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 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC:
Short\n } \n} \n \n /** \n * Exposes the JavaScript
[HTMLTableCellElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTableCellElement) to Kotlin \n
*/ \n public external abstract class HTMLTableCellElement : HTMLElement { \n open var colSpan: Int \n open var
rowSpan: Int \n open var headers: String \n open val cellIndex: Int \n open var scope: String \n open var abbr:
String \n open var align: String \n open var axis: String \n open var height: String \n open var width: String \n
open var ch: String \n open var chOff: String \n open var noWrap: Boolean \n open var vAlign: String \n open
var bgColor: String \n \n companion object { \n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE:
Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n
 val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val
NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val
DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n
 val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n \n /** \n * Exposes
the JavaScript [HTMLFormElement](https://developer.mozilla.org/en/docs/Web/API/HTMLFormElement) to
Kotlin \n */ \n public external abstract class HTMLFormElement : HTMLElement { \n open var acceptCharset:
String \n open var action: String \n open var autocomplete: String \n open var enctype: String \n open var
encoding: String \n open var method: String \n open var name: String \n open var noValidate: Boolean \n open
var target: String \n open val elements: HTMLFormControlsCollection \n open val length: Int \n fun submit() \n
 fun reset() \n fun checkValidity(): Boolean \n fun reportValidity(): Boolean \n \n companion object { \n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n
 } \n} \n \n @Suppress(\\"INVISIBLE_REFERENCE\",
\\"INVISIBLE_MEMBER\") \n @kotlin.internal.InlineOnly \n public inline operator fun
HTMLFormElement.get(index:
Int): Element? = asDynamic()[index] \n \n @Suppress(\\"INVISIBLE_REFERENCE\",
\\"INVISIBLE_MEMBER\") \n @kotlin.internal.InlineOnly \n public inline operator fun
HTMLFormElement.get(name: String): UnionElementOrRadioNodeList? = asDynamic()[name] \n \n /** \n * Exposes
the JavaScript [HTMLLabelElement](https://developer.mozilla.org/en/docs/Web/API/HTMLLabelElement) to
Kotlin \n */ \n public external abstract class HTMLLabelElement : HTMLElement { \n open val form:
HTMLFormElement? \n open var htmlFor: String \n open val control: HTMLElement? \n \n companion object
{ \n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n
 val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:

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Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val
 NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val
DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n
val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes
the JavaScript [HTMLElement](https://developer.mozilla.org/en/docs/Web/API/HTMLElement) to
Kotlin\n */\npublic external abstract class HTMLElement : HTMLInputElement {\n open var
accept: String\n open var alt: String\n open var autocomplete: String\n open var
autofocus: Boolean\n open var defaultChecked: Boolean\n open var checked: Boolean\n
 open var dirName: String\n open var disabled: Boolean\n open val form: HTMLFormElement?\n
 open val files: FileList?\n open var formAction: String\n open var formEnctype:
String\n open var formMethod: String\n open var formNoValidate: Boolean\n open
var formTarget: String\n open var height: Int\n open var indeterminate: Boolean\n open
var inputMode: String\n open val list: HTMLCollection?\n open var max: String\n open
var maxLength: Int\n open var min: String\n open var minLength: Int\n open var
multiple: Boolean\n open var name: String\n open var pattern: String\n open var
placeholder: String\n open var readOnly: Boolean\n open var required: Boolean\n open
var size: Int\n open var src: String\n open var step: String\n open var type:
String\n open var defaultValue: String\n open var value: String\n open var
valueAsDate: dynamic\n open var valueAsNumber: Double\n open var width: Int\n open
val willValidate: Boolean\n open val validity: ValidityState\n open val
validationMessage: String\n open val labels: NodeList\n open var selectionStart: Int?\n
 open var selectionEnd: Int?\n open var selectionDirection: String?\n open var
align: String\n open var useMap: String\n fun stepUp(n: Int = definedExternally)\n
 fun stepDown(n: Int = definedExternally)\n fun checkValidity(): Boolean\n fun
reportValidity(): Boolean\n fun setCustomValidity(error: String)\n fun select()\n
 fun setRangeText(replacement: String)\n fun setRangeText(replacement: String,
start: Int, end: Int, selectionMode: SelectionMode = definedExternally)\n fun
setSelectionRange(start: Int, end: Int, direction: String = definedExternally)\n\n companion
object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val
TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE:
Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val
DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val
DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC:
Short\n }\n}\n\n/**\n * Exposes the JavaScript [HTMLButtonElement](https://developer.mozilla.org/en/docs/Web/API/HTMLButtonElement) to Kotlin\n */\npublic external abstract class HTMLButtonElement : HTMLInputElement {\n open var
autofocus: Boolean\n open var disabled: Boolean\n open val form: HTMLFormElement?\n
 open var formAction: String\n open var formEnctype: String\n open var formMethod:
String\n open var formNoValidate: Boolean\n open var formTarget: String\n open var
name: String\n open var type: String\n open var value: String\n open var menu:
HTMLMenuElement?\n open val willValidate: Boolean\n open val validity: ValidityState\n
 open val validationMessage: String\n open val labels: NodeList\n fun checkValidity():
Boolean\n fun reportValidity(): Boolean\n fun setCustomValidity(error: String)\n\n companion
object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val
TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE:
Short\n

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 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n \n /** \n * Exposes the JavaScript
[HTMLSelectElement](https://developer.mozilla.org/en/docs/Web/API/HTMLSelectElement)
to Kotlin \n * \n public external abstract class HTMLSelectElement : HTMLInputElement, ItemArrayLike<Element> { \n
open var autocomplete: String \n open var autofocus: Boolean \n open var disabled: Boolean \n open val form:
HTMLFormElement? \n open var multiple: Boolean \n open var name: String \n open var required: Boolean \n
open var size: Int \n open val type: String \n open val options: HTMLOptionsCollection \n override var length:
Int \n open val selectedOptions: HTMLCollection \n open var selectedIndex: Int \n open var value: String \n
open val willValidate: Boolean \n open val validity: ValidityState \n open val validationMessage: String \n open
val labels: NodeList \n fun namedItem(name: String): HTMLOptionElement? \n fun add(element:
UnionHTMLOptGroupElementOrHTMLOptionElement, before: dynamic = definedExternally) \n fun
remove(index: Int) \n fun checkValidity(): Boolean \n fun reportValidity(): Boolean \n
 fun setCustomValidity(error: String) \n override fun item(index: Int): Element? \n \n companion object { \n
val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n
} \n} \n \n @Suppress(\ "INVISIBLE_REFERENCE",
\ "INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun
HTMLSelectElement.get(index:
Int): Element? = asDynamic()[index] \n \n @Suppress(\ "INVISIBLE_REFERENCE",
\ "INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun
HTMLSelectElement.set(index: Int, option: HTMLOptionElement?) { asDynamic()[index] = option } \n \n /** \n *
Exposes the JavaScript
[HTMLDataListElement](https://developer.mozilla.org/en/docs/Web/API/HTMLDataListElement) to Kotlin \n
* \n public external abstract class HTMLDataListElement : HTMLInputElement { \n open val options:
HTMLCollection \n \n companion object { \n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE:
Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED:
Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val
DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n \n /** \n * Exposes the JavaScript
[HTMLOptGroupElement](https://developer.mozilla.org/en/docs/Web/API/HTMLOptGroupElement) to Kotlin \n
* \n public external abstract class HTMLOptGroupElement : HTMLInputElement,
UnionHTMLOptGroupElementOrHTMLOptionElement { \n open var disabled: Boolean \n open var label:

```

```

String companion object {
 val ELEMENT_NODE: Short
 val ATTRIBUTE_NODE: Short
 val TEXT_NODE: Short
 val CDATA_SECTION_NODE: Short
 val ENTITY_REFERENCE_NODE: Short
 val ENTITY_NODE: Short
 val PROCESSING_INSTRUCTION_NODE: Short
 val COMMENT_NODE: Short
 val DOCUMENT_NODE: Short
 val DOCUMENT_TYPE_NODE: Short

 val DOCUMENT_FRAGMENT_NODE: Short
 val NOTATION_NODE: Short

 DOCUMENT_POSITION_DISCONNECTED: Short
 val DOCUMENT_POSITION_PRECEDING: Short
 val DOCUMENT_POSITION_FOLLOWING: Short
 val DOCUMENT_POSITION_CONTAINS: Short
 val DOCUMENT_POSITION_CONTAINED_BY: Short

 DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short }
}

/** Exposes the JavaScript [HTMLOptionElement](https://developer.mozilla.org/en/docs/Web/API/HTMLOptionElement) to Kotlin
 *
 * public external abstract class HTMLOptionElement : HTMLElement,
 * UnionHTMLOptGroupElementOrHTMLOptionElement {
 open var disabled: Boolean
 open val form: HTMLFormElement?
 open var label: String
 open var defaultSelected: Boolean
 open var selected: Boolean
 open var value: String
 open var text: String
 open val index: Int
 companion object {
 val ELEMENT_NODE: Short
 val ATTRIBUTE_NODE: Short
 val TEXT_NODE: Short
 val CDATA_SECTION_NODE: Short
 val ENTITY_REFERENCE_NODE: Short
 val ENTITY_NODE: Short
 val PROCESSING_INSTRUCTION_NODE: Short
 val COMMENT_NODE: Short
 val DOCUMENT_NODE: Short
 val DOCUMENT_TYPE_NODE: Short
 val DOCUMENT_FRAGMENT_NODE: Short
 val NOTATION_NODE: Short

 DOCUMENT_POSITION_DISCONNECTED: Short
 val DOCUMENT_POSITION_PRECEDING: Short
 val DOCUMENT_POSITION_FOLLOWING: Short
 val DOCUMENT_POSITION_CONTAINS: Short
 val DOCUMENT_POSITION_CONTAINED_BY: Short

 DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short }
 }

 /** Exposes the JavaScript [HTMLTextAreaElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTextAreaElement) to Kotlin
 *
 * public external abstract class HTMLTextAreaElement : HTMLElement {
 open var autocomplete: String
 open var autofocus: Boolean
 open var cols: Int
 open var dirName: String
 open var disabled: Boolean
 open val form: HTMLFormElement?
 open var inputMode: String
 open var maxLength: Int
 open var minLength: Int
 open var name: String
 open var placeholder: String
 open var readOnly: Boolean
 open var required: Boolean
 open var rows: Int
 open var wrap: String
 open val type: String
 open var defaultValue: String
 open var value: String
 open val textLength: Int
 open val willValidate: Boolean
 open val validity: ValidityState
 open val validationMessage: String
 open val labels: NodeList
 open var selectionStart: Int?
 open var selectionEnd: Int?
 open var selectionDirection: String?
 fun checkValidity(): Boolean
 fun reportValidity(): Boolean
 fun setCustomValidity(error: String)
 fun select()
 fun setRangeText(replacement: String)
 fun setRangeText(replacement: String, start: Int, end: Int, selectionMode: SelectionMode = definedExternally)
 fun setSelectionRange(start: Int, end: Int, direction: String = definedExternally)
 }
 companion object {
 val ELEMENT_NODE: Short
 val ATTRIBUTE_NODE: Short
 val TEXT_NODE: Short
 val CDATA_SECTION_NODE: Short
 val ENTITY_REFERENCE_NODE: Short
 val ENTITY_NODE: Short
 val PROCESSING_INSTRUCTION_NODE: Short
 val COMMENT_NODE: Short
 val DOCUMENT_NODE: Short
 val DOCUMENT_TYPE_NODE: Short
 val DOCUMENT_FRAGMENT_NODE: Short
 val NOTATION_NODE: Short

 DOCUMENT_POSITION_DISCONNECTED: Short
 val DOCUMENT_POSITION_PRECEDING: Short
 val DOCUMENT_POSITION_FOLLOWING: Short
 val DOCUMENT_POSITION_CONTAINS: Short
 val DOCUMENT_POSITION_CONTAINED_BY: Short

 DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short }
 }

 /** Exposes the JavaScript [HTMLKeygenElement](https://developer.mozilla.org/en/docs/Web/API/HTMLKeygenElement) to Kotlin
 *
 * public

```



```

external abstract class HTMLKeygenElement : HTMLInputElement {\n open var autofocus: Boolean\n open var
challenge: String\n open var disabled: Boolean\n open val form: HTMLFormElement?\n open var keytype:
String\n open var name: String\n open val type: String\n open val willValidate: Boolean\n open val validity:
ValidityState\n open val validationMessage: String\n open val labels: NodeList\n fun checkValidity():
Boolean\n fun reportValidity(): Boolean\n fun setCustomValidity(error: String)\n\n companion object {\n
val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n
 val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING:
Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val
DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n
 val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the
JavaScript [HTMLOutputElement](https://developer.mozilla.org/en/docs/Web/API/HTMLOutputElement) to
Kotlin\n */\npublic external abstract class HTMLOutputElement : HTMLInputElement {\n open val htmlFor:
DOMTokenList\n open val form: HTMLFormElement?\n open var name: String\n open val type: String\n
open var defaultValue: String\n open var value: String\n open val willValidate: Boolean\n open val validity:
ValidityState\n open val validationMessage: String\n open val labels: NodeList\n fun checkValidity():
Boolean\n fun reportValidity(): Boolean\n fun setCustomValidity(error: String)\n\n companion object {\n
val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLProgressElement](https://developer.mozilla.org/en/docs/Web/API/HTMLProgressElement) to Kotlin\n
*/\npublic external abstract class HTMLProgressElement : HTMLInputElement {\n open var value: Double\n open
var max:
Double\n open val position: Double\n open val labels: NodeList\n\n companion object {\n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLMeterElement](https://developer.mozilla.org/en/docs/Web/API/HTMLMeterElement) to Kotlin\n */\npublic
external
abstract class HTMLMeterElement : HTMLInputElement {\n open var value: Double\n open var min: Double\n
open var max: Double\n open var low: Double\n open var high: Double\n open var optimum: Double\n open
val labels: NodeList\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE:
Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val

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ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC:
Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLFieldSetElement](https://developer.mozilla.org/en/docs/Web/API/HTMLFieldSetElement) to Kotlin\n
*\npublic external abstract class HTMLFieldSetElement : HTMLElement {\n open var disabled: Boolean\n
open val form: HTMLFormElement?\n open var name: String\n open val type: String\n open val elements:
HTMLCollection\n open val willValidate: Boolean\n open val validity: ValidityState\n open val
validationMessage: String\n fun checkValidity(): Boolean\n fun reportValidity(): Boolean\n fun
setCustomValidity(error: String)\n companion object {\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE:
Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLLegendElement](https://developer.mozilla.org/en/docs/Web/API/HTMLLegendElement) to Kotlin\n
*\npublic external abstract class HTMLLegendElement : HTMLElement {\n open val form:
HTMLFormElement?\n open var align: String\n companion object {\n val ELEMENT_NODE: Short\n
 val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n
 val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n
 val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[ValidityState](https://developer.mozilla.org/en/docs/Web/API/ValidityState) to Kotlin\n
*\npublic external
abstract class ValidityState {\n open val valueMissing: Boolean\n open val typeMismatch: Boolean\n open val
patternMismatch: Boolean\n open val tooLong: Boolean\n open val tooShort: Boolean\n open val
rangeUnderflow: Boolean\n open val rangeOverflow: Boolean\n open val stepMismatch: Boolean\n open val
badInput: Boolean\n open val customError: Boolean\n open val
valid: Boolean\n}\n}\n\n/**\n * Exposes the JavaScript
[HTMLDetailsElement](https://developer.mozilla.org/en/docs/Web/API/HTMLDetailsElement) to Kotlin\n
*\npublic external abstract class HTMLDetailsElement : HTMLElement {\n open var open: Boolean\n
companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val
TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n

```

```

 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC:
Short\n }\n}\n\npublic external abstract class HTMLMenuElement : HTMLElement {\n open var type: String\n
open var label: String\n open var compact: Boolean\n\n companion object {\n val ELEMENT_NODE:
Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE:
Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external abstract
class HTMLMenuItemElement : HTMLElement {\n open var type: String\n open var label: String\n open var
icon: String\n open var disabled: Boolean\n open var checked: Boolean\n open var radiogroup: String\n open
var default: Boolean\n\n companion object {\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC:
Short\n }\n}\n\npublic external open class RelatedEvent(type: String, eventInitDict: RelatedEventInit =
definedExternally) : Event {\n open val relatedTarget: EventTarget?\n\n companion object {\n val NONE:
Short\n val CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE:
Short\n }\n}\n\npublic external interface RelatedEventInit : EventInit {\n var relatedTarget: EventTarget? /* =
null */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\n\npublic inline fun RelatedEventInit(relatedTarget:
EventTarget? = null, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false):
RelatedEventInit {\n val o = js(\"{\}\")\n o[\"relatedTarget\"] = relatedTarget\n o[\"bubbles\"] = bubbles\n
o[\"cancelable\"] = cancelable\n o[\"composed\"] = composed\n return o\n}\n\n/**\n * Exposes the JavaScript
[HTMLDialogElement](https://developer.mozilla.org/en/docs/Web/API/HTMLDialogElement) to Kotlin\n
*/\n\npublic external abstract class HTMLDialogElement : HTMLElement {\n open var open: Boolean\n open var
returnValue: String\n fun show(anchor: UnionElementOrMouseEvent = definedExternally)\n fun
showModal(anchor: UnionElementOrMouseEvent = definedExternally)\n fun close(returnValue: String =
definedExternally)\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE:
Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val

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DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING:
Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val
DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n
val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the
JavaScript [HTMLScriptElement](https://developer.mozilla.org/en/docs/Web/API/HTMLScriptElement) to Kotlin\n
*\n\npublic external abstract class HTMLScriptElement : HTMLElement, HTMLOrSVGScriptElement {\n open
var src: String\n open var type: String\n open var charset: String\n open var async: Boolean\n open var defer:
Boolean\n open var crossOrigin: String?\n open var text: String\n open var nonce: String\n open var event:
String\n open var htmlFor: String\n\n companion object {\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n
 val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLTemplateElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTemplateElement) to Kotlin\n
*\n\npublic external abstract class HTMLTemplateElement : HTMLElement {\n open val content:
DocumentFragment\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE:
Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n
 val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLSlotElement](https://developer.mozilla.org/en/docs/Web/API/HTMLSlotElement) to Kotlin\n
*\n\npublic external abstract class HTMLSlotElement : HTMLElement {\n open var name: String\n fun
assignedNodes(options: AssignedNodesOptions = definedExternally): Array<Node>\n\n companion object {\n
 val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n
 val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external interface
AssignedNodesOptions {\n var flatten: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n\n@kotlin.internal.InlineOnly\n\npublic inline fun AssignedNodesOptions(flatten:
Boolean? = false): AssignedNodesOptions

```

```

{\n val o = js("{}")\n o["flatten"] = flatten\n return o\n}\n\n/**\n * Exposes the JavaScript
[HTMLCanvasElement](https://developer.mozilla.org/en/docs/Web/API/HTMLCanvasElement) to Kotlin\n
*\npublic external abstract class HTMLCanvasElement : HTMLDivElement, CanvasImageSource, TexImageSource
{\n open var width: Int\n open var height: Int\n fun getContext(contextId: String, vararg arguments: Any?):
RenderingContext?\n fun toDataURL(type: String = definedExternally, quality: Any? = definedExternally):
String\n fun toBlob(_callback: (Blob?) -> Unit, type: String = definedExternally, quality: Any? =
definedExternally)\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE:
Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE:
Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n
val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val
DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n
val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external
interface CanvasRenderingContext2DSettings {\n var alpha: Boolean? /* = true */\n get() =
definedExternally\n set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun
CanvasRenderingContext2DSettings(alpha: Boolean? = true): CanvasRenderingContext2DSettings {\n val o =
js("{}")\n o["alpha"] = alpha\n return o\n}\n\n/**\n * Exposes the JavaScript
[CanvasRenderingContext2D](https://developer.mozilla.org/en/docs/Web/API/CanvasRenderingContext2D)
to Kotlin\n
*\npublic external abstract class CanvasRenderingContext2D : CanvasState, CanvasTransform,
CanvasCompositing, CanvasImageSmoothing, CanvasFillStrokeStyles, CanvasShadowStyles, CanvasFilters,
CanvasRect, CanvasDrawPath, CanvasUserInterface, CanvasText, CanvasDrawImage, CanvasHitRegion,
CanvasImageData, CanvasPathDrawingStyles, CanvasTextDrawingStyles, CanvasPath, RenderingContext {\n
open val canvas: HTMLCanvasElement\n}\n\npublic external interface CanvasState {\n fun save()\n fun
restore()\n}\n\npublic external interface CanvasTransform {\n fun scale(x: Double, y: Double)\n fun
rotate(angle: Double)\n fun translate(x: Double, y: Double)\n fun transform(a: Double, b: Double, c: Double, d:
Double, e: Double, f: Double)\n fun getTransform(): DOMMatrix\n fun setTransform(a: Double, b: Double, c:
Double, d: Double, e: Double, f: Double)\n fun setTransform(transform: dynamic = definedExternally)\n fun
resetTransform()\n}\n\npublic
external interface CanvasCompositing {\n var globalAlpha: Double\n var globalCompositeOperation:
String\n}\n\npublic external interface CanvasImageSmoothing {\n var imageSmoothingEnabled: Boolean\n var
imageSmoothingQuality: ImageSmoothingQuality\n}\n\npublic external interface CanvasFillStrokeStyles {\n var
strokeStyle: dynamic\n get() = definedExternally\n set(value) = definedExternally\n var fillStyle:
dynamic\n get() = definedExternally\n set(value) = definedExternally\n fun createLinearGradient(x0:
Double, y0: Double, x1: Double, y1: Double): CanvasGradient\n fun createRadialGradient(x0: Double, y0:
Double, r0: Double, x1: Double, y1: Double, r1: Double): CanvasGradient\n fun createPattern(image:
CanvasImageSource, repetition: String): CanvasPattern?\n}\n\npublic external interface CanvasShadowStyles {\n
var shadowOffsetX: Double\n var shadowOffsetY: Double\n var shadowBlur: Double\n var shadowColor:
String\n}\n\npublic external interface CanvasFilters {\n var filter: String\n}\n\npublic external interface
CanvasRect {\n fun clearRect(x: Double, y: Double, w: Double, h: Double)\n fun fillRect(x: Double, y: Double,
w: Double, h: Double)\n fun strokeRect(x: Double, y: Double, w: Double, h: Double)\n}\n\npublic external
interface CanvasDrawPath {\n fun beginPath()\n fun fill(fillRule: CanvasFillRule = definedExternally)\n fun
fill(path: Path2D, fillRule: CanvasFillRule = definedExternally)\n fun stroke()\n fun stroke(path: Path2D)\n
fun clip(fillRule: CanvasFillRule = definedExternally)\n fun clip(path: Path2D, fillRule: CanvasFillRule =
definedExternally)\n fun resetClip()\n fun isPointInPath(x: Double, y: Double, fillRule: CanvasFillRule =

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definedExternally): Boolean\n fun isPointInPath(path: Path2D, x: Double, y: Double, fillRule: CanvasFillRule =
definedExternally): Boolean\n fun isPointInStroke(x: Double, y: Double): Boolean\n
fun isPointInStroke(path: Path2D, x: Double, y: Double): Boolean\n}\n\npublic external interface
CanvasUserInterface {\n fun drawFocusIfNeeded(element: Element)\n fun drawFocusIfNeeded(path: Path2D,
element: Element)\n fun scrollPathIntoView()\n fun scrollPathIntoView(path: Path2D)\n}\n\npublic external
interface CanvasText {\n fun fillText(text: String, x: Double, y: Double, maxWidth: Double =
definedExternally)\n fun strokeText(text: String, x: Double, y: Double, maxWidth: Double = definedExternally)\n
fun measureText(text: String): TextMetrics\n}\n\npublic external interface CanvasDrawImage {\n fun
drawImage(image: CanvasImageSource, dx: Double, dy: Double)\n fun drawImage(image: CanvasImageSource,
dx: Double, dy: Double, dw: Double, dh: Double)\n fun drawImage(image: CanvasImageSource, sx: Double, sy:
Double, sw: Double, sh: Double, dx: Double, dy: Double, dw: Double, dh: Double)\n}\n\npublic external interface
CanvasHitRegion {\n fun addHitRegion(options:
HitRegionOptions = definedExternally)\n fun removeHitRegion(id: String)\n fun
clearHitRegions()\n}\n\npublic external interface CanvasImageData {\n fun createImageData(sw: Double, sh:
Double): ImageData\n fun createImageData(imagedata: ImageData): ImageData\n fun getImageData(sx:
Double, sy: Double, sw: Double, sh: Double): ImageData\n fun putImageData(imagedata: ImageData, dx: Double,
dy: Double)\n fun putImageData(imagedata: ImageData, dx: Double, dy: Double, dirtyX: Double, dirtyY: Double,
dirtyWidth: Double, dirtyHeight: Double)\n}\n\npublic external interface CanvasPathDrawingStyles {\n var
lineWidth: Double\n var lineCap: CanvasLineCap\n var lineJoin: CanvasLineJoin\n var miterLimit: Double\n
var lineDashOffset: Double\n fun setLineDash(segments: Array<Double>)\n fun getLineDash():
Array<Double>\n}\n\npublic external interface CanvasTextDrawingStyles {\n var font: String\n var textAlign:
CanvasTextAlign\n var textBaseline:
CanvasTextBaseline\n var direction: CanvasDirection\n}\n\npublic external interface CanvasPath {\n fun
closePath()\n fun moveTo(x: Double, y: Double)\n fun lineTo(x: Double, y: Double)\n fun
quadraticCurveTo(cpx: Double, cpy: Double, x: Double, y: Double)\n fun bezierCurveTo(cp1x: Double, cp1y:
Double, cp2x: Double, cp2y: Double, x: Double, y: Double)\n fun arcTo(x1: Double, y1: Double, x2: Double, y2:
Double, radius: Double)\n fun arcTo(x1: Double, y1: Double, x2: Double, y2: Double, radiusX: Double, radiusY:
Double, rotation: Double)\n fun rect(x: Double, y: Double, w: Double, h: Double)\n fun arc(x: Double, y:
Double, radius: Double, startAngle: Double, endAngle: Double, anticlockwise: Boolean = definedExternally)\n
fun ellipse(x: Double, y: Double, radiusX: Double, radiusY: Double, rotation: Double, startAngle: Double,
endAngle: Double, anticlockwise: Boolean = definedExternally)\n}\n\n/**\n * Exposes the JavaScript
[CanvasGradient](https://developer.mozilla.org/en/docs/Web/API/CanvasGradient)
to Kotlin\n */\n\npublic external abstract class CanvasGradient {\n fun addColorStop(offset: Double, color:
String)\n}\n\n/**\n * Exposes the JavaScript
[CanvasPattern](https://developer.mozilla.org/en/docs/Web/API/CanvasPattern) to Kotlin\n */\n\npublic external
abstract class CanvasPattern {\n fun setTransform(transform: dynamic = definedExternally)\n}\n\n/**\n * Exposes
the JavaScript [TextMetrics](https://developer.mozilla.org/en/docs/Web/API/TextMetrics) to Kotlin\n */\n\npublic
external abstract class TextMetrics {\n open val width: Double\n open val actualBoundingBoxLeft: Double\n
open val actualBoundingBoxRight: Double\n open val fontBoundingBoxAscent: Double\n open val
fontBoundingBoxDescent: Double\n open val actualBoundingBoxAscent: Double\n open val
actualBoundingBoxDescent: Double\n open val emHeightAscent: Double\n open val emHeightDescent:
Double\n open val hangingBaseline: Double\n open val
alphabeticBaseline: Double\n open val ideographicBaseline: Double\n}\n\npublic external interface
HitRegionOptions {\n var path: Path2D? /* = null */\n get() = definedExternally\n set(value) =
definedExternally\n var fillRule: CanvasFillRule? /* = CanvasFillRule.NONZERO */\n get() =
definedExternally\n set(value) = definedExternally\n var id: String? /* = "" */\n get() =
definedExternally\n set(value) = definedExternally\n var parentID: String? /* = null */\n get() =
definedExternally\n set(value) = definedExternally\n var cursor: String? /* = "inherit" */\n get() =

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definedExternally\n set(value) = definedExternally\n var control: Element? /* = null */\n get() =
definedExternally\n set(value) = definedExternally\n var label: String? /* = null */\n get() =
definedExternally\n set(value) = definedExternally\n var role: String? /* = null */\n get() =
definedExternally\n
 set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun HitRegionOptions(path: Path2D? =
null, fillRule: CanvasFillRule? = CanvasFillRule.NONZERO, id: String? = \"\", parentID: String? = null, cursor:
String? = \"inherit\", control: Element? = null, label: String? = null, role: String? = null): HitRegionOptions {\n val
o = js(\"({})\")\n o[\"path\"] = path\n o[\"fillRule\"] = fillRule\n o[\"id\"] = id\n o[\"parentID\"] = parentID\n
o[\"cursor\"] = cursor\n o[\"control\"] = control\n o[\"label\"] = label\n o[\"role\"] = role\n return
o}\n\n/**\n * Exposes the JavaScript [ImageData](https://developer.mozilla.org/en/docs/Web/API/ImageData) to
Kotlin\n */\npublic external open class ImageData : ImageBitmapSource, TexImageSource {\n constructor(sw:
Int, sh: Int)\n constructor(data: Uint8ClampedArray, sw: Int, sh: Int = definedExternally)\n open
val width: Int\n open val height: Int\n open val data: Uint8ClampedArray}\n\n/**\n * Exposes the JavaScript
[Path2D](https://developer.mozilla.org/en/docs/Web/API/Path2D) to Kotlin\n */\npublic external open class
Path2D() : CanvasPath {\n constructor(path: Path2D)\n constructor(paths: Array<Path2D>, fillRule:
CanvasFillRule = definedExternally)\n constructor(d: String)\n fun addPath(path: Path2D, transform: dynamic =
definedExternally)\n override fun closePath()\n override fun moveTo(x: Double, y: Double)\n override fun
lineTo(x: Double, y: Double)\n override fun quadraticCurveTo(cpx: Double, cpy: Double, x: Double, y: Double)\n
 override fun bezierCurveTo(cp1x: Double, cp1y: Double, cp2x: Double, cp2y: Double, x: Double, y: Double)\n
 override fun arcTo(x1: Double, y1: Double, x2: Double, y2: Double, radius: Double)\n override fun arcTo(x1:
Double, y1: Double, x2: Double, y2: Double, radiusX: Double, radiusY: Double, rotation: Double)\n override
fun rect(x: Double, y: Double, w: Double, h: Double)\n override fun arc(x: Double, y: Double, radius: Double,
startAngle: Double, endAngle: Double, anticlockwise: Boolean /* = definedExternally */)\n override fun ellipse(x:
Double, y: Double, radiusX: Double, radiusY: Double, rotation: Double, startAngle: Double, endAngle: Double,
anticlockwise: Boolean /* = definedExternally */)\n}\n\n/**\n * Exposes the JavaScript
[ImageBitmapRenderingContext](https://developer.mozilla.org/en/docs/Web/API/ImageBitmapRenderingContext)
to Kotlin\n */\npublic external abstract class ImageBitmapRenderingContext {\n open val canvas:
HTMLCanvasElement\n fun transferFromImageBitmap(bitmap: ImageBitmap?)}\n\npublic external interface
ImageBitmapRenderingContextSettings {\n var alpha: Boolean? /* = true */\n get() = definedExternally\n
set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline
fun ImageBitmapRenderingContextSettings(alpha: Boolean? = true): ImageBitmapRenderingContextSettings {\n
val o = js(\"({})\")\n o[\"alpha\"] = alpha\n return o}\n\n/**\n * Exposes the JavaScript
[CustomElementRegistry](https://developer.mozilla.org/en/docs/Web/API/CustomElementRegistry) to Kotlin\n
*/\npublic external abstract class CustomElementRegistry {\n fun define(name: String, constructor: () -> dynamic,
options: ElementDefinitionOptions = definedExternally)\n fun get(name: String): Any?\n fun
whenDefined(name: String): Promise<Unit>\n}\n\npublic external interface ElementDefinitionOptions {\n var
extends: String?\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ElementDefinitionOptions(extends:
String? = undefined): ElementDefinitionOptions {\n val o = js(\"({})\")\n o[\"extends\"] = extends\n return
o}\n\npublic
external interface ElementContentEditable {\n var contentEditable: String\n val isContentEditable:
Boolean}\n\n/**\n * Exposes the JavaScript
[DataTransfer](https://developer.mozilla.org/en/docs/Web/API/DataTransfer) to Kotlin\n */\npublic external
abstract class DataTransfer {\n open var dropEffect: String\n open var effectAllowed: String\n open val items:
DataTransferItemList\n open val types: Array<out String>\n open val files: FileList\n fun

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setDragImage(image: Element, x: Int, y: Int)\n fun getData(format: String): String\n fun setData(format: String,
data: String)\n fun clearData(format: String = definedExternally)\n}\n\n/**\n * Exposes the JavaScript
[DataTransferItemList](https://developer.mozilla.org/en/docs/Web/API/DataTransferItemList) to Kotlin\n */\n\npublic
external abstract class DataTransferItemList {\n open val length: Int\n fun add(data: String, type: String):
DataTransferItem?\n fun add(data: File): DataTransferItem?\n
fun remove(index: Int)\n fun clear()\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\n\npublic inline operator fun
DataTransferItemList.get(index: Int): DataTransferItem? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[DataTransferItem](https://developer.mozilla.org/en/docs/Web/API/DataTransferItem) to Kotlin\n */\n\npublic
external abstract class DataTransferItem {\n open val kind: String\n open val type: String\n fun
getAsString(_callback: ((String) -> Unit)?)\n fun getAsFile(): File?\n}\n\n/**\n * Exposes the JavaScript
[DragEvent](https://developer.mozilla.org/en/docs/Web/API/TouchEvent) to Kotlin\n */\n\npublic external open class
DragEvent(type: String, eventInitDict: DragEventInit = definedExternally) : MouseEvent {\n open val
dataTransfer: DataTransfer?\n\n companion object {\n val NONE: Short\n val CAPTURING_PHASE:
Short\n val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n }\n}\n\n\npublic
external interface DragEventInit : MouseEventInit {\n var dataTransfer: DataTransfer? /* = null */\n get() =
definedExternally\n set(value) = definedExternally\n}\n\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\n\npublic inline fun DragEventInit(dataTransfer:
DataTransfer? = null, screenX: Int? = 0, screenY: Int? = 0, clientX: Int? = 0, clientY: Int? = 0, button: Short? = 0,
buttons: Short? = 0, relatedTarget: EventTarget? = null, region: String? = null, ctrlKey: Boolean? = false, shiftKey:
Boolean? = false, altKey: Boolean? = false, metaKey: Boolean? = false, modifierAltGraph: Boolean? = false,
modifierCapsLock: Boolean? = false, modifierFn: Boolean? = false, modifierFnLock: Boolean? = false,
modifierHyper: Boolean? = false, modifierNumLock: Boolean? = false, modifierScrollLock: Boolean? = false,
modifierSuper: Boolean? = false, modifierSymbol: Boolean? = false, modifierSymbolLock: Boolean? = false, view:
Window? = null, detail:
Int? = 0, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): DragEventInit {\n
val o = js("{}")\n o["dataTransfer"] = dataTransfer\n o["screenX"] = screenX\n o["screenY"] =
screenY\n o["clientX"] = clientX\n o["clientY"] = clientY\n o["button"] = button\n o["buttons"] =
buttons\n o["relatedTarget"] = relatedTarget\n o["region"] = region\n o["ctrlKey"] = ctrlKey\n
o["shiftKey"] = shiftKey\n o["altKey"] = altKey\n o["metaKey"] = metaKey\n o["modifierAltGraph"] =
modifierAltGraph\n o["modifierCapsLock"] = modifierCapsLock\n o["modifierFn"] = modifierFn\n
o["modifierFnLock"] = modifierFnLock\n o["modifierHyper"] = modifierHyper\n o["modifierNumLock"] =
modifierNumLock\n o["modifierScrollLock"] = modifierScrollLock\n o["modifierSuper"] = modifierSuper\n
o["modifierSymbol"] = modifierSymbol\n o["modifierSymbolLock"] = modifierSymbolLock\n
o["view"] = view\n o["detail"] = detail\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n
o["composed"] = composed\n return o\n}\n\n\n/**\n * Exposes the JavaScript
[Window](https://developer.mozilla.org/en/docs/Web/API/Window) to Kotlin\n */\n\npublic external abstract class
Window : EventTarget, GlobalEventHandlers, WindowEventHandlers, WindowOrWorkerGlobalScope,
WindowSessionStorage, WindowLocalStorage, GlobalPerformance, UnionMessagePortOrWindowProxy {\n open
val window: Window\n open val self: Window\n open val document: Document\n open var name: String\n
open val location: Location\n open val history: History\n open val customElements: CustomElementRegistry\n
open val locationbar: BarProp\n open val menubar: BarProp\n open val personalbar: BarProp\n open val
scrollbars: BarProp\n open val statusbar: BarProp\n open val toolbar: BarProp\n open var status: String\n
open val closed: Boolean\n open
val frames: Window\n open val length: Int\n open val top: Window\n open var opener: Any?\n open val
parent: Window\n open val frameElement: Element?\n open val navigator: Navigator\n open val
applicationCache: ApplicationCache\n open val external: External\n open val screen: Screen\n open val
innerWidth: Int\n open val innerHeight: Int\n open val scrollX: Double\n open val pageXOffset: Double\n

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open val scrollY: Double\n open val pageYOffset: Double\n open val screenX: Int\n open val screenY: Int\n
open val outerWidth: Int\n open val outerHeight: Int\n open val devicePixelRatio: Double\n fun close()\n fun
stop()\n fun focus()\n fun blur()\n fun open(url: String = definedExternally, target: String = definedExternally,
features: String = definedExternally): Window?\n fun alert()\n fun alert(message: String)\n fun
confirm(message: String = definedExternally): Boolean\n fun prompt(message: String = definedExternally,
default: String = definedExternally): String?\n fun print()\n fun requestAnimationFrame(callback: (Double) ->
Unit): Int\n fun cancelAnimationFrame(handle: Int)\n fun postMessage(message: Any?, targetOrigin: String,
transfer: Array<dynamic> = definedExternally)\n fun captureEvents()\n fun releaseEvents()\n fun
matchMedia(query: String): MediaQueryList\n fun moveTo(x: Int, y: Int)\n fun moveBy(x: Int, y: Int)\n fun
resizeTo(x: Int, y: Int)\n fun resizeBy(x: Int, y: Int)\n fun scroll(options: ScrollToOptions = definedExternally)\n
fun scroll(x: Double, y: Double)\n fun scrollTo(options: ScrollToOptions = definedExternally)\n fun
scrollTo(x: Double, y: Double)\n fun scrollBy(options: ScrollToOptions = definedExternally)\n fun scrollBy(x:
Double, y: Double)\n fun getComputedStyle(elt: Element, pseudoElt: String? = definedExternally):
CSSStyleDeclaration\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic
inline operator fun Window.get(name: String): dynamic = asDynamic()[name]\n\npublic external abstract class
BarProp {\n open val visible: Boolean\n}\n\n/**\n * Exposes the JavaScript
[History](https://developer.mozilla.org/en/docs/Web/API/History) to Kotlin\n */\npublic external abstract class
History {\n open val length: Int\n open var scrollRestoration: ScrollRestoration\n open val state: Any?\n fun
go(delta: Int = definedExternally)\n fun back()\n fun forward()\n fun pushState(data: Any?, title: String, url:
String? = definedExternally)\n fun replaceState(data: Any?, title: String, url: String? =
definedExternally)\n}\n\n/**\n * Exposes the JavaScript
[Location](https://developer.mozilla.org/en/docs/Web/API/Location) to Kotlin\n */\npublic external abstract class
Location {\n open var href: String\n open val origin: String\n open var protocol: String\n open var host:
String\n open var hostname: String\n open
var port: String\n open var pathname: String\n open var search: String\n open var hash: String\n open val
ancestorOrigins: Array<out String>\n fun assign(url: String)\n fun replace(url: String)\n fun
reload()\n}\n\n/**\n * Exposes the JavaScript
[PopStateEvent](https://developer.mozilla.org/en/docs/Web/API/PopStateEvent) to Kotlin\n */\npublic external
open class PopStateEvent(type: String, eventInitDict: PopStateEventInit = definedExternally) : Event {\n open val
state: Any?\n\n companion object {\n val NONE: Short\n val CAPTURING_PHASE: Short\n val
AT_TARGET: Short\n val BUBBLING_PHASE: Short\n }\n}\n\npublic external interface PopStateEventInit
: EventInit {\n var state: Any? /* = null */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun PopStateEventInit(state: Any? = null,
bubbles: Boolean?
= false, cancelable: Boolean? = false, composed: Boolean? = false): PopStateEventInit {\n val o = js(\"({})\")\n
o[\"state\"] = state\n o[\"bubbles\"] = bubbles\n o[\"cancelable\"] = cancelable\n o[\"composed\"] =
composed\n return o\n}\n\n/**\n * Exposes the JavaScript
[HashChangeEvent](https://developer.mozilla.org/en/docs/Web/API/HashChangeEvent) to Kotlin\n */\npublic
external open class HashChangeEvent(type: String, eventInitDict: HashChangeEventInit = definedExternally) :
Event {\n open val oldURL: String\n open val newURL: String\n\n companion object {\n val NONE:
Short\n val CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE:
Short\n }\n}\n\npublic external interface HashChangeEventInit : EventInit {\n var oldURL: String? /* = \"\" */\n
get() = definedExternally\n set(value) = definedExternally\n var newURL: String? /* = \"\" */\n get() =
definedExternally\n set(value)
= definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun HashChangeEventInit(oldURL:

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String? = "", newURL: String? = "", bubbles: Boolean? = false, cancelable: Boolean? = false, composed:
Boolean? = false): HashChangeEventInit {\n val o = js("{}")\n o["oldURL"] = oldURL\n o["newURL"]
= newURL\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] = composed\n
return o}\n\n/**\n * Exposes the JavaScript
[PageTransitionEvent](https://developer.mozilla.org/en/docs/Web/API/PageTransitionEvent) to Kotlin\n */\npublic
external open class PageTransitionEvent(type: String, eventInitDict: PageTransitionEventInit = definedExternally) :
Event {\n open val persisted: Boolean\n\n companion object {\n val NONE: Short\n val
CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n
}\n}\n\npublic external interface
PageTransitionEventInit : EventInit {\n var persisted: Boolean? /* = false */\n get() = definedExternally\n
set(value) = definedExternally}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun PageTransitionEventInit(persisted:
Boolean? = false, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false):
PageTransitionEventInit {\n val o = js("{}")\n o["persisted"] = persisted\n o["bubbles"] = bubbles\n
o["cancelable"] = cancelable\n o["composed"] = composed\n return o}\n\n/**\n * Exposes the JavaScript
[BeforeUnloadEvent](https://developer.mozilla.org/en/docs/Web/API/BeforeUnloadEvent) to Kotlin\n */\npublic
external open class BeforeUnloadEvent : Event {\n var returnValue: String\n\n companion object {\n val
NONE: Short\n val CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val
BUBBLING_PHASE: Short\n }\n}\n\npublic
external abstract class ApplicationCache : EventTarget {\n open val status: Short\n open var onchecking:
((Event) -> dynamic)?\n open var onerror: ((Event) -> dynamic)?\n open var onnoupdate: ((Event) ->
dynamic)?\n open var ondownloading: ((Event) -> dynamic)?\n open var onprogress: ((ProgressEvent) ->
dynamic)?\n open var onunreadystatechange: ((Event) -> dynamic)?\n open var oncached: ((Event) -> dynamic)?\n
open var onobsolete: ((Event) -> dynamic)?\n fun update()\n fun abort()\n fun swapCache()\n\n companion
object {\n val UNCACHED: Short\n val IDLE: Short\n val CHECKING: Short\n val
DOWNLOADING: Short\n val UPDATEREADY: Short\n val OBSOLETE: Short\n }\n}\n\n/**\n *
Exposes the JavaScript [NavigatorOnLine](https://developer.mozilla.org/en/docs/Web/API/NavigatorOnLine) to
Kotlin\n */\n\npublic external interface NavigatorOnLine {\n val onLine: Boolean\n}\n\n/**\n * Exposes the
JavaScript [ErrorEvent](https://developer.mozilla.org/en/docs/Web/API/ErrorEvent)
to Kotlin\n */\n\npublic external open class ErrorEvent(type: String, eventInitDict: ErrorEventInit =
definedExternally) : Event {\n open val message: String\n open val filename: String\n open val lineno: Int\n
open val colno: Int\n open val error: Any?\n\n companion object {\n val NONE: Short\n val
CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n
}\n}\n\npublic external interface ErrorEventInit : EventInit {\n var message: String? /* = "" */\n get() =
definedExternally\n set(value) = definedExternally\n var filename: String? /* = "" */\n get() =
definedExternally\n set(value) = definedExternally\n var lineno: Int? /* = 0 */\n get() =
definedExternally\n set(value) = definedExternally\n var colno: Int? /* = 0 */\n get() =
definedExternally\n set(value) = definedExternally\n var error: Any?
/* = null */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun ErrorEventInit(message: String? = "",
filename: String? = "", lineno: Int? = 0, colno: Int? = 0, error: Any? = null, bubbles: Boolean? = false, cancelable:
Boolean? = false, composed: Boolean? = false): ErrorEventInit {\n val o = js("{}")\n o["message"] =
message\n o["filename"] = filename\n o["lineno"] = lineno\n o["colno"] = colno\n o["error"] = error\n
o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] = composed\n return
o}\n\n/**\n * Exposes the JavaScript
[PromiseRejectionEvent](https://developer.mozilla.org/en/docs/Web/API/PromiseRejectionEvent) to Kotlin\n
*/\n\npublic external open class PromiseRejectionEvent(type: String, eventInitDict: PromiseRejectionEventInit) :

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Event {\n open val promise: Promise<Any?>\n
 open val reason: Any?\n\n companion object {\n val NONE: Short\n val CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n }\n\n public external interface PromiseRejectionEventInit : EventInit {\n var promise: Promise<Any?>?\n var reason: Any?\n get() = definedExternally\n set(value) = definedExternally\n }\n\n @Suppress("INVISIBLE_REFERENCE", "INVISIBLE_MEMBER")\n @kotlin.internal.InlineOnly\n public inline fun PromiseRejectionEventInit(promise: Promise<Any?>?, reason: Any? = undefined, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): PromiseRejectionEventInit {\n val o = js("({})")\n o["promise"] = promise\n o["reason"] = reason\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] = composed\n return o\n }\n\n /**\n * Exposes the JavaScript [GlobalEventHandlers](https://developer.mozilla.org/en/docs/Web/API/GlobalEventHandlers) to Kotlin\n */\n public external interface GlobalEventHandlers {\n var onabort: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onblur: ((FocusEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var oncancel: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var oncanplay: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var oncanplaythrough: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onchange: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onclick: ((MouseEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onclose: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var oncontextmenu: ((MouseEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var oncuechange: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var ondblclick: ((MouseEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var ondrag: ((DragEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var ondragend: ((DragEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var ondragenter: ((DragEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var ondragexit: ((DragEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var ondragleave: ((DragEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var ondragover: ((DragEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var ondragstart: ((DragEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var ondrop: ((DragEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var ondurationchange: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onemptied: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onended: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onerror: ((dynamic, String, Int, Int, Any?) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onfocus: ((FocusEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var oninput: ((InputEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var oninvalid: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onkeydown: ((KeyboardEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onkeypress: ((KeyboardEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onkeyup: ((KeyboardEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onload: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onloadeddata: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onloadedmetadata: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onloadend: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n }

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= definedExternally\n set(value) = definedExternally\n var onloadstart: ((ProgressEvent) -> dynamic)?\n
get() = definedExternally\n set(value) = definedExternally\n var onmousedown: ((MouseEvent) ->
dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onmouseenter:
((MouseEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var
onmouseleave: ((MouseEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n
var onmousemove: ((MouseEvent) -> dynamic)?\n get() = definedExternally\n set(value) =
definedExternally\n var onmouseout: ((MouseEvent) -> dynamic)?\n get() = definedExternally\n
set(value) = definedExternally\n var onmouseover: ((MouseEvent) -> dynamic)?\n get() = definedExternally\n
 set(value) = definedExternally\n var onmouseup: ((MouseEvent) -> dynamic)?\n get() =
definedExternally\n set(value) = definedExternally\n var onwheel: ((WheelEvent) -> dynamic)?\n get() =
definedExternally\n set(value) = definedExternally\n var onpause: ((Event) -> dynamic)?\n get() =
definedExternally\n set(value) = definedExternally\n var onplay: ((Event) -> dynamic)?\n get() =
definedExternally\n set(value) = definedExternally\n var onplaying: ((Event) -> dynamic)?\n get() =
definedExternally\n set(value) = definedExternally\n var onprogress: ((ProgressEvent) -> dynamic)?\n
get() = definedExternally\n set(value) = definedExternally\n var onratechange: ((Event) -> dynamic)?\n
get() = definedExternally\n set(value) = definedExternally\n var onreset: ((Event) -> dynamic)?\n get() =
definedExternally\n set(value) = definedExternally\n var onresize: ((Event) -> dynamic)?\n get() =
definedExternally\n set(value) = definedExternally\n
 var onscroll: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var
onseeked: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var
onseeking: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var
onselect: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var
onshow: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var
onstalled: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var
onsubmit: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var
onsuspend: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var
ontimeupdate: ((Event) -> dynamic)?\n get() = definedExternally\n
 set(value) = definedExternally\n var ontoggle: ((Event) -> dynamic)?\n get() = definedExternally\n
set(value) = definedExternally\n var onvolumechange: ((Event) -> dynamic)?\n get() = definedExternally\n
set(value) = definedExternally\n var onwaiting: ((Event) -> dynamic)?\n get() = definedExternally\n
set(value) = definedExternally\n var ongotpointercapture: ((PointerEvent) -> dynamic)?\n get() =
definedExternally\n set(value) = definedExternally\n var onlostpointercapture: ((PointerEvent) -> dynamic)?\n
 get() = definedExternally\n set(value) = definedExternally\n var onpointerdown: ((PointerEvent) ->
dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onpointermove:
((PointerEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var
onpointerup: ((PointerEvent) -> dynamic)?\n get() = definedExternally\n
 set(value) = definedExternally\n var onpointercancel: ((PointerEvent) -> dynamic)?\n get() =
definedExternally\n set(value) = definedExternally\n var onpointerover: ((PointerEvent) -> dynamic)?\n
get() = definedExternally\n set(value) = definedExternally\n var onpointerout: ((PointerEvent) -> dynamic)?\n
 get() = definedExternally\n set(value) = definedExternally\n var onpointerenter: ((PointerEvent) ->
dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onpointerleave:
((PointerEvent) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n}\n\n/**\n *
Exposes the JavaScript
[WindowEventHandlers](https://developer.mozilla.org/en/docs/Web/API/WindowEventHandlers) to Kotlin\n
*\npublic external interface WindowEventHandlers {\n var onafterprint: ((Event) -> dynamic)?\n get() =
definedExternally\n set(value) = definedExternally\n
 var onbeforeprint: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n
var onbeforeunload: ((BeforeUnloadEvent) -> String)?\n get() = definedExternally\n set(value) =

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definedExternally\n var onhashchange: ((HashChangeEvent) -> dynamic)?\n get() = definedExternally\n
set(value) = definedExternally\n var onlanguagechange: ((Event) -> dynamic)?\n get() = definedExternally\n
 set(value) = definedExternally\n var onmessage: ((MessageEvent) -> dynamic)?\n get() =
definedExternally\n set(value) = definedExternally\n var onoffline: ((Event) -> dynamic)?\n get() =
definedExternally\n set(value) = definedExternally\n var ononline: ((Event) -> dynamic)?\n get() =
definedExternally\n set(value) = definedExternally\n var onpagehide: ((PageTransitionEvent) -> dynamic)?\n
 get() = definedExternally\n set(value) = definedExternally\n
 var onpageshow: ((PageTransitionEvent) -> dynamic)?\n get() = definedExternally\n set(value) =
definedExternally\n var onpopstate: ((PopStateEvent) -> dynamic)?\n get() = definedExternally\n
set(value) = definedExternally\n var onrejectionhandled: ((Event) -> dynamic)?\n get() = definedExternally\n
 set(value) = definedExternally\n var onstorage: ((StorageEvent) -> dynamic)?\n get() = definedExternally\n
 set(value) = definedExternally\n var onunhandledrejection: ((PromiseRejectionEvent) -> dynamic)?\n
get() = definedExternally\n set(value) = definedExternally\n var onunload: ((Event) -> dynamic)?\n get()
= definedExternally\n set(value) = definedExternally\n}\n\npublic external interface
DocumentAndElementEventHandlers {\n var oncopy: ((ClipboardEvent) -> dynamic)?\n get() =
definedExternally\n set(value) = definedExternally\n var oncut: ((ClipboardEvent) ->
dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n var onpaste: ((ClipboardEvent)
-> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n}\n\n/**\n * Exposes the
JavaScript
[WindowOrWorkerGlobalScope](https://developer.mozilla.org/en/docs/Web/API/WindowOrWorkerGlobalScope)
to Kotlin\n */\npublic external interface WindowOrWorkerGlobalScope {\n val origin: String\n val caches:
CacheStorage\n fun btoa(data: String): String\n fun atob(data: String): String\n fun setTimeout(handler:
dynamic, timeout: Int = definedExternally, vararg arguments: Any?): Int\n fun clearTimeout(handle: Int =
definedExternally)\n fun setInterval(handler: dynamic, timeout: Int = definedExternally, vararg arguments: Any?):
Int\n fun clearInterval(handle: Int = definedExternally)\n fun createImageBitmap(image: ImageBitmapSource,
options: ImageBitmapOptions = definedExternally): Promise<ImageBitmap>\n fun createImageBitmap(image:
ImageBitmapSource, sx: Int, sy: Int, sw: Int, sh: Int, options: ImageBitmapOptions = definedExternally):
Promise<ImageBitmap>\n fun fetch(input: dynamic, init: RequestInit = definedExternally):
Promise<Response>}\n\n/**\n * Exposes the JavaScript
[Navigator](https://developer.mozilla.org/en/docs/Web/API/Navigator) to Kotlin\n */\npublic external abstract class
Navigator : NavigatorID, NavigatorLanguage, NavigatorOnLine, NavigatorContentUtils, NavigatorCookies,
NavigatorPlugins, NavigatorConcurrentHardware {\n open val clipboard: Clipboard\n open val mediaDevices:
MediaDevices\n open val maxTouchPoints: Int\n open val serviceWorker: ServiceWorkerContainer\n fun
requestMediaKeySystemAccess(keySystem: String, supportedConfigurations:
Array<MediaKeySystemConfiguration>): Promise<MediaKeySystemAccess>\n fun getUserMedia(constraints:
MediaStreamConstraints, successCallback: (MediaStream) -> Unit, errorCallback: (dynamic) -> Unit)\n fun
vibrate(pattern:
dynamic): Boolean}\n\n/**\n * Exposes the JavaScript
[NavigatorID](https://developer.mozilla.org/en/docs/Web/API/NavigatorID) to Kotlin\n */\npublic external interface
NavigatorID {\n val appCodeName: String\n val appName: String\n val appVersion: String\n val platform:
String\n val product: String\n val productSub: String\n val userAgent: String\n val vendor: String\n val
vendorSub: String\n val oscpu: String\n fun taintEnabled(): Boolean}\n\n/**\n * Exposes the JavaScript
[NavigatorLanguage](https://developer.mozilla.org/en/docs/Web/API/NavigatorLanguage) to Kotlin\n */\npublic
external interface NavigatorLanguage {\n val language: String\n val languages: Array<out String>}\n\npublic
external interface NavigatorContentUtils {\n fun registerProtocolHandler(scheme: String, url: String, title:
String)\n fun registerContentHandler(mimeType: String, url: String, title: String)\n fun
isProtocolHandlerRegistered(scheme: String, url: String):

```



```

ResizeQuality? = ResizeQuality.LOW): ImageBitmapOptions {\n val o = js("{}")\n o["imageOrientation"] =
= imageOrientation\n o["premultiplyAlpha"] = premultiplyAlpha\n o["colorSpaceConversion"] =
colorSpaceConversion\n o["resizeWidth"] = resizeWidth\n o["resizeHeight"] = resizeHeight\n
o["resizeQuality"] = resizeQuality\n return o\n}\n\n/**\n * Exposes the JavaScript
[MessageEvent](https://developer.mozilla.org/en/docs/Web/API/MessageEvent) to Kotlin\n */\npublic external open
class MessageEvent(type:
String, eventInitDict: MessageEventInit = definedExternally) : Event {\n open val data: Any?\n open val origin:
String\n open val lastEventId: String\n open val source: UnionMessagePortOrWindowProxy?\n open val ports:
Array<out MessagePort>\n fun initMessageEvent(type: String, bubbles: Boolean, cancelable: Boolean, data:
Any?, origin: String, lastEventId: String, source: UnionMessagePortOrWindowProxy?, ports:
Array<MessagePort>)\n\n companion object {\n val NONE: Short\n val CAPTURING_PHASE: Short\n
 val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n }\n\n\npublic external interface
MessageEventInit : EventInit {\n var data: Any? /* = null */\n get() = definedExternally\n set(value) =
definedExternally\n var origin: String? /* = "" */\n get() = definedExternally\n set(value) =
definedExternally\n var lastEventId: String? /* = "" */\n get() = definedExternally\n set(value)
= definedExternally\n var source: UnionMessagePortOrWindowProxy? /* = null */\n get() =
definedExternally\n set(value) = definedExternally\n var ports: Array<MessagePort>? /* = arrayOf() */\n
get() = definedExternally\n set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun MessageEventInit(data: Any? = null,
origin: String? = "", lastEventId: String? = "", source: UnionMessagePortOrWindowProxy? = null, ports:
Array<MessagePort>? = arrayOf(), bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? =
false): MessageEventInit {\n val o = js("{}")\n o["data"] = data\n o["origin"] = origin\n
o["lastEventId"] = lastEventId\n o["source"] = source\n o["ports"] = ports\n o["bubbles"] = bubbles\n
o["cancelable"] = cancelable\n o["composed"] = composed\n return o\n}\n\n/**\n * Exposes the JavaScript
[EventSource](https://developer.mozilla.org/en/docs/Web/API/EventSource)
to Kotlin\n */\npublic external open class EventSource(url: String, eventSourceInitDict: EventSourceInit =
definedExternally) : EventTarget {\n open val url: String\n open val withCredentials: Boolean\n open val
readyState: Short\n var onopen: ((Event) -> dynamic)?\n var onmessage: ((MessageEvent) -> dynamic)?\n var
onerror: ((Event) -> dynamic)?\n fun close()\n\n companion object {\n val CONNECTING: Short\n val
OPEN: Short\n val CLOSED: Short\n }\n\n\npublic external interface EventSourceInit {\n var
withCredentials: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun EventSourceInit(withCredentials:
Boolean? = false): EventSourceInit {\n val o = js("{}")\n o["withCredentials"] = withCredentials\n
return o\n}\n\n/**\n * Exposes the JavaScript
[WebSocket](https://developer.mozilla.org/en/docs/Web/API/WebSocket) to Kotlin\n */\npublic external open class
WebSocket(url: String, protocols: dynamic = definedExternally) : EventTarget {\n open val url: String\n open
val readyState: Short\n open val bufferedAmount: Number\n var onopen: ((Event) -> dynamic)?\n var onerror:
((Event) -> dynamic)?\n var onclose: ((Event) -> dynamic)?\n open val extensions: String\n open val protocol:
String\n var onmessage: ((MessageEvent) -> dynamic)?\n var binaryType: BinaryType\n fun close(code: Short
= definedExternally, reason: String = definedExternally)\n fun send(data: String)\n fun send(data: Blob)\n fun
send(data: ArrayBuffer)\n fun send(data: ArrayBufferView)\n\n companion object {\n val CONNECTING:
Short\n val OPEN: Short\n val CLOSING: Short\n val CLOSED: Short\n }\n}\n\n/**\n * Exposes the
JavaScript [CloseEvent](https://developer.mozilla.org/en/docs/Web/API/CloseEvent)
to Kotlin\n */\npublic external open class CloseEvent(type: String, eventInitDict: CloseEventInit =
definedExternally) : Event {\n open val wasClean: Boolean\n open val code: Short\n open val reason:
String\n\n companion object {\n val NONE: Short\n val CAPTURING_PHASE: Short\n val
AT_TARGET: Short\n val BUBBLING_PHASE: Short\n }\n}\n\npublic external interface CloseEventInit :

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EventInit {n var wasClean: Boolean? /* = false */n get() = definedExternallyn set(value) =
definedExternallyn var code: Short? /* = 0 */n get() = definedExternallyn set(value) =
definedExternallyn var reason: String? /* = "" */n get() = definedExternallyn set(value) =
definedExternallyn}n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")n@kotlin.internal.InlineOnlynpublic inline fun CloseEventInit(wasClean: Boolean? =
false, code: Short? =
0, reason: String? = "", bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false):
CloseEventInit {n val o = js("{}")n o["wasClean"] = wasCleann o["code"] = code\n o["reason"] =
reason\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] = composed\n return
o\n}n\n/**n * Exposes the JavaScript
[MessageChannel](https://developer.mozilla.org/en/docs/Web/API/MessageChannel) to Kotlin\n */npublic external
open class MessageChannel {n open val port1: MessagePort\n open val port2: MessagePort\n}n\n/**n *
Exposes the JavaScript [MessagePort](https://developer.mozilla.org/en/docs/Web/API/MessagePort) to Kotlin\n
*/npublic external abstract class MessagePort : EventTarget, UnionMessagePortOrWindowProxy,
UnionMessagePortOrServiceWorker, UnionClientOrMessagePortOrServiceWorker {n open var onmessage:
((MessageEvent) -> dynamic)?n fun postMessage(message: Any?, transfer: Array<dynamic>
= definedExternally)n fun start()\n fun close()\n}n\n/**n * Exposes the JavaScript
[BroadcastChannel](https://developer.mozilla.org/en/docs/Web/API/BroadcastChannel) to Kotlin\n */npublic
external open class BroadcastChannel(name: String) : EventTarget {n open val name: String\n var onmessage:
((MessageEvent) -> dynamic)?n fun postMessage(message: Any?)n fun close()\n}n\n/**n * Exposes the
JavaScript [WorkerGlobalScope](https://developer.mozilla.org/en/docs/Web/API/WorkerGlobalScope) to Kotlin\n
*/npublic external abstract class WorkerGlobalScope : EventTarget, WindowOrWorkerGlobalScope,
GlobalPerformance {n open val self: WorkerGlobalScope\n open val location: WorkerLocation\n open val
navigator: WorkerNavigator\n open var onerror: ((dynamic, String, Int, Int, Any?) -> dynamic)?n open var
onlanguagechange: ((Event) -> dynamic)?n open var onoffline: ((Event) -> dynamic)?n open var ononline:
((Event) -> dynamic)?n open var onrejectionhandled:
((Event) -> dynamic)?n open var onunhandledrejection: ((PromiseRejectionEvent) -> dynamic)?n fun
importScripts(vararg urls: String)\n}n\n/**n * Exposes the JavaScript
[DedicatedWorkerGlobalScope](https://developer.mozilla.org/en/docs/Web/API/DedicatedWorkerGlobalScope) to
Kotlin\n */npublic external abstract class DedicatedWorkerGlobalScope : WorkerGlobalScope {n open var
onmessage: ((MessageEvent) -> dynamic)?n fun postMessage(message: Any?, transfer: Array<dynamic> =
definedExternally)n fun close()\n}n\n/**n * Exposes the JavaScript
[SharedWorkerGlobalScope](https://developer.mozilla.org/en/docs/Web/API/SharedWorkerGlobalScope) to
Kotlin\n */npublic external abstract class SharedWorkerGlobalScope : WorkerGlobalScope {n open val name:
String\n open val applicationCache: ApplicationCache\n open var onconnect: ((Event) -> dynamic)?n fun
close()\n}n\n/**n * Exposes the JavaScript
[AbstractWorker](https://developer.mozilla.org/en/docs/Web/API/AbstractWorker)
to Kotlin\n */npublic external interface AbstractWorker {n var onerror: ((Event) -> dynamic)?n get() =
definedExternallyn set(value) = definedExternally\n}n\n/**n * Exposes the JavaScript
[Worker](https://developer.mozilla.org/en/docs/Web/API/Worker) to Kotlin\n */npublic external open class
Worker(scriptURL: String, options: WorkerOptions = definedExternally) : EventTarget, AbstractWorker {n var
onmessage: ((MessageEvent) -> dynamic)?n override var onerror: ((Event) -> dynamic)?n fun terminate()\n
fun postMessage(message: Any?, transfer: Array<dynamic> = definedExternally)\n}n\npublic external interface
WorkerOptions {n var type: WorkerType? /* = WorkerType.CLASSIC */n get() = definedExternallyn
set(value) = definedExternallyn var credentials: RequestCredentials? /* = RequestCredentials.OMIT */n
get() = definedExternallyn set(value) = definedExternally\n}n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")n@kotlin.internal.InlineOnlynpublic inline fun WorkerOptions(type: WorkerType? =
WorkerType.CLASSIC, credentials: RequestCredentials? = RequestCredentials.OMIT): WorkerOptions {n val o

```



```

= js("{}")\n o["type"] = type\n o["credentials"] = credentials\n return o\n}\n\n**\n * Exposes the
JavaScript [SharedWorker](https://developer.mozilla.org/en/docs/Web/API/SharedWorker) to Kotlin\n *\npublic
external open class SharedWorker(scriptURL: String, name: String = definedExternally, options: WorkerOptions =
definedExternally) : EventTarget, AbstractWorker {\n open val port: MessagePort\n override var onerror:
((Event) -> dynamic)?\n}\n\n**\n * Exposes the JavaScript
[NavigatorConcurrentHardware](https://developer.mozilla.org/en/docs/Web/API/NavigatorConcurrentHardware) to
Kotlin\n *\npublic external interface NavigatorConcurrentHardware {\n val hardwareConcurrency:
Number\n}\n\n**\n * Exposes the JavaScript
[WorkerNavigator](https://developer.mozilla.org/en/docs/Web/API/WorkerNavigator)
to Kotlin\n *\npublic external abstract class WorkerNavigator : NavigatorID, NavigatorLanguage,
NavigatorOnLine, NavigatorConcurrentHardware {\n open val serviceWorker:
ServiceWorkerContainer\n}\n\n**\n * Exposes the JavaScript
[WorkerLocation](https://developer.mozilla.org/en/docs/Web/API/WorkerLocation) to Kotlin\n *\npublic external
abstract class WorkerLocation {\n open val href: String\n open val origin: String\n open val protocol: String\n
open val host: String\n open val hostname: String\n open val port: String\n open val pathname: String\n open
val search: String\n open val hash: String\n}\n\n**\n * Exposes the JavaScript
[Storage](https://developer.mozilla.org/en/docs/Web/API/Storage) to Kotlin\n *\npublic external abstract class
Storage {\n open val length: Int\n fun key(index: Int): String?\n fun removeItem(key: String)\n fun clear()\n
fun getItem(key: String): String?\n
 fun setItem(key: String, value: String)\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Storage.get(key: String):
String? = asDynamic()[key]\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Storage.set(key: String, value:
String) { asDynamic()[key] = value }\n\n**\n * Exposes the JavaScript
[WindowSessionStorage](https://developer.mozilla.org/en/docs/Web/API/WindowSessionStorage) to Kotlin\n
*\npublic external interface WindowSessionStorage {\n val sessionStorage: Storage\n}\n\n**\n * Exposes the
JavaScript [WindowLocalStorage](https://developer.mozilla.org/en/docs/Web/API/WindowLocalStorage) to
Kotlin\n *\npublic external interface WindowLocalStorage {\n val localStorage: Storage\n}\n\n**\n * Exposes
the JavaScript [StorageEvent](https://developer.mozilla.org/en/docs/Web/API/StorageEvent) to Kotlin\n *\npublic
external open class
StorageEvent(type: String, eventInitDict: StorageEventInit = definedExternally) : Event {\n open val key:
String?\n open val oldValue: String?\n open val newValue: String?\n open val url: String\n open val
storageArea: Storage?\n\n companion object {\n val NONE: Short\n val CAPTURING_PHASE: Short\n
 val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n }\n}\n\npublic external interface
StorageEventInit : EventInit {\n var key: String? /* = null */\n get() = definedExternally\n set(value) =
definedExternally\n var oldValue: String? /* = null */\n get() = definedExternally\n set(value) =
definedExternally\n var newValue: String? /* = null */\n get() = definedExternally\n set(value) =
definedExternally\n var url: String? /* = "" */\n get() = definedExternally\n set(value) =
definedExternally\n var storageArea: Storage? /* = null */\n get() = definedExternally\n
 set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun StorageEventInit(key: String? = null,
oldValue: String? = null, newValue: String? = null, url: String? = "", storageArea: Storage? = null, bubbles:
Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): StorageEventInit {\n val o =
js("{}")\n o["key"] = key\n o["oldValue"] = oldValue\n o["newValue"] = newValue\n o["url"] =
url\n o["storageArea"] = storageArea\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n
o["composed"] = composed\n return o\n}\n\npublic external abstract class HTMLElement :
HTMLElement {\n open var align: String\n open var alt: String\n open var archive: String\n open var code:
String\n open var codeBase: String\n open var height: String\n open var hspace: Int\n open var name:

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String\n open var _object: String\n
 open var vspace: Int\n open var width: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n\n /**\n * Exposes the JavaScript [HTMLMarqueeElement](https://developer.mozilla.org/en/docs/Web/API/HTMLMarqueeElement) to Kotlin\n */\n public external abstract class HTMLMarqueeElement : HTMLElement {\n open var behavior: String\n open var bgColor: String\n open var direction: String\n open var height: String\n open var hspace: Int\n open var loop: Int\n open var scrollAmount: Int\n open var scrollDelay: Int\n open var trueSpeed: Boolean\n open var vspace: Int\n open var width: String\n open var onbounce: ((Event) -> dynamic)?\n open var onfinish: ((Event) -> dynamic)?\n open var onstart: ((Event) -> dynamic)?\n fun start()\n fun stop()\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n\n /**\n * Exposes the JavaScript [HTMLFrameSetElement](https://developer.mozilla.org/en/docs/Web/API/HTMLFrameSetElement) to Kotlin\n */\n public external abstract class HTMLFrameSetElement : HTMLElement, WindowEventHandlers {\n open var cols: String\n open var rows: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n\n public external abstract class HTMLFrameElement : HTMLElement {\n open var name: String\n open var scrolling: String\n open var src: String\n open var frameBorder: String\n open var longDesc: String\n open var noResize: Boolean\n open val contentDocument: Document?\n open val contentWindow: Window?\n open var marginHeight: String\n open var marginWidth: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n }\n }\n }\n }\n}

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DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external abstract class
HTMLDirectoryElement : HTMLElement {\n open var compact: Boolean\n\n companion object {\n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n
 val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[HTMLFontElement](https://developer.mozilla.org/en/docs/Web/API/HTMLFontElement) to Kotlin\n *\npublic
external abstract class HTMLFontElement : HTMLElement {\n open var color: String\n open var face: String\n
open var size: String\n\n companion object {\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE:
Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val
DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val
NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val
DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n
 val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external
interface External {\n fun AddSearchProvider()\n fun IsSearchProviderInstalled()\n}\n\npublic external interface
EventInit {\n var bubbles: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n var cancelable: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n var composed: Boolean? /* = false */\n get() = definedExternally\n set(value)
= definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\n\npublic inline fun EventInit(bubbles: Boolean? = false,
cancelable: Boolean? = false, composed: Boolean? = false): EventInit {\n val o = js("{}")\n o["bubbles"] =
bubbles\n o["cancelable"] = cancelable\n o["composed"] = composed\n return o\n}\n\n/**\n * Exposes the
JavaScript [CustomEvent](https://developer.mozilla.org/en/docs/Web/API/CustomEvent) to Kotlin\n *\npublic
external open class CustomEvent(type: String, eventInitDict: CustomEventInit = definedExternally) : Event {\n
open val detail: Any?\n fun initCustomEvent(type: String, bubbles: Boolean, cancelable: Boolean, detail:
Any?)\n\n companion object {\n val NONE: Short\n val CAPTURING_PHASE: Short\n val
AT_TARGET: Short\n val BUBBLING_PHASE: Short\n }\n}\n\npublic external interface CustomEventInit :
EventInit {\n var detail: Any? /* = null */\n get() = definedExternally\n set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\n\npublic inline fun CustomEventInit(detail: Any? = null,
bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): CustomEventInit {\n val o
= js("{}")\n o["detail"] = detail\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n
o["composed"] = composed\n return o\n}\n\npublic external interface EventListenerOptions {\n var capture:
Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\n\npublic inline fun EventListenerOptions(capture:

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Boolean? = false): EventListenerOptions {\n val o = js("{}")\n o["capture"] = capture\n return
o}\n\n\npublic external interface AddEventListenerOptions : EventListenerOptions {\n var
passive: Boolean? /* = false */\n get() = definedExternally\n set(value) = definedExternally\n var once:
Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun AddEventListenerOptions(passive:
Boolean? = false, once: Boolean? = false, capture: Boolean? = false): AddEventListenerOptions {\n val o =
js("{}")\n o["passive"] = passive\n o["once"] = once\n o["capture"] = capture\n return o}\n\n\npublic
external interface NonElementParentNode {\n fun getElementById(elementId: String): Element?\n}\n\n/**\n *
Exposes the JavaScript
[DocumentOrShadowRoot](https://developer.mozilla.org/en/docs/Web/API/DocumentOrShadowRoot) to Kotlin\n
*/\n\npublic external interface DocumentOrShadowRoot {\n val fullscreenElement: Element?\n get() =
definedExternally\n}\n\n/**\n * Exposes the JavaScript
[ParentNode](https://developer.mozilla.org/en/docs/Web/API/ParentNode)
to Kotlin\n */\n\npublic external interface ParentNode {\n val children: HTMLCollection\n val firstElementChild:
Element?\n get() = definedExternally\n val lastElementChild: Element?\n get() = definedExternally\n
val childElementCount: Int\n fun prepend(vararg nodes: dynamic)\n fun append(vararg nodes: dynamic)\n fun
querySelector(selectors: String): Element?\n fun querySelectorAll(selectors: String): NodeList\n}\n\n/**\n *
Exposes the JavaScript
[NonDocumentTypeChildNode](https://developer.mozilla.org/en/docs/Web/API/NonDocumentTypeChildNode) to
Kotlin\n */\n\npublic external interface NonDocumentTypeChildNode {\n val previousElementSibling: Element?\n
get() = definedExternally\n val nextElementSibling: Element?\n get() = definedExternally\n}\n\n/**\n *
Exposes the JavaScript
[ChildNode](https://developer.mozilla.org/en/docs/Web/API/ChildNode) to Kotlin\n
*/\n\npublic
external interface ChildNode {\n fun before(vararg nodes: dynamic)\n fun after(vararg nodes: dynamic)\n fun
replaceWith(vararg nodes: dynamic)\n fun remove()\n}\n\n/**\n * Exposes the JavaScript
[Slotable](https://developer.mozilla.org/en/docs/Web/API/Slotable) to Kotlin\n */\n\npublic external interface Slotable
{\n val assignedSlot: HTMLSlotElement?\n get() = definedExternally\n}\n\n/**\n * Exposes the JavaScript
[NodeList](https://developer.mozilla.org/en/docs/Web/API/NodeList) to Kotlin\n */\n\npublic external abstract class
NodeList : ItemArrayLike<Node> {\n override fun item(index: Int):
Node?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun NodeList.get(index: Int):
Node? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[HTMLCollection](https://developer.mozilla.org/en/docs/Web/API/HTMLCollection) to Kotlin\n */\n\npublic
external abstract class HTMLCollection : ItemArrayLike<Element>,
UnionElementOrHTMLCollection {\n override fun item(index: Int): Element?\n fun namedItem(name: String):
Element?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun HTMLCollection.get(index:
Int): Element? = asDynamic()[index]\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun HTMLCollection.get(name:
String): Element? = asDynamic()[name]\n\n/**\n * Exposes the JavaScript
[MutationObserver](https://developer.mozilla.org/en/docs/Web/API/MutationObserver) to Kotlin\n */\n\npublic
external open class MutationObserver(callback: (Array<MutationRecord>, MutationObserver) -> Unit) {\n fun
observe(target: Node, options: MutationObserverInit = definedExternally)\n fun disconnect()\n fun
takeRecords(): Array<MutationRecord>\n}\n\n/**\n * Exposes the JavaScript
[MutationObserverInit](https://developer.mozilla.org/en/docs/Web/API/MutationObserverInit)
to Kotlin\n */\n\npublic external interface MutationObserverInit {\n var childList: Boolean? /* = false */\n get()
= definedExternally\n set(value) = definedExternally\n var attributes: Boolean?\n get() =

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definedExternally\n set(value) = definedExternally\n var characterData: Boolean?\n get() =
definedExternally\n set(value) = definedExternally\n var subtree: Boolean? /* = false */\n get() =
definedExternally\n set(value) = definedExternally\n var attributeOldValue: Boolean?\n get() =
definedExternally\n set(value) = definedExternally\n var characterDataOldValue: Boolean?\n get() =
definedExternally\n set(value) = definedExternally\n var attributeFilter: Array<String>?\n get() =
definedExternally\n set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun MutationObserverInit(childList:
Boolean? = false, attributes: Boolean? = undefined, characterData: Boolean? = undefined, subtree: Boolean? =
false, attributeOldValue: Boolean? = undefined, characterDataOldValue: Boolean? = undefined, attributeFilter:
Array<String>? = undefined): MutationObserverInit {\n val o = js(\"({})\")\n o[\"childList\"] = childList\n o[\"attributes\"] = attributes\n o[\"characterData\"] = characterData\n o[\"subtree\"] = subtree\n o[\"attributeOldValue\"] = attributeOldValue\n o[\"characterDataOldValue\"] = characterDataOldValue\n o[\"attributeFilter\"] = attributeFilter\n return o\n}\n\n/**\n * Exposes the JavaScript
[MutationRecord](https://developer.mozilla.org/en/docs/Web/API/MutationRecord) to Kotlin\n */\npublic external
abstract class MutationRecord {\n open val type: String\n open val target: Node\n open val addedNodes:
NodeList\n open val removedNodes: NodeList\n open val previousSibling: Node?\n open val nextSibling:
Node?\n open val attributeName:
String?\n open val attributeNamespace: String?\n open val oldValue: String?\n}\n\n/**\n * Exposes the
JavaScript [Node](https://developer.mozilla.org/en/docs/Web/API/Node) to Kotlin\n */\npublic external abstract
class Node : EventTarget {\n open val nodeType: Short\n open val nodeName: String\n open val baseURI:
String\n open val isConnected: Boolean\n open val ownerDocument: Document?\n open val parentNode:
Node?\n open val parentElement: Element?\n open val childNodes: NodeList\n open val firstChild: Node?\n
open val lastChild: Node?\n open val previousSibling: Node?\n open val nextSibling: Node?\n open var
nodeValue: String?\n open var textContent: String?\n fun getRootNode(options: GetRootNodeOptions =
definedExternally): Node\n fun hasChildNodes(): Boolean\n fun normalize()\n fun cloneNode(deep: Boolean
= definedExternally): Node\n fun isEqualNode(otherNode: Node?): Boolean\n fun isSameNode(otherNode:
Node?):
Boolean\n fun compareDocumentPosition(other: Node): Short\n fun contains(other: Node?): Boolean\n fun
lookupPrefix(namespace: String?): String?\n fun lookupNamespaceURI(prefix: String?): String?\n fun
isDefaultNamespace(namespace: String?): Boolean\n fun insertBefore(node: Node, child: Node?): Node\n fun
appendChild(node: Node): Node\n fun replaceChild(node: Node, child: Node): Node\n fun removeChild(child:
Node): Node\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE:
Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING:
Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val
DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n
 val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external interface
GetRootNodeOptions {\n var composed: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun GetRootNodeOptions(composed:
Boolean? = false): GetRootNodeOptions {\n val o = js(\"({})\")\n o[\"composed\"] = composed\n return
o\n}\n\n/**\n * Exposes the JavaScript [Document](https://developer.mozilla.org/en/docs/Web/API/Document) to
Kotlin\n */\npublic external open class Document : Node, GlobalEventHandlers,
DocumentAndElementEventHandlers, NonElementParentNode, DocumentOrShadowRoot, ParentNode,

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GeometryUtils {\n open val implementation: DOMImplementation\n
 open val URL: String\n open val documentURI: String\n open val origin: String\n open val compatMode:
String\n open val characterSet: String\n open val charset: String\n open val inputEncoding: String\n open val
contentType: String\n open val doctype: DocumentType?\n open val documentElement: Element?\n open val
location: Location?\n var domain: String\n open val referrer: String\n var cookie: String\n open val
lastModified: String\n open val readyState: DocumentReadyState\n var title: String\n var dir: String\n var
body: HTMLElement?\n open val head: HTMLHeadElement?\n open val images: HTMLCollection\n open val
embeds: HTMLCollection\n open val plugins: HTMLCollection\n open val links: HTMLCollection\n open val
forms: HTMLCollection\n open val scripts: HTMLCollection\n open val currentScript:
HTMLScriptElement?\n open val defaultView: Window?\n open val activeElement: Element?\n var
designMode:
String\n var onreadystatechange: ((Event) -> dynamic)?\n var fgColor: String\n var linkColor: String\n var
vlinkColor: String\n var alinkColor: String\n var bgColor: String\n open val anchors: HTMLCollection\n
open val applets: HTMLCollection\n open val all: HTMLAllCollection\n open val scrollingElement: Element?\n
open val styleSheets: StyleSheetList\n open val rootElement: SVGSVGElement?\n open val fullscreenEnabled:
Boolean\n open val fullscreen: Boolean\n var onfullscreenchange: ((Event) -> dynamic)?\n var
onfullscreenerror: ((Event) -> dynamic)?\n override var onabort: ((Event) -> dynamic)?\n override var onblur:
((FocusEvent) -> dynamic)?\n override var oncancel: ((Event) -> dynamic)?\n override var oncanplay: ((Event) -
> dynamic)?\n override var oncanplaythrough: ((Event) -> dynamic)?\n override var onchange: ((Event) ->
dynamic)?\n override var onclick: ((MouseEvent) -> dynamic)?\n override var onclose:
((Event) -> dynamic)?\n override var oncontextmenu: ((MouseEvent) -> dynamic)?\n override var
oncuechange: ((Event) -> dynamic)?\n override var ondblclick: ((MouseEvent) -> dynamic)?\n override var
ondrag: ((DragEvent) -> dynamic)?\n override var ondragend: ((DragEvent) -> dynamic)?\n override var
ondragenter: ((DragEvent) -> dynamic)?\n override var ondragexit: ((DragEvent) -> dynamic)?\n override var
ondragleave: ((DragEvent) -> dynamic)?\n override var ondragover: ((DragEvent) -> dynamic)?\n override var
ondragstart: ((DragEvent) -> dynamic)?\n override var ondrop: ((DragEvent) -> dynamic)?\n override var
ondurationchange: ((Event) -> dynamic)?\n override var onemptied: ((Event) -> dynamic)?\n override var
onended: ((Event) -> dynamic)?\n override var onerror: ((dynamic, String, Int, Int, Any?) -> dynamic)?\n
override var onfocus: ((FocusEvent) -> dynamic)?\n override var oninput: ((InputEvent) -> dynamic)?\n override
var oninvalid:
((Event) -> dynamic)?\n override var onkeydown: ((KeyboardEvent) -> dynamic)?\n override var onkeypress:
((KeyboardEvent) -> dynamic)?\n override var onkeyup: ((KeyboardEvent) -> dynamic)?\n override var onload:
((Event) -> dynamic)?\n override var onloadeddata: ((Event) -> dynamic)?\n override var onloadedmetadata:
((Event) -> dynamic)?\n override var onloadend: ((Event) -> dynamic)?\n override var onloadstart:
((ProgressEvent) -> dynamic)?\n override var onmousedown: ((MouseEvent) -> dynamic)?\n override var
onmouseenter: ((MouseEvent) -> dynamic)?\n override var onmouseleave: ((MouseEvent) -> dynamic)?\n
override var onmousemove: ((MouseEvent) -> dynamic)?\n override var onmouseout: ((MouseEvent) ->
dynamic)?\n override var onmouseover: ((MouseEvent) -> dynamic)?\n override var onmouseup: ((MouseEvent)
-> dynamic)?\n override var onwheel: ((WheelEvent) -> dynamic)?\n override var onpause: ((Event) ->
dynamic)?\n override var
onplay: ((Event) -> dynamic)?\n override var onplaying: ((Event) -> dynamic)?\n override var onprogress:
((ProgressEvent) -> dynamic)?\n override var onratechange: ((Event) -> dynamic)?\n override var onreset:
((Event) -> dynamic)?\n override var onresize: ((Event) -> dynamic)?\n override var onscroll: ((Event) ->
dynamic)?\n override var onseeked: ((Event) -> dynamic)?\n override var onseeking: ((Event) -> dynamic)?\n
override var onselect: ((Event) -> dynamic)?\n override var onshow: ((Event) -> dynamic)?\n override var
onstalled: ((Event) -> dynamic)?\n override var onsubmit: ((Event) -> dynamic)?\n override var onsuspend:
((Event) -> dynamic)?\n override var ontimeupdate: ((Event) -> dynamic)?\n override var ontoggle: ((Event) ->
dynamic)?\n override var onvolumechange: ((Event) -> dynamic)?\n override var onwaiting: ((Event) ->

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dynamic)?\n override var ongotpointercapture: ((PointerEvent) -> dynamic)?\n override var
onlostpointercapture:
 ((PointerEvent) -> dynamic)?\n override var onpointerdown: ((PointerEvent) -> dynamic)?\n override var
onpointermove: ((PointerEvent) -> dynamic)?\n override var onpointerup: ((PointerEvent) -> dynamic)?\n
override var onpointercancel: ((PointerEvent) -> dynamic)?\n override var onpointerover: ((PointerEvent) ->
dynamic)?\n override var onpointerout: ((PointerEvent) -> dynamic)?\n override var onpointerenter:
((PointerEvent) -> dynamic)?\n override var onpointerleave: ((PointerEvent) -> dynamic)?\n override var
oncopy: ((ClipboardEvent) -> dynamic)?\n override var oncut: ((ClipboardEvent) -> dynamic)?\n override var
onpaste: ((ClipboardEvent) -> dynamic)?\n override val fullscreenElement: Element?\n override val children:
HTMLCollection\n override val firstElementChild: Element?\n override val lastElementChild: Element?\n
override val childElementCount: Int\n fun getElementsByTagName(qualifiedName: String): HTMLCollection\n
 fun getElementsByTagNameNS(namespace: String?, localName: String): HTMLCollection\n fun
getElementsByTagName(className: String): HTMLCollection\n fun createElement(localName: String,
options: ElementCreationOptions = definedExternally): Element\n fun createElementNS(namespace: String?,
qualifiedName: String, options: ElementCreationOptions = definedExternally): Element\n fun
createDocumentFragment(): DocumentFragment\n fun createTextNode(data: String): Text\n fun
createCDATASection(data: String): CDATASection\n fun createComment(data: String): Comment\n fun
createProcessingInstruction(target: String, data: String): ProcessingInstruction\n fun importNode(node: Node,
deep: Boolean = definedExternally): Node\n fun adoptNode(node: Node): Node\n fun
createAttribute(localName: String): Attr\n fun createAttributeNS(namespace: String?, qualifiedName: String):
Attr\n fun createEvent(`interface`: String): Event\n fun createRange(): Range\n fun
createNodeIterator(root: Node, whatToShow: Int = definedExternally, filter: NodeFilter? = definedExternally):
NodeIterator\n fun createNodeIterator(root: Node, whatToShow: Int = definedExternally, filter: ((Node) -> Short)?
= definedExternally): NodeIterator\n fun createTreeWalker(root: Node, whatToShow: Int = definedExternally,
filter: NodeFilter? = definedExternally): TreeWalker\n fun createTreeWalker(root: Node, whatToShow: Int =
definedExternally, filter: ((Node) -> Short)? = definedExternally): TreeWalker\n fun
getElementsByTagName(elementName: String): NodeList\n fun open(type: String = definedExternally, replace:
String = definedExternally): Document\n fun open(url: String, name: String, features: String): Window\n fun
close()\n fun write(vararg text: String)\n fun writeln(vararg text: String)\n fun hasFocus(): Boolean\n fun
execCommand(commandId: String, showUI: Boolean = definedExternally, value: String = definedExternally):
Boolean\n fun queryCommandEnabled(commandId:
String): Boolean\n fun queryCommandIndeterm(commandId: String): Boolean\n fun
queryCommandState(commandId: String): Boolean\n fun queryCommandSupported(commandId: String):
Boolean\n fun queryCommandValue(commandId: String): String\n fun clear()\n fun captureEvents()\n fun
releaseEvents()\n fun elementFromPoint(x: Double, y: Double): Element?\n fun elementsFromPoint(x: Double,
y: Double): Array<Element>\n fun caretPositionFromPoint(x: Double, y: Double): CaretPosition?\n fun
createTouch(view: Window, target: EventTarget, identifier: Int, pageX: Int, pageY: Int, screenX: Int, screenY: Int):
Touch\n fun createTouchList(vararg touches: Touch): TouchList\n fun exitFullscreen(): Promise<Unit>\n
override fun getElementById(elementId: String): Element?\n override fun prepend(vararg nodes: dynamic)\n
override fun append(vararg nodes: dynamic)\n override fun querySelector(selectors: String): Element?\n
override fun
 querySelectorAll(selectors: String): NodeList\n override fun getBoxQuads(options: BoxQuadOptions /* =
definedExternally */): Array<DOMQuad>\n override fun convertQuadFromNode(quad: dynamic, from: dynamic,
options: ConvertCoordinateOptions /* = definedExternally */): DOMQuad\n override fun
convertRectFromNode(rect: DOMRectReadOnly, from: dynamic, options: ConvertCoordinateOptions /* =
definedExternally */): DOMQuad\n override fun convertPointFromNode(point: DOMPointInit, from: dynamic,
options: ConvertCoordinateOptions /* = definedExternally */): DOMPoint\n\n companion object {\n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val

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CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE:
Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n
val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n
 val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n
}\n}\n\n@Suppress(\\"INVISIBLE_REFERENCE\",
\\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun Document.get(name: String):
dynamic = asDynamic()[name]\n\n/**\n * Exposes the JavaScript
[XMLDocument](https://developer.mozilla.org/en/docs/Web/API/XMLDocument) to Kotlin\n */\npublic external
open class XMLDocument : Document {\n companion object {\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n
 val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE:
Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external interface
ElementCreationOptions {\n var `is`: String?\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\\"INVISIBLE_REFERENCE\",
\\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ElementCreationOptions(`is`: String?
= undefined): ElementCreationOptions {\n val o = js(\\"({})\")\n o[\"is\"] = `is`\n return o\n}\n\n/**\n *
Exposes the JavaScript
[DOMImplementation](https://developer.mozilla.org/en/docs/Web/API/DOMImplementation)
to Kotlin\n */\npublic external abstract class DOMImplementation {\n fun createDocumentType(qualifiedName:
String, publicId: String, systemId: String): DocumentType\n fun createDocument(namespace: String?,
qualifiedName: String, doctype: DocumentType? = definedExternally): XMLDocument\n fun
createHTMLDocument(title: String = definedExternally): Document\n fun hasFeature(): Boolean\n}\n\n/**\n *
Exposes the JavaScript [DocumentType](https://developer.mozilla.org/en/docs/Web/API/DocumentType) to
Kotlin\n */\npublic external abstract class DocumentType : Node, ChildNode {\n open val name: String\n open
val publicId: String\n open val systemId: String\n\n companion object {\n val ELEMENT_NODE: Short\n
 val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n
 val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[DocumentFragment](https://developer.mozilla.org/en/docs/Web/API/DocumentFragment) to Kotlin\n */\npublic
external open class DocumentFragment : Node, NonElementParentNode, ParentNode {\n override val children:
HTMLCollection\n override val firstElementChild: Element?\n override val lastElementChild: Element?\n
 override val childElementCount: Int\n override fun getElementById(elementId: String): Element?\n override fun

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prepend(vararg nodes: dynamic)\n override fun
append(vararg nodes: dynamic)\n override fun querySelector(selectors: String): Element?\n override fun
querySelectorAll(selectors: String): NodeList\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[ShadowRoot](https://developer.mozilla.org/en/docs/Web/API/ShadowRoot)
to Kotlin\n *

public external open class ShadowRoot : DocumentFragment, DocumentOrShadowRoot {\n open
val mode: ShadowRootMode\n open val host: Element\n override val fullscreenElement: Element?\n
companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val
TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC:
Short\n }\n}\n\n/**\n * Exposes the JavaScript
[Element](https://developer.mozilla.org/en/docs/Web/API/Element) to Kotlin\n *

public external abstract class
Element : Node, ParentNode, NonDocumentTypeChildNode, ChildNode, Slotable, GeometryUtils,
UnionElementOrHTMLCollection, UnionElementOrRadioNodeList, UnionElementOrMouseEvent,
UnionElementOrProcessingInstruction {\n open val namespaceURI: String?\n open val prefix: String?\n
open val localName: String\n open val tagName: String\n open var id: String\n open var className: String\n
open val classList: DOMTokenList\n open var slot: String\n open val attributes: NamedNodeMap\n
open val shadowRoot: ShadowRoot?\n open var scrollTop: Double\n open var scrollLeft: Double\n
open val scrollWidth: Int\n open val scrollHeight: Int\n open val clientTop: Int\n open val clientLeft: Int\n
open val clientWidth: Int\n open val clientHeight: Int\n open var innerHTML: String\n
open var outerHTML: String\n fun hasAttributes(): Boolean\n fun getAttributeNames(): Array<String>\n
fun getAttribute(qualifiedName: String): String?\n fun getAttributeNS(namespace: String?, localName: String):
String?\n fun setAttribute(qualifiedName: String, value: String)\n fun setAttributeNS(namespace: String?,
qualifiedName: String, value: String)\n fun removeAttribute(qualifiedName: String)\n fun
removeAttributeNS(namespace: String?, localName: String)\n fun hasAttribute(qualifiedName: String): Boolean\n
fun hasAttributeNS(namespace: String?, localName: String): Boolean\n fun getAttributeNode(qualifiedName:
String): Attr?\n fun getAttributeNodeNS(namespace: String?, localName: String): Attr?\n fun
setAttributeNode(attr: Attr): Attr?\n fun setAttributeNodeNS(attr: Attr): Attr?\n fun removeAttributeNode(attr:
Attr): Attr\n fun attachShadow(init: ShadowRootInit): ShadowRoot\n fun closest(selectors: String): Element?\n
fun
matches(selectors: String): Boolean\n fun webkitMatchesSelector(selectors: String): Boolean\n fun
getElementsByTagName(qualifiedName: String): HTMLCollection\n fun
getElementsByTagNameNS(namespace: String?, localName: String): HTMLCollection\n fun
getElementsByClassName(classNames: String): HTMLCollection\n fun insertAdjacentElement(where: String,

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element: Element): Element?
fun insertAdjacentText(where: String, data: String)
fun getClientRects():
Array<DOMRect>
fun getBoundingClientRect(): DOMRect
fun scrollIntoView()
fun scrollIntoView(arg: dynamic)
fun scroll(options: ScrollToOptions = definedExternally)
fun scroll(x: Double,
y: Double)
fun scrollTo(options: ScrollToOptions = definedExternally)
fun scrollTo(x: Double, y: Double)
fun scrollBy(options: ScrollToOptions = definedExternally)
fun scrollBy(x: Double, y: Double)
fun insertAdjacentHTML(position: String, text: String)
fun setPointerCapture(pointerId:
Int)
fun releasePointerCapture(pointerId: Int)
fun hasPointerCapture(pointerId: Int): Boolean
fun requestFullscreen(): Promise<Unit>
companion object {
 val ELEMENT_NODE: Short
 val ATTRIBUTE_NODE: Short
 val TEXT_NODE: Short
 val CDATA_SECTION_NODE: Short
 val ENTITY_REFERENCE_NODE: Short
 val ENTITY_NODE: Short
 val PROCESSING_INSTRUCTION_NODE: Short
 val COMMENT_NODE: Short
 val DOCUMENT_NODE: Short
 val DOCUMENT_TYPE_NODE: Short
 val DOCUMENT_FRAGMENT_NODE: Short
 val NOTATION_NODE: Short
 val DOCUMENT_POSITION_DISCONNECTED: Short
 val DOCUMENT_POSITION_PRECEDING: Short
 val DOCUMENT_POSITION_FOLLOWING: Short
 val DOCUMENT_POSITION_CONTAINS: Short
 val DOCUMENT_POSITION_CONTAINED_BY: Short
 val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short
}
}
public external interface
ShadowRootInit {
 var mode:
ShadowRootMode
}
@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
public inline fun ShadowRootInit(mode:
ShadowRootMode?): ShadowRootInit {
 val o = js("{}")
 o["mode"] = mode
 return o
}
/**
 * Exposes the JavaScript [NamedNodeMap](https://developer.mozilla.org/en/docs/Web/API/NamedNodeMap) to
 * Kotlin
 */
public external abstract class NamedNodeMap : ItemArrayLike<Attr> {
 fun
 getNamedItemNS(namespace: String?, localName: String): Attr?
 fun setNamedItem(attr: Attr): Attr?
 fun
 setNamedItemNS(attr: Attr): Attr?
 fun removeNamedItem(qualifiedName: String): Attr?
 fun
 removeNamedItemNS(namespace: String?, localName: String): Attr?
 override fun item(index: Int): Attr?
 fun
 getNamedItem(qualifiedName: String): Attr?
}
@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
public inline operator fun NamedNodeMap.get(index:
Int): Attr? = asDynamic()[index]
@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
public inline operator fun
NamedNodeMap.get(qualifiedName: String): Attr? = asDynamic()[qualifiedName]
/**
 * Exposes the
 * JavaScript [Attr](https://developer.mozilla.org/en/docs/Web/API/Attr) to Kotlin
 */
public external abstract class
Attr : Node {
 open val namespaceURI: String?
 open val prefix: String?
 open val localName: String
 open val name: String
 open var value: String
 open val ownerElement: Element?
 open val specified:
Boolean
companion object {
 val ELEMENT_NODE: Short
 val ATTRIBUTE_NODE: Short
 val TEXT_NODE: Short
 val CDATA_SECTION_NODE: Short
 val ENTITY_REFERENCE_NODE:
Short
 val ENTITY_NODE: Short
 val PROCESSING_INSTRUCTION_NODE: Short
 val COMMENT_NODE: Short
 val DOCUMENT_NODE: Short
 val DOCUMENT_TYPE_NODE: Short
 val DOCUMENT_FRAGMENT_NODE: Short
 val NOTATION_NODE: Short
 val DOCUMENT_POSITION_DISCONNECTED: Short
 val DOCUMENT_POSITION_PRECEDING: Short
 val DOCUMENT_POSITION_FOLLOWING: Short
 val DOCUMENT_POSITION_CONTAINS: Short
 val DOCUMENT_POSITION_CONTAINED_BY:
Short
 val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short
}
}
/**
 * Exposes the
 * JavaScript [CharacterData](https://developer.mozilla.org/en/docs/Web/API/CharacterData) to Kotlin
 */
public external abstract class CharacterData : Node, NonDocumentTypeChildNode, ChildNode {
 open var
 data: String
 open val length: Int
 fun substringData(offset: Int, count: Int): String
 fun appendData(data:
String)
 fun insertData(offset: Int, data: String)
 fun deleteData(offset: Int, count: Int)
 fun
 replaceData(offset: Int, count: Int, data: String)
companion object {
 val ELEMENT_NODE: Short

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val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE:
Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n \n /** \n * Exposes the JavaScript
[Text](https://developer.mozilla.org/en/docs/Web/API/Text) to Kotlin \n * \n public external open class Text(data:
String = definedExternally) : CharacterData, Slotable, GeometryUtils { \n open val wholeText: String \n override
val assignedSlot: HTMLSlotElement? \n override val previousElementSibling: Element? \n
 override val nextElementSibling: Element? \n fun splitText(offset: Int): Text \n override fun
getBoxQuads(options: BoxQuadOptions /* = definedExternally */): Array<DOMQuad> \n override fun
convertQuadFromNode(quad: dynamic, from: dynamic, options: ConvertCoordinateOptions /* = definedExternally
*/): DOMQuad \n override fun convertRectFromNode(rect: DOMRectReadOnly, from: dynamic, options:
ConvertCoordinateOptions /* = definedExternally */): DOMQuad \n override fun convertPointFromNode(point:
DOMPointInit, from: dynamic, options: ConvertCoordinateOptions /* = definedExternally */): DOMPoint \n
 override fun before(vararg nodes: dynamic) \n override fun after(vararg nodes: dynamic) \n override fun
replaceWith(vararg nodes: dynamic) \n override fun remove() \n \n companion object { \n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n \n /** \n * Exposes the JavaScript
[CDATASection](https://developer.mozilla.org/en/docs/Web/API/CDATASection) to Kotlin \n * \n public external
open class CDATASection : Text { \n companion object { \n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE:
Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val
DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val
NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val
DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n
 val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n \n /** \n * Exposes
the JavaScript [ProcessingInstruction](https://developer.mozilla.org/en/docs/Web/API/ProcessingInstruction) to
Kotlin \n * \n public external abstract class ProcessingInstruction : CharacterData, LinkStyle,
UnionElementOrProcessingInstruction { \n open val target: String \n \n companion object { \n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val

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DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n \n /** \n * Exposes the JavaScript
[Comment](https://developer.mozilla.org/en/docs/Web/API/Comment) to Kotlin \n * \n public external open class
Comment(data: String = definedExternally) : CharacterData { \n override val previousElementSibling: Element? \n
 override val nextElementSibling: Element? \n override fun before(vararg nodes: dynamic) \n override fun
after(vararg nodes: dynamic) \n
 override fun replaceWith(vararg nodes: dynamic) \n override fun remove() \n \n companion object { \n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n \n /** \n * Exposes the JavaScript
[Range](https://developer.mozilla.org/en/docs/Web/API/Range) to Kotlin \n * \n public external open class
Range { \n open val startContainer: Node \n open val startOffset: Int \n open val endContainer: Node \n open
val endOffset: Int \n open val collapsed: Boolean \n open val commonAncestorContainer: Node \n fun
setStart(node: Node, offset: Int) \n fun setEnd(node: Node, offset: Int) \n fun setStartBefore(node: Node) \n fun
setStartAfter(node: Node) \n fun setEndBefore(node: Node) \n fun setEndAfter(node: Node) \n fun
collapse(toStart: Boolean = definedExternally) \n fun selectNode(node: Node) \n fun selectNodeContents(node:
Node) \n fun compareBoundaryPoints(how: Short, sourceRange: Range): Short \n fun deleteContents() \n fun
extractContents(): DocumentFragment \n fun cloneContents(): DocumentFragment \n fun insertNode(node:
Node) \n fun surroundContents(newParent: Node) \n fun cloneRange(): Range \n fun detach() \n fun
isPointInRange(node: Node, offset: Int): Boolean \n fun comparePoint(node: Node, offset: Int): Short \n fun
intersectsNode(node:
Node): Boolean \n fun getClientRects(): Array<DOMRect> \n fun getBoundingClientRect(): DOMRect \n fun
createContextualFragment(fragment: String): DocumentFragment \n \n companion object { \n val
START_TO_START: Short\n val START_TO_END: Short\n val END_TO_END: Short\n val
END_TO_START: Short\n } \n} \n \n /** \n * Exposes the JavaScript
[NodeIterator](https://developer.mozilla.org/en/docs/Web/API/NodeIterator) to Kotlin \n * \n public external abstract
class NodeIterator { \n open val root: Node \n open val referenceNode: Node \n open val
pointerBeforeReferenceNode: Boolean \n open val whatToShow: Int \n open val filter: NodeFilter? \n fun
nextNode(): Node? \n fun previousNode(): Node? \n fun detach() \n} \n \n /** \n * Exposes the JavaScript
[TreeWalker](https://developer.mozilla.org/en/docs/Web/API/TreeWalker) to Kotlin \n * \n public external abstract
class TreeWalker { \n open val root: Node \n open val whatToShow: Int \n open
val filter: NodeFilter? \n open var currentNode: Node \n fun parentNode(): Node? \n fun firstChild(): Node? \n
fun lastChild(): Node? \n fun previousSibling(): Node? \n fun nextSibling(): Node? \n fun previousNode():
Node? \n fun nextNode(): Node? \n} \n \n /** \n * Exposes the JavaScript
[NodeFilter](https://developer.mozilla.org/en/docs/Web/API/NodeFilter) to Kotlin \n
* \n @Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE") \n public external interface NodeFilter { \n
fun acceptNode(node: Node): Short \n \n companion object { \n val FILTER_ACCEPT: Short\n val
FILTER_REJECT: Short\n val FILTER_SKIP: Short\n val SHOW_ALL: Int\n val
SHOW_ELEMENT: Int\n val SHOW_ATTRIBUTE: Int\n val SHOW_TEXT: Int\n val
SHOW_CDATA_SECTION: Int\n val SHOW_ENTITY_REFERENCE: Int\n val SHOW_ENTITY: Int\n

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\ "INVISIBLE_MEMBER")\n @kotlin.internal.InlineOnly\n public inline operator fun DOMRectList.get(index: Int):
DOMRect? = asDynamic()[index]\n\n /**\n * Exposes the JavaScript
[DOMQuad](https://developer.mozilla.org/en/docs/Web/API/DOMQuad) to Kotlin\n\n */\n public external open class
DOMQuad {\n constructor(p1: DOMPointInit = definedExternally, p2: DOMPointInit = definedExternally, p3:
DOMPointInit = definedExternally, p4: DOMPointInit = definedExternally)\n constructor(rect: DOMRectInit)\n
open val p1: DOMPoint\n open val p2:
DOMPoint\n open val p3: DOMPoint\n open val p4: DOMPoint\n open val bounds:
DOMRectReadOnly\n}\n\n /**\n * Exposes the JavaScript
[DOMMatrixReadOnly](https://developer.mozilla.org/en/docs/Web/API/DOMMatrixReadOnly) to Kotlin\n\n
*/\n public external open class DOMMatrixReadOnly(numberSequence: Array<Double>) {\n open val a: Double\n
open val b: Double\n open val c: Double\n open val d: Double\n open val e: Double\n open val f: Double\n
open val m11: Double\n open val m12: Double\n open val m13: Double\n open val m14: Double\n open val
m21: Double\n open val m22: Double\n open val m23: Double\n open val m24: Double\n open val m31:
Double\n open val m32: Double\n open val m33: Double\n open val m34: Double\n open val m41: Double\n
open val m42: Double\n open val m43: Double\n open val m44: Double\n open val is2D: Boolean\n open
val isIdentity: Boolean\n fun translate(tx: Double, ty: Double, tz: Double = definedExternally):
DOMMatrix\n fun scale(scale: Double, originX: Double = definedExternally, originY: Double =
definedExternally): DOMMatrix\n fun scale3d(scale: Double, originX: Double = definedExternally, originY:
Double = definedExternally, originZ: Double = definedExternally): DOMMatrix\n fun scaleNonUniform(scaleX:
Double, scaleY: Double = definedExternally, scaleZ: Double = definedExternally, originX: Double =
definedExternally, originY: Double = definedExternally, originZ: Double = definedExternally): DOMMatrix\n fun
rotate(angle: Double, originX: Double = definedExternally, originY: Double = definedExternally): DOMMatrix\n
fun rotateFromVector(x: Double, y: Double): DOMMatrix\n fun rotateAxisAngle(x: Double, y: Double, z:
Double, angle: Double): DOMMatrix\n fun skewX(sx: Double): DOMMatrix\n fun skewY(sy: Double):
DOMMatrix\n fun multiply(other: DOMMatrix): DOMMatrix\n fun flipX(): DOMMatrix\n fun flipY():
DOMMatrix\n fun inverse(): DOMMatrix\n
fun transformPoint(point: DOMPointInit = definedExternally): DOMPoint\n fun toFloat32Array():
Float32Array\n fun toFloat64Array(): Float64Array\n}\n\n /**\n * Exposes the JavaScript
[DOMMatrix](https://developer.mozilla.org/en/docs/Web/API/DOMMatrix) to Kotlin\n\n */\n public external open
class DOMMatrix() : DOMMatrixReadOnly {\n constructor(transformList: String)\n constructor(other:
DOMMatrixReadOnly)\n constructor(array32: Float32Array)\n constructor(array64: Float64Array)\n
constructor(numberSequence: Array<Double>)\n override var a: Double\n override var b: Double\n override
var c: Double\n override var d: Double\n override var e: Double\n override var f: Double\n override var m11:
Double\n override var m12: Double\n override var m13: Double\n override var m14: Double\n override var
m21: Double\n override var m22: Double\n override var m23: Double\n override var m24: Double\n override
var m31: Double\n override
var m32: Double\n override var m33: Double\n override var m34: Double\n override var m41: Double\n
override var m42: Double\n override var m43: Double\n override var m44: Double\n fun multiplySelf(other:
DOMMatrix): DOMMatrix\n fun preMultiplySelf(other: DOMMatrix): DOMMatrix\n fun translateSelf(tx:
Double, ty: Double, tz: Double = definedExternally): DOMMatrix\n fun scaleSelf(scale: Double, originX: Double
= definedExternally, originY: Double = definedExternally): DOMMatrix\n fun scale3dSelf(scale: Double,
originX: Double = definedExternally, originY: Double = definedExternally, originZ: Double = definedExternally):
DOMMatrix\n fun scaleNonUniformSelf(scaleX: Double, scaleY: Double = definedExternally, scaleZ: Double =
definedExternally, originX: Double = definedExternally, originY: Double = definedExternally, originZ: Double =
definedExternally): DOMMatrix\n fun rotateSelf(angle: Double, originX: Double = definedExternally, originY:
Double = definedExternally):
DOMMatrix\n fun rotateFromVectorSelf(x: Double, y: Double): DOMMatrix\n fun rotateAxisAngleSelf(x:
Double, y: Double, z: Double, angle: Double): DOMMatrix\n fun skewXSelf(sx: Double): DOMMatrix\n fun

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skewYSelf(sy: Double): DOMMatrix\n fun invertSelf(): DOMMatrix\n fun setMatrixValue(transformList:
String): DOMMatrix\n}\n\npublic external interface ScrollOptions {\n var behavior: ScrollBehavior? /* =
ScrollBehavior.AUTO */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ScrollOptions(behavior:
ScrollBehavior? = ScrollBehavior.AUTO): ScrollOptions {\n val o = js(\"({})\")\n o[\"behavior\"] = behavior\n
return o\n}\n\n/**\n * Exposes the JavaScript
[ScrollToOptions](https://developer.mozilla.org/en/docs/Web/API/ScrollToOptions) to Kotlin\n */\n\npublic external
interface ScrollToOptions : ScrollOptions {\n
var left: Double?\n get() = definedExternally\n set(value) = definedExternally\n var top: Double?\n
get() = definedExternally\n set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ScrollToOptions(left: Double? =
undefined, top: Double? = undefined, behavior: ScrollBehavior? = ScrollBehavior.AUTO): ScrollToOptions {\n
val o = js(\"({})\")\n o[\"left\"] = left\n o[\"top\"] = top\n o[\"behavior\"] = behavior\n return o\n}\n\n/**\n *
Exposes the JavaScript [MediaQueryList](https://developer.mozilla.org/en/docs/Web/API/MediaQueryList) to
Kotlin\n */\n\npublic external abstract class MediaQueryList : EventTarget {\n open val media: String\n open val
matches: Boolean\n open var onchange: ((Event) -> dynamic)?\n fun addListener(listener: EventListener?)\n
fun addListener(listener: ((Event) -> Unit)?)\n fun removeListener(listener: EventListener?)\n
fun removeListener(listener: ((Event) -> Unit)?)\n}\n\n/**\n * Exposes the JavaScript
[MediaQueryListEvent](https://developer.mozilla.org/en/docs/Web/API/MediaQueryListEvent) to Kotlin\n
*/\n\npublic external open class MediaQueryListEvent(type: String, eventInitDict: MediaQueryListEventInit =
definedExternally) : Event {\n open val media: String\n open val matches: Boolean\n\n companion object {\n
val NONE: Short\n val CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val
BUBBLING_PHASE: Short\n }\n}\n\npublic external interface MediaQueryListEventInit : EventInit {\n var
media: String? /* = \"\" */\n get() = definedExternally\n set(value) = definedExternally\n var matches:
Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun MediaQueryListEventInit(media:
String? =
\"\", matches: Boolean? = false, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? =
false): MediaQueryListEventInit {\n val o = js(\"({})\")\n o[\"media\"] = media\n o[\"matches\"] = matches\n
o[\"bubbles\"] = bubbles\n o[\"cancelable\"] = cancelable\n o[\"composed\"] = composed\n return
o\n}\n\n/**\n * Exposes the JavaScript [Screen](https://developer.mozilla.org/en/docs/Web/API/Screen) to Kotlin\n
*/\n\npublic external abstract class Screen {\n open val availWidth: Int\n open val availHeight: Int\n open val
width: Int\n open val height: Int\n open val colorDepth: Int\n open val pixelDepth: Int\n}\n\n/**\n * Exposes
the JavaScript [CaretPosition](https://developer.mozilla.org/en/docs/Web/API/CaretPosition) to Kotlin\n */\n\npublic
external abstract class CaretPosition {\n open val offsetNode: Node\n open val offset: Int\n fun
getClientRect(): DOMRect?\n}\n\npublic external interface ScrollIntoViewOptions : ScrollOptions
{\n var block: ScrollLogicalPosition? /* = ScrollLogicalPosition.CENTER */\n get() = definedExternally\n
set(value) = definedExternally\n var inline: ScrollLogicalPosition? /* = ScrollLogicalPosition.CENTER */\n
get() = definedExternally\n set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ScrollIntoViewOptions(block:
ScrollLogicalPosition? = ScrollLogicalPosition.CENTER, inline: ScrollLogicalPosition? =
ScrollLogicalPosition.CENTER, behavior: ScrollBehavior? = ScrollBehavior.AUTO): ScrollIntoViewOptions {\n
val o = js(\"({})\")\n o[\"block\"] = block\n o[\"inline\"] = inline\n o[\"behavior\"] = behavior\n return
o\n}\n\npublic external interface BoxQuadOptions {\n var box: CSSBoxType? /* = CSSBoxType.BORDER */\n
get() = definedExternally\n set(value) = definedExternally\n var relativeTo: dynamic\n get() =
definedExternally\n

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 set(value) = definedExternally\n}\n\n@Suppress(\\"INVISIBLE_REFERENCE\",
\\"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun BoxQuadOptions(box: CSSBoxType?
= CSSBoxType.BORDER, relativeTo: dynamic = undefined): BoxQuadOptions {\n val o = js(\\"({})\")\n
o[\"box\"] = box\n o[\"relativeTo\"] = relativeTo\n return o\n}\n\npublic external interface
ConvertCoordinateOptions {\n var fromBox: CSSBoxType? /* = CSSBoxType.BORDER */\n get() =
definedExternally\n set(value) = definedExternally\n var toBox: CSSBoxType? /* = CSSBoxType.BORDER
*/\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\\"INVISIBLE_REFERENCE\",
\\"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun ConvertCoordinateOptions(fromBox:
CSSBoxType? = CSSBoxType.BORDER, toBox: CSSBoxType? = CSSBoxType.BORDER):
ConvertCoordinateOptions {\n val o = js(\\"({})\")\n o[\"fromBox\"] = fromBox\n o[\"toBox\"]
= toBox\n return o\n}\n\n/**\n * Exposes the JavaScript
[GeometryUtils](https://developer.mozilla.org/en/docs/Web/API/GeometryUtils) to Kotlin\n */\npublic external
interface GeometryUtils {\n fun getBoxQuads(options: BoxQuadOptions = definedExternally):
Array<DOMQuad>\n fun convertQuadFromNode(quad: dynamic, from: dynamic, options:
ConvertCoordinateOptions = definedExternally): DOMQuad\n fun convertRectFromNode(rect:
DOMRectReadOnly, from: dynamic, options: ConvertCoordinateOptions = definedExternally): DOMQuad\n fun
convertPointFromNode(point: DOMPointInit, from: dynamic, options: ConvertCoordinateOptions =
definedExternally): DOMPoint\n}\n\n/**\n * Exposes the JavaScript
[Touch](https://developer.mozilla.org/en/docs/Web/API/Touch) to Kotlin\n */\npublic external abstract class Touch
{\n open val identifier: Int\n open val target: EventTarget\n open val screenX: Int\n open val screenY: Int\n
open val clientX: Int\n open val clientY: Int\n open val
pageX: Int\n open val pageY: Int\n open val region: String?\n}\n\npublic external abstract class TouchList :
ItemArrayLike<Touch> {\n override fun item(index: Int):
Touch?\n}\n\n@Suppress(\\"INVISIBLE_REFERENCE\",
\\"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun TouchList.get(index: Int):
Touch? = asDynamic()[index]\n\npublic external open class TouchEvent : UIEvent {\n open val touches:
TouchList\n open val targetTouches: TouchList\n open val changedTouches: TouchList\n open val altKey:
Boolean\n open val metaKey: Boolean\n open val ctrlKey: Boolean\n open val shiftKey: Boolean\n\n companion object {\n val NONE: Short\n val CAPTURING_PHASE: Short\n val AT_TARGET:
Short\n val BUBBLING_PHASE: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[Image](https://developer.mozilla.org/en/docs/Web/API/Image) to Kotlin\n */\npublic external open class
Image(width: Int = definedExternally, height: Int = definedExternally)
: HTMLElement {\n override var onabort: ((Event) -> dynamic)?\n override var onblur: ((FocusEvent) ->
dynamic)?\n override var oncancel: ((Event) -> dynamic)?\n override var oncanplay: ((Event) -> dynamic)?\n
override var oncanplaythrough: ((Event) -> dynamic)?\n override var onchange: ((Event) -> dynamic)?\n
override var onclick: ((MouseEvent) -> dynamic)?\n override var onclose: ((Event) -> dynamic)?\n override var
oncontextmenu: ((MouseEvent) -> dynamic)?\n override var oncuechange: ((Event) -> dynamic)?\n override var
ondblclick: ((MouseEvent) -> dynamic)?\n override var ondrag: ((DragEvent) -> dynamic)?\n override var
ondragend: ((DragEvent) -> dynamic)?\n override var ondragenter: ((DragEvent) -> dynamic)?\n override var
ondragexit: ((DragEvent) -> dynamic)?\n override var ondragleave: ((DragEvent) -> dynamic)?\n override var
ondragover: ((DragEvent) -> dynamic)?\n override var ondragstart: ((DragEvent) ->
dynamic)?\n override var ondrop: ((DragEvent) -> dynamic)?\n override var ondurationchange: ((Event) ->
dynamic)?\n override var onemptied: ((Event) -> dynamic)?\n override var onended: ((Event) -> dynamic)?\n
override var onerror: ((dynamic, String, Int, Int, Any?) -> dynamic)?\n override var onfocus: ((FocusEvent) ->
dynamic)?\n override var oninput: ((InputEvent) -> dynamic)?\n override var oninvalid: ((Event) -> dynamic)?\n
override var onkeydown: ((KeyboardEvent) -> dynamic)?\n override var onkeypress: ((KeyboardEvent) ->
dynamic)?\n override var onkeyup: ((KeyboardEvent) -> dynamic)?\n override var onload: ((Event) ->

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dynamic)?\n override var onloadeddata: ((Event) -> dynamic)?\n override var onloadedmetadata: ((Event) ->
dynamic)?\n override var onloadend: ((Event) -> dynamic)?\n override var onloadstart: ((ProgressEvent) ->
dynamic)?\n override var onmousedown: ((MouseEvent) -> dynamic)?\n override var onmouseenter:
((MouseEvent)
-> dynamic)?\n override var onmouseleave: ((MouseEvent) -> dynamic)?\n override var onmousemove:
((MouseEvent) -> dynamic)?\n override var onmouseout: ((MouseEvent) -> dynamic)?\n override var
onmouseover: ((MouseEvent) -> dynamic)?\n override var onmouseup: ((MouseEvent) -> dynamic)?\n override
var onwheel: ((WheelEvent) -> dynamic)?\n override var onpause: ((Event) -> dynamic)?\n override var onplay:
((Event) -> dynamic)?\n override var onplaying: ((Event) -> dynamic)?\n override var onprogress:
((ProgressEvent) -> dynamic)?\n override var onratechange: ((Event) -> dynamic)?\n override var onreset:
((Event) -> dynamic)?\n override var onresize: ((Event) -> dynamic)?\n override var onscroll: ((Event) ->
dynamic)?\n override var onseeked: ((Event) -> dynamic)?\n override var onseeking: ((Event) -> dynamic)?\n
override var onselect: ((Event) -> dynamic)?\n override var onshow: ((Event) -> dynamic)?\n override var
onstalled:
((Event) -> dynamic)?\n override var onsubmit: ((Event) -> dynamic)?\n override var onsuspend: ((Event) ->
dynamic)?\n override var ontimeupdate: ((Event) -> dynamic)?\n override var ontoggle: ((Event) -> dynamic)?\n
 override var onvolumechange: ((Event) -> dynamic)?\n override var onwaiting: ((Event) -> dynamic)?\n
override var ongotpointercapture: ((PointerEvent) -> dynamic)?\n override var onlostpointercapture:
((PointerEvent) -> dynamic)?\n override var onpointerdown: ((PointerEvent) -> dynamic)?\n override var
onpointermove: ((PointerEvent) -> dynamic)?\n override var onpointerup: ((PointerEvent) -> dynamic)?\n
override var onpointercancel: ((PointerEvent) -> dynamic)?\n override var onpointerover: ((PointerEvent) ->
dynamic)?\n override var onpointerout: ((PointerEvent) -> dynamic)?\n override var onpointerenter:
((PointerEvent) -> dynamic)?\n override var onpointerleave: ((PointerEvent) -> dynamic)?\n override var
oncopy: ((ClipboardEvent)
-> dynamic)?\n override var oncut: ((ClipboardEvent) -> dynamic)?\n override var onpaste: ((ClipboardEvent) -
> dynamic)?\n override var contentEditable: String\n override val isContentEditable: Boolean\n override val
style: CSSStyleDeclaration\n override val children: HTMLCollection\n override val firstElementChild:
Element?\n override val lastElementChild: Element?\n override val childElementCount: Int\n override val
previousElementSibling: Element?\n override val nextElementSibling: Element?\n override val assignedSlot:
HTMLSlotElement?\n override fun prepend(vararg nodes: dynamic)\n override fun append(vararg nodes:
dynamic)\n override fun querySelector(selectors: String): Element?\n override fun querySelectorAll(selectors:
String): NodeList\n override fun before(vararg nodes: dynamic)\n override fun after(vararg nodes: dynamic)\n
override fun replaceWith(vararg nodes: dynamic)\n override fun remove()\n override
fun getBoxQuads(options: BoxQuadOptions /* = definedExternally */): Array<DOMQuad>\n override fun
convertQuadFromNode(quad: dynamic, from: dynamic, options: ConvertCoordinateOptions /* = definedExternally
*/): DOMQuad\n override fun convertRectFromNode(rect: DOMRectReadOnly, from: dynamic, options:
ConvertCoordinateOptions /* = definedExternally */): DOMQuad\n override fun convertPointFromNode(point:
DOMPointInit, from: dynamic, options: ConvertCoordinateOptions /* = definedExternally */): DOMPoint\n\n
companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val
TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n\npublic external open class
Audio(src: String = definedExternally) : HTMLAudioElement {\n override var onabort: ((Event) -> dynamic)?\n

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override var onBlur: ((FocusEvent) -> dynamic)?\n override var onCancel: ((Event) -> dynamic)?\n override var
onCanplay: ((Event) -> dynamic)?\n override var onCanplaythrough: ((Event) -> dynamic)?\n override var
onChange: ((Event) -> dynamic)?\n override var onClick: ((MouseEvent) -> dynamic)?\n override var onClose:
((Event) -> dynamic)?\n override var onContextMenu: ((MouseEvent) -> dynamic)?\n override var onCuechange:
((Event) -> dynamic)?\n override var ondblclick: ((MouseEvent) -> dynamic)?\n override var ondrag:
((DragEvent) -> dynamic)?\n override var ondragend: ((DragEvent) -> dynamic)?\n override var ondragenter:
((DragEvent) -> dynamic)?\n override var ondragexit: ((DragEvent) -> dynamic)?\n override var ondragleave:
((DragEvent) -> dynamic)?\n override var ondragover: ((DragEvent) -> dynamic)?\n override var ondragstart:
((DragEvent) -> dynamic)?\n override var ondrop: ((DragEvent) -> dynamic)?\n override var onDurationchange:
((Event) -> dynamic)?\n override var onemptied: ((Event) -> dynamic)?\n override var onended: ((Event) ->
dynamic)?\n override var onerror: ((dynamic, String, Int, Int, Any?) -> dynamic)?\n override var onFocus:
((FocusEvent) -> dynamic)?\n override var oninput: ((InputEvent) -> dynamic)?\n override var oninvalid:
((Event) -> dynamic)?\n override var onKeyDown: ((KeyboardEvent) -> dynamic)?\n override var onkeypress:
((KeyboardEvent) -> dynamic)?\n override var onkeyup: ((KeyboardEvent) -> dynamic)?\n override
var onload: ((Event) -> dynamic)?\n override var onloadeddata: ((Event) -> dynamic)?\n override var
onloadedmetadata: ((Event) -> dynamic)?\n override var onloadend: ((Event) -> dynamic)?\n override var
onloadstart: ((ProgressEvent) -> dynamic)?\n override var onmousedown: ((MouseEvent) -> dynamic)?\n
override var onmouseenter: ((MouseEvent) -> dynamic)?\n override var onmouseleave: ((MouseEvent) ->
dynamic)?\n override var onmousemove: ((MouseEvent) -> dynamic)?\n override var onmouseout:
((MouseEvent) -> dynamic)?\n override var onmouseover: ((MouseEvent) -> dynamic)?\n override var
onmouseup: ((MouseEvent) -> dynamic)?\n override var onwheel: ((WheelEvent) -> dynamic)?\n override var
onPause: ((Event) -> dynamic)?\n override var onPlay: ((Event) -> dynamic)?\n override var onPlaying: ((Event)
-> dynamic)?\n override var onProgress: ((ProgressEvent) -> dynamic)?\n override var onRatechange: ((Event) ->
dynamic)?\n override var onReset:
((Event) -> dynamic)?\n override var onResize: ((Event) -> dynamic)?\n override var onScroll: ((Event) ->
dynamic)?\n override var onSeeked: ((Event) -> dynamic)?\n override var onSeeking: ((Event) -> dynamic)?\n
override var onSelect: ((Event) -> dynamic)?\n override var onShow: ((Event) -> dynamic)?\n override var
onStalled: ((Event) -> dynamic)?\n override var onsubmit: ((Event) -> dynamic)?\n override var onSuspend:
((Event) -> dynamic)?\n override var onTimeupdate: ((Event) -> dynamic)?\n override var onToggle: ((Event) ->
dynamic)?\n override var onVolumechange: ((Event) -> dynamic)?\n override var onWaiting: ((Event) ->
dynamic)?\n override var onGotPointerCapture: ((PointerEvent) -> dynamic)?\n override var
onLostPointerCapture: ((PointerEvent) -> dynamic)?\n override var onPointerdown: ((PointerEvent) -> dynamic)?\n
override var onPointermove: ((PointerEvent) -> dynamic)?\n override var onPointerup: ((PointerEvent)
-> dynamic)?\n override var onPointercancel: ((PointerEvent) -> dynamic)?\n override var onPointerover:
((PointerEvent) -> dynamic)?\n override var onPointerout: ((PointerEvent) -> dynamic)?\n override var
onPointerenter: ((PointerEvent) -> dynamic)?\n override var onPointerleave: ((PointerEvent) -> dynamic)?\n
override var onCopy: ((ClipboardEvent) -> dynamic)?\n override var onCut: ((ClipboardEvent) -> dynamic)?\n
override var onPaste: ((ClipboardEvent) -> dynamic)?\n override var contentEditable: String\n override val
isContentEditable: Boolean\n override val style: CSSStyleDeclaration\n override val children:
HTMLCollection\n override val firstElementChild: Element?\n override val lastElementChild: Element?\n
override val childElementCount: Int\n override val previousElementSibling: Element?\n override val
nextElementSibling: Element?\n override val assignedSlot: HTMLSlotElement?\n override fun prepend(vararg
nodes: dynamic)\n
 override fun append(vararg nodes: dynamic)\n override fun querySelector(selectors: String): Element?\n
override fun querySelectorAll(selectors: String): NodeList\n override fun before(vararg nodes: dynamic)\n
override fun after(vararg nodes: dynamic)\n override fun replaceWith(vararg nodes: dynamic)\n override fun
remove()\n override fun getBoxQuads(options: BoxQuadOptions /* = definedExternally */): Array<DOMQuad>\n
 override fun convertQuadFromNode(quad: dynamic, from: dynamic, options: ConvertCoordinateOptions /* =

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definedExternally */): DOMQuad\n override fun convertRectFromNode(rect: DOMRectReadOnly, from:
dynamic, options: ConvertCoordinateOptions /* = definedExternally */): DOMQuad\n override fun
convertPointFromNode(point: DOMPointInit, from: dynamic, options: ConvertCoordinateOptions /* =
definedExternally */): DOMPoint\n\n companion object {\n val NETWORK_EMPTY: Short\n val
NETWORK_IDLE: Short\n val NETWORK_LOADING: Short\n
 val NETWORK_NO_SOURCE: Short\n val HAVE_NOTHING: Short\n val HAVE_METADATA:
Short\n val HAVE_CURRENT_DATA: Short\n val HAVE_FUTURE_DATA: Short\n val
HAVE_ENOUGH_DATA: Short\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n
 val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the
JavaScript [Option](https://developer.mozilla.org/en/docs/Web/API/Option) to Kotlin\n *\npublic external open
class Option(text: String = definedExternally, value: String = definedExternally, defaultSelected: Boolean =
definedExternally, selected: Boolean = definedExternally) : HTMLInputElement {\n override var onabort:
((Event) -> dynamic)?\n override var onblur: ((FocusEvent) -> dynamic)?\n override var oncancel: ((Event) ->
dynamic)?\n override var oncanplay: ((Event) -> dynamic)?\n override var oncanplaythrough: ((Event) ->
dynamic)?\n override var onchange: ((Event) -> dynamic)?\n override var onclick: ((MouseEvent) ->
dynamic)?\n override var onclose: ((Event) -> dynamic)?\n override var oncontextmenu: ((MouseEvent) ->
dynamic)?\n override var oncuechange: ((Event) -> dynamic)?\n override var ondblclick: ((MouseEvent) ->
dynamic)?\n override var ondrag: ((DragEvent) -> dynamic)?\n override var ondragend: ((DragEvent) ->
dynamic)?\n override
 var ondragenter: ((DragEvent) -> dynamic)?\n override var ondragexit: ((DragEvent) -> dynamic)?\n override
 var ondragleave: ((DragEvent) -> dynamic)?\n override var ondragover: ((DragEvent) -> dynamic)?\n override
 var ondragstart: ((DragEvent) -> dynamic)?\n override var ondrop: ((DragEvent) -> dynamic)?\n override var
ondurationchange: ((Event) -> dynamic)?\n override var onemptied: ((Event) -> dynamic)?\n override var
onended: ((Event) -> dynamic)?\n override var onerror: ((dynamic, String, Int, Int, Any?) -> dynamic)?\n
 override var onfocus: ((FocusEvent) -> dynamic)?\n override var oninput: ((InputEvent) -> dynamic)?\n
 override var oninvalid: ((Event) -> dynamic)?\n override var onkeydown: ((KeyboardEvent) -> dynamic)?\n
 override var onkeypress: ((KeyboardEvent) -> dynamic)?\n override var onkeyup: ((KeyboardEvent) ->
dynamic)?\n override var onload: ((Event) -> dynamic)?\n override var onloadeddata: ((Event) -> dynamic)?\n
 override var onloadedmetadata: ((Event) -> dynamic)?\n override var onloadend: ((Event) -> dynamic)?\n
 override var onloadstart: ((ProgressEvent) -> dynamic)?\n override var onmousedown: ((MouseEvent) ->
dynamic)?\n override var onmouseenter: ((MouseEvent) -> dynamic)?\n override var onmouseleave:
((MouseEvent) -> dynamic)?\n override var onmousemove: ((MouseEvent) -> dynamic)?\n override var
onmouseout: ((MouseEvent) -> dynamic)?\n override var onmouseover: ((MouseEvent) -> dynamic)?\n override
 var onmouseup: ((MouseEvent) -> dynamic)?\n override var onwheel: ((WheelEvent) -> dynamic)?\n override
 var onpause: ((Event) -> dynamic)?\n override var onplay: ((Event) -> dynamic)?\n override var onplaying:
((Event) -> dynamic)?\n override var onprogress: ((ProgressEvent) -> dynamic)?\n override var onratechange:
((Event) -> dynamic)?\n override var onreset: ((Event) -> dynamic)?\n override var onresize: ((Event) ->
dynamic)?\n override
 var onscroll: ((Event) -> dynamic)?\n override var onseeked: ((Event) -> dynamic)?\n override var onseeking:
((Event) -> dynamic)?\n override var onselect: ((Event) -> dynamic)?\n override var onshow: ((Event) ->
dynamic)?\n override var onstalled: ((Event) -> dynamic)?\n override var onsubmit: ((Event) -> dynamic)?\n

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override var onsuspend: ((Event) -> dynamic)?\n override var ontimeupdate: ((Event) -> dynamic)?\n override
var ontoggle: ((Event) -> dynamic)?\n override var onvolumechange: ((Event) -> dynamic)?\n override var
onwaiting: ((Event) -> dynamic)?\n override var ongotpointercapture: ((PointerEvent) -> dynamic)?\n override
var onlostpointercapture: ((PointerEvent) -> dynamic)?\n override var onpointerdown: ((PointerEvent) ->
dynamic)?\n override var onpointermove: ((PointerEvent) -> dynamic)?\n override var onpointerup:
((PointerEvent) -> dynamic)?\n override var onpointercancel: ((PointerEvent) -> dynamic)?\n override
var onpointerover: ((PointerEvent) -> dynamic)?\n override var onpointerout: ((PointerEvent) -> dynamic)?\n
override var onpointerenter: ((PointerEvent) -> dynamic)?\n override var onpointerleave: ((PointerEvent) ->
dynamic)?\n override var oncopy: ((ClipboardEvent) -> dynamic)?\n override var oncut: ((ClipboardEvent) ->
dynamic)?\n override var onpaste: ((ClipboardEvent) -> dynamic)?\n override var contentEditable: String\n
override val isContentEditable: Boolean\n override val style: CSSStyleDeclaration\n override val children:
HTMLCollection\n override val firstElementChild: Element?\n override val lastElementChild: Element?\n
override val childElementCount: Int\n override val previousElementSibling: Element?\n override val
nextElementSibling: Element?\n override val assignedSlot: HTMLSlotElement?\n override fun prepend(vararg
nodes: dynamic)\n override fun append(vararg nodes: dynamic)\n override fun querySelector(selectors:
String): Element?\n override fun querySelectorAll(selectors: String): NodeList\n override fun before(vararg
nodes: dynamic)\n override fun after(vararg nodes: dynamic)\n override fun replaceWith(vararg nodes:
dynamic)\n override fun remove()\n override fun getBoxQuads(options: BoxQuadOptions /* =
definedExternally */): Array<DOMQuad>\n override fun convertQuadFromNode(quad: dynamic, from: dynamic,
options: ConvertCoordinateOptions /* = definedExternally */): DOMQuad\n override fun
convertRectFromNode(rect: DOMRectReadOnly, from: dynamic, options: ConvertCoordinateOptions /* =
definedExternally */): DOMQuad\n override fun convertPointFromNode(point: DOMPointInit, from: dynamic,
options: ConvertCoordinateOptions /* = definedExternally */): DOMPoint\n\n companion object {\n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external interface
UnionElementOrHTMLCollection\n\npublic external interface UnionElementOrRadioNodeList\n\npublic external
interface UnionHTMLOptGroupElementOrHTMLOptionElement\n\npublic external interface
UnionAudioTrackOrTextTrackOrVideoTrack\n\npublic external interface UnionElementOrMouseEvent\n\npublic
external interface UnionMessagePortOrWindowProxy\n\npublic external interface MediaProvider\n\npublic
external
interface RenderingContext\n\npublic external interface HTMLOrSVGImageElement :
CanvasImageSource\n\npublic external interface CanvasImageSource : ImageBitmapSource\n\npublic external
interface ImageBitmapSource\n\npublic external interface HTMLOrSVGScriptElement\n\n/* please, don't
implement this interface!
*/\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface DocumentReadyState {\n companion object\n}\n\npublic inline val
DocumentReadyState.Companion.LOADING: DocumentReadyState get() =
"loading".asDynamic().unsafeCast<DocumentReadyState>()\n\npublic inline val
DocumentReadyState.Companion.INTERACTIVE: DocumentReadyState get() =
"interactive".asDynamic().unsafeCast<DocumentReadyState>()\n\npublic inline val
DocumentReadyState.Companion.COMPLETE: DocumentReadyState get() =

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"complete".asDynamic().unsafeCast<DocumentReadyState>()\n\n/* please, don't implement this interface!
*\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic
external interface CanPlayTypeResult {\n companion object\n}\n\npublic inline val
CanPlayTypeResult.Companion.EMPTY: CanPlayTypeResult get() =
"\n".asDynamic().unsafeCast<CanPlayTypeResult>()\n\npublic inline val CanPlayTypeResult.Companion.MAYBE:
CanPlayTypeResult get() = "maybe".asDynamic().unsafeCast<CanPlayTypeResult>()\n\npublic inline val
CanPlayTypeResult.Companion.PROBABLY: CanPlayTypeResult get() =
"probably".asDynamic().unsafeCast<CanPlayTypeResult>()\n\n/* please, don't implement this interface!
*\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface TextTrackMode {\n companion object\n}\n\npublic inline val TextTrackMode.Companion.DISABLED:
TextTrackMode get() = "disabled".asDynamic().unsafeCast<TextTrackMode>()\n\npublic inline val
TextTrackMode.Companion.HIDDEN: TextTrackMode get() =
"hidden".asDynamic().unsafeCast<TextTrackMode>()\n\npublic inline val
TextTrackMode.Companion.SHOWING: TextTrackMode
get() = "showing".asDynamic().unsafeCast<TextTrackMode>()\n\n/* please, don't implement this interface!
*\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface TextTrackKind {\n companion object\n}\n\npublic inline val TextTrackKind.Companion.SUBTITLES:
TextTrackKind get() = "subtitles".asDynamic().unsafeCast<TextTrackKind>()\n\npublic inline val
TextTrackKind.Companion.CAPTIONS: TextTrackKind get() =
"captions".asDynamic().unsafeCast<TextTrackKind>()\n\npublic inline val
TextTrackKind.Companion.DESCRPTIONS: TextTrackKind get() =
"descriptions".asDynamic().unsafeCast<TextTrackKind>()\n\npublic inline val
TextTrackKind.Companion.CHAPTERS: TextTrackKind get() =
"chapters".asDynamic().unsafeCast<TextTrackKind>()\n\npublic inline val
TextTrackKind.Companion.METADATA: TextTrackKind get() =
"metadata".asDynamic().unsafeCast<TextTrackKind>()\n\n/* please, don't implement this interface!
*\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic
external interface SelectionMode {\n companion object\n}\n\npublic inline val
SelectionMode.Companion.SELECT: SelectionMode get() =
"select".asDynamic().unsafeCast<SelectionMode>()\n\npublic inline val SelectionMode.Companion.START:
SelectionMode get() = "start".asDynamic().unsafeCast<SelectionMode>()\n\npublic inline val
SelectionMode.Companion.END: SelectionMode get() =
"end".asDynamic().unsafeCast<SelectionMode>()\n\npublic inline val SelectionMode.Companion.PRESERVE:
SelectionMode get() = "preserve".asDynamic().unsafeCast<SelectionMode>()\n\n/* please, don't implement this
interface! *\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic
external interface CanvasFillRule {\n companion object\n}\n\npublic inline val
CanvasFillRule.Companion.NONZERO: CanvasFillRule get() =
"nonzero".asDynamic().unsafeCast<CanvasFillRule>()\n\npublic inline val
CanvasFillRule.Companion.EVENODD: CanvasFillRule get() =
"evenodd".asDynamic().unsafeCast<CanvasFillRule>()\n\n/*
please, don't implement this interface!
*\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface ImageSmoothingQuality {\n companion object\n}\n\npublic inline val
ImageSmoothingQuality.Companion.LOW: ImageSmoothingQuality get() =
"low".asDynamic().unsafeCast<ImageSmoothingQuality>()\n\npublic inline val
ImageSmoothingQuality.Companion.MEDIUM: ImageSmoothingQuality get() =
"medium".asDynamic().unsafeCast<ImageSmoothingQuality>()\n\npublic inline val
ImageSmoothingQuality.Companion.HIGH: ImageSmoothingQuality get() =

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\"high\".asDynamic().unsafeCast<ImageSmoothingQuality>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n\npublic external
interface CanvasLineCap {\n companion object\n}\n\npublic inline val CanvasLineCap.Companion.BUTT:
CanvasLineCap get() = \"butt\".asDynamic().unsafeCast<CanvasLineCap>()\n\npublic
inline val CanvasLineCap.Companion.ROUND: CanvasLineCap get() =
\"round\".asDynamic().unsafeCast<CanvasLineCap>()\n\npublic inline val CanvasLineCap.Companion.SQUARE:
CanvasLineCap get() = \"square\".asDynamic().unsafeCast<CanvasLineCap>()\n\n/* please, don't implement this
interface! *\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n\npublic
external interface CanvasLineJoin {\n companion object\n}\n\npublic inline val
CanvasLineJoin.Companion.ROUND: CanvasLineJoin get() =
\"round\".asDynamic().unsafeCast<CanvasLineJoin>()\n\npublic inline val CanvasLineJoin.Companion.BEVEL:
CanvasLineJoin get() = \"bevel\".asDynamic().unsafeCast<CanvasLineJoin>()\n\npublic inline val
CanvasLineJoin.Companion.MITER: CanvasLineJoin get() =
\"miter\".asDynamic().unsafeCast<CanvasLineJoin>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n\npublic external
interface CanvasTextAlign {\n companion object\n}\n\npublic
inline val CanvasTextAlign.Companion.START: CanvasTextAlign get() =
\"start\".asDynamic().unsafeCast<CanvasTextAlign>()\n\npublic inline val CanvasTextAlign.Companion.END:
CanvasTextAlign get() = \"end\".asDynamic().unsafeCast<CanvasTextAlign>()\n\npublic inline val
CanvasTextAlign.Companion.LEFT: CanvasTextAlign get() =
\"left\".asDynamic().unsafeCast<CanvasTextAlign>()\n\npublic inline val CanvasTextAlign.Companion.RIGHT:
CanvasTextAlign get() = \"right\".asDynamic().unsafeCast<CanvasTextAlign>()\n\npublic inline val
CanvasTextAlign.Companion.CENTER: CanvasTextAlign get() =
\"center\".asDynamic().unsafeCast<CanvasTextAlign>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n\npublic external
interface CanvasTextBaseline {\n companion object\n}\n\npublic inline val CanvasTextBaseline.Companion.TOP:
CanvasTextBaseline get() = \"top\".asDynamic().unsafeCast<CanvasTextBaseline>()\n\npublic inline val
CanvasTextBaseline.Companion.HANGING:
CanvasTextBaseline get() = \"hanging\".asDynamic().unsafeCast<CanvasTextBaseline>()\n\npublic inline val
CanvasTextBaseline.Companion.MIDDLE: CanvasTextBaseline get() =
\"middle\".asDynamic().unsafeCast<CanvasTextBaseline>()\n\npublic inline val
CanvasTextBaseline.Companion.ALPHABETIC: CanvasTextBaseline get() =
\"alphabetic\".asDynamic().unsafeCast<CanvasTextBaseline>()\n\npublic inline val
CanvasTextBaseline.Companion.IDEOGRAPHIC: CanvasTextBaseline get() =
\"ideographic\".asDynamic().unsafeCast<CanvasTextBaseline>()\n\npublic inline val
CanvasTextBaseline.Companion.BOTTOM: CanvasTextBaseline get() =
\"bottom\".asDynamic().unsafeCast<CanvasTextBaseline>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n\npublic external
interface CanvasDirection {\n companion object\n}\n\npublic inline val CanvasDirection.Companion.LTR:
CanvasDirection get() = \"ltr\".asDynamic().unsafeCast<CanvasDirection>()\n\npublic
inline val CanvasDirection.Companion.RTL: CanvasDirection get() =
\"rtl\".asDynamic().unsafeCast<CanvasDirection>()\n\npublic inline val CanvasDirection.Companion.INHERIT:
CanvasDirection get() = \"inherit\".asDynamic().unsafeCast<CanvasDirection>()\n\n/* please, don't implement this
interface! *\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n\npublic
external interface ScrollRestoration {\n companion object\n}\n\npublic inline val
ScrollRestoration.Companion.AUTO: ScrollRestoration get() =
\"auto\".asDynamic().unsafeCast<ScrollRestoration>()\n\npublic inline val
ScrollRestoration.Companion.MANUAL: ScrollRestoration get() =

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\"manual\".asDynamic().unsafeCast<ScrollRestoration>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external
interface ImageOrientation {\n companion object\n}\n\npublic inline val ImageOrientation.Companion.NONE:
ImageOrientation get()
= \"none\".asDynamic().unsafeCast<ImageOrientation>()\n\npublic inline val
ImageOrientation.Companion.FLIPY: ImageOrientation get() =
\"flipY\".asDynamic().unsafeCast<ImageOrientation>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external
interface PremultiplyAlpha {\n companion object\n}\n\npublic inline val PremultiplyAlpha.Companion.NONE:
PremultiplyAlpha get() = \"none\".asDynamic().unsafeCast<PremultiplyAlpha>()\n\npublic inline val
PremultiplyAlpha.Companion.PREMULTIPLY: PremultiplyAlpha get() =
\"premultiply\".asDynamic().unsafeCast<PremultiplyAlpha>()\n\npublic inline val
PremultiplyAlpha.Companion.DEFAULT: PremultiplyAlpha get() =
\"default\".asDynamic().unsafeCast<PremultiplyAlpha>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external
interface ColorSpaceConversion {\n companion object\n}\n\npublic inline
val ColorSpaceConversion.Companion.NONE: ColorSpaceConversion get() =
\"none\".asDynamic().unsafeCast<ColorSpaceConversion>()\n\npublic inline val
ColorSpaceConversion.Companion.DEFAULT: ColorSpaceConversion get() =
\"default\".asDynamic().unsafeCast<ColorSpaceConversion>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external
interface ResizeQuality {\n companion object\n}\n\npublic inline val ResizeQuality.Companion.PIXELATED:
ResizeQuality get() = \"pixelated\".asDynamic().unsafeCast<ResizeQuality>()\n\npublic inline val
ResizeQuality.Companion.LOW: ResizeQuality get() =
\"low\".asDynamic().unsafeCast<ResizeQuality>()\n\npublic inline val ResizeQuality.Companion.MEDIUM:
ResizeQuality get() = \"medium\".asDynamic().unsafeCast<ResizeQuality>()\n\npublic inline val
ResizeQuality.Companion.HIGH: ResizeQuality get() = \"high\".asDynamic().unsafeCast<ResizeQuality>()\n\n/*
please, don't implement this
interface! *\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic
external interface BinaryType {\n companion object\n}\n\npublic inline val BinaryType.Companion.BLOB:
BinaryType get() = \"blob\".asDynamic().unsafeCast<BinaryType>()\n\npublic inline val
BinaryType.Companion.ARRAYBUFFER: BinaryType get() =
\"arraybuffer\".asDynamic().unsafeCast<BinaryType>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external
interface WorkerType {\n companion object\n}\n\npublic inline val WorkerType.Companion.CLASSIC:
WorkerType get() = \"classic\".asDynamic().unsafeCast<WorkerType>()\n\npublic inline val
WorkerType.Companion.MODULE: WorkerType get() =
\"module\".asDynamic().unsafeCast<WorkerType>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external
interface ShadowRootMode {\n companion object\n}\n\npublic
inline val ShadowRootMode.Companion.OPEN: ShadowRootMode get() =
\"open\".asDynamic().unsafeCast<ShadowRootMode>()\n\npublic inline val
ShadowRootMode.Companion.CLOSED: ShadowRootMode get() =
\"closed\".asDynamic().unsafeCast<ShadowRootMode>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external
interface ScrollBehavior {\n companion object\n}\n\npublic inline val ScrollBehavior.Companion.AUTO:
ScrollBehavior get() = \"auto\".asDynamic().unsafeCast<ScrollBehavior>()\n\npublic inline val
ScrollBehavior.Companion.INSTANT: ScrollBehavior get() =

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definedExternally\n var integrity: String?\n get() = definedExternally\n set(value) = definedExternally\n
var keepalive: Boolean?\n get() = definedExternally\n set(value) = definedExternally\n var window:
Any?\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun RequestInit(method: String? =
undefined, headers: dynamic = undefined, body: dynamic = undefined, referrer: String? = undefined, referrerPolicy:
dynamic = undefined, mode: RequestMode? = undefined, credentials:
RequestCredentials? = undefined, cache: RequestCache? = undefined, redirect: RequestRedirect? = undefined,
integrity: String? = undefined, keepalive: Boolean? = undefined, window: Any? = undefined): RequestInit {\n val
o = js(\"({})\")\n o[\"method\"] = method\n o[\"headers\"] = headers\n o[\"body\"] = body\n o[\"referrer\"] =
referrer\n o[\"referrerPolicy\"] = referrerPolicy\n o[\"mode\"] = mode\n o[\"credentials\"] = credentials\n
o[\"cache\"] = cache\n o[\"redirect\"] = redirect\n o[\"integrity\"] = integrity\n o[\"keepalive\"] = keepalive\n
o[\"window\"] = window\n return o\n}\n\n/*\n * Exposes the JavaScript
[Response](https://developer.mozilla.org/en/docs/Web/API/Response) to Kotlin\n */\npublic external open class
Response(body: dynamic = definedExternally, init: ResponseInit = definedExternally) : Body {\n open val type:
ResponseType\n open val url: String\n open val redirected: Boolean\n open val status: Short\n open
val ok: Boolean\n open val statusText: String\n open val headers: Headers\n open val body: dynamic\n open
val trailer: Promise<Headers>\n override val bodyUsed: Boolean\n fun clone(): Response\n override fun
arrayBuffer(): Promise<ArrayBuffer>\n override fun blob(): Promise<Blob>\n override fun formData():
Promise<FormData>\n override fun json(): Promise<Any?>\n override fun text(): Promise<String>\n}\n\ncompanion object {\n fun error(): Response\n fun redirect(url: String, status: Short = definedExternally):
Response\n }\n}\n\npublic external interface ResponseInit {\n var status: Short? /* = 200 */\n get() =
definedExternally\n set(value) = definedExternally\n var statusText: String? /* = \"OK\" */\n get() =
definedExternally\n set(value) = definedExternally\n var headers: dynamic\n get() = definedExternally\n
set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic
inline fun ResponseInit(status: Short? = 200, statusText: String? = \"OK\", headers: dynamic = undefined):
ResponseInit {\n val o = js(\"({})\")\n o[\"status\"] = status\n o[\"statusText\"] = statusText\n o[\"headers\"]
= headers\n return o\n}\n\n/* please, don't implement this interface!
*/\n\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external
interface RequestType {\n companion object\n}\n\npublic inline val RequestType.Companion.EMPTY:
RequestType get() = \"\".asDynamic().unsafeCast<RequestType>()\n\npublic inline val
RequestType.Companion.AUDIO: RequestType get() =
\"audio\".asDynamic().unsafeCast<RequestType>()\n\npublic inline val RequestType.Companion.FONT:
RequestType get() = \"font\".asDynamic().unsafeCast<RequestType>()\n\npublic inline val
RequestType.Companion.IMAGE: RequestType get() =
\"image\".asDynamic().unsafeCast<RequestType>()\n\npublic inline val RequestType.Companion.SCRIPT:
RequestType get() = \"script\".asDynamic().unsafeCast<RequestType>()\n\npublic inline val
RequestType.Companion.STYLE: RequestType get() =
\"style\".asDynamic().unsafeCast<RequestType>()\n\npublic inline val RequestType.Companion.TRACK:
RequestType get() = \"track\".asDynamic().unsafeCast<RequestType>()\n\npublic inline val
RequestType.Companion.VIDEO: RequestType get() = \"video\".asDynamic().unsafeCast<RequestType>()\n\n/*
please, don't implement this interface!
*/\n\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external
interface RequestDestination {\n companion object\n}\n\npublic inline val
RequestDestination.Companion.EMPTY: RequestDestination get() =
\"\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.DOCUMENT: RequestDestination get() =

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\"document\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.EMBED: RequestDestination get() =
\"embed\".asDynamic().unsafeCast<RequestDestination>()\n\npublic
inline val RequestDestination.Companion.FONT: RequestDestination get() =
\"font\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.IMAGE: RequestDestination get() =
\"image\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.MANIFEST: RequestDestination get() =
\"manifest\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.MEDIA: RequestDestination get() =
\"media\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.OBJECT: RequestDestination get() =
\"object\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.REPORT: RequestDestination get() =
\"report\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.SCRIPT: RequestDestination get() =
\"script\".asDynamic().unsafeCast<RequestDestination>()\n\npublic
inline val RequestDestination.Companion.SERVICEWORKER: RequestDestination get() =
\"serviceworker\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.SHAREDWORKER: RequestDestination get() =
\"sharedworker\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.STYLE: RequestDestination get() =
\"style\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.WORKER: RequestDestination get() =
\"worker\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.XSLT: RequestDestination get() =
\"xslt\".asDynamic().unsafeCast<RequestDestination>()\n\n/* please, don't implement this interface!
*\n\n@JsName(\"null\")\n\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n\npublic external
interface RequestMode {\n\n companion object\n\n}\n\n\npublic inline val RequestMode.Companion.NAVIGATE:
RequestMode
get() = \"navigate\".asDynamic().unsafeCast<RequestMode>()\n\n\npublic inline val
RequestMode.Companion.SAME_ORIGIN: RequestMode get() = \"same-
origin\".asDynamic().unsafeCast<RequestMode>()\n\n\npublic inline val RequestMode.Companion.NO_CORS:
RequestMode get() = \"no-cors\".asDynamic().unsafeCast<RequestMode>()\n\n\npublic inline val
RequestMode.Companion.CORS: RequestMode get() = \"cors\".asDynamic().unsafeCast<RequestMode>()\n\n\n/*
please, don't implement this interface!
*\n\n@JsName(\"null\")\n\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n\npublic external
interface RequestCredentials {\n\n companion object\n\n}\n\n\npublic inline val RequestCredentials.Companion.OMIT:
RequestCredentials get() = \"omit\".asDynamic().unsafeCast<RequestCredentials>()\n\n\npublic inline val
RequestCredentials.Companion.SAME_ORIGIN: RequestCredentials get() = \"same-
origin\".asDynamic().unsafeCast<RequestCredentials>()\n\n\npublic inline val
RequestCredentials.Companion.INCLUDE: RequestCredentials get() =
\"include\".asDynamic().unsafeCast<RequestCredentials>()\n\n\n/* please, don't implement this interface!
*\n\n@JsName(\"null\")\n\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n\npublic external
interface RequestCache {\n\n companion object\n\n}\n\n\npublic inline val RequestCache.Companion.DEFAULT:
RequestCache get() = \"default\".asDynamic().unsafeCast<RequestCache>()\n\n\npublic inline val
RequestCache.Companion.NO_STORE: RequestCache get() = \"no-
store\".asDynamic().unsafeCast<RequestCache>()\n\n\npublic inline val RequestCache.Companion.RELOAD:

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RequestCache get() = "reload".asDynamic().unsafeCast<RequestCache>()\n\npublic inline val
RequestCache.Companion.NO_CACHE: RequestCache get() = "no-
cache".asDynamic().unsafeCast<RequestCache>()\n\npublic inline val
RequestCache.Companion.FORCE_CACHE: RequestCache get() = "force-
cache".asDynamic().unsafeCast<RequestCache>()\n\npublic inline val
RequestCache.Companion.ONLY_IF_CACHED: RequestCache get() = "only-if-
cached".asDynamic().unsafeCast<RequestCache>()\n\n/*
please, don't implement this interface!
*/\n\n@JsName("null")\n\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface RequestRedirect {\n companion object\n}\n\npublic inline val RequestRedirect.Companion.FOLLOW:
RequestRedirect get() = "follow".asDynamic().unsafeCast<RequestRedirect>()\n\npublic inline val
RequestRedirect.Companion.ERROR: RequestRedirect get() =
"error".asDynamic().unsafeCast<RequestRedirect>()\n\npublic inline val RequestRedirect.Companion.MANUAL:
RequestRedirect get() = "manual".asDynamic().unsafeCast<RequestRedirect>()\n\n/* please, don't implement this
interface! */\n\n@JsName("null")\n\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic
external interface ResponseType {\n companion object\n}\n\npublic inline val ResponseType.Companion.BASIC:
ResponseType get() = "basic".asDynamic().unsafeCast<ResponseType>()\n\npublic inline val
ResponseType.Companion.CORS: ResponseType get() =
"cors".asDynamic().unsafeCast<ResponseType>()\n\npublic
inline val ResponseType.Companion.DEFAULT: ResponseType get() =
"default".asDynamic().unsafeCast<ResponseType>()\n\npublic inline val ResponseType.Companion.ERROR:
ResponseType get() = "error".asDynamic().unsafeCast<ResponseType>()\n\npublic inline val
ResponseType.Companion.OPAQUE: ResponseType get() =
"opaque".asDynamic().unsafeCast<ResponseType>()\n\npublic inline val
ResponseType.Companion.OPAQUEREDIRECT: ResponseType get() =
"opaqueredirect".asDynamic().unsafeCast<ResponseType>()", /*\n\n * Copyright 2010-2021 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n\n */\n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT
EDIT!\n\n// See github.com/kotlin/dukat for details\n\n\npackage org.w3c.dom.mediacapture\n\n\nimport
kotlin.js.*\n\nimport org.khronos.webgl.*\n\nimport org.w3c.dom.*\n\nimport org.w3c.dom.events.*\n\n\n/**\n\n * Exposes
the JavaScript [MediaStream](https://developer.mozilla.org/en/docs/Web/API/MediaStream) to Kotlin\n\n */\n\npublic
external open class MediaStream() : EventTarget, MediaProvider {\n constructor(stream: MediaStream)\n
constructor(tracks: Array<MediaStreamTrack>)\n open val id: String\n open val active: Boolean\n var
onaddtrack: ((MediaStreamTrackEvent) -> dynamic)?\n var onremovetrack: ((MediaStreamTrackEvent) ->
dynamic)?\n fun getAudioTracks(): Array<MediaStreamTrack>\n fun getVideoTracks():
Array<MediaStreamTrack>\n fun getTracks(): Array<MediaStreamTrack>\n fun getTrackById(trackId: String):
MediaStreamTrack?\n fun addTrack(track: MediaStreamTrack)\n fun removeTrack(track: MediaStreamTrack)\n
fun clone(): MediaStream\n}\n\n\n/**\n\n * Exposes the JavaScript
[MediaStreamTrack](https://developer.mozilla.org/en/docs/Web/API/MediaStreamTrack) to Kotlin\n\n */\n\npublic
external abstract class MediaStreamTrack : EventTarget {\n open val kind: String\n
open val id: String\n open val label: String\n open var enabled: Boolean\n open val muted: Boolean\n open
var onmute: ((Event) -> dynamic)?\n open var onunmute: ((Event) -> dynamic)?\n open val readyState:
MediaStreamTrackState\n open var onended: ((Event) -> dynamic)?\n open var onoverconstrained: ((Event) ->
dynamic)?\n fun clone(): MediaStreamTrack\n fun stop()\n fun getCapabilities(): MediaTrackCapabilities\n
fun getConstraints(): MediaTrackConstraints\n fun getSettings(): MediaTrackSettings\n fun
applyConstraints(constraints: MediaTrackConstraints = definedExternally): Promise<Unit>\n}\n\n\n/**\n\n * Exposes
the JavaScript
[MediaTrackSupportedConstraints](https://developer.mozilla.org/en/docs/Web/API/MediaTrackSupportedConstrain

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ts) to Kotlin\n */\npublic external interface MediaTrackSupportedConstraints {\n var width: Boolean? /* = true
/\n get() = definedExternally\n set(value) = definedExternally\n var height: Boolean? /
= true */\n get() = definedExternally\n set(value) = definedExternally\n var aspectRatio: Boolean? /* =
true */\n get() = definedExternally\n set(value) = definedExternally\n var frameRate: Boolean? /* = true
/\n get() = definedExternally\n set(value) = definedExternally\n var facingMode: Boolean? / = true */\n
 get() = definedExternally\n set(value) = definedExternally\n var resizeMode: Boolean? /* = true */\n
 get() = definedExternally\n set(value) = definedExternally\n var volume: Boolean? /* = true */\n get() =
definedExternally\n set(value) = definedExternally\n var sampleRate: Boolean? /* = true */\n get() =
definedExternally\n set(value) = definedExternally\n var sampleSize: Boolean? /* = true */\n get() =
definedExternally\n set(value) = definedExternally\n var echoCancellation: Boolean? /* = true */\n get()
= definedExternally\n
 set(value) = definedExternally\n var autoGainControl: Boolean? /* = true */\n get() = definedExternally\n
 set(value) = definedExternally\n var noiseSuppression: Boolean? /* = true */\n get() = definedExternally\n
 set(value) = definedExternally\n var latency: Boolean? /* = true */\n get() = definedExternally\n
 set(value) = definedExternally\n var channelCount: Boolean? /* = true */\n get() = definedExternally\n
 set(value) = definedExternally\n var deviceId: Boolean? /* = true */\n get() = definedExternally\n
 set(value) = definedExternally\n var groupId: Boolean? /* = true */\n get() = definedExternally\n
 set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n\n@kotlin.internal.InlineOnly\n\npublic inline fun
MediaTrackSupportedConstraints(width: Boolean? = true, height: Boolean? = true, aspectRatio: Boolean? = true,
frameRate: Boolean? = true, facingMode:
Boolean? = true, resizeMode: Boolean? = true, volume: Boolean? = true, sampleRate: Boolean? = true, sampleSize:
Boolean? = true, echoCancellation: Boolean? = true, autoGainControl: Boolean? = true, noiseSuppression: Boolean?
= true, latency: Boolean? = true, channelCount: Boolean? = true, deviceId: Boolean? = true, groupId: Boolean? =
true): MediaTrackSupportedConstraints {\n val o = js(\"({})\")\n o[\"width\"] = width\n o[\"height\"] =
height\n o[\"aspectRatio\"] = aspectRatio\n o[\"frameRate\"] = frameRate\n o[\"facingMode\"] = facingMode\n
 o[\"resizeMode\"] = resizeMode\n o[\"volume\"] = volume\n o[\"sampleRate\"] = sampleRate\n
 o[\"sampleSize\"] = sampleSize\n o[\"echoCancellation\"] = echoCancellation\n o[\"autoGainControl\"] =
autoGainControl\n o[\"noiseSuppression\"] = noiseSuppression\n o[\"latency\"] = latency\n
 o[\"channelCount\"] = channelCount\n o[\"deviceId\"] = deviceId\n o[\"groupId\"] = groupId\n return
o}\n\n}\n\npublic
external interface MediaTrackCapabilities {\n var width: ULongRange?\n get() = definedExternally\n
set(value) = definedExternally\n var height: ULongRange?\n get() = definedExternally\n set(value) =
definedExternally\n var aspectRatio: DoubleRange?\n get() = definedExternally\n set(value) =
definedExternally\n var frameRate: DoubleRange?\n get() = definedExternally\n set(value) =
definedExternally\n var facingMode: Array<String>?\n get() = definedExternally\n set(value) =
definedExternally\n var resizeMode: Array<String>?\n get() = definedExternally\n set(value) =
definedExternally\n var volume: DoubleRange?\n get() = definedExternally\n set(value) =
definedExternally\n var sampleRate: ULongRange?\n get() = definedExternally\n set(value) =
definedExternally\n var sampleSize: ULongRange?\n get() = definedExternally\n set(value)
= definedExternally\n var echoCancellation: Array<Boolean>?\n get() = definedExternally\n set(value) =
definedExternally\n var autoGainControl: Array<Boolean>?\n get() = definedExternally\n set(value) =
definedExternally\n var noiseSuppression: Array<Boolean>?\n get() = definedExternally\n set(value) =
definedExternally\n var latency: DoubleRange?\n get() = definedExternally\n set(value) =
definedExternally\n var channelCount: ULongRange?\n get() = definedExternally\n set(value) =
definedExternally\n var deviceId: String?\n get() = definedExternally\n set(value) = definedExternally\n
var groupId: String?\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",

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\INVISIBLE_MEMBER\)\n@kotlin.internal.InlineOnly\npublic inline fun MediaTrackCapabilities(width:
ULongRange? = undefined, height: ULongRange? = undefined, aspectRatio:
DoubleRange? = undefined, frameRate: DoubleRange? = undefined, facingMode: Array<String>? = undefined,
resizeMode: Array<String>? = undefined, volume: DoubleRange? = undefined, sampleRate: ULongRange? =
undefined, sampleSize: ULongRange? = undefined, echoCancellation: Array<Boolean>? = undefined,
autoGainControl: Array<Boolean>? = undefined, noiseSuppression: Array<Boolean>? = undefined, latency:
DoubleRange? = undefined, channelCount: ULongRange? = undefined, deviceId: String? = undefined, groupId:
String? = undefined): MediaTrackCapabilities {\n val o = js(\{"{")\}\n o["width"] = width\n o["height"] =
height\n o["aspectRatio"] = aspectRatio\n o["frameRate"] = frameRate\n o["facingMode"] = facingMode\n
o["resizeMode"] = resizeMode\n o["volume"] = volume\n o["sampleRate"] = sampleRate\n
o["sampleSize"] = sampleSize\n o["echoCancellation"] = echoCancellation\n o["autoGainControl"] =
autoGainControl\n o["noiseSuppression"]
= noiseSuppression\n o["latency"] = latency\n o["channelCount"] = channelCount\n o["deviceId"] =
deviceId\n o["groupId"] = groupId\n return o}\n\n/**\n * Exposes the JavaScript
[MediaTrackConstraints](https://developer.mozilla.org/en/docs/Web/API/MediaTrackConstraints) to Kotlin\n
*\npublic external interface MediaTrackConstraints : MediaTrackConstraintSet {\n var advanced:
Array<MediaTrackConstraintSet>?\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\INVISIBLE_REFERENCE",
\INVISIBLE_MEMBER\)\n@kotlin.internal.InlineOnly\npublic inline fun MediaTrackConstraints(advanced:
Array<MediaTrackConstraintSet>? = undefined, width: dynamic = undefined, height: dynamic = undefined,
aspectRatio: dynamic = undefined, frameRate: dynamic = undefined, facingMode: dynamic = undefined,
resizeMode: dynamic = undefined, volume: dynamic = undefined, sampleRate: dynamic = undefined, sampleSize:
dynamic = undefined, echoCancellation:
dynamic = undefined, autoGainControl: dynamic = undefined, noiseSuppression: dynamic = undefined, latency:
dynamic = undefined, channelCount: dynamic = undefined, deviceId: dynamic = undefined, groupId: dynamic =
undefined): MediaTrackConstraints {\n val o = js(\{"{")\}\n o["advanced"] = advanced\n o["width"] =
width\n o["height"] = height\n o["aspectRatio"] = aspectRatio\n o["frameRate"] = frameRate\n
o["facingMode"] = facingMode\n o["resizeMode"] = resizeMode\n o["volume"] = volume\n
o["sampleRate"] = sampleRate\n o["sampleSize"] = sampleSize\n o["echoCancellation"] =
echoCancellation\n o["autoGainControl"] = autoGainControl\n o["noiseSuppression"] = noiseSuppression\n
o["latency"] = latency\n o["channelCount"] = channelCount\n o["deviceId"] = deviceId\n o["groupId"] =
groupId\n return o}\n\npublic external interface MediaTrackConstraintSet {\n var width: dynamic\n get()
= definedExternally\n
set(value) = definedExternally\n var height: dynamic\n get() = definedExternally\n set(value) =
definedExternally\n var aspectRatio: dynamic\n get() = definedExternally\n set(value) =
definedExternally\n var frameRate: dynamic\n get() = definedExternally\n set(value) =
definedExternally\n var facingMode: dynamic\n get() = definedExternally\n set(value) =
definedExternally\n var resizeMode: dynamic\n get() = definedExternally\n set(value) =
definedExternally\n var volume: dynamic\n get() = definedExternally\n set(value) = definedExternally\n
var sampleRate: dynamic\n get() = definedExternally\n set(value) = definedExternally\n var sampleSize:
dynamic\n get() = definedExternally\n set(value) = definedExternally\n var echoCancellation: dynamic\n
get() = definedExternally\n set(value) = definedExternally\n var
autoGainControl: dynamic\n get() = definedExternally\n set(value) = definedExternally\n var
noiseSuppression: dynamic\n get() = definedExternally\n set(value) = definedExternally\n var latency:
dynamic\n get() = definedExternally\n set(value) = definedExternally\n var channelCount: dynamic\n
get() = definedExternally\n set(value) = definedExternally\n var deviceId: dynamic\n get() =
definedExternally\n set(value) = definedExternally\n var groupId: dynamic\n get() = definedExternally\n
set(value) = definedExternally\n}\n\n@Suppress(\INVISIBLE_REFERENCE",

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\@kotlin.internal.InlineOnly\npublic inline fun MediaTrackConstraintSet(width:
dynamic = undefined, height: dynamic = undefined, aspectRatio: dynamic = undefined, frameRate: dynamic =
undefined, facingMode: dynamic = undefined, resizeMode: dynamic = undefined, volume: dynamic = undefined,
sampleRate: dynamic = undefined,
sampleSize: dynamic = undefined, echoCancellation: dynamic = undefined, autoGainControl: dynamic =
undefined, noiseSuppression: dynamic = undefined, latency: dynamic = undefined, channelCount: dynamic =
undefined, deviceId: dynamic = undefined, groupId: dynamic = undefined): MediaTrackConstraintSet {\n val o =
js("{}")\n o["width"] = width\n o["height"] = height\n o["aspectRatio"] = aspectRatio\n
o["frameRate"] = frameRate\n o["facingMode"] = facingMode\n o["resizeMode"] = resizeMode\n
o["volume"] = volume\n o["sampleRate"] = sampleRate\n o["sampleSize"] = sampleSize\n
o["echoCancellation"] = echoCancellation\n o["autoGainControl"] = autoGainControl\n
o["noiseSuppression"] = noiseSuppression\n o["latency"] = latency\n o["channelCount"] = channelCount\n
o["deviceId"] = deviceId\n o["groupId"] = groupId\n return o\n}\n\n**\n * Exposes the JavaScript
[MediaTrackSettings](https://developer.mozilla.org/en/docs/Web/API/MediaTrackSettings)
to Kotlin\n * \npublic external interface MediaTrackSettings {\n var width: Int?\n get() = definedExternally\n
set(value) = definedExternally\n var height: Int?\n get() = definedExternally\n set(value) =
definedExternally\n var aspectRatio: Double?\n get() = definedExternally\n set(value) =
definedExternally\n var frameRate: Double?\n get() = definedExternally\n set(value) =
definedExternally\n var facingMode: String?\n get() = definedExternally\n set(value) =
definedExternally\n var resizeMode: String?\n get() = definedExternally\n set(value) =
definedExternally\n var volume: Double?\n get() = definedExternally\n set(value) = definedExternally\n
var sampleRate: Int?\n get() = definedExternally\n set(value) = definedExternally\n var sampleSize:
Int?\n get() = definedExternally\n set(value) =
definedExternally\n var echoCancellation: Boolean?\n get() = definedExternally\n set(value) =
definedExternally\n var autoGainControl: Boolean?\n get() = definedExternally\n set(value) =
definedExternally\n var noiseSuppression: Boolean?\n get() = definedExternally\n set(value) =
definedExternally\n var latency: Double?\n get() = definedExternally\n set(value) = definedExternally\n
var channelCount: Int?\n get() = definedExternally\n set(value) = definedExternally\n var deviceId:
String?\n get() = definedExternally\n set(value) = definedExternally\n var groupId: String?\n get() =
definedExternally\n set(value) = definedExternally\n}\n\n@Suppress("\@kotlin.internal.InlineOnly\npublic inline fun MediaTrackSettings(width: Int? =
undefined, height: Int? = undefined, aspectRatio: Double? = undefined, frameRate: Double? = undefined,
facingMode: String? = undefined, resizeMode: String? = undefined, volume: Double? = undefined, sampleRate:
Int? = undefined, sampleSize: Int? = undefined, echoCancellation: Boolean? = undefined, autoGainControl:
Boolean? = undefined, noiseSuppression: Boolean? = undefined, latency: Double? = undefined, channelCount: Int?
= undefined, deviceId: String? = undefined, groupId: String? = undefined): MediaTrackSettings {\n val o =
js("{}")\n o["width"] = width\n o["height"] = height\n o["aspectRatio"] = aspectRatio\n
o["frameRate"] = frameRate\n o["facingMode"] = facingMode\n o["resizeMode"] = resizeMode\n
o["volume"] = volume\n o["sampleRate"] = sampleRate\n o["sampleSize"] = sampleSize\n
o["echoCancellation"] = echoCancellation\n o["autoGainControl"] = autoGainControl\n
o["noiseSuppression"] = noiseSuppression\n o["latency"] = latency\n o["channelCount"] = channelCount\n
o["deviceId"] = deviceId\n o["groupId"]
= groupId\n return o\n}\n\n**\n * Exposes the JavaScript
[MediaStreamTrackEvent](https://developer.mozilla.org/en/docs/Web/API/MediaStreamTrackEvent) to Kotlin\n
*\npublic external open class MediaStreamTrackEvent(type: String, eventInitDict: MediaStreamTrackEventInit) :
Event {\n open val track: MediaStreamTrack\n\n companion object {\n val NONE: Short\n val
CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n
}\n}\n\npublic external interface MediaStreamTrackEventInit : EventInit {\n var track:

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MediaStreamTrack?}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun MediaStreamTrackEventInit(track:
MediaStreamTrack?, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false):
MediaStreamTrackEventInit {\n val o = js(\"({})\")\n o[\"track\"] = track\n o[\"bubbles\"] = bubbles\n o[\"cancelable\"] = cancelable\n o[\"composed\"]
= composed\n return o}\n\npublic external open class OverconstrainedErrorEvent(type: String, eventInitDict:
OverconstrainedErrorEventInit) : Event {\n open val error: dynamic\n\n companion object {\n val NONE:
Short\n val CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE:
Short\n }\n\npublic external interface OverconstrainedErrorEventInit : EventInit {\n var error: dynamic /* =
null */\n get() = definedExternally\n set(value) =
definedExternally}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun OverconstrainedErrorEventInit(error:
dynamic = null, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false):
OverconstrainedErrorEventInit {\n val o = js(\"({})\")\n o[\"error\"] = error\n o[\"bubbles\"] = bubbles\n
o[\"cancelable\"] = cancelable\n o[\"composed\"] = composed\n return o}\n\n/**\n * Exposes the JavaScript [MediaDevices](https://developer.mozilla.org/en/docs/Web/API/MediaDevices) to
Kotlin\n */\npublic external abstract class MediaDevices : EventTarget {\n open var ondevicechange: ((Event) ->
dynamic)?\n fun enumerateDevices(): Promise<Array<MediaDeviceInfo>>\n fun getSupportedConstraints():
MediaTrackSupportedConstraints\n fun getUserMedia(constraints: MediaStreamConstraints = definedExternally):
Promise<MediaStream>\n}\n\n/**\n * Exposes the JavaScript
[MediaDeviceInfo](https://developer.mozilla.org/en/docs/Web/API/MediaDeviceInfo) to Kotlin\n */\npublic
external abstract class MediaDeviceInfo {\n open val deviceId: String\n open val kind: MediaDeviceKind\n
open val label: String\n open val groupId: String\n fun toJSON(): dynamic}\n\npublic external abstract class
InputDeviceInfo : MediaDeviceInfo {\n fun getCapabilities(): MediaTrackCapabilities}\n\n\n/**\n * Exposes the
JavaScript [MediaStreamConstraints](https://developer.mozilla.org/en/docs/Web/API/MediaStreamConstraints)
to Kotlin\n */\npublic external interface MediaStreamConstraints {\n var video: dynamic /* = false */\n get()
= definedExternally\n set(value) = definedExternally\n var audio: dynamic /* = false */\n get() =
definedExternally\n set(value) = definedExternally}\n\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun MediaStreamConstraints(video:
dynamic = false, audio: dynamic = false): MediaStreamConstraints {\n val o = js(\"({})\")\n o[\"video\"] =
video\n o[\"audio\"] = audio\n return o}\n\npublic external interface ConstrainingPattern {\n var
onoverconstrained: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n
fun getCapabilities(): Capabilities\n fun getConstraints(): Constraints\n fun getSettings(): Settings\n fun
applyConstraints(constraints: Constraints = definedExternally):
Promise<Unit>\n}\n\n/**\n * Exposes the JavaScript
[DoubleRange](https://developer.mozilla.org/en/docs/Web/API/DoubleRange) to Kotlin\n */\npublic external
interface DoubleRange {\n var max: Double?\n get() = definedExternally\n set(value) =
definedExternally\n var min: Double?\n get() = definedExternally\n set(value) =
definedExternally}\n\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun DoubleRange(max: Double? =
undefined, min: Double? = undefined): DoubleRange {\n val o = js(\"({})\")\n o[\"max\"] = max\n o[\"min\"] =
min\n return o}\n\npublic external interface ConstrainDoubleRange : DoubleRange {\n var exact: Double?\n
get() = definedExternally\n set(value) = definedExternally\n var ideal: Double?\n get() =
definedExternally\n set(value) = definedExternally}\n\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic
inline fun ConstrainDoubleRange(exact: Double? = undefined, ideal: Double? = undefined, max: Double? =
undefined, min: Double? = undefined): ConstrainDoubleRange {\n val o = js(\"({})\")\n o[\"exact\"] = exact\n
o[\"ideal\"] = ideal\n o[\"max\"] = max\n o[\"min\"] = min\n return o}\n\npublic external interface

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ULongRange {\n var max: Int?\n get() = definedExternally\n set(value) = definedExternally\n var min:\n Int?\n get() = definedExternally\n set(value) =\n definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",\n\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ULongRange(max: Int? = undefined,\nmin: Int? = undefined): ULongRange {\n val o = js(\"({})\")\n o[\"max\"] = max\n o[\"min\"] = min\n return\n o\n}\n\npublic external interface ConstrainULongRange : ULongRange {\n var exact: Int?\n get() =\n definedExternally\n set(value) = definedExternally\n var ideal:\n Int?\n get() = definedExternally\n set(value) =\n definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",\n\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ConstrainULongRange(exact: Int? =\nundefined, ideal: Int? = undefined, max: Int? = undefined, min: Int? = undefined): ConstrainULongRange {\n val o\n = js(\"({})\")\n o[\"exact\"] = exact\n o[\"ideal\"] = ideal\n o[\"max\"] = max\n o[\"min\"] = min\n return\n o\n}\n\n/**\n * Exposes the JavaScript\n [ConstrainBooleanParameters](https://developer.mozilla.org/en/docs/Web/API/ConstrainBooleanParameters) to\n Kotlin\n *\npublic external interface ConstrainBooleanParameters {\n var exact: Boolean?\n get() =\n definedExternally\n set(value) = definedExternally\n var ideal: Boolean?\n get() = definedExternally\n set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",\n\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ConstrainBooleanParameters(exact:\nBoolean? = undefined, ideal: Boolean? = undefined): ConstrainBooleanParameters {\n val o = js(\"({})\")\n o[\"exact\"] = exact\n o[\"ideal\"] = ideal\n return o\n}\n\n/**\n * Exposes the JavaScript\n [ConstrainDOMStringParameters](https://developer.mozilla.org/en/docs/Web/API/ConstrainDOMStringParameters)\n to Kotlin\n *\npublic external interface ConstrainDOMStringParameters {\n var exact: dynamic\n get() =\n definedExternally\n set(value) = definedExternally\n var ideal: dynamic\n get() = definedExternally\n set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",\n\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun\nConstrainDOMStringParameters(exact: dynamic = undefined, ideal: dynamic = undefined):\nConstrainDOMStringParameters {\n val o = js(\"({})\")\n o[\"exact\"] = exact\n o[\"ideal\"] = ideal\n return\n o\n}\n\npublic external interface Capabilities\n\n@Suppress(\"INVISIBLE_REFERENCE\",\n\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun Capabilities(): Capabilities {\n val o\n = js(\"({})\")\n return o\n}\n\npublic external interface Settings\n\n@Suppress(\"INVISIBLE_REFERENCE\",\n\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun Settings(): Settings {\n val o =\n js(\"({})\")\n return o\n}\n\npublic external interface ConstraintSet\n\n@Suppress(\"INVISIBLE_REFERENCE\",\n\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ConstraintSet(): ConstraintSet {\n val\n o = js(\"({})\")\n return o\n}\n\npublic external interface Constraints : ConstraintSet {\n var advanced:\n Array<ConstraintSet>?\n get() = definedExternally\n set(value) =\n definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",\n\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun Constraints(advanced:\nArray<ConstraintSet>? = undefined): Constraints {\n val o = js(\"({})\")\n o[\"advanced\"]\n = advanced\n return o\n}\n\n/**\n * please, don't implement this interface!\n *\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external\ninterface MediaStreamTrackState {\n companion object\n}\n\npublic inline val\nMediaStreamTrackState.Companion.LIVE: MediaStreamTrackState get() =\n\"live\".asDynamic().unsafeCast<MediaStreamTrackState>()\n\npublic inline val\nMediaStreamTrackState.Companion.ENDED: MediaStreamTrackState get() =\n\"ended\".asDynamic().unsafeCast<MediaStreamTrackState>()\n\n/**\n * please, don't implement this interface!\n *\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external\ninterface VideoFacingModeEnum {\n companion object\n}\n\npublic inline val\nVideoFacingModeEnum.Companion.USER: VideoFacingModeEnum get() =

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"user".asDynamic().unsafeCast<VideoFacingModeEnum>()\n\npublic inline val
VideoFacingModeEnum.Companion.ENVIRONMENT: VideoFacingModeEnum get() =
"environment".asDynamic().unsafeCast<VideoFacingModeEnum>()\n\npublic
inline val VideoFacingModeEnum.Companion.LEFT: VideoFacingModeEnum get() =
"left".asDynamic().unsafeCast<VideoFacingModeEnum>()\n\npublic inline val
VideoFacingModeEnum.Companion.RIGHT: VideoFacingModeEnum get() =
"right".asDynamic().unsafeCast<VideoFacingModeEnum>()\n\n/* please, don't implement this interface!
*\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface VideoResizeModeEnum {\n companion object\n}\n\npublic inline val
VideoResizeModeEnum.Companion.NONE: VideoResizeModeEnum get() =
"none".asDynamic().unsafeCast<VideoResizeModeEnum>()\n\npublic inline val
VideoResizeModeEnum.Companion.CROP_AND_SCALE: VideoResizeModeEnum get() = "crop-and-
scale".asDynamic().unsafeCast<VideoResizeModeEnum>()\n\n/* please, don't implement this interface!
*\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface MediaDeviceKind {\n companion object\n}\n\npublic inline val
MediaDeviceKind.Companion.AUDIOINPUT:
MediaDeviceKind get() = "audioinput".asDynamic().unsafeCast<MediaDeviceKind>()\n\npublic inline val
MediaDeviceKind.Companion.AUDIOOUTPUT: MediaDeviceKind get() =
"audiooutput".asDynamic().unsafeCast<MediaDeviceKind>()\n\npublic inline val
MediaDeviceKind.Companion.VIDEOINPUT: MediaDeviceKind get() =
"videoinput".asDynamic().unsafeCast<MediaDeviceKind>()),"/*\n * Copyright 2010-2021 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n */\n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT
EDIT!\n\n// See github.com/kotlin/dukat for details\n\npackage org.w3c.dom.mediasource\n\nimport
kotlin.js.*\nimport org.khronos.webgl.*\nimport org.w3c.dom.*\nimport org.w3c.dom.events.*\n\n/**\n * Exposes
the JavaScript [MediaSource](https://developer.mozilla.org/en/docs/Web/API/MediaSource) to Kotlin\n */\n\npublic
external open class MediaSource
: EventTarget, MediaProvider {\n open val sourceBuffers: SourceBufferList\n open val activeSourceBuffers:
SourceBufferList\n open val readyState: ReadyState\n var duration: Double\n var onsourceopen: ((Event) ->
dynamic)?\n var onsourceended: ((Event) -> dynamic)?\n var onsourceclose: ((Event) -> dynamic)?\n fun
addSourceBuffer(type: String): SourceBuffer\n fun removeSourceBuffer(sourceBuffer: SourceBuffer)\n fun
endOfStream(error: EndOfStreamError = definedExternally)\n fun setLiveSeekableRange(start: Double, end:
Double)\n fun clearLiveSeekableRange()\n\n companion object {\n fun isTypeSupported(type: String):
Boolean\n }\n}\n\n/**\n * Exposes the JavaScript
[SourceBuffer](https://developer.mozilla.org/en/docs/Web/API/SourceBuffer) to Kotlin\n */\n\npublic external
abstract class SourceBuffer : EventTarget {\n open var mode: AppendMode\n open val updating: Boolean\n open
val buffered: TimeRanges\n open var timestampOffset:
Double\n open val audioTracks: AudioTrackList\n open val videoTracks: VideoTrackList\n open val
textTracks: TextTrackList\n open var appendWindowStart: Double\n open var appendWindowEnd: Double\n open
var onupdatestart: ((Event) -> dynamic)?\n open var onupdate: ((Event) -> dynamic)?\n open var
onupdateend: ((Event) -> dynamic)?\n open var onerror: ((Event) -> dynamic)?\n open var onabort: ((Event) ->
dynamic)?\n fun appendBuffer(data: dynamic)\n fun abort()\n fun remove(start: Double, end:
Double)\n}\n\n/**\n * Exposes the JavaScript
[SourceBufferList](https://developer.mozilla.org/en/docs/Web/API/SourceBufferList) to Kotlin\n */\n\npublic
external abstract class SourceBufferList : EventTarget {\n open val length: Int\n open var onaddsourcebuffer:
((Event) -> dynamic)?\n open var onremovesourcebuffer: ((Event) ->
dynamic)?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\n\npublic inline operator

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fun SourceBufferList.get(index: Int): SourceBuffer? = asDynamic()[index]\n\n/* please, don't implement this
interface! *\n@JsName("\null")\n@Suppress("\NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic
external interface ReadyState {\n companion object\n}\n\npublic inline val ReadyState.Companion.CLOSED:
ReadyState get() = "\closed".asDynamic().unsafeCast<ReadyState>()\n\npublic inline val
ReadyState.Companion.OPEN: ReadyState get() = "\open".asDynamic().unsafeCast<ReadyState>()\n\npublic
inline val ReadyState.Companion.ENDED: ReadyState get() =
"\ended".asDynamic().unsafeCast<ReadyState>()\n\n/* please, don't implement this interface!
*\n@JsName("\null")\n@Suppress("\NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface EndOfStreamError {\n companion object\n}\n\npublic inline val
EndOfStreamError.Companion.NETWORK: EndOfStreamError get() =
"\network".asDynamic().unsafeCast<EndOfStreamError>()\n\npublic inline val
EndOfStreamError.Companion.DECODE: EndOfStreamError
get() = "\decode".asDynamic().unsafeCast<EndOfStreamError>()\n\n/* please, don't implement this interface!
*\n@JsName("\null")\n@Suppress("\NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface AppendMode {\n companion object\n}\n\npublic inline val AppendMode.Companion.SEGMENTS:
AppendMode get() = "\segments".asDynamic().unsafeCast<AppendMode>()\n\npublic inline val
AppendMode.Companion.SEQUENCE: AppendMode get() =
"\sequence".asDynamic().unsafeCast<AppendMode>())"/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n *\n@n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT EDIT!\n//
See github.com/kotlin/dukat for details\n\npackage org.w3c.dom.pointerevents\n\nimport kotlin.js.*\nimport
org.khronos.webgl.*\nimport org.w3c.dom.*\nimport org.w3c.dom.events.*\n\npublic external interface
PointerEventInit : MouseEventInit
{\n var pointerId: Int? /* = 0 *\n get() = definedExternally\n set(value) = definedExternally\n var
width: Double? /* = 1.0 *\n get() = definedExternally\n set(value) = definedExternally\n var height:
Double? /* = 1.0 *\n get() = definedExternally\n set(value) = definedExternally\n var pressure: Float? /*
= 0f *\n get() = definedExternally\n set(value) = definedExternally\n var tangentialPressure: Float? /*
= 0f *\n get() = definedExternally\n set(value) = definedExternally\n var tiltX: Int? /* = 0 *\n get() =
definedExternally\n set(value) = definedExternally\n var tiltY: Int? /* = 0 *\n get() = definedExternally\n
 set(value) = definedExternally\n var twist: Int? /* = 0 *\n get() = definedExternally\n set(value) =
definedExternally\n var pointerType: String? /* = "\" *\n get() = definedExternally\n set(value) =
definedExternally\n
 var isPrimary: Boolean? /* = false *\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("\INVISIBLE_REFERENCE",
"\INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun PointerEventInit(pointerId: Int? = 0,
width: Double? = 1.0, height: Double? = 1.0, pressure: Float? = 0f, tangentialPressure: Float? = 0f, tiltX: Int? = 0,
tiltY: Int? = 0, twist: Int? = 0, pointerType: String? = "\", isPrimary: Boolean? = false, screenX: Int? = 0, screenY:
Int? = 0, clientX: Int? = 0, clientY: Int? = 0, button: Short? = 0, buttons: Short? = 0, relatedTarget: EventTarget? =
null, region: String? = null, ctrlKey: Boolean? = false, shiftKey: Boolean? = false, altKey: Boolean? = false,
metaKey: Boolean? = false, modifierAltGraph: Boolean? = false, modifierCapsLock: Boolean? = false, modifierFn:
Boolean? = false, modifierFnLock: Boolean? = false, modifierHyper: Boolean? = false, modifierNumLock:
Boolean? = false, modifierScrollLock: Boolean?
= false, modifierSuper: Boolean? = false, modifierSymbol: Boolean? = false, modifierSymbolLock: Boolean? =
false, view: Window? = null, detail: Int? = 0, bubbles: Boolean? = false, cancelable: Boolean? = false, composed:
Boolean? = false): PointerEventInit {\n val o = js("\({})")\n o["pointerId"] = pointerId\n o["width"] =
width\n o["height"] = height\n o["pressure"] = pressure\n o["tangentialPressure"] = tangentialPressure\n
o["tiltX"] = tiltX\n o["tiltY"] = tiltY\n o["twist"] = twist\n o["pointerType"] = pointerType\n
o["isPrimary"] = isPrimary\n o["screenX"] = screenX\n o["screenY"] = screenY\n o["clientX"] =

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clientX\n o["clientY"] = clientY\n o["button"] = button\n o["buttons"] = buttons\n o["relatedTarget"] =
relatedTarget\n o["region"] = region\n o["ctrlKey"] = ctrlKey\n o["shiftKey"] = shiftKey\n o["altKey"]
= altKey\n o["metaKey"] = metaKey\n o["modifierAltGraph"]
= modifierAltGraph\n o["modifierCapsLock"] = modifierCapsLock\n o["modifierFn"] = modifierFn\n
o["modifierFnLock"] = modifierFnLock\n o["modifierHyper"] = modifierHyper\n o["modifierNumLock"] =
modifierNumLock\n o["modifierScrollLock"] = modifierScrollLock\n o["modifierSuper"] = modifierSuper\n
o["modifierSymbol"] = modifierSymbol\n o["modifierSymbolLock"] = modifierSymbolLock\n o["view"] =
view\n o["detail"] = detail\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] =
composed\n return o\n}\n\n/**\n * Exposes the JavaScript
[PointerEvent](https://developer.mozilla.org/en/docs/Web/API/PointerEvent) to Kotlin\n */\npublic external open
class PointerEvent(type: String, eventInitDict: PointerEventInit = definedExternally) : MouseEvent {\n open val
pointerId: Int\n open val width: Double\n open val height: Double\n open val pressure: Float\n open val
tangentialPressure: Float\n
open val tiltX: Int\n open val tiltY: Int\n open val twist: Int\n open val pointerType: String\n open val
isPrimary: Boolean\n\n companion object {\n val NONE: Short\n val CAPTURING_PHASE: Short\n
val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n }\n}"/*\n * Copyright 2010-2021 JetBrains
s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.\n */\n\n// NOTE: THIS FILE IS AUTO-GENERATED,
DO NOT EDIT!\n// See github.com/kotlin/dukat for details\n\npackage org.w3c.dom.svg\n\nimport
kotlin.js.*\nimport org.khronos.webgl.*\nimport org.w3c.dom.*\nimport org.w3c.dom.css.*\n\n/**\n * Exposes the
JavaScript [SVGElement](https://developer.mozilla.org/en/docs/Web/API/SVGEElement) to Kotlin\n */\npublic
external abstract class SVGElement : Element, ElementCSSInlineStyle, GlobalEventHandlers, SVGElementInstance
{\n open val dataset:
DOMStringMap\n open val ownerSVGElement: SVGSVGElement?\n open val viewportElement:
SVGElement?\n open var tabIndex: Int\n fun focus()\n fun blur()\n\n companion object {\n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external interface
SVGBoundingBoxOptions
{\n var fill: Boolean? /* = true */\n get() = definedExternally\n set(value) = definedExternally\n var
stroke: Boolean? /* = false */\n get() = definedExternally\n set(value) = definedExternally\n var markers:
Boolean? /* = false */\n get() = definedExternally\n set(value) = definedExternally\n var clipped:
Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\npublic inline fun SVGBoundingBoxOptions(fill:
Boolean? = true, stroke: Boolean? = false, markers: Boolean? = false, clipped: Boolean? = false):
SVGBoundingBoxOptions {\n val o = js("{}")\n o["fill"] = fill\n o["stroke"] = stroke\n o["markers"]
= markers\n o["clipped"] = clipped\n return o\n}\n\n/**\n * Exposes the JavaScript
[SVGGraphicsElement](https://developer.mozilla.org/en/docs/Web/API/SVGGraphicsElement)
to Kotlin\n */\npublic external abstract class SVGGraphicsElement : SVGElement, SVGTests {\n open val
transform: SVGAnimatedTransformList\n fun getBBox(options: SVGBoundingBoxOptions = definedExternally):
DOMRect\n fun getCTM(): DOMMatrix?\n fun getScreenCTM(): DOMMatrix?\n\n companion object {\n

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val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n
 val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the
JavaScript [SVGGeometryElement](https://developer.mozilla.org/en/docs/Web/API/SVGGeometryElement) to
Kotlin\n */\npublic external abstract class SVGGeometryElement : SVGGraphicsElement {\n open val
pathLength: SVGAnimatedNumber\n fun isPointInFill(point: DOMPoint): Boolean\n fun isPointInStroke(point:
DOMPoint): Boolean\n fun getTotalLength(): Float\n fun getPointAtLength(distance: Float): DOMPoint\n\n
companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val
TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED:
Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val
DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[SVGNumber](https://developer.mozilla.org/en/docs/Web/API/SVGNumber) to Kotlin\n */\npublic external
abstract class SVGNumber {\n open var value: Float\n}\n\n/**\n * Exposes the JavaScript
[SVGLength](https://developer.mozilla.org/en/docs/Web/API/SVGLength) to Kotlin\n */\npublic external
abstract class SVGLength {\n open val unitType: Short\n open var value: Float\n open var valueInSpecifiedUnits:
Float\n open var valueAsString: String\n fun newValueSpecifiedUnits(unitType: Short, valueInSpecifiedUnits:
Float)\n fun convertToSpecifiedUnits(unitType: Short)\n\n companion object {\n val
SVG_LENGTHTYPE_UNKNOWN: Short\n val SVG_LENGTHTYPE_NUMBER:
Short\n val SVG_LENGTHTYPE_PERCENTAGE: Short\n val SVG_LENGTHTYPE_EMS: Short\n
 val SVG_LENGTHTYPE_EXS: Short\n val SVG_LENGTHTYPE_PX: Short\n val
SVG_LENGTHTYPE_CM: Short\n val SVG_LENGTHTYPE_MM: Short\n val
SVG_LENGTHTYPE_IN: Short\n val SVG_LENGTHTYPE_PT: Short\n val SVG_LENGTHTYPE_PC:
Short\n }\n}\n\n/**\n * Exposes the JavaScript
[SVGAngle](https://developer.mozilla.org/en/docs/Web/API/SVGAngle) to Kotlin\n */\npublic external
abstract class SVGAngle {\n open val unitType: Short\n open var value: Float\n open var valueInSpecifiedUnits:
Float\n open var valueAsString: String\n fun newValueSpecifiedUnits(unitType: Short, valueInSpecifiedUnits:
Float)\n fun convertToSpecifiedUnits(unitType: Short)\n\n companion object {\n val
SVG_ANGLETYPE_UNKNOWN: Short\n val SVG_ANGLETYPE_UNSPECIFIED: Short\n val
SVG_ANGLETYPE_DEG: Short\n val SVG_ANGLETYPE_RAD: Short\n
 val SVG_ANGLETYPE_GRAD: Short\n }\n}\n\npublic external abstract class SVGNameList {\n open val
length: Int\n open val numberOfItems: Int\n fun clear()\n fun initialize(newItem: dynamic): dynamic\n fun
insertItemBefore(newItem: dynamic, index: Int): dynamic\n fun replaceItem(newItem: dynamic, index: Int):
dynamic\n fun removeItem(index: Int): dynamic\n fun appendItem(newItem: dynamic): dynamic\n fun
getItem(index: Int): dynamic\n}\n\n@Suppress(\n "INVISIBLE_REFERENCE",
 "INVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\npublic inline operator fun SVGNameList.get(index: Int):
dynamic = asDynamic()[index]\n\n@Suppress(\n "INVISIBLE_REFERENCE",

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\@kotlin.internal.InlineOnly\npublic inline operator fun SVGNameList.set(index: Int,
newItem: dynamic) { asDynamic()[index] = newItem }\n\n/**\n * Exposes the JavaScript
[SVGNumberList](https://developer.mozilla.org/en/docs/Web/API/SVGNumberList) to Kotlin\n *\npublic external
abstract
class SVGNumberList {\n open val length: Int\n open val numberOfItems: Int\n fun clear()\n fun
initialize(newItem: SVGNumber): SVGNumber\n fun insertItemBefore(newItem: SVGNumber, index: Int):
SVGNumber\n fun replaceItem(newItem: SVGNumber, index: Int): SVGNumber\n fun removeItem(index: Int):
SVGNumber\n fun appendItem(newItem: SVGNumber): SVGNumber\n fun getItem(index: Int):
SVGNumber\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun SVGNumberList.get(index:
Int): SVGNumber? = asDynamic()[index]\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun SVGNumberList.set(index:
Int, newItem: SVGNumber) { asDynamic()[index] = newItem }\n\n/**\n * Exposes the JavaScript
[SVGLengthList](https://developer.mozilla.org/en/docs/Web/API/SVGLengthList) to Kotlin\n *\npublic external
abstract class SVGLengthList {\n open val length: Int\n
 open val numberOfItems: Int\n fun clear()\n fun initialize(newItem: SVGLength): SVGLength\n fun
insertItemBefore(newItem: SVGLength, index: Int): SVGLength\n fun replaceItem(newItem: SVGLength, index:
Int): SVGLength\n fun removeItem(index: Int): SVGLength\n fun appendItem(newItem: SVGLength):
SVGLength\n fun getItem(index: Int): SVGLength\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun SVGLengthList.get(index:
Int): SVGLength? = asDynamic()[index]\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun SVGLengthList.set(index: Int,
newItem: SVGLength) { asDynamic()[index] = newItem }\n\n/**\n * Exposes the JavaScript
[SVGAnimatedBoolean](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedBoolean) to Kotlin\n
*\npublic external abstract class SVGAnimatedBoolean {\n open var baseVal: Boolean\n open val animVal:
Boolean\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedEnumeration](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedEnumeration) to
Kotlin\n *\npublic external abstract class SVGAnimatedEnumeration {\n open var baseVal: Short\n open val
animVal: Short\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedInteger](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedInteger) to Kotlin\n
*\npublic external abstract class SVGAnimatedInteger {\n open var baseVal: Int\n open val animVal:
Int\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedNumber](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedNumber) to Kotlin\n
*\npublic external abstract class SVGAnimatedNumber {\n open var baseVal: Float\n open val animVal:
Float\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedLength](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedLength) to Kotlin\n
*\npublic external abstract class SVGAnimatedLength {\n open val baseVal: SVGLength\n open val animVal:
SVGLength\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedAngle](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedAngle) to Kotlin\n *\npublic
external abstract class SVGAnimatedAngle {\n open val baseVal: SVGAngle\n open val animVal:
SVGAngle\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedString](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedString) to Kotlin\n *\npublic
external abstract class SVGAnimatedString {\n open var baseVal: String\n open val animVal: String\n}\n\n/**\n
 * Exposes the JavaScript [SVGAnimatedRect](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedRect)
to Kotlin\n *\npublic external abstract class SVGAnimatedRect {\n open val baseVal: DOMRect\n open val
animVal: DOMRectReadOnly\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedNumberList](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedNumberList) to Kotlin\n

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*\npublic external abstract class SVGAnimatedNumberList {\n open val baseVal: SVGNumberList\n open val animVal: SVGNumberList\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedLengthList](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedLengthList) to Kotlin\n*\npublic external abstract class SVGAnimatedLengthList {\n open val baseVal: SVGLengthList\n open val
animVal: SVGLengthList\n}\n\n/**\n * Exposes the JavaScript
[SVGStringList](https://developer.mozilla.org/en/docs/Web/API/SVGStringList) to Kotlin\n*\npublic external
abstract class SVGStringList {\n open val length: Int\n open val numberOfItems: Int\n fun clear()\n fun
initialize(newItem: String): String\n fun insertItemBefore(newItem: String, index: Int): String\n fun
replaceItem(newItem: String, index: Int): String\n fun removeItem(index: Int): String\n fun
appendItem(newItem: String): String\n fun getItem(index: Int):
String\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun SVGStringList.get(index:
Int):
String? = asDynamic()[index]\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun SVGStringList.set(index: Int,
newItem: String) { asDynamic()[index] = newItem }\n\n/**\n * Exposes the JavaScript
[SVGUnitTypes](https://developer.mozilla.org/en/docs/Web/API/SVGUnitTypes) to Kotlin\n*\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external interface SVGUnitTypes
{\n companion object {\n val SVG_UNIT_TYPE_UNKNOWN: Short\n val
SVG_UNIT_TYPE_USERSPACEONUSE: Short\n val SVG_UNIT_TYPE_OBJECTBOUNDINGBOX:
Short\n }\n}\n\n/**\n * Exposes the JavaScript
[SVGTTests](https://developer.mozilla.org/en/docs/Web/API/SVGTTests) to Kotlin\n*\npublic external interface
SVGTTests {\n val requiredExtensions: SVGStringList\n val systemLanguage: SVGStringList\n}\n\npublic
external interface SVGFitToViewBox {\n val viewBox: SVGAnimatedRect\n val preserveAspectRatio:
SVGAnimatedPreserveAspectRatio\n}\n\n/**\n * Exposes the JavaScript [SVGZoomAndPan](https://developer.mozilla.org/en/docs/Web/API/SVGZoomAndPan)
to Kotlin\n*\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external interface
SVGZoomAndPan {\n var zoomAndPan: Short\n\n companion object {\n val
SVG_ZOOMANDPAN_UNKNOWN: Short\n val SVG_ZOOMANDPAN_DISABLE: Short\n val
SVG_ZOOMANDPAN_MAGNIFY: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[SVGURIReference](https://developer.mozilla.org/en/docs/Web/API/SVGURIReference) to Kotlin\n*\npublic
external interface SVGURIReference {\n val href: SVGAnimatedString\n}\n\n/**\n * Exposes the JavaScript
[SVGSVGElement](https://developer.mozilla.org/en/docs/Web/API/SVGSVGElement) to Kotlin\n*\npublic
external abstract class SVGSVGElement : SVGGraphicsElement, SVGFitToViewBox, SVGZoomAndPan,
WindowEventHandlers {\n open val x: SVGAnimatedLength\n open val y: SVGAnimatedLength\n open val
width: SVGAnimatedLength\n open val
height: SVGAnimatedLength\n open var currentScale: Float\n open val currentTranslate:
DOMPointReadOnly\n fun getIntersectionList(rect: DOMRectReadOnly, referenceElement: SVGElement?):
NodeList\n fun getEnclosureList(rect: DOMRectReadOnly, referenceElement: SVGElement?): NodeList\n fun
checkIntersection(element: SVGElement, rect: DOMRectReadOnly): Boolean\n fun checkEnclosure(element:
SVGElement, rect: DOMRectReadOnly): Boolean\n fun deselectAll()\n fun createSVGNumber():
SVGNumber\n fun createSVGLength(): SVGLength\n fun createSVGAngle(): SVGAngle\n fun
createSVGPoint(): DOMPoint\n fun createSVGMatrix(): DOMMatrix\n fun createSVGRect(): DOMRect\n fun
createSVGTransform(): SVGTransform\n fun createSVGTransformFromMatrix(matrix:
DOMMatrixReadOnly): SVGTransform\n fun getElementById(elementId: String): Element\n fun
suspendRedraw(maxWaitMilliseconds: Int): Int\n fun unsuspendRedraw(suspendHandleID: Int)\n fun
unsuspendRedrawAll()\n}

```

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fun forceRedraw()\n\n companion object {\n val SVG_ZOOMANDPAN_UNKNOWN: Short\n val SVG_ZOOMANDPAN_DISABLE: Short\n val SVG_ZOOMANDPAN_MAGNIFY: Short\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n}

}

\n\n/**\n * Exposes the JavaScript [SVGGElement](https://developer.mozilla.org/en/docs/Web/API/SVGGElement) to Kotlin\n *\npublic external abstract class SVGGElement : SVGGraphicsElement {\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n }\n}\n\npublic external abstract class SVGUnknownElement : SVGGraphicsElement {\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n }\n}\n\npublic external abstract class SVGDefsElement : SVGGraphicsElement {\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n }\n}\n\npublic external abstract class SVGDescElement : SVGElement {\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n }\n}

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PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[SVGMetadataElement](https://developer.mozilla.org/en/docs/Web/API/SVGMetadataElement) to Kotlin\n
*\npublic external abstract class SVGMetadataElement : SVGElement {\n companion object {\n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE:
Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[SVGTitleElement](https://developer.mozilla.org/en/docs/Web/API/SVGTitleElement) to Kotlin\n
*\npublic
external abstract class SVGTitleElement : SVGElement {\n companion object {\n val
ELEMENT_NODE:
Short\n val ATTRIBUTE_NODE: Short\n
 val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
 val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[SVGSymbolElement](https://developer.mozilla.org/en/docs/Web/API/SVGSymbolElement) to Kotlin\n
*\npublic
external abstract class SVGSymbolElement : SVGGraphicsElement, SVGFitToViewBox {\n companion object
{\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n
 val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[SVGUseElement](https://developer.mozilla.org/en/docs/Web/API/SVGUseElement) to Kotlin\n
*\npublic external
abstract class SVGUseElement : SVGGraphicsElement, SVGURIReference {\n open val x:
SVGAnimatedLength\n open val y: SVGAnimatedLength\n open val width: SVGAnimatedLength\n
 open val height: SVGAnimatedLength\n open val instanceRoot: SVGElement?\n open val
animatedInstanceRoot: SVGElement?\n\n companion object {\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val

```



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ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external open class
SVGUseElementShadowRoot : ShadowRoot {\n companion
 object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE:
Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external interface
SVGElementInstance {\n val correspondingElement: SVGElement?\n get() = definedExternally\n val
correspondingUseElement: SVGUseElement?\n get() = definedExternally\n}\n\npublic external
open class ShadowAnimation(source: dynamic, newTarget: dynamic) {\n open val sourceAnimation:
dynamic\n}\n\n/**\n * Exposes the JavaScript
[SVGSwitchElement](https://developer.mozilla.org/en/docs/Web/API/SVGSwitchElement) to Kotlin\n */\n\npublic
external abstract class SVGSwitchElement : SVGGraphicsElement {\n companion object {\n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external
interface GetSVGDocument {\n fun getSVGDocument(): Document\n}\n\n/**\n * Exposes the JavaScript
[SVGStyleElement](https://developer.mozilla.org/en/docs/Web/API/SVGStyleElement) to Kotlin\n */\n\npublic
external abstract class SVGStyleElement : SVGElement, LinkStyle {\n open var type: String\n open var media:
String\n open var title: String\n\n companion object {\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n
 val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n
 val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes
the JavaScript [SVGTransform](https://developer.mozilla.org/en/docs/Web/API/SVGTransform) to Kotlin\n
*/\n\npublic external abstract class SVGTransform {\n open val type: Short\n open val matrix: DOMMatrix\n

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open val angle: Float\n fun setMatrix(matrix: DOMMatrixReadOnly)\n fun setTranslate(tx: Float, ty: Float)\n
fun setScale(sx: Float, sy: Float)\n fun setRotate(angle: Float, cx: Float, cy: Float)\n fun setSkewX(angle:
Float)\n fun setSkewY(angle: Float)\n\n companion object {\n val SVG_TRANSFORM_UNKNOWN:
Short\n val SVG_TRANSFORM_MATRIX: Short\n val SVG_TRANSFORM_TRANSLATE: Short\n
val SVG_TRANSFORM_SCALE: Short\n val SVG_TRANSFORM_ROTATE: Short\n
val SVG_TRANSFORM_SKEWX: Short\n val SVG_TRANSFORM_SKEWY: Short\n }\n\n/**\n *
Exposes the JavaScript [SVGTransformList](https://developer.mozilla.org/en/docs/Web/API/SVGTransformList) to
Kotlin\n */\npublic external abstract class SVGTransformList {\n open val length: Int\n open val
numberOfItems: Int\n fun clear()\n fun initialize(newItem: SVGTransform): SVGTransform\n fun
insertItemBefore(newItem: SVGTransform, index: Int): SVGTransform\n fun replaceItem(newItem:
SVGTransform, index: Int): SVGTransform\n fun removeItem(index: Int): SVGTransform\n fun
appendItem(newItem: SVGTransform): SVGTransform\n fun createSVGTransformFromMatrix(matrix:
DOMMatrixReadOnly): SVGTransform\n fun consolidate(): SVGTransform?\n fun getItem(index: Int):
SVGTransform\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun SVGTransformList.get(index:
Int): SVGTransform? = asDynamic()[index]\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun SVGTransformList.set(index:
Int, newItem: SVGTransform) { asDynamic()[index] = newItem }\n\n/**\n * Exposes the JavaScript
[SVGAnimatedTransformList](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedTransformList) to
Kotlin\n */\npublic external abstract class SVGAnimatedTransformList {\n open val baseVal:
SVGTransformList\n open val animVal: SVGTransformList\n}\n\n/**\n * Exposes the JavaScript
[SVGPreserveAspectRatio](https://developer.mozilla.org/en/docs/Web/API/SVGPreserveAspectRatio) to Kotlin\n
*/\npublic external abstract class SVGPreserveAspectRatio {\n open var align: Short\n open var meetOrSlice:
Short\n\n companion object {\n val SVG_PRESERVEASPECTRATIO_UNKNOWN: Short\n val
SVG_PRESERVEASPECTRATIO_NONE: Short\n val SVG_PRESERVEASPECTRATIO_XMINYMIN:
Short\n val SVG_PRESERVEASPECTRATIO_XMIDYMIN: Short\n
val SVG_PRESERVEASPECTRATIO_XMAXYMIN: Short\n val
SVG_PRESERVEASPECTRATIO_XMINYMID: Short\n val
SVG_PRESERVEASPECTRATIO_XMIDYMID: Short\n val
SVG_PRESERVEASPECTRATIO_XMAXYMID: Short\n val
SVG_PRESERVEASPECTRATIO_XMINYMAX: Short\n val
SVG_PRESERVEASPECTRATIO_XMIDYMAX: Short\n val
SVG_PRESERVEASPECTRATIO_XMAXYMAX: Short\n val SVG_MEETORSLICE_UNKNOWN: Short\n
val SVG_MEETORSLICE_MEET: Short\n val SVG_MEETORSLICE_SLICE: Short\n }\n}\n\n/**\n *
Exposes the JavaScript
[SVGAnimatedPreserveAspectRatio](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedPreserveAspect
Ratio) to Kotlin\n */\npublic external abstract class SVGAnimatedPreserveAspectRatio {\n open val baseVal:
SVGPreserveAspectRatio\n open val animVal: SVGPreserveAspectRatio\n}\n\n/**\n * Exposes the JavaScript
[SVGPathElement](https://developer.mozilla.org/en/docs/Web/API/SVGPathElement) to Kotlin\n */\npublic
external abstract class SVGPathElement : SVGGeometryElement
{\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val
TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

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DOCUMENT\_POSITION\_IMPLEMENTATION\_SPECIFIC: Short\n }\n}\n\n/\*\*\n \* Exposes the JavaScript [SVGRectElement](https://developer.mozilla.org/en/docs/Web/API/SVGRectElement) to Kotlin\n \*/\n\npublic external abstract class SVGRectElement : SVGGeometryElement {\n\n open val x: SVGAnimatedLength\n open val y: SVGAnimatedLength\n open val width: SVGAnimatedLength\n open val height: SVGAnimatedLength\n open val rx: SVGAnimatedLength\n open val ry: SVGAnimatedLength\n\n companion object {\n val ELEMENT\_NODE: Short\n val ATTRIBUTE\_NODE: Short\n val TEXT\_NODE: Short\n val CDATA\_SECTION\_NODE: Short\n val ENTITY\_REFERENCE\_NODE: Short\n val ENTITY\_NODE: Short\n val PROCESSING\_INSTRUCTION\_NODE: Short\n val COMMENT\_NODE: Short\n val DOCUMENT\_NODE: Short\n val DOCUMENT\_TYPE\_NODE: Short\n val DOCUMENT\_FRAGMENT\_NODE: Short\n val NOTATION\_NODE: Short\n val DOCUMENT\_POSITION\_DISCONNECTED: Short\n val DOCUMENT\_POSITION\_PRECEDING: Short\n val DOCUMENT\_POSITION\_FOLLOWING: Short\n val DOCUMENT\_POSITION\_CONTAINS: Short\n val DOCUMENT\_POSITION\_CONTAINED\_BY: Short\n }\n}\n\n\n/\*\*\n \* Exposes the JavaScript [SVGCircleElement](https://developer.mozilla.org/en/docs/Web/API/SVGCircleElement) to Kotlin\n \*/\n\npublic external abstract class SVGCircleElement : SVGGeometryElement {\n open val cx: SVGAnimatedLength\n open val cy: SVGAnimatedLength\n open val r: SVGAnimatedLength\n\n companion object {\n val ELEMENT\_NODE: Short\n val ATTRIBUTE\_NODE: Short\n val TEXT\_NODE: Short\n val CDATA\_SECTION\_NODE: Short\n val ENTITY\_REFERENCE\_NODE: Short\n val ENTITY\_NODE: Short\n val PROCESSING\_INSTRUCTION\_NODE: Short\n val COMMENT\_NODE: Short\n val DOCUMENT\_NODE: Short\n val DOCUMENT\_TYPE\_NODE: Short\n val DOCUMENT\_FRAGMENT\_NODE: Short\n val NOTATION\_NODE: Short\n val DOCUMENT\_POSITION\_DISCONNECTED: Short\n val DOCUMENT\_POSITION\_PRECEDING: Short\n val DOCUMENT\_POSITION\_FOLLOWING: Short\n val DOCUMENT\_POSITION\_CONTAINS: Short\n val DOCUMENT\_POSITION\_CONTAINED\_BY: Short\n }\n}\n\n\n/\*\*\n \* Exposes the JavaScript [SVGEllipseElement](https://developer.mozilla.org/en/docs/Web/API/SVGEllipseElement) to Kotlin\n \*/\n\npublic external abstract class SVGEllipseElement : SVGGeometryElement {\n open val cx: SVGAnimatedLength\n open val cy: SVGAnimatedLength\n open val rx: SVGAnimatedLength\n open val ry: SVGAnimatedLength\n\n companion object {\n val ELEMENT\_NODE: Short\n val ATTRIBUTE\_NODE: Short\n val TEXT\_NODE: Short\n val CDATA\_SECTION\_NODE: Short\n val ENTITY\_REFERENCE\_NODE: Short\n val ENTITY\_NODE: Short\n val PROCESSING\_INSTRUCTION\_NODE: Short\n val COMMENT\_NODE: Short\n val DOCUMENT\_NODE: Short\n val DOCUMENT\_TYPE\_NODE: Short\n val DOCUMENT\_FRAGMENT\_NODE: Short\n val NOTATION\_NODE: Short\n val DOCUMENT\_POSITION\_DISCONNECTED: Short\n val DOCUMENT\_POSITION\_PRECEDING: Short\n val DOCUMENT\_POSITION\_FOLLOWING: Short\n val DOCUMENT\_POSITION\_CONTAINS: Short\n val DOCUMENT\_POSITION\_CONTAINED\_BY: Short\n }\n}\n\n\n/\*\*\n \* Exposes the JavaScript [SVGLineElement](https://developer.mozilla.org/en/docs/Web/API/SVGLineElement) to Kotlin\n \*/\n\npublic external abstract class SVGLineElement : SVGGeometryElement {\n open val x1: SVGAnimatedLength\n open val y1: SVGAnimatedLength\n open val x2: SVGAnimatedLength\n open val y2: SVGAnimatedLength\n\n companion object {\n val ELEMENT\_NODE: Short\n val ATTRIBUTE\_NODE: Short\n val TEXT\_NODE: Short\n val CDATA\_SECTION\_NODE: Short\n val ENTITY\_REFERENCE\_NODE: Short\n val ENTITY\_NODE: Short\n val PROCESSING\_INSTRUCTION\_NODE: Short\n val COMMENT\_NODE: Short\n val DOCUMENT\_NODE: Short\n val DOCUMENT\_TYPE\_NODE: Short\n }\n}\n

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DOCUMENT_FRAGMENT_NODE:
Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n
val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n
 val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes
the JavaScript [SVGMeshElement](https://developer.mozilla.org/en/docs/Web/API/SVGMeshElement) to Kotlin\n
*/\npublic external abstract class SVGMeshElement : SVGGeometryElement, SVGURIReference {\n companion
object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE:
Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE:
Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n
val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n
 val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes
the JavaScript [SVGAnimatedPoints](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedPoints) to
Kotlin\n */\npublic external interface SVGAnimatedPoints {\n val points: SVGPointList\n val animatedPoints:
SVGPointList\n}\n\npublic external abstract class SVGPointList {\n open val length: Int\n open val
numberOfItems: Int\n fun clear()\n fun initialize(newItem: DOMPoint): DOMPoint\n fun
insertItemBefore(newItem: DOMPoint, index: Int): DOMPoint\n fun replaceItem(newItem: DOMPoint, index:
Int): DOMPoint\n fun removeItem(index: Int): DOMPoint\n fun appendItem(newItem: DOMPoint):
DOMPoint\n
 fun getItem(index: Int): DOMPoint\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun SVGPointList.get(index: Int):
DOMPoint? = asDynamic()[index]\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun SVGPointList.set(index: Int,
newItem: DOMPoint) { asDynamic()[index] = newItem }\n\n/**\n * Exposes the JavaScript
[SVGPolylineElement](https://developer.mozilla.org/en/docs/Web/API/SVGPolylineElement) to Kotlin\n
*/\npublic external abstract class SVGPolylineElement : SVGGeometryElement, SVGAnimatedPoints {\n
 companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val
TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n
 val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val
NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val
DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n
 val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes
the JavaScript [SVGPolygonElement](https://developer.mozilla.org/en/docs/Web/API/SVGPolygonElement) to
Kotlin\n */\npublic external abstract class SVGPolygonElement : SVGGeometryElement, SVGAnimatedPoints {\n
 companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val
TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE:
Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n
val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val
DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n

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val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes
the JavaScript
[SVGTextContentElement](https://developer.mozilla.org/en/docs/Web/API/SVGTextContentElement) to Kotlin\n
*\npublic external abstract class SVGTextContentElement : SVGGraphicsElement {\n open val textLength:
SVGAnimatedLength\n open val lengthAdjust: SVGAnimatedEnumeration\n fun getNumberOfChars(): Int\n
fun getComputedTextLength(): Float\n fun getSubStringLength(charnum: Int, nchars: Int): Float\n fun
getStartPositionOfChar(charnum: Int): DOMPoint\n fun getEndPositionOfChar(charnum: Int): DOMPoint\n
 fun getExtentOfChar(charnum: Int): DOMRect\n fun getRotationOfChar(charnum: Int): Float\n fun
getCharNumAtPosition(point: DOMPoint): Int\n fun selectSubString(charnum: Int, nchars: Int)\n\n companion
object {\n val LENGTHADJUST_UNKNOWN: Short\n val LENGTHADJUST_SPACING: Short\n
val LENGTHADJUST_SPACINGANDGLYPHS: Short\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[SVGTextPositioningElement](https://developer.mozilla.org/en/docs/Web/API/SVGTextPositioningElement) to
Kotlin\n
*\npublic external abstract class SVGTextPositioningElement : SVGTextContentElement {\n open val x:
SVGAnimatedLengthList\n open val y: SVGAnimatedLengthList\n open val dx: SVGAnimatedLengthList\n
open val dy: SVGAnimatedLengthList\n open val rotate: SVGAnimatedNumberList\n\n companion object {\n
val LENGTHADJUST_UNKNOWN: Short\n val LENGTHADJUST_SPACING: Short\n val
LENGTHADJUST_SPACINGANDGLYPHS: Short\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[SVGTextElement](https://developer.mozilla.org/en/docs/Web/API/SVGTextElement) to Kotlin\n
*\npublic external abstract class SVGTextElement : SVGTextPositioningElement {\n companion object {\n val
LENGTHADJUST_UNKNOWN: Short\n val LENGTHADJUST_SPACING: Short\n val
LENGTHADJUST_SPACINGANDGLYPHS: Short\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

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DOCUMENT\_POSITION\_IMPLEMENTATION\_SPECIFIC: Short\n }\n}\n\n/\*\*\n \* Exposes the JavaScript [SVGTSpanElement](https://developer.mozilla.org/en/docs/Web/API/SVGTSpanElement) to Kotlin\n \*/\npublic external abstract class SVGTSpanElement : SVGTextPositioningElement {\n companion object {\n val LENGTHADJUST\_UNKNOWN: Short\n val LENGTHADJUST\_SPACING: Short\n val LENGTHADJUST\_SPACINGANDGLYPHS: Short\n val ELEMENT\_NODE: Short\n val ATTRIBUTE\_NODE: Short\n val TEXT\_NODE: Short\n val CDATA\_SECTION\_NODE: Short\n val ENTITY\_REFERENCE\_NODE: Short\n val ENTITY\_NODE: Short\n val PROCESSING\_INSTRUCTION\_NODE: Short\n val COMMENT\_NODE: Short\n val DOCUMENT\_NODE: Short\n val DOCUMENT\_TYPE\_NODE: Short\n val DOCUMENT\_FRAGMENT\_NODE: Short\n val NOTATION\_NODE: Short\n val DOCUMENT\_POSITION\_DISCONNECTED: Short\n val DOCUMENT\_POSITION\_PRECEDING: Short\n val DOCUMENT\_POSITION\_FOLLOWING: Short\n val DOCUMENT\_POSITION\_CONTAINS: Short\n val DOCUMENT\_POSITION\_CONTAINED\_BY: Short\n val

DOCUMENT\_POSITION\_IMPLEMENTATION\_SPECIFIC: Short\n }\n}\n\n/\*\*\n \* Exposes the JavaScript [SVGTextPathElement](https://developer.mozilla.org/en/docs/Web/API/SVGTextPathElement) to Kotlin\n \*/\npublic external abstract class SVGTextPathElement : SVGTextContentElement, SVGURIReference {\n open val startOffset: SVGAnimatedLength\n open val method: SVGAnimatedEnumeration\n open val spacing: SVGAnimatedEnumeration\n\n companion object {\n val TEXTPATH\_METHODTYPE\_UNKNOWN: Short\n val TEXTPATH\_METHODTYPE\_ALIGN: Short\n val TEXTPATH\_METHODTYPE\_STRETCH: Short\n val TEXTPATH\_SPACINGTYPE\_UNKNOWN: Short\n val TEXTPATH\_SPACINGTYPE\_AUTO: Short\n val TEXTPATH\_SPACINGTYPE\_EXACT: Short\n val LENGTHADJUST\_UNKNOWN: Short\n val LENGTHADJUST\_SPACING: Short\n val LENGTHADJUST\_SPACINGANDGLYPHS: Short\n val ELEMENT\_NODE: Short\n val ATTRIBUTE\_NODE: Short\n val TEXT\_NODE: Short\n val CDATA\_SECTION\_NODE: Short\n val ENTITY\_REFERENCE\_NODE: Short\n val ENTITY\_NODE: Short\n val PROCESSING\_INSTRUCTION\_NODE: Short\n val COMMENT\_NODE: Short\n val DOCUMENT\_NODE: Short\n val DOCUMENT\_TYPE\_NODE: Short\n val DOCUMENT\_FRAGMENT\_NODE: Short\n val NOTATION\_NODE: Short\n val DOCUMENT\_POSITION\_DISCONNECTED: Short\n val DOCUMENT\_POSITION\_PRECEDING: Short\n val DOCUMENT\_POSITION\_FOLLOWING: Short\n val DOCUMENT\_POSITION\_CONTAINS: Short\n val DOCUMENT\_POSITION\_CONTAINED\_BY: Short\n val

DOCUMENT\_POSITION\_IMPLEMENTATION\_SPECIFIC: Short\n }\n}\n\n/\*\*\n \* Exposes the JavaScript [SVGImageElement](https://developer.mozilla.org/en/docs/Web/API/SVGImageElement) to Kotlin\n \*/\npublic external abstract class SVGImageElement : SVGGraphicsElement, SVGURIReference, HTMLOrSVGImageElement {\n open val x: SVGAnimatedLength\n open val y: SVGAnimatedLength\n open val width: SVGAnimatedLength\n open val height: SVGAnimatedLength\n open val preserveAspectRatio: SVGAnimatedPreserveAspectRatio\n\n open var crossOrigin: String?\n\n companion object {\n val ELEMENT\_NODE: Short\n val ATTRIBUTE\_NODE: Short\n val TEXT\_NODE: Short\n val CDATA\_SECTION\_NODE: Short\n val ENTITY\_REFERENCE\_NODE: Short\n val ENTITY\_NODE: Short\n val PROCESSING\_INSTRUCTION\_NODE: Short\n val COMMENT\_NODE: Short\n val DOCUMENT\_NODE: Short\n val DOCUMENT\_TYPE\_NODE: Short\n val DOCUMENT\_FRAGMENT\_NODE: Short\n val NOTATION\_NODE: Short\n val DOCUMENT\_POSITION\_DISCONNECTED: Short\n val DOCUMENT\_POSITION\_PRECEDING: Short\n val DOCUMENT\_POSITION\_FOLLOWING: Short\n val DOCUMENT\_POSITION\_CONTAINS: Short\n val DOCUMENT\_POSITION\_CONTAINED\_BY: Short\n val

DOCUMENT\_POSITION\_IMPLEMENTATION\_SPECIFIC: Short\n }\n}\n\n/\*\*\n \* Exposes the JavaScript [SVGForeignObjectElement](https://developer.mozilla.org/en/docs/Web/API/SVGForeignObjectElement) to

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Kotlin\n */\npublic external abstract class SVGForeignObjectElement : SVGGraphicsElement {\n open val x: SVGAnimatedLength\n open val y: SVGAnimatedLength\n open val width: SVGAnimatedLength\n open val height: SVGAnimatedLength\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external abstract class SVGMarkerElement : SVGElement, SVGFitToViewBox {\n open val refX: SVGAnimatedLength\n open val refY: SVGAnimatedLength\n open val markerUnits: SVGAnimatedEnumeration\n open val markerWidth: SVGAnimatedLength\n open val markerHeight: SVGAnimatedLength\n open val orientType: SVGAnimatedEnumeration\n open val orientAngle: SVGAnimatedAngle\n open var orient: String\n fun setOrientToAuto()\n fun setOrientToAngle(angle: SVGAngle)\n\n companion object {\n val SVG_MARKERUNITS_UNKNOWN: Short\n val SVG_MARKERUNITS_USERSPACEONUSE: Short\n val SVG_MARKERUNITS_STROKEWIDTH: Short\n val SVG_MARKER_ORIENT_UNKNOWN: Short\n val SVG_MARKER_ORIENT_AUTO: Short\n val SVG_MARKER_ORIENT_ANGLE: Short\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [SVGSolidcolorElement](https://developer.mozilla.org/en/docs/Web/API/SVGSolidcolorElement) to Kotlin\n */\n\npublic external abstract class SVGSolidcolorElement : SVGElement {\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [SVGGradientElement](https://developer.mozilla.org/en/docs/Web/API/SVGGradientElement) to Kotlin\n */\n\npublic external abstract class SVGGradientElement : SVGElement, SVGURIReference, SVGUnitTypes {\n open val gradientUnits: SVGAnimatedEnumeration\n open val gradientTransform: SVGAnimatedTransformList\n open val spreadMethod: SVGAnimatedEnumeration\n\n companion object {\n val SVG_SPREADMETHOD_UNKNOWN: Short\n val SVG_SPREADMETHOD_PAD: Short\n val

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SVG_SPREADMETHOD_REFLECT: Short\n val SVG_SPREADMETHOD_REPEAT: Short\n val
SVG_UNIT_TYPE_UNKNOWN: Short\n val SVG_UNIT_TYPE_USERSPACEONUSE: Short\n val
SVG_UNIT_TYPE_OBJECTBOUNDINGBOX: Short\n
 val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n \n /** \n * Exposes the JavaScript
[SVGLinearGradientElement](https://developer.mozilla.org/en/docs/Web/API/SVGLinearGradientElement) to
Kotlin \n * \n public external abstract class SVGLinearGradientElement : SVGGradientElement { \n open val
x1: SVGAnimatedLength \n open val y1: SVGAnimatedLength \n open val x2: SVGAnimatedLength \n open
val y2: SVGAnimatedLength \n \n companion object { \n val SVG_SPREADMETHOD_UNKNOWN: Short\n
 val SVG_SPREADMETHOD_PAD: Short\n val SVG_SPREADMETHOD_REFLECT: Short\n val
SVG_SPREADMETHOD_REPEAT: Short\n val SVG_UNIT_TYPE_UNKNOWN: Short\n val
SVG_UNIT_TYPE_USERSPACEONUSE: Short\n val SVG_UNIT_TYPE_OBJECTBOUNDINGBOX:
Short\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n
 val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING:
Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val
DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n
 val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n \n /** \n * Exposes the
JavaScript
[SVGRadialGradientElement](https://developer.mozilla.org/en/docs/Web/API/SVGRadialGradientElement) to
Kotlin \n * \n public external abstract class SVGRadialGradientElement : SVGGradientElement { \n open val cx:
SVGAnimatedLength \n open val cy: SVGAnimatedLength \n open val r: SVGAnimatedLength \n open val fx:
SVGAnimatedLength \n open val fy: SVGAnimatedLength \n open val fr: SVGAnimatedLength \n \n companion
object { \n val SVG_SPREADMETHOD_UNKNOWN: Short\n val SVG_SPREADMETHOD_PAD:
Short\n val SVG_SPREADMETHOD_REFLECT: Short\n val SVG_SPREADMETHOD_REPEAT:
Short\n val SVG_UNIT_TYPE_UNKNOWN: Short\n val SVG_UNIT_TYPE_USERSPACEONUSE:
Short\n val SVG_UNIT_TYPE_OBJECTBOUNDINGBOX:
Short\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n
 val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n \n public external abstract class
SVGMeshGradientElement : SVGGradientElement { \n companion object { \n val
SVG_SPREADMETHOD_UNKNOWN: Short\n val SVG_SPREADMETHOD_PAD: Short\n val

```



SVG\_SPREADMETHOD\_REFLECT:

```
Short\n val SVG_SPREADMETHOD_REPEAT: Short\n val SVG_UNIT_TYPE_UNKNOWN: Short\n val SVG_UNIT_TYPE_USERSPACEONUSE: Short\n val SVG_UNIT_TYPE_OBJECTBOUNDINGBOX:
Short\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external abstract class
SVGMeshrowElement
```

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: SVGElement {\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE:
Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
```

```
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external abstract class
SVGMeshpatchElement : SVGElement {\n companion object {\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
```

```
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[SVGStopElement](https://developer.mozilla.org/en/docs/Web/API/SVGStopElement) to Kotlin\n */\npublic
external abstract class SVGStopElement : SVGElement {\n open val offset: SVGAnimatedNumber\n}\n\ncompanion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val
TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:
Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val
COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[SVGPatternElement](https://developer.mozilla.org/en/docs/Web/API/SVGPatternElement) to Kotlin\n */\npublic
external abstract class SVGPatternElement : SVGElement, SVGFitToViewBox, SVGURIReference,
SVGUnitTypes {\n open val patternUnits: SVGAnimatedEnumeration\n open val patternContentUnits:
```

```

SVGAnimatedEnumeration\n open val patternTransform: SVGAnimatedTransformList\n open val x:
SVGAnimatedLength\n open val y: SVGAnimatedLength\n open val width: SVGAnimatedLength\n open val
height: SVGAnimatedLength\n\n companion object {\n val SVG_UNIT_TYPE_UNKNOWN: Short\n
val SVG_UNIT_TYPE_USERSPACEONUSE: Short\n val SVG_UNIT_TYPE_OBJECTBOUNDINGBOX:
Short\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n
val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n
 val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n\npublic external
abstract class SVGHatchElement : SVGElement {\n companion object {\n val ELEMENT_NODE: Short\n
val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n
val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC:
Short\n }\n\npublic external abstract class SVGHatchpathElement : SVGElement {\n companion object {\n
val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n\n\n/**\n * Exposes the JavaScript
[SVGCursorElement](https://developer.mozilla.org/en/docs/Web/API/SVGCursorElement) to Kotlin\n */\npublic
external abstract class SVGCursorElement : SVGElement, SVGURIReference {\n open val x:
SVGAnimatedLength\n open val y: SVGAnimatedLength\n\n companion object {\n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n\n\n\n/**\n * Exposes the JavaScript
[SVGScriptElement](https://developer.mozilla.org/en/docs/Web/API/SVGScriptElement)
to Kotlin\n */\npublic external abstract class SVGScriptElement : SVGElement, SVGURIReference,
HTMLOrSVGScriptElement {\n open var type: String\n open var crossOrigin: String?\n\n companion object

```

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{\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n
val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC:
Short\n } \n} \n \n /** \n * Exposes the JavaScript
[SVGAElement](https://developer.mozilla.org/en/docs/Web/API/SVGAElement) to Kotlin \n * \n public external
abstract class SVGAElement : SVGGraphicsElement, SVGURIReference {\n open val target:
SVGAnimatedString \n open val download: SVGAnimatedString \n open val rel: SVGAnimatedString \n open
val relList: SVGAnimatedString \n open val hreflang: SVGAnimatedString \n open val type:
SVGAnimatedString \n \n companion object {\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val
DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n
val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY:
Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n \n /** \n * Exposes
the JavaScript [SVGViewElement](https://developer.mozilla.org/en/docs/Web/API/SVGViewElement) to Kotlin \n
* \n public external abstract class SVGViewElement : SVGElement, SVGFitToViewBox, SVGZoomAndPan {\n
 companion object {\n val SVG_ZOOMANDPAN_UNKNOWN: Short\n val
SVG_ZOOMANDPAN_DISABLE: Short\n val SVG_ZOOMANDPAN_MAGNIFY: Short\n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n
val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n \n /** \n * Copyright 2010-2021
JetBrains s.r.o. and Kotlin Programming Language contributors. \n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file. \n * \n \n // NOTE: THIS FILE IS AUTO-
GENERATED, DO NOT EDIT! \n // See github.com/kotlin/dukat for details \n \n package org.w3c.files \n \n import
kotlin.js.* \n import org.khronos.webgl.* \n import org.w3c.dom.* \n import org.w3c.dom.events.* \n import
org.w3c.xhr.* \n \n /** \n * Exposes the JavaScript [Blob](https://developer.mozilla.org/en/docs/Web/API/Blob) to
Kotlin \n * \n public external open class Blob(blobParts: Array<dynamic>
= definedExternally, options: BlobPropertyBag = definedExternally) : MediaProvider, ImageBitmapSource {\n
 open val size: Number \n open val type: String \n open val isClosed: Boolean \n fun slice(start: Int =
definedExternally, end: Int = definedExternally, contentType: String = definedExternally): Blob \n fun
close() \n} \n \n public external interface BlobPropertyBag {\n var type: String? /* = \"\" */ \n fun get() =
definedExternally \n set(value) = definedExternally \n} \n \n @Suppress(\"INVISIBLE_REFERENCE\",

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\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun BlobPropertyBag(type: String? = \ ""):
BlobPropertyBag {\n val o = js(\ "({})")\n o["type"] = type\n return o\n}\n\n/**\n * Exposes the JavaScript
[File](https://developer.mozilla.org/en/docs/Web/API/File) to Kotlin\n\n * \npublic external open class File(fileBits:
Array<dynamic>, fileName: String, options: FilePropertyBag = definedExternally) : Blob {\n open val name:
String\n open val lastModified: Int\n}\n\npublic external interface FilePropertyBag : BlobPropertyBag {\n var
lastModified: Int?\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun FilePropertyBag(lastModified: Int? =
undefined, type: String? = \ ""): FilePropertyBag {\n val o = js(\ "({})")\n o["lastModified"] = lastModified\n
o["type"] = type\n return o\n}\n\n/**\n * Exposes the JavaScript
[FileList](https://developer.mozilla.org/en/docs/Web/API/FileList) to Kotlin\n\n * \npublic external abstract class
FileList : ItemArrayLike<File> {\n override fun item(index: Int):
File?\n}\n\n@Suppress(\ "INVISIBLE_REFERENCE"),
\ "INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun FileList.get(index: Int): File?
= asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[FileReader](https://developer.mozilla.org/en/docs/Web/API/FileReader)
to Kotlin\n\n * \npublic external open class FileReader : EventTarget {\n open val readyState: Short\n open val
result: dynamic\n open val error: dynamic\n var onloadstart: ((ProgressEvent) -> dynamic)?\n var onprogress:
((ProgressEvent) -> dynamic)?\n var onload: ((Event) -> dynamic)?\n var onabort: ((Event) -> dynamic)?\n var
onerror: ((Event) -> dynamic)?\n var onloadend: ((Event) -> dynamic)?\n fun readAsArrayBuffer(blob: Blob)\n
fun readAsBinaryString(blob: Blob)\n fun readAsText(blob: Blob, label: String = definedExternally)\n fun
readAsDataURL(blob: Blob)\n fun abort()\n\n companion object {\n val EMPTY: Short\n val
LOADING: Short\n val DONE: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[FileReaderSync](https://developer.mozilla.org/en/docs/Web/API/FileReaderSync) to Kotlin\n\n * \npublic external
open class FileReaderSync {\n fun readAsArrayBuffer(blob: Blob): ArrayBuffer\n fun readAsBinaryString(blob:
Blob): String\n fun readAsText(blob: Blob, label: String = definedExternally): String\n fun
readAsDataURL(blob: Blob): String\n}\n\n" /* Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n * \n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT EDIT!\n// See
github.com/kotlin/dukat for details\n\npackage org.w3c.notifications\n\nimport kotlin.js.*\nimport
org.khronos.webgl.*\nimport org.w3c.dom.events.*\nimport org.w3c.workers.*\n\n/**\n * Exposes the JavaScript
[Notification](https://developer.mozilla.org/en/docs/Web/API/Notification) to Kotlin\n\n * \npublic external open
class Notification(title: String, options: NotificationOptions = definedExternally) : EventTarget {\n var onclick:
((MouseEvent) -> dynamic)?\n var onerror: ((Event) -> dynamic)?\n open val title: String\n open val dir:
NotificationDirection\n
 open val lang: String\n open val body: String\n open val tag: String\n open val image: String\n open val
icon: String\n open val badge: String\n open val sound: String\n open val vibrate: Array<out Int>\n open val
timestamp: Number\n open val renotify: Boolean\n open val silent: Boolean\n open val noscreen: Boolean\n
 open val requireInteraction: Boolean\n open val sticky: Boolean\n open val data: Any?\n open val actions:
Array<out NotificationAction>\n fun close()\n\n companion object {\n val permission:
NotificationPermission\n val maxActions: Int\n fun requestPermission(deprecatedCallback:
(NotificationPermission) -> Unit = definedExternally): Promise<NotificationPermission>\n }\n}\n\npublic
external interface NotificationOptions {\n var dir: NotificationDirection? /* = NotificationDirection.AUTO */\n
get() = definedExternally\n set(value) = definedExternally\n var lang: String? /* =
\ "" */\n get() = definedExternally\n set(value) = definedExternally\n var body: String? /* = \ "" */\n
get() = definedExternally\n set(value) = definedExternally\n var tag: String? /* = \ "" */\n get() =
definedExternally\n set(value) = definedExternally\n var image: String?\n get() = definedExternally\n
set(value) = definedExternally\n var icon: String?\n get() = definedExternally\n set(value) =

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definedExternally\n var badge: String?\n get() = definedExternally\n set(value) = definedExternally\n
var sound: String?\n get() = definedExternally\n set(value) = definedExternally\n var vibrate: dynamic\n
 get() = definedExternally\n set(value) = definedExternally\n var timestamp: Number?\n get() =
definedExternally\n set(value) = definedExternally\n var renotify: Boolean? /* = false */\n get() =
definedExternally\n set(value)
= definedExternally\n var silent: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n var noscreen: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n var requireInteraction: Boolean? /* = false */\n get() = definedExternally\n set(value)
= definedExternally\n var sticky: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n var data: Any? /* = null */\n get() = definedExternally\n set(value) =
definedExternally\n var actions: Array<NotificationAction>? /* = arrayOf() */\n get() = definedExternally\n
 set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun NotificationOptions(dir:
NotificationDirection? = NotificationDirection.AUTO, lang: String? = "", body: String? = "", tag: String? = "",
image:
String? = undefined, icon: String? = undefined, badge: String? = undefined, sound: String? = undefined, vibrate:
dynamic = undefined, timestamp: Number? = undefined, renotify: Boolean? = false, silent: Boolean? = false,
noscreen: Boolean? = false, requireInteraction: Boolean? = false, sticky: Boolean? = false, data: Any? = null,
actions: Array<NotificationAction>? = arrayOf()): NotificationOptions {\n val o = js("{}")\n o["dir"] = dir\n
 o["lang"] = lang\n o["body"] = body\n o["tag"] = tag\n o["image"] = image\n o["icon"] = icon\n
 o["badge"] = badge\n o["sound"] = sound\n o["vibrate"] = vibrate\n o["timestamp"] = timestamp\n
 o["renotify"] = renotify\n o["silent"] = silent\n o["noscreen"] = noscreen\n o["requireInteraction"] =
requireInteraction\n o["sticky"] = sticky\n o["data"] = data\n o["actions"] = actions\n return
o\n}\n\npublic external interface NotificationAction {\n var action: String?\n
 var title: String?\n var icon: String?\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun NotificationAction(action: String?,
title: String?, icon: String? = undefined): NotificationAction {\n val o = js("{}")\n o["action"] = action\n
 o["title"] = title\n o["icon"] = icon\n return o\n}\n\npublic external interface GetNotificationOptions {\n var
tag: String? /* = "" */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun GetNotificationOptions(tag: String? =
 ""): GetNotificationOptions {\n val o = js("{}")\n o["tag"] = tag\n return o\n}\n\n/**\n * Exposes the
JavaScript [NotificationEvent](https://developer.mozilla.org/en/docs/Web/API/NotificationEvent) to Kotlin\n
 */\npublic external open class NotificationEvent(type: String, eventInitDict: NotificationEventInit) :
ExtendableEvent {\n open val notification: Notification\n open val action: String\n\n companion object {\n
val NONE: Short\n val CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val
BUBBLING_PHASE: Short\n }\n}\n\npublic external interface NotificationEventInit : ExtendableEventInit {\n
var notification: Notification?\n var action: String? /* = "" */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun NotificationEventInit(notification:
Notification?, action: String? = "", bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? =
false): NotificationEventInit {\n val o = js("{}")\n o["notification"] = notification\n o["action"] =
action\n o["bubbles"] = bubbles\n
 o["cancelable"] = cancelable\n o["composed"] = composed\n return o\n}\n\n/* please, don't implement this
interface! */\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic
external interface NotificationPermission {\n companion object\n}\n\npublic inline val
NotificationPermission.Companion.DEFAULT: NotificationPermission get() =

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"default".asDynamic().unsafeCast<NotificationPermission>()\n\npublic inline val
NotificationPermission.Companion.DENIED: NotificationPermission get() =
"denied".asDynamic().unsafeCast<NotificationPermission>()\n\npublic inline val
NotificationPermission.Companion.GRANTED: NotificationPermission get() =
"granted".asDynamic().unsafeCast<NotificationPermission>()\n\n/* please, don't implement this interface!
*\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface NotificationDirection {\n companion object\n}\n\npublic inline val
NotificationDirection.Companion.AUTO: NotificationDirection
get() = "auto".asDynamic().unsafeCast<NotificationDirection>()\n\npublic inline val
NotificationDirection.Companion.LTR: NotificationDirection get() =
"ltr".asDynamic().unsafeCast<NotificationDirection>()\n\npublic inline val
NotificationDirection.Companion.RTL: NotificationDirection get() =
"rtl".asDynamic().unsafeCast<NotificationDirection>()"/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n *\n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT EDIT!\n//
See github.com/kotlin/dukat for details\n\npackage org.w3c.workers\n\nimport kotlin.js.*\nimport
org.khronos.webgl.*\nimport org.w3c.dom.*\nimport org.w3c.dom.events.*\nimport org.w3c.fetch.*\nimport
org.w3c.notifications.*\n\n/**\n * Exposes the JavaScript
[ServiceWorker](https://developer.mozilla.org/en/docs/Web/API/ServiceWorker) to Kotlin\n *\n\npublic
external abstract class ServiceWorker : EventTarget, AbstractWorker, UnionMessagePortOrServiceWorker,
UnionClientOrMessagePortOrServiceWorker {\n open val scriptURL: String\n open val state:
ServiceWorkerState\n open var onstatechange: ((Event) -> dynamic)?\n fun postMessage(message: Any?,
transfer: Array<dynamic> = definedExternally)\n}\n\n/**\n * Exposes the JavaScript
[ServiceWorkerRegistration](https://developer.mozilla.org/en/docs/Web/API/ServiceWorkerRegistration) to
Kotlin\n *\n\npublic external abstract class ServiceWorkerRegistration : EventTarget {\n open val installing:
ServiceWorker?\n open val waiting: ServiceWorker?\n open val active: ServiceWorker?\n open val scope:
String\n open var onupdatefound: ((Event) -> dynamic)?\n open val APISpace: dynamic\n fun update():
Promise<Unit>\n fun unregister(): Promise<Boolean>\n fun showNotification(title: String, options:
NotificationOptions = definedExternally): Promise<Unit>\n fun getNotifications(filter:
GetNotificationOptions = definedExternally): Promise<Array<Notification>>\n fun methodName():
Promise<dynamic>\n}\n\n/**\n * Exposes the JavaScript
[ServiceWorkerContainer](https://developer.mozilla.org/en/docs/Web/API/ServiceWorkerContainer) to Kotlin\n
*\n\npublic external abstract class ServiceWorkerContainer : EventTarget {\n open val controller:
ServiceWorker?\n open val ready: Promise<ServiceWorkerRegistration>\n open var oncontrollerchange:
((Event) -> dynamic)?\n open var onmessage: ((MessageEvent) -> dynamic)?\n fun register(scriptURL: String,
options: RegistrationOptions = definedExternally): Promise<ServiceWorkerRegistration>\n fun
getRegistration(clientURL: String = definedExternally): Promise<Any?>\n fun getRegistrations():
Promise<Array<ServiceWorkerRegistration>>\n fun startMessages()\n}\n\npublic external interface
RegistrationOptions {\n var scope: String?\n get() = definedExternally\n set(value) = definedExternally\n
 var type: WorkerType? /* = WorkerType.CLASSIC */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\n\npublic inline fun RegistrationOptions(scope: String? =
undefined, type: WorkerType? = WorkerType.CLASSIC): RegistrationOptions {\n val o = js("{}")\n o["scope"] =
scope\n o["type"] = type\n return o\n}\n\n/**\n * Exposes the JavaScript
[ServiceWorkerMessageEvent](https://developer.mozilla.org/en/docs/Web/API/ServiceWorkerMessageEvent) to
Kotlin\n *\n\npublic external open class ServiceWorkerMessageEvent(type: String, eventInitDict:
ServiceWorkerMessageEventInit = definedExternally) : Event {\n open val data: Any?\n open val origin:
String\n open val lastEventId: String\n open val source: UnionMessagePortOrServiceWorker?\n open val

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ports: Array<out MessagePort>?\n\n companion object {\n val NONE: Short\n val
CAPTURING_PHASE:
Short\n val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n } }\n\npublic external interface
ServiceWorkerMessageEventInit : EventInit {\n var data: Any?\n get() = definedExternally\n set(value) =
definedExternally\n var origin: String?\n get() = definedExternally\n set(value) = definedExternally\n
var lastEventId: String?\n get() = definedExternally\n set(value) = definedExternally\n var source:
UnionMessagePortOrServiceWorker?\n get() = definedExternally\n set(value) = definedExternally\n var
ports: Array<MessagePort>?\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\\"INVISIBLE_REFERENCE\","
\\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ServiceWorkerMessageEventInit(data:
Any? = undefined, origin: String? = undefined, lastEventId: String? = undefined, source:
UnionMessagePortOrServiceWorker? = undefined, ports: Array<MessagePort>?
= undefined, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false):
ServiceWorkerMessageEventInit {\n val o = js(\\"(\{\})\")\n o[\"data\"] = data\n o[\"origin\"] = origin\n
o[\"lastEventId\"] = lastEventId\n o[\"source\"] = source\n o[\"ports\"] = ports\n o[\"bubbles\"] = bubbles\n
o[\"cancelable\"] = cancelable\n o[\"composed\"] = composed\n return o\n}\n\n/**\n * Exposes the JavaScript
[ServiceWorkerGlobalScope](https://developer.mozilla.org/en/docs/Web/API/ServiceWorkerGlobalScope) to
Kotlin\n *\npublic external abstract class ServiceWorkerGlobalScope : WorkerGlobalScope {\n open val clients:
Clients\n open val registration: ServiceWorkerRegistration\n open var oninstall: ((Event) -> dynamic)?\n open
var onactivate: ((Event) -> dynamic)?\n open var onfetch: ((FetchEvent) -> dynamic)?\n open var
onforeignfetch: ((Event) -> dynamic)?\n open var onmessage: ((MessageEvent) -> dynamic)?\n open
var onnotificationclick: ((NotificationEvent) -> dynamic)?\n open var onnotificationclose: ((NotificationEvent) ->
dynamic)?\n open var onfunctionalevent: ((Event) -> dynamic)?\n fun skipWaiting():
Promise<Unit>\n}\n\n/**\n * Exposes the JavaScript
[Client](https://developer.mozilla.org/en/docs/Web/API/Client) to Kotlin\n *\npublic external abstract class Client :
UnionClientOrMessagePortOrServiceWorker {\n open val url: String\n open val frameType: FrameType\n
open val id: String\n fun postMessage(message: Any?, transfer: Array<dynamic> = definedExternally)\n}\n\n/**\n
* Exposes the JavaScript [WindowClient](https://developer.mozilla.org/en/docs/Web/API/WindowClient) to
Kotlin\n *\npublic external abstract class WindowClient : Client {\n open val visibilityState: dynamic\n open
val focused: Boolean\n fun focus(): Promise<WindowClient>\n fun navigate(url: String):
Promise<WindowClient>\n}\n\n/**\n * Exposes the JavaScript
[Clients](https://developer.mozilla.org/en/docs/Web/API/Clients)
to Kotlin\n *\npublic external abstract class Clients {\n fun get(id: String): Promise<Any?>\n fun
matchAll(options: ClientQueryOptions = definedExternally): Promise<Array<Client>>\n fun openWindow(url:
String): Promise<WindowClient?>\n fun claim(): Promise<Unit>\n}\n\npublic external interface
ClientQueryOptions {\n var includeUncontrolled: Boolean? /* = false *\n get() = definedExternally\n
set(value) = definedExternally\n var type: ClientType? /* = ClientType.WINDOW *\n get() =
definedExternally\n set(value) = definedExternally\n}\n\n@Suppress(\\"INVISIBLE_REFERENCE\","
\\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun
ClientQueryOptions(includeUncontrolled: Boolean? = false, type: ClientType? = ClientType.WINDOW):
ClientQueryOptions {\n val o = js(\\"(\{\})\")\n o[\"includeUncontrolled\"] = includeUncontrolled\n o[\"type\"] =
type\n return o\n}\n\n/**\n * Exposes the
JavaScript [ExtendableEvent](https://developer.mozilla.org/en/docs/Web/API/ExtendableEvent) to Kotlin\n
*\npublic external open class ExtendableEvent(type: String, eventInitDict: ExtendableEventInit =
definedExternally) : Event {\n fun waitUntil(f: Promise<Any?>)\n\n companion object {\n val NONE:
Short\n val CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE:
Short\n } }\n\npublic external interface ExtendableEventInit :
EventInit\n\n@Suppress(\\"INVISIBLE_REFERENCE\","

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\@kotlin.internal.InlineOnly\npublic inline fun ExtendableEventInit(bubbles:
Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): ExtendableEventInit {\n val o =
js("{}")\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] = composed\n return o\n}\n\n/**\n * Exposes the JavaScript
[InstallEvent](https://developer.mozilla.org/en/docs/Web/API/InstallEvent) to Kotlin\n *\npublic
external open class InstallEvent(type: String, eventInitDict: ExtendableEventInit = definedExternally) :
ExtendableEvent {\n fun registerForeignFetch(options: ForeignFetchOptions)\n\n companion object {\n val
NONE: Short\n val CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val
BUBBLING_PHASE: Short\n }\n\n public external interface ForeignFetchOptions {\n var scopes:
Array<String>?\n var origins: Array<String>?\n\n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n @kotlin.internal.InlineOnly\n public inline fun ForeignFetchOptions(scopes:
Array<String>?, origins: Array<String>?): ForeignFetchOptions {\n val o = js("{}")\n o["scopes"] =
scopes\n o["origins"] = origins\n return o\n }\n\n /**\n * Exposes the JavaScript
[FetchEvent](https://developer.mozilla.org/en/docs/Web/API/FetchEvent) to Kotlin\n *\npublic external open class
FetchEvent(type: String, eventInitDict: FetchEventInit) : ExtendableEvent {\n open val
request: Request\n open val clientId: String?\n open val isReload: Boolean\n fun respondWith(r:
Promise<Response>)\n\n companion object {\n val NONE: Short\n val CAPTURING_PHASE: Short\n
 val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n }\n\n public external interface
FetchEventInit : ExtendableEventInit {\n var request: Request?\n var clientId: String? /* = null */\n get() =
definedExternally\n set(value) = definedExternally\n var isReload: Boolean? /* = false */\n get() =
definedExternally\n set(value) = definedExternally\n }\n\n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n @kotlin.internal.InlineOnly\n public inline fun FetchEventInit(request: Request?,
clientId: String? = null, isReload: Boolean? = false, bubbles: Boolean? = false, cancelable: Boolean? = false,
composed: Boolean? = false): FetchEventInit {\n val o = js("{}")\n o["request"] = request\n o["clientId"]
= clientId\n
 o["isReload"] = isReload\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] =
composed\n return o\n }\n\n public external open class ForeignFetchEvent(type: String, eventInitDict:
ForeignFetchEventInit) : ExtendableEvent {\n open val request: Request\n open val origin: String\n fun
respondWith(r: Promise<ForeignFetchResponse>)\n\n companion object {\n val NONE: Short\n val
CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n }\n\n public external interface ForeignFetchEventInit : ExtendableEventInit {\n var request: Request?\n var
origin: String? /* = "null" */\n get() = definedExternally\n set(value) =
definedExternally\n }\n\n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n @kotlin.internal.InlineOnly\n public inline fun ForeignFetchEventInit(request:
Request?, origin: String? = "null", bubbles: Boolean? = false, cancelable: Boolean? = false,
composed: Boolean? = false): ForeignFetchEventInit {\n val o = js("{}")\n o["request"] = request\n
o["origin"] = origin\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] =
composed\n return o\n }\n\n public external interface ForeignFetchResponse {\n var response: Response?\n var
origin: String?\n get() = definedExternally\n set(value) = definedExternally\n var headers:
Array<String>?\n get() = definedExternally\n set(value) =
definedExternally\n }\n\n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n @kotlin.internal.InlineOnly\n public inline fun ForeignFetchResponse(response:
Response?, origin: String? = undefined, headers: Array<String>? = undefined): ForeignFetchResponse {\n val o =
js("{}")\n o["response"] = response\n o["origin"] = origin\n o["headers"] = headers\n return
o\n }\n\n /**\n * Exposes the JavaScript
[ExtendableMessageEvent](https://developer.mozilla.org/en/docs/Web/API/ExtendableMessageEvent)
to Kotlin\n *\npublic external open class ExtendableMessageEvent(type: String, eventInitDict:
ExtendableMessageEventInit = definedExternally) : ExtendableEvent {\n open val data: Any?\n open val origin:

```



```

String\n open val lastEventId: String\n open val source: UnionClientOrMessagePortOrServiceWorker?\n open
val ports: Array<out MessagePort>?\n\n companion object {\n val NONE: Short\n val
CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n
}\n}\n\npublic external interface ExtendableMessageEventInit : ExtendableEventInit {\n var data: Any?\n
get() = definedExternally\n set(value) = definedExternally\n var origin: String?\n get() =
definedExternally\n set(value) = definedExternally\n var lastEventId: String?\n get() =
definedExternally\n set(value) = definedExternally\n var source:
UnionClientOrMessagePortOrServiceWorker?\n
 get() = definedExternally\n set(value) = definedExternally\n var ports: Array<MessagePort>?\n get()
= definedExternally\n set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun ExtendableMessageEventInit(data:
Any? = undefined, origin: String? = undefined, lastEventId: String? = undefined, source:
UnionClientOrMessagePortOrServiceWorker? = undefined, ports: Array<MessagePort>? = undefined, bubbles:
Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): ExtendableMessageEventInit {\n
val o = js("{}")\n o["data"] = data\n o["origin"] = origin\n o["lastEventId"] = lastEventId\n
o["source"] = source\n o["ports"] = ports\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n
o["composed"] = composed\n return o\n}\n\n/**\n * Exposes the JavaScript
[Cache](https://developer.mozilla.org/en/docs/Web/API/Cache)
to Kotlin\n */\npublic external abstract class Cache {\n fun match(request: dynamic, options: CacheQueryOptions
= definedExternally): Promise<Any?>\n fun matchAll(request: dynamic = definedExternally, options:
CacheQueryOptions = definedExternally): Promise<Array<Response>>\n fun add(request: dynamic):
Promise<Unit>\n fun addAll(requests: Array<dynamic>): Promise<Unit>\n fun put(request: dynamic, response:
Response): Promise<Unit>\n fun delete(request: dynamic, options: CacheQueryOptions = definedExternally):
Promise<Boolean>\n fun keys(request: dynamic = definedExternally, options: CacheQueryOptions =
definedExternally): Promise<Array<Request>>\n}\n\npublic external interface CacheQueryOptions {\n var
ignoreSearch: Boolean? /* = false */\n get() = definedExternally\n set(value) = definedExternally\n var
ignoreMethod: Boolean? /* = false */\n get() = definedExternally\n set(value) = definedExternally\n var
ignoreVary:
Boolean? /* = false */\n get() = definedExternally\n set(value) = definedExternally\n var cacheName:
String?\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun CacheQueryOptions(ignoreSearch:
Boolean? = false, ignoreMethod: Boolean? = false, ignoreVary: Boolean? = false, cacheName: String? = undefined):
CacheQueryOptions {\n val o = js("{}")\n o["ignoreSearch"] = ignoreSearch\n o["ignoreMethod"] =
ignoreMethod\n o["ignoreVary"] = ignoreVary\n o["cacheName"] = cacheName\n return o\n}\n\npublic
external interface CacheBatchOperation {\n var type: String?\n get() = definedExternally\n set(value) =
definedExternally\n var request: Request?\n get() = definedExternally\n set(value) = definedExternally\n
var response: Response?\n get() = definedExternally\n
 set(value) = definedExternally\n var options: CacheQueryOptions?\n get() = definedExternally\n
set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun CacheBatchOperation(type: String? =
undefined, request: Request? = undefined, response: Response? = undefined, options: CacheQueryOptions? =
undefined): CacheBatchOperation {\n val o = js("{}")\n o["type"] = type\n o["request"] = request\n
o["response"] = response\n o["options"] = options\n return o\n}\n\n/**\n * Exposes the JavaScript
[CacheStorage](https://developer.mozilla.org/en/docs/Web/API/CacheStorage)
to Kotlin\n */\npublic external
abstract class CacheStorage {\n fun match(request: dynamic, options: CacheQueryOptions = definedExternally):
Promise<Any?>\n fun has(cacheName: String): Promise<Boolean>\n fun open(cacheName: String):
Promise<Cache>\n fun delete(cacheName: String): Promise<Boolean>\n

```

```

fun keys(): Promise<Array<String>>\n}\n\npublic external open class FunctionalEvent : ExtendableEvent {\n
companion object {\n val NONE: Short\n val CAPTURING_PHASE: Short\n val AT_TARGET:
Short\n val BUBBLING_PHASE: Short\n }\n}\n\npublic external interface
UnionMessagePortOrServiceWorker\n\npublic external interface
UnionClientOrMessagePortOrServiceWorker\n\n/* please, don't implement this interface!
*\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface ServiceWorkerState {\n companion object\n}\n\npublic inline val
ServiceWorkerState.Companion.INSTALLING: ServiceWorkerState get() =
"installing".asDynamic().unsafeCast<ServiceWorkerState>()\n\npublic inline val
ServiceWorkerState.Companion.INSTALLED: ServiceWorkerState get() =
"installed".asDynamic().unsafeCast<ServiceWorkerState>()\n\npublic inline val
ServiceWorkerState.Companion.ACTIVATING: ServiceWorkerState get() =
"activating".asDynamic().unsafeCast<ServiceWorkerState>()\n\npublic
inline val ServiceWorkerState.Companion.ACTIVATED: ServiceWorkerState get() =
"activated".asDynamic().unsafeCast<ServiceWorkerState>()\n\npublic inline val
ServiceWorkerState.Companion.REDUNDANT: ServiceWorkerState get() =
"redundant".asDynamic().unsafeCast<ServiceWorkerState>()\n\n/* please, don't implement this interface!
*\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface FrameType {\n companion object\n}\n\npublic inline val FrameType.Companion.AUXILIARY:
FrameType get() = "auxiliary".asDynamic().unsafeCast<FrameType>()\n\npublic inline val
FrameType.Companion.TOP_LEVEL: FrameType get() = "top-
level".asDynamic().unsafeCast<FrameType>()\n\npublic inline val FrameType.Companion.NESTED: FrameType
get() = "nested".asDynamic().unsafeCast<FrameType>()\n\npublic inline val FrameType.Companion.NONE:
FrameType get() = "none".asDynamic().unsafeCast<FrameType>()\n\n/* please,
don't implement this interface!
*\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface ClientType {\n companion object\n}\n\npublic inline val ClientType.Companion.WINDOW: ClientType
get() = "window".asDynamic().unsafeCast<ClientType>()\n\npublic inline val ClientType.Companion.WORKER:
ClientType get() = "worker".asDynamic().unsafeCast<ClientType>()\n\npublic inline val
ClientType.Companion.SHAREDWORKER: ClientType get() =
"sharedworker".asDynamic().unsafeCast<ClientType>()\n\npublic inline val ClientType.Companion.ALL:
ClientType get() = "all".asDynamic().unsafeCast<ClientType>()"/*\n * Copyright 2010-2021 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n *\n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT
EDIT!\n// See github.com/kotlin/dukat for details\n\npackage org.w3c.xhr\n\nimport kotlin.js.*\nimport
org.khronos.webgl.*\nimport org.w3c.dom.*\nimport org.w3c.dom.events.*\nimport org.w3c.files.*\n\n/**\n *
Exposes the JavaScript
[XMLHttpRequestEventTarget](https://developer.mozilla.org/en/docs/Web/API/XMLHttpRequestEventTarget) to
Kotlin\n *\n\npublic external abstract class XMLHttpRequestEventTarget : EventTarget {\n open var onloadstart:
((ProgressEvent) -> dynamic)?\n open var onprogress: ((ProgressEvent) -> dynamic)?\n open var onabort:
((Event) -> dynamic)?\n open var onerror: ((Event) -> dynamic)?\n open var onload: ((Event) -> dynamic)?\n
open var ontimeout: ((Event) -> dynamic)?\n open var onloadend: ((Event) -> dynamic)?\n}\n\n\npublic external
abstract class XMLHttpRequestUpload : XMLHttpRequestEventTarget\n\n/**\n * Exposes the JavaScript
[XMLHttpRequest](https://developer.mozilla.org/en/docs/Web/API/XMLHttpRequest) to Kotlin\n *\n\npublic
external open class XMLHttpRequest : XMLHttpRequestEventTarget {\n var onreadystatechange: ((Event) ->
dynamic)?\n
open val readyState: Short\n var timeout: Int\n var withCredentials: Boolean\n open val upload:
XMLHttpRequestUpload\n open val responseURL: String\n open val status: Short\n open val statusText:

```

```

String\n var responseType: XMLHttpRequestResponseType\n open val response: Any?\n open val
responseText: String\n open val responseXML: Document?\n fun open(method: String, url: String)\n fun
open(method: String, url: String, async: Boolean, username: String? = definedExternally, password: String? =
definedExternally)\n fun setRequestHeader(name: String, value: String)\n fun send(body: dynamic =
definedExternally)\n fun abort()\n fun getResponseHeader(name: String): String?\n fun
getAllResponseHeaders(): String\n fun overrideMimeType(mime: String)\n\n companion object {\n val
UNSENT: Short\n val OPENED: Short\n val HEADERS_RECEIVED: Short\n val LOADING:
Short\n val DONE: Short\n }\n\n/**\n * Exposes the JavaScript [FormData](https://developer.mozilla.org/en/docs/Web/API/FormData) to Kotlin\n
*\n\n @public external open class FormData(form: HTMLFormElement = definedExternally) {\n fun append(name:
String, value: String)\n fun append(name: String, value: Blob, filename: String = definedExternally)\n fun
delete(name: String)\n fun get(name: String): dynamic\n fun getAll(name: String): Array<dynamic>\n fun
has(name: String): Boolean\n fun set(name: String, value: String)\n fun set(name: String, value: Blob, filename:
String = definedExternally)\n }\n\n/**\n * Exposes the JavaScript
[ProgressEvent](https://developer.mozilla.org/en/docs/Web/API/ProgressEvent) to Kotlin\n
*\n\n @public external open class ProgressEvent(type: String, eventInitDict: ProgressEventInit = definedExternally) : Event {\n open val
lengthComputable: Boolean\n open val loaded: Number\n open val total: Number\n\n companion object {\n val NONE: Short\n val CAPTURING_PHASE:
Short\n val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n }\n\n @public external interface
ProgressEventInit : EventInit {\n var lengthComputable: Boolean? /* = false */\n get() = definedExternally\n set(value) = definedExternally\n var loaded: Number? /* = 0 */\n get() = definedExternally\n set(value) =
definedExternally\n var total: Number? /* = 0 */\n get() = definedExternally\n set(value) =
definedExternally\n }\n\n @Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n @kotlin.internal.InlineOnly\n @public inline fun ProgressEventInit(lengthComputable:
Boolean? = false, loaded: Number? = 0, total: Number? = 0, bubbles: Boolean? = false, cancelable: Boolean? =
false, composed: Boolean? = false): ProgressEventInit {\n val o = js(\"({})\")\n o[\"lengthComputable\"] =
lengthComputable\n o[\"loaded\"] = loaded\n o[\"total\"] = total\n o[\"bubbles\"] = bubbles\n o[\"cancelable\"] = cancelable\n o[\"composed\"] = composed\n return o\n }\n\n please, don't implement this interface!\n
*\n\n @JsName(\"null\")\n @Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n @public external
interface XMLHttpRequestResponseType {\n companion object\n }\n\n @public inline val
XMLHttpRequestResponseType.Companion.EMPTY: XMLHttpRequestResponseType get() =
\"\".asDynamic().unsafeCast<XMLHttpRequestResponseType>()\n\n @public inline val
XMLHttpRequestResponseType.Companion.ARRAYBUFFER: XMLHttpRequestResponseType get() =
\"arraybuffer\".asDynamic().unsafeCast<XMLHttpRequestResponseType>()\n\n @public inline val
XMLHttpRequestResponseType.Companion.BLOB: XMLHttpRequestResponseType get() =
\"blob\".asDynamic().unsafeCast<XMLHttpRequestResponseType>()\n\n @public inline val
XMLHttpRequestResponseType.Companion.DOCUMENT: XMLHttpRequestResponseType get() =
\"document\".asDynamic().unsafeCast<XMLHttpRequestResponseType>()\n\n @public inline val
XMLHttpRequestResponseType.Companion.JSON: XMLHttpRequestResponseType
get() = \"json\".asDynamic().unsafeCast<XMLHttpRequestResponseType>()\n\n @public inline val
XMLHttpRequestResponseType.Companion.TEXT: XMLHttpRequestResponseType get() =
\"text\".asDynamic().unsafeCast<XMLHttpRequestResponseType>()\n\n */\n\n * Copyright 2010-2018 JetBrains s.r.o.
and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license
that can be found in the license/LICENSE.txt file.\n\n */\n\n @package kotlin\n\n @import
kotlin.annotation.AnnotationRetention.BINARY\n\n @import kotlin.annotation.AnnotationRetention.SOURCE\n\n @import
kotlin.annotation.AnnotationTarget.*\n\n @import kotlin.internal.RequireKotlin\n\n @import
kotlin.internal.RequireKotlinVersionKind\n\n @import kotlin.reflect.KClass\n\n */\n\n * Signals that the annotated

```



\*\n \* Example: we declare\n \* ```\n \* fun <T> sequence(@BuilderInference block: suspend SequenceScope<T>.() -> Unit): Sequence<T>\n \* ```\n \* and use it like\n \* ```\n \* val result = sequence { yield("result") }\n \* ```\n \* Here the type argument of the resulting sequence is inferred to `String` from\n \* the argument of the [SequenceScope.yield] function, that is called inside the lambda passed to [sequence].\n \* \n \* Note: this annotation is experimental, see [ExperimentalTypeInference] on how to opt-in for it.\n \* \n @Target(VALUE\_PARAMETER, FUNCTION, PROPERTY)\n @Retention(AnnotationRetention.BINARY)\n @SinceKotlin("1.3")\n @ExperimentalTypeInference\n public annotation class BuilderInference\n {\n /\*\*\n \* Enables overload selection based on the type of the value returned from lambda argument.\n \* \n \* When two or more function overloads have otherwise the same parameter lists that differ only in the return type\n \* of a functional parameter, this annotation enables overload selection by the type of the value returned from\n \* the lambda function passed to this functional parameter.\n \* \n \* Example:\n \* ```\n \* @OverloadResolutionByLambdaReturnType\n \* fun create(intProducer: () -> Int): Int\n \* fun create(doubleProducer: () -> Double): Double\n \* val newValue = create { 3.14 }\n \* ```\n \* \n \* The annotation being applied to one of overloads allows to resolve this ambiguity by analyzing what value is returned\n \* from the lambda function.\n \* \n \* This annotation is also used to discriminate the annotated overloads in case if overload selection still cannot\n \* choose one of them even taking in account the result of lambda parameter analysis. In that case a warning is reported.\n \* \n \* Note: this annotation is experimental, see [ExperimentalTypeInference] on how to opt-in for it.\n \* \n @Target(FUNCTION)\n @Retention(AnnotationRetention.BINARY)\n @SinceKotlin("1.4")\n @ExperimentalTypeInference\n public annotation class OverloadResolutionByLambdaReturnType", "/\*\n \* Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n \* Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n \* \n package kotlin\n import kotlin.annotation.AnnotationTarget.\*\n import kotlin.internal.RequireKotlin\n import kotlin.internal.RequireKotlinVersionKind\n /\*\*\n \* The experimental multiplatform support API marker.\n \* \n \* Any usage of a declaration annotated with `@ExperimentalMultiplatform` must be accepted either by\n \* annotating that usage with the [OptIn] annotation, e.g. `@OptIn(ExperimentalMultiplatform::class)`,\n \* or by using the compiler argument `-opt-in=kotlin.ExperimentalMultiplatform`.\n \* \n @RequiresOptIn\n @MustBeDocumented\n @Target(\n CLASS,\n ANNOTATION\_CLASS,\n PROPERTY,\n FIELD,\n LOCAL\_VARIABLE,\n VALUE\_PARAMETER,\n CONSTRUCTOR,\n FUNCTION,\n PROPERTY\_GETTER,\n PROPERTY\_SETTER,\n TYPEALIAS)\n @Retention(AnnotationRetention.BINARY)\n @RequireKotlin("1.2.50", versionKind = RequireKotlinVersionKind.COMPILER\_VERSION)\n public annotation class ExperimentalMultiplatform\n {\n /\*\*\n \* Marks an expected annotation class that it isn't required to have actual counterparts in all platforms.\n \* \n \* This annotation is only applicable to `expect` annotation classes in multi-platform projects and marks that class as `optional`.\n \* \n \* Optional expected class is allowed to have no corresponding actual class on the platform. Optional annotations can only be used\n \* to annotate something, not as types in signatures. If an optional annotation has no corresponding actual class on a platform,\n \* the annotation entries where it's used are simply erased when compiling code on that platform.\n \* \n \* Note: this annotation is experimental, see [ExperimentalMultiplatform] on how to opt-in for it.\n \* \n @Target(ANNOTATION\_CLASS)\n @Retention(AnnotationRetention.BINARY)\n @ExperimentalMultiplatform\n @RequireKotlin("1.2.50", versionKind = RequireKotlinVersionKind.COMPILER\_VERSION)\n public annotation class OptionalExpectation\n {\n /\*\*\n \* Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n \* Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n \* \n package kotlin\n import kotlin.annotation.AnnotationRetention.BINARY\n import kotlin.annotation.AnnotationTarget.\*\n import kotlin.internal.RequireKotlin\n import kotlin.internal.RequireKotlinVersionKind\n \*/

kotlin.reflect.KClass\n\n/\*\*\n \* Signals that the annotated annotation class is a marker of an API that requires an explicit opt-in.\n \* Call sites of any declaration annotated with that marker should opt in to the API either by using [OptIn],\n \* or by being annotated with that marker themselves, effectively causing further propagation of the opt-in requirement.\n \* This class requires opt-in itself and can only be used with the compiler argument `opt-in=kotlin.RequiresOptIn`.\n \* @property message message to be reported on usages of API without an explicit opt-in, or empty string for the default message.\n \* The default message is: `\"This declaration is experimental and its usage should be marked with 'Marker'` or `\"@OptIn(Marker::class)`, where `Marker` is the opt-in requirement marker.\n \* @property level specifies how usages of API without an explicit opt-in are reported in code.\n

```
*\n@Target(ANNOTATION_CLASS)\n@Retention(BINARY)\n@SinceKotlin(\"1.3\")\n@RequireKotlin(\"1.3.70\n\",
```

```
versionKind = RequireKotlinVersionKind.COMPILER_VERSION)\npublic annotation class RequiresOptIn(\n val message: String = \"\", \n val level: Level = Level.ERROR) {\n /**\n * Severity of the diagnostic that should be reported on usages which did not explicitly opt into\n * the API either by using [OptIn] or by being annotated with the corresponding marker annotation.\n */\n public enum class Level {\n /** Specifies that a warning should be reported on incorrect usages of this API. */\n WARNING, \n /** Specifies that an error should be reported on incorrect usages of this API. */\n ERROR, \n }\n}\n\n/**\n * Allows to use the API denoted by the given markers in the annotated file, declaration, or expression.\n * If a declaration is annotated with [OptIn], its usages are **not** required to opt in to that API.\n * This class requires opt-in itself and can only be used with the compiler argument `opt-in=kotlin.RequiresOptIn`.\n * @Target(\n CLASS, \n PROPERTY, \n LOCAL_VARIABLE, \n VALUE_PARAMETER, \n CONSTRUCTOR, \n FUNCTION, \n PROPERTY_GETTER, \n PROPERTY_SETTER, \n EXPRESSION, \n FILE,
```

```
TYPEALIAS)\n\n@Retention(SOURCE)\n@SinceKotlin(\"1.3\")\n@RequireKotlin(\"1.3.70\", versionKind = \nRequireKotlinVersionKind.COMPILER_VERSION)\npublic annotation class OptIn(\n vararg val markerClass: \nKClass<out Annotation>)\n\n\", \"/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the \nlicense/LICENSE.txt file.\n */\npackage kotlin.collections\n\nimport kotlin.js.JsName\n\n/**\n * Provides a skeletal implementation of the read-only [Collection] interface.\n * @param E the type of elements contained in the collection. The collection is covariant in its element type.\n */\n@SinceKotlin(\"1.1\")\npublic abstract class \nAbstractCollection<out
```

```
E> protected constructor() : Collection<E> {\n abstract override val size: Int\n abstract override fun iterator(): \nIterator<E>\n\n override fun contains(element: @UnsafeVariance E): Boolean = any { it == element }\n\n override fun containsAll(elements: Collection<@UnsafeVariance E>): Boolean =\n elements.all { contains(it) }\n\n // use when js will support bound refs: elements.all(this::contains)\n\n override fun isEmpty(): Boolean = size == \n0\n\n override fun toString(): String = joinToString(\"\", \"\", \"[\", \"]\") {\n if (it === this) \"(this Collection)\" \n else it.toString()\n }\n\n /**\n * Returns new array of type `Array<Any?>` with the elements of this \n collection.\n */\n @JsName(\"toArray\")\n protected open fun toArray(): Array<Any?> = \n copyToArrayImpl(this)\n\n /**\n * Fills the provided [array] or creates new array of the same type\n * and fills it with the elements of this collection.\n */\n protected open fun <T>
```

```
toArray(array: Array<T>): Array<T> = copyToArrayImpl(this, array)\n}\n\n\", \"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 \nlicense that can be found in the license/LICENSE.txt file.\n */\npackage kotlin.collections\n\nprivate enum class \nState {\n Ready, \n NotReady, \n Done, \n Failed\n}\n\n/**\n * A base class to simplify implementing iterators so that implementations only have to implement [computeNext]\n * to implement the iterator, calling [done] when the iteration is complete.\n */\npublic abstract class AbstractIterator<T> : Iterator<T> {\n private var state = \nState.NotReady\n private var nextValue: T? = null\n\n override fun hasNext(): Boolean {\n require(state != \nState.Failed)\n return when (state) {\n State.Done -> false\n State.Ready -> true\n else -> \n tryToComputeNext()\n }\n }\n\n override fun next():
```

```

T {\n if (!hasNext()) throw NoSuchElementException()\n state = State.NotReady\n}
@Suppress("UNCHECKED_CAST")\n return nextValue as T\n }\n\n private fun tryToComputeNext():
Boolean {\n state = State.Failed\n computeNext()\n return state == State.Ready\n }\n\n /**\n *
Computes the next item in the iterator.\n * This callback method should call one of these two methods:\n
*\n * * [setNext] with the next value of the iteration\n * * [done] to indicate there are no more elements\n
*\n * Failure to call either method will result in the iteration terminating with a failed state\n */\n abstract
protected fun computeNext(): Unit\n\n /**\n * Sets the next value in the iteration, called from the
[computeNext] function\n */\n protected fun setNext(value: T): Unit {\n nextValue = value\n state =
State.Ready\n }\n\n /**\n * Sets the state to done so that
the iteration terminates.\n */\n protected fun done() {\n state = State.Done\n }\n}\n\n", "/*\n *
Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is
governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n * Based on GWT
AbstractList\n * Copyright 2007 Google Inc.\n */\n\npackage kotlin.collections\n\n/**\n * Provides a skeletal
implementation of the read-only [List] interface.\n * This class is intended to help implementing read-only lists
so it doesn't support concurrent modification tracking.\n * This class is intended to help implementing read-only lists
so it doesn't support concurrent modification tracking.\n * @param E the type of elements contained in the list.
The list is covariant in its element type.\n */\n\n@SinceKotlin("1.1")\npublic abstract class AbstractList<out E>
protected constructor() : AbstractCollection<E>(), List<E> {\n abstract override val size: Int\n abstract override
fun get(index: Int): E\n\n override fun iterator(): Iterator<E> = IteratorImpl()\n\n override fun indexOf(element: @UnsafeVariance E): Int = indexOfFirst { it == element }\n\n override fun
lastIndexOf(element: @UnsafeVariance E): Int = indexOfLast { it == element }\n\n override fun listIterator():
ListIterator<E> = ListIteratorImpl(0)\n\n override fun listIterator(index: Int): ListIterator<E> =
ListIteratorImpl(index)\n\n override fun subList(fromIndex: Int, toIndex: Int): List<E> = SubList(this, fromIndex,
toIndex)\n\n private class SubList<out E>(private val list: AbstractList<E>, private val fromIndex: Int, toIndex:
Int) : AbstractList<E>(), RandomAccess {\n private var _size: Int = 0\n init {\n
checkRangeIndexes(fromIndex, toIndex, list.size)\n this._size = toIndex - fromIndex\n }\n\n override fun get(index: Int): E {\n checkElementIndex(index, _size)\n return list[fromIndex +
index]\n }\n\n override val size: Int get() = _size\n }\n\n /**\n * Compares this list with other list instance with the ordered structural equality.\n * This class is intended to help implementing read-only lists
so it doesn't support concurrent modification tracking.\n * @return true, if
[other] instance is a [List] of the same size, which contains the same elements in the same order.\n */\n override
fun equals(other: Any?): Boolean {\n if (other === this) return true\n if (other !is List<*>) return false\n\n return orderedEquals(this, other)\n }\n\n /**\n * Returns the hash code value for this list.\n */\n override
fun hashCode(): Int = orderedHashCode(this)\n\n private open inner class IteratorImpl : Iterator<E> {\n /**
the index of the item that will be returned on the next call to [next]`()\n */\n protected var index = 0\n\n override fun hasNext(): Boolean = index < size\n\n override fun next(): E {\n if (!hasNext()) throw
NoSuchElementException()\n return get(index++)\n }\n }\n\n /**\n * Implementation of
[ListIterator] for abstract
lists.\n */\n private open inner class ListIteratorImpl(index: Int) : IteratorImpl(), ListIterator<E> {\n init
{\n checkPositionIndex(index, this@AbstractList.size)\n this.index = index\n }\n\n override
fun hasPrevious(): Boolean = index > 0\n\n override fun nextIndex(): Int = index\n\n override fun
previous(): E {\n if (!hasPrevious()) throw NoSuchElementException()\n return get(--index)\n }\n\n override fun previousIndex(): Int = index - 1\n }\n\n internal companion object {\n internal fun
checkElementIndex(index: Int, size: Int) {\n if (index < 0 || index >= size) {\n throw
IndexOutOfBoundsException("index: $index, size: $size")\n }\n }\n\n internal fun
checkPositionIndex(index: Int, size: Int) {\n if (index < 0 || index > size) {\n throw
IndexOutOfBoundsException("index: $index, size: $size")\n }\n }\n\n internal fun checkRangeIndexes(fromIndex: Int, toIndex: Int, size: Int) {\n if
(fromIndex < 0 || toIndex > size) {\n throw IndexOutOfBoundsException("fromIndex: $fromIndex,
toIndex: $toIndex, size: $size")\n }\n if (fromIndex > toIndex) {\n throw

```





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@UnsafeVariance V): Boolean = containsValue(element)\n\n override operator fun iterator():
Iterator<V> {\n val entryIterator
= entries.iterator()\n return object : Iterator<V> {\n override fun hasNext(): Boolean
= entryIterator.hasNext()\n override fun next(): V = entryIterator.next().value\n }\n\n }\n\n override val size: Int get() = this@AbstractMap.size\n }\n }\n\nreturn _values!!\n }\n\n @kotlin.jvm.Volatile\n private var _values: Collection<V>? = null\n\n private fun
implFindEntry(key: K): Map.Entry<K, V>? = entries.firstOrNull { it.key == key }\n\n internal companion object
{\n\n internal fun entryHashCode(e: Map.Entry<*, *>): Int = with(e) { (key?.hashCode() ?: 0) xor
(value?.hashCode() ?: 0) }\n internal fun entryToString(e: Map.Entry<*, *>): String = with(e) {
\"$key=$value\" }\n internal fun entryEquals(e: Map.Entry<*, *>, other: Any?): Boolean {\n if (other !is
Map.Entry<*,
*>) return false\n return e.key == other.key && e.value == other.value\n }\n }\n\n }
}

/*\n * Copyright
2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed
by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\npackage
kotlin.collections\n\n/**\n * Provides a skeletal implementation of the read-only [Set] interface.\n * This class is
intended to help implementing read-only sets so it doesn't support concurrent modification tracking.\n */\n * @param
E the type of elements contained in the set. The set is covariant in its element type.\n\n
*/\n@SinceKotlin("1.1")\npublic abstract class AbstractSet<out E> protected constructor() :
AbstractCollection<E>(), Set<E> {\n\n /**\n * Compares this set with other set instance with the unordered
structural equality.\n *\n * @return true, if [other] instance is a [Set] of the same size, all elements of which are
contained
in this set.\n *\n * override fun equals(other: Any?): Boolean {\n if (other === this) return true\n if
(other !is Set<*>) return false\n return setEquals(this, other)\n }\n\n /**\n * Returns the hash code value
for this set.\n *\n * override fun hashCode(): Int = unorderedHashCode(this)\n\n internal companion object {\n
 internal fun unorderedHashCode(c: Collection<*>): Int {\n var hashCode = 0\n for (element in c)
{\n hashCode += (element?.hashCode() ?: 0)\n }\n return hashCode\n }\n\n internal
fun setEquals(c: Set<*>, other: Set<*>): Boolean {\n if (c.size != other.size) return false\n return
c.containsAll(other)\n }\n\n }\n\n}

/*\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt
file.\n */\npackage kotlin.collections\n\n/**\n * Resizable-array implementation of the deque data structure.\n */\n
* The name deque is short for "double ended queue" and is usually pronounced "deck".\n */\n * The collection
provide methods for convenient access to the both ends.\n * It also implements [MutableList] interface and supports
efficient get/set operations by index.\n\n
*/\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic class ArrayDeque<E> :
AbstractMutableList<E> {\n private var head: Int = 0\n private var elementData: Array<Any?>\n\n override
var size: Int = 0\n private set\n\n /**\n * Constructs an empty deque with specified [initialCapacity], or
throws [IllegalArgumentException] if [initialCapacity] is negative.\n *\n */\n public constructor(initialCapacity:
Int) {\n elementData = when {\n initialCapacity == 0 -> emptyElementData\n initialCapacity > 0 -
> arrayOfNulls(initialCapacity)\n\n else -> throw IllegalArgumentException("Illegal Capacity: $initialCapacity")\n }\n }\n\n /**\n *
Constructs an empty deque.\n *\n */\n public constructor() {\n elementData = emptyElementData\n }\n\n /**\n *
Constructs a deque that contains the same elements as the specified [elements] collection in the same
order.\n *\n */\n public constructor(elements: Collection<E>) {\n elementData = elements.toArray()\n size = elementData.size\n if (elementData.isEmpty()) elementData = emptyElementData\n }\n\n /**\n *
Ensures that the capacity of this deque is at least equal to the specified [minCapacity].\n *\n * If the current
capacity is less than the [minCapacity], a new backing storage is allocated with greater capacity.\n * Otherwise,
this method takes no action and simply returns.\n *\n */\n private fun ensureCapacity(minCapacity: Int) {\n if

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(minCapacity < 0) throw IllegalStateException("Deque
is too big.") // overflow\n if (minCapacity <= elementData.size) return\n if (elementData ===
emptyElementData) {\n elementData = arrayOfNulls(minCapacity.coerceAtLeast(defaultMinCapacity))\n
return\n }\n\n val newCapacity = newCapacity(elementData.size, minCapacity)\n
copyElements(newCapacity)\n }\n\n /**\n * Creates a new array with the specified [newCapacity] size and
copies elements in the [elementData] array to it.\n */\n private fun copyElements(newCapacity: Int) {\n val
newElements = arrayOfNulls<Any?>(newCapacity)\n elementData.copyInto(newElements, 0, head,
elementData.size)\n elementData.copyInto(newElements, elementData.size - head, 0, head)\n head = 0\n
elementData = newElements\n }\n\n @kotlin.internal.InlineOnly\n private inline fun
internalGet(internalIndex: Int): E {\n @Suppress("UNCHECKED_CAST")\n return
elementData[internalIndex]
as E\n }\n\n private fun positiveMod(index: Int): Int = if (index >= elementData.size) index - elementData.size
else index\n\n private fun negativeMod(index: Int): Int = if (index < 0) index + elementData.size else index\n\n
@kotlin.internal.InlineOnly\n private inline fun internalIndex(index: Int): Int = positiveMod(head + index)\n\n
private fun incremented(index: Int): Int = if (index == elementData.lastIndex) 0 else index + 1\n\n private fun
decremented(index: Int): Int = if (index == 0) elementData.lastIndex else index - 1\n\n override fun isEmpty():
Boolean = size == 0\n\n /**\n * Returns the first element, or throws [NoSuchElementException] if this deque is
empty.\n */\n public fun first(): E = if (isEmpty()) throw NoSuchElementException("ArrayDeque is empty.")
else internalGet(head)\n\n /**\n * Returns the first element, or `null` if this deque is empty.\n */\n public
fun firstOrNull(): E? = if (isEmpty()) null
else internalGet(head)\n\n /**\n * Returns the last element, or throws [NoSuchElementException] if this deque
is empty.\n */\n public fun last(): E = if (isEmpty()) throw NoSuchElementException("ArrayDeque is empty.")
else internalGet(internalIndex(lastIndex))\n\n /**\n * Returns the last element, or `null` if this deque is empty.\n
*/\n public fun lastOrNull(): E? = if (isEmpty()) null else internalGet(internalIndex(lastIndex))\n\n /**\n *
Prepends the specified [element] to this deque.\n */\n public fun addFirst(element: E) {\n
ensureCapacity(size + 1)\n head = decremented(head)\n elementData[head] = element\n size += 1\n
}\n\n /**\n * Appends the specified [element] to this deque.\n */\n public fun addLast(element: E) {\n
ensureCapacity(size + 1)\n elementData[internalIndex(size)] = element\n size += 1\n }\n\n /**\n *
Removes the first element from this deque
and returns that removed element, or throws [NoSuchElementException] if this deque is empty.\n */\n public
fun removeFirst(): E {\n if (isEmpty()) throw NoSuchElementException("ArrayDeque is empty.")\n val
element = internalGet(head)\n elementData[head] = null\n head = incremented(head)\n size -= 1\n
return element\n }\n\n /**\n * Removes the first element from this deque and returns that removed element, or
returns `null` if this deque is empty.\n */\n public fun removeFirstOrNull(): E? = if (isEmpty()) null else
removeFirst()\n\n /**\n * Removes the last element from this deque and returns that removed element, or
throws [NoSuchElementException] if this deque is empty.\n */\n public fun removeLast(): E {\n if
(isEmpty()) throw NoSuchElementException("ArrayDeque is empty.")\n val internalLastIndex =
internalIndex(lastIndex)\n val element = internalGet(internalLastIndex)\n
elementData[internalLastIndex] = null\n size -= 1\n return element\n }\n\n /**\n * Removes the
last element from this deque and returns that removed element, or returns `null` if this deque is empty.\n */\n
public fun removeLastOrNull(): E? = if (isEmpty()) null else removeLast()\n\n // MutableList,
MutableCollection\n public override fun add(element: E): Boolean {\n addLast(element)\n return true\n
}\n\n public override fun add(index: Int, element: E) {\n AbstractList.checkPositionIndex(index, size)\n
}\n\n if (index == size) {\n addLast(element)\n return\n } else if (index == 0) {\n
addFirst(element)\n return\n }\n\n ensureCapacity(size + 1)\n\n // Elements in circular array lay
in 2 ways:\n // 1. `head` is less than `tail`: [# , #, e1, e2, e3, #]\n // 2. `head` is greater than `tail`: [e3,
#, #, #, e1, e2]\n //

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where head is the index of the first element in the circular array,\n // and tail is the index following the last
element.\n // At this point the insertion index is not equal to head or tail.\n // Also the circular array
can store at least one more element.\n // Depending on where the given element must be inserted the
preceding or the succeeding\n // elements will be shifted to make room for the element to be inserted.\n //
// In case the preceding elements are shifted:\n // * if the insertion index is greater than the head (regardless
of circular array form)\n // -> shift the preceding elements\n // * otherwise, the circular array has (2)
form and the insertion index is less than tail\n // -> shift all elements in the back of the array\n // ->
shift preceding elements in the front of the array\n // In case the succeeding elements are shifted:\n
// * if the insertion index is less than the tail (regardless of circular array form)\n // -> shift the succeeding
elements\n // * otherwise, the circular array has (2) form and the insertion index is greater than head\n //
-> shift all elements in the front of the array\n // -> shift succeeding elements in the back of the array\n\n
val internalIndex = internalIndex(index)\n\n if (index < (size + 1) shr 1) {\n // closer to the first element -
> shift preceding elements\n val decrementedInternalIndex = decremented(internalIndex)\n val
decrementedHead = decremented(head)\n\n if (decrementedInternalIndex >= head) {\n
elementData[decrementedHead] = elementData[head] // head can be zero\n
elementData.copyInto(elementData, head, head + 1, decrementedInternalIndex + 1)\n } else { // head > tail\n
elementData.copyInto(elementData, head
- 1, head, elementData.size) // head can't be zero\n elementData[elementData.size - 1] = elementData[0]\n
elementData.copyInto(elementData, 0, 1, decrementedInternalIndex + 1)\n }\n\n
elementData[decrementedInternalIndex] = element\n head = decrementedHead\n } else {\n //
closer to the last element -> shift succeeding elements\n val tail = internalIndex(size)\n\n if
(internalIndex < tail) {\n elementData.copyInto(elementData, internalIndex + 1, internalIndex, tail)\n
} else { // head > tail\n elementData.copyInto(elementData, 1, 0, tail)\n elementData[0] =
elementData[elementData.size - 1]\n elementData.copyInto(elementData, internalIndex + 1, internalIndex,
elementData.size - 1)\n }\n\n elementData[internalIndex] = element\n }\n size += 1\n }\n\n
private fun copyCollectionElements(internalIndex:
Int, elements: Collection<E>) {\n val iterator = elements.iterator()\n\n for (index in internalIndex until
elementData.size) {\n if (!iterator.hasNext()) break\n elementData[index] = iterator.next()\n }\n\n
for (index in 0 until head) {\n if (!iterator.hasNext()) break\n elementData[index] = iterator.next()\n
}\n\n size += elements.size\n }\n\n public override fun addAll(elements: Collection<E>): Boolean {\n
if (elements.isEmpty()) return false\n ensureCapacity(this.size + elements.size)\n
copyCollectionElements(internalIndex(size), elements)\n return true\n }\n\n public override fun
addAll(index: Int, elements: Collection<E>): Boolean {\n AbstractList.checkPositionIndex(index, size)\n\n
if (elements.isEmpty()) {\n return false\n } else if (index == size) {\n return addAll(elements)\n
}\n\n
ensureCapacity(this.size + elements.size)\n\n val tail = internalIndex(size)\n val internalIndex =
internalIndex(index)\n val elementsSize = elements.size\n\n if (index < (size + 1) shr 1) {\n // closer
to the first element -> shift preceding elements\n\n var shiftedHead = head - elementsSize\n\n if
(internalIndex >= head) {\n if (shiftedHead >= 0) {\n elementData.copyInto(elementData,
shiftedHead, head, internalIndex)\n } else { // head < tail, insertion leads to head >= tail\n
shiftedHead += elementData.size\n val elementsToShift = internalIndex - head\n val
shiftToBack = elementData.size - shiftedHead\n\n if (shiftToBack >= elementsToShift) {\n
elementData.copyInto(elementData, shiftedHead, head, internalIndex)\n } else {\n
elementData.copyInto(elementData,
shiftedHead, head, head + shiftToBack)\n elementData.copyInto(elementData, 0, head +
shiftToBack, internalIndex)\n }\n }\n } else { // head > tail, internalIndex < tail\n
elementData.copyInto(elementData, shiftedHead, head, elementData.size)\n\n if (elementsSize >=
internalIndex) {\n elementData.copyInto(elementData, elementData.size - elementsSize, 0,

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internalIndex)\n } else {\n elementData.copyInto(elementData, elementData.size -
elementsSize, 0, elementsSize)\n elementData.copyInto(elementData, 0, elementsSize, internalIndex)\n
 }\n }\n head = shiftedHead\n copyCollectionElements(negativeMod(internalIndex -
elementsSize), elements)\n } else {\n // closer to the last element -> shift succeeding elements\n\n
val
shiftedInternalIndex = internalIndex + elementsSize\n\n if (internalIndex < tail) {\n if (tail +
elementsSize <= elementData.size) {\n elementData.copyInto(elementData, shiftedInternalIndex,
internalIndex, tail)\n } else { // head < tail, insertion leads to head >= tail\n if
(shiftedInternalIndex >= elementData.size) {\n elementData.copyInto(elementData,
shiftedInternalIndex - elementData.size, internalIndex, tail)\n } else {\n val shiftToFront =
tail + elementsSize - elementData.size\n elementData.copyInto(elementData, 0, tail - shiftToFront,
tail)\n elementData.copyInto(elementData, shiftedInternalIndex, internalIndex, tail - shiftToFront)\n
 }\n }\n } else { // head > tail, internalIndex > head\n
elementData.copyInto(elementData, elementsSize,
0, tail)\n if (shiftedInternalIndex >= elementData.size) {\n elementData.copyInto(elementData,
shiftedInternalIndex - elementData.size, internalIndex, elementData.size)\n } else {\n
elementData.copyInto(elementData, 0, elementData.size - elementsSize, elementData.size)\n
elementData.copyInto(elementData, shiftedInternalIndex, internalIndex, elementData.size - elementsSize)\n
}\n }\n copyCollectionElements(internalIndex, elements)\n }\n\n return true\n }\n\n public
override fun get(index: Int): E {\n AbstractList.checkElementIndex(index, size)\n\n return
internalGet(internalIndex(index))\n }\n\n public override fun set(index: Int, element: E): E {\n
AbstractList.checkElementIndex(index, size)\n\n val internalIndex = internalIndex(index)\n val oldElement
= internalGet(internalIndex)\n elementData[internalIndex]
= element\n\n return oldElement\n }\n\n public override fun contains(element: E): Boolean =
indexOf(element) != -1\n\n public override fun indexOf(element: E): Int {\n val tail = internalIndex(size)\n\n
if (head < tail) {\n for (index in head until tail) {\n if (element == elementData[index]) return
index - head\n }\n } else if (head >= tail) {\n for (index in head until elementData.size) {\n
if (element == elementData[index]) return index - head\n }\n for (index in 0 until tail) {\n if
(element == elementData[index]) return index + elementData.size - head\n }\n }\n return -1\n
}\n\n public override fun lastIndexOf(element: E): Int {\n val tail = internalIndex(size)\n\n if (head < tail)
{\n for (index in tail - 1 downTo head) {\n if (element == elementData[index])
return index - head\n }\n } else if (head > tail) {\n for (index in tail - 1 downTo 0) {\n if
(element == elementData[index]) return index + elementData.size - head\n }\n for (index in
elementData.lastIndex downTo head) {\n if (element == elementData[index]) return index - head\n
}\n }\n }\n return -1\n }\n\n public override fun remove(element: E): Boolean {\n val index =
indexOf(element)\n if (index == -1) return false\n removeAt(index)\n return true\n }\n\n public
override fun removeAt(index: Int): E {\n AbstractList.checkElementIndex(index, size)\n\n if (index ==
lastIndex) {\n return removeLast()\n } else if (index == 0) {\n return removeFirst()\n }\n\n val internalIndex = internalIndex(index)\n val element = internalGet(internalIndex)\n\n if (index < size shr
1) {\n
 // closer to the first element -> shift preceding elements\n if (internalIndex >= head) {\n
elementData.copyInto(elementData, head + 1, head, internalIndex)\n } else { // head > tail, internalIndex <
head\n elementData.copyInto(elementData, 1, 0, internalIndex)\n elementData[0] =
elementData[elementData.size - 1]\n elementData.copyInto(elementData, head + 1, head, elementData.size
- 1)\n }\n }\n elementData[head] = null\n head = incremented(head)\n } else {\n //
closer to the last element -> shift succeeding elements\n val internalLastIndex = internalIndex(lastIndex)\n\n
if (internalIndex <= internalLastIndex) {\n elementData.copyInto(elementData, internalIndex,
internalIndex + 1, internalLastIndex + 1)\n } else { // head > tail, internalIndex > head\n

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elementData.copyInto(elementData,
 internalIndex, internalIndex + 1, elementData.size)\n elementData[elementData.size - 1] =
elementData[0]\n elementData.copyInto(elementData, 0, 1, internalLastIndex + 1)\n }\n\n
elementData[internalLastIndex] = null\n }\n size -= 1\n return element\n }\n\n public override fun
removeAll(elements: Collection<E>): Boolean = filterInPlace { !elements.contains(it) }\n\n public override fun
retainAll(elements: Collection<E>): Boolean = filterInPlace { elements.contains(it) }\n\n private inline fun
filterInPlace(predicate: (E) -> Boolean): Boolean {\n if (this.isEmpty() || elementData.isEmpty())\n return
false\n\n val tail = internalIndex(size)\n var newTail = head\n var modified = false\n if (head <
tail) {\n for (index in head until tail) {\n val element = elementData[index]\n\n
@Suppress(\"UNCHECKED_CAST\")\n if (predicate(element as E))\n elementData[newTail++] = element\n else\n
modified = true\n }\n\n elementData.fill(null, newTail, tail)\n } else {\n for (index in head
until elementData.size) {\n val element = elementData[index]\n elementData[index] = null\n\n
@Suppress(\"UNCHECKED_CAST\")\n if (predicate(element as E))\n elementData[newTail++] = element\n else\n
modified = true\n }\n\n newTail =
positiveMod(newTail)\n for (index in 0 until tail) {\n val element = elementData[index]\n
elementData[index] = null\n\n @Suppress(\"UNCHECKED_CAST\")\n if (predicate(element as
E)) {\n elementData[newTail] = element\n newTail = incremented(newTail)\n
 } else {\n modified = true\n }\n }\n } if (modified)\n size =
negativeMod(newTail - head)\n return modified\n }\n\n public override fun clear() {\n val tail =
internalIndex(size)\n if (head < tail) {\n elementData.fill(null, head, tail)\n } else if (isNotEmpty())\n
{\n elementData.fill(null, head, elementData.size)\n elementData.fill(null, 0, tail)\n }\n head =
0\n size = 0\n }\n\n @Suppress(\"NOTHING_TO_OVERRIDE\")\n override fun <T> toArray(array:
Array<T>): Array<T> {\n @Suppress(\"UNCHECKED_CAST\")\n val dest = (if (array.size >= size) array
else arrayOfNulls(array, size)) as Array<Any?>\n val tail = internalIndex(size)\n if (head < tail) {\n
elementData.copyInto(dest, startIndex = head, endIndex = tail)\n } else if (isNotEmpty()) {\n
elementData.copyInto(dest,
 destinationOffset = 0, startIndex = head, endIndex = elementData.size)\n elementData.copyInto(dest,
 destinationOffset = elementData.size - head, startIndex = 0, endIndex = tail)\n }\n if (dest.size > size) {\n
 dest[size] = null // null-terminate\n }\n\n @Suppress(\"UNCHECKED_CAST\")\n return dest as
Array<T>\n }\n\n @Suppress(\"NOTHING_TO_OVERRIDE\")\n override fun toArray(): Array<Any?> {\n
 return toArray(arrayOfNulls<Any?>(size))\n }\n\n // for testing\n internal fun <T> testToArray(array:
Array<T>): Array<T> = toArray(array)\n internal fun testToArray(): Array<Any?> = toArray()\n\n internal
companion object {\n private val emptyElementData = emptyArray<Any?>()\n private const val
maxArraySize = Int.MAX_VALUE - 8\n private const val defaultMinCapacity = 10\n internal fun
newCapacity(oldCapacity: Int, minCapacity: Int): Int {\n // overflow-conscious\n var newCapacity = oldCapacity + (oldCapacity shr 1)\n if (newCapacity - minCapacity < 0)\n
newCapacity = minCapacity\n if (newCapacity - maxArraySize > 0)\n newCapacity = if
(minCapacity > maxArraySize) Int.MAX_VALUE else maxArraySize\n return newCapacity\n }\n\n // For testing only\n internal fun internalStructure(structure: (head: Int, elements: Array<Any?>) -> Unit)
{\n val tail = internalIndex(size)\n val head = if (isEmpty() || head < tail) head else head -
elementData.size\n structure(head, toArray())\n }\n }, /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n
*/\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName(\"ArraysKt\")\n\n\npackage
kotlin.collections\n\nimport kotlin.contracts.*\n\n/**\n * Returns a single list of all elements from all arrays in the given array.\n * @sample
samples.collections.Arrays.Transformations.flattenArray\n */\n\npublic fun <T> Array<out Array<out T>>.flatten():

```

```

List<T> {\n val result = ArrayList<T>(sumOf { it.size })\n for (element in this) {\n result.addAll(element)\n }\n return result}\n\n/**\n * Returns a pair of lists, where\n * *first* list is built from the first values of each\n * pair from this array,\n * *second* list is built from the second values of each pair from this array.\n * @sample\n * samples.collections.Arrays.Transformations.unzipArray\n */\npublic fun <T, R> Array<out Pair<T, R>>.unzip():\nPair<List<T>, List<R>> {\n val listT = ArrayList<T>(size)\n val listR = ArrayList<R>(size)\n for (pair in\nthis) {\n listT.add(pair.first)\n listR.add(pair.second)\n }\n return listT to listR}\n\n/**\n * Returns\n * `true` if this nullable array is either null or empty.\n * @sample\n * samples.collections.Arrays.Usage.arrayIsNullOrEmpty\n */\n\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun Array<*>?.isNullOrEmpty(): Boolean\n{\n contract {\n returns(false) implies (this@isNullOrEmpty != null)\n }\n return this == null ||\nthis.isEmpty()\n}\n\n/**\n * Returns this array if it's not empty\n * or the result of calling [defaultValue] function if\n * the array is empty.\n * @sample\n * samples.collections.Arrays.Usage.arrayIfEmpty\n */\n\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Suppress("UPPER_BOUND_CANNOT_BE_ARRAY")\npublic inline fun <C, R> C.ifEmpty(defaultValue: () -> R): R where C : Array<*>, C : R =\n if (isEmpty())\ndefaultValue() else\nthis\n\n@OptIn(ExperimentalUnsignedTypes::class)\n@SinceKotlin("1.3")\n@PublishedApi\n@kotlin.jvm.Jvm\nName("contentDeepEquals")\n@kotlin.js.JsName("contentDeepEqualsImpl")\ninternal fun <T> Array<out\nT>?.contentDeepEqualsImpl(other: Array<out T>?): Boolean {\n if (this === other)\n return true\n if (this == null || other == null || this.size != other.size) return false\n\n for (i in indices) {\n val\nv1 = this[i]\n val v2 = other[i]\n\n if (v1 === v2) {\n continue\n } else if (v1 == null || v2 ==\nnull) {\n return false\n }\n\n when {\n v1 is Array<*> && v2 is Array<*> -> if\n(!v1.contentDeepEquals(v2)) return false\n v1 is ByteArray && v2 is ByteArray -> if\n(!v1.contentEquals(v2)) return false\n v1 is ShortArray && v2 is ShortArray -> if (!v1.contentEquals(v2))\nreturn false\n v1 is IntArray && v2 is IntArray -> if (!v1.contentEquals(v2)) return false\n v1 is\nLongArray && v2 is LongArray -> if (!v1.contentEquals(v2)) return false\n v1 is\nFloatArray && v2 is\nFloatArray -> if (!v1.contentEquals(v2)) return false\n v1 is\nDoubleArray && v2 is\nDoubleArray -> if\n(!v1.contentEquals(v2)) return\nfalse\n v1 is\nCharArray && v2 is\nCharArray -> if (!v1.contentEquals(v2)) return false\n v1 is\nBooleanArray && v2 is\nBooleanArray -> if (!v1.contentEquals(v2)) return false\n v1 is\nUByteArray &&\nv2 is\nUByteArray -> if (!v1.contentEquals(v2)) return false\n v1 is\nUShortArray && v2 is\nUShortArray ->\nif (!v1.contentEquals(v2)) return false\n v1 is\nUIntArray && v2 is\nUIntArray -> if\n(!v1.contentEquals(v2)) return false\n v1 is\nULongArray && v2 is\nULongArray -> if\n(!v1.contentEquals(v2)) return false\n else -> if (v1 != v2) return false\n }\n }\n return\ntrue\n}\n\n@SinceKotlin("1.3")\n@PublishedApi\n@kotlin.jvm.JvmName("contentDeepToString")\n@kotlin.js.JsName("contentDeepToStringImpl")\ninternal fun <T> Array<out T>?.contentDeepToStringImpl(): String {\n if (this == null) return "null"\n val length = size.coerceAtMost((Int.MAX_VALUE - 2) / 5) * 5 + 2 // in\norder not to overflow Int.MAX_VALUE\n return buildString(length) {\n contentDeepToStringInternal(this,\nmutableListOf())\n }\n}\n\n@OptIn(ExperimentalUnsignedTypes::class)\nprivate fun <T> Array<out\nT>.contentDeepToStringInternal(result: StringBuilder, processed: MutableList<Array<*>>) {\n if (this in\nprocessed) {\n result.append("[...]")\n return\n }\n processed.add(this)\n result.append("[")\n\n for (i\nin indices) {\n if (i != 0) {\n result.append(", ")\n }\n val element = this[i]\n when\n(element) {\n null -> result.append("null")\n is Array<*> ->\nelement.contentDeepToStringInternal(result, processed)\n is ByteArray ->\nresult.append(element.contentToString())\n is ShortArray -> result.append(element.contentToString())\n is\nIntArray -> result.append(element.contentToString())\n is\nLongArray ->\nresult.append(element.contentToString())\n is\nFloatArray -> result.append(element.contentToString())\n is\nDoubleArray ->\nresult.append(element.contentToString())\n is\nCharArray -> result.append(element.contentToString())\n }\n }\n}

```

```

 is BooleanArray -> result.append(element.contentToString())\n\n is UByteArray ->
result.append(element.contentToString())\n is UShortArray -> result.append(element.contentToString())\n
 is UIntArray -> result.append(element.contentToString())\n is ULongArray ->
result.append(element.contentToString())\n else -> result.append(element.toString())\n }\n
}\n\n result.append('}')\n processed.removeAt(processed.lastIndex)\n}", "/*\n * Copyright 2010-2021 JetBrains
s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\n/**
Returns true if the brittle contains optimization is enabled. See KT-45438. *\ninternal fun
brittleContainsOptimizationEnabled(): Boolean\n\n**\n * Returns true if [brittleContainsOptimizationEnabled] is
true\n * and it's safe to convert this collection to a set without changing contains method behavior.\n *\nprivate fun
<T> Collection<T>.safeToConvertToSet() = brittleContainsOptimizationEnabled() && size > 2 && this is
ArrayList\n\n**\n * When [brittleContainsOptimizationEnabled] is true:\n * - Converts this [Iterable] to a set if it is
not a [Collection].\n * - Converts this [Collection] to a set, when it's worth so and it doesn't change contains method
behavior.\n * - Otherwise returns this.\n * When [brittleContainsOptimizationEnabled] is false:\n * - Converts this
[Iterable] to a list if it is not a [Collection].\n * - Otherwise returns this.\n *\ninternal fun <T>
Iterable<T>.convertToSetForSetOperationWith(source: Iterable<T>): Collection<T>
=\n when (this) {\n is Set -> this\n is Collection ->\n when {\n source is Collection &&
source.size < 2 -> this\n else -> if (this.safeToConvertToSet()) toHashSet() else this\n }\n else -
> if (brittleContainsOptimizationEnabled()) toHashSet() else toList()\n } \n\n**\n * When
[brittleContainsOptimizationEnabled] is true:\n * - Converts this [Iterable] to a set if it is not a [Collection].\n * -
Converts this [Collection] to a set, when it's worth so and it doesn't change contains method behavior.\n * -
Otherwise returns this.\n * When [brittleContainsOptimizationEnabled] is false:\n * - Converts this [Iterable] to a
list if it is not a [Collection].\n * - Otherwise returns this.\n *\ninternal fun <T>
Iterable<T>.convertToSetForSetOperation(): Collection<T> =\n when (this) {\n is Set -> this\n is
Collection -> if (this.safeToConvertToSet()) toHashSet() else this\n else -> if
(brittleContainsOptimizationEnabled())
toHashSet() else toList()\n } \n\n**\n * Converts this sequence to a set if [brittleContainsOptimizationEnabled] is
true,\n * otherwise converts it to a list.\n *\ninternal fun <T> Sequence<T>.convertToSetForSetOperation():
Collection<T> =\n if (brittleContainsOptimizationEnabled()) toHashSet() else toList()\n\n**\n * Converts this
array to a set if [brittleContainsOptimizationEnabled] is true,\n * otherwise converts it to a list.\n *\ninternal fun
<T> Array<T>.convertToSetForSetOperation(): Collection<T> =\n if (brittleContainsOptimizationEnabled())
toHashSet() else asList()", "/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\n/**\n * Data class representing a value from a
collection or sequence, along with its index in that collection or sequence.\n *\n * @property value the underlying value.\n * @property index the index of the value in the collection or sequence.\n\n
\npublic data class IndexedValue<out T>(public val index: Int, public val value: T)\n", "/\n * Copyright 2010-
2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n\n
*\n\n@file:kotlin.jvm.JvmName("MapAccessorsKt")\n\npackage kotlin.collections\n\nimport
kotlin.reflect.KProperty\nimport kotlin.internal.Exact\n\n**\n * Returns the value of the property for the given
object from this read-only map.\n * @param thisRef the object for which the value is requested (not used).\n *
@param property the metadata for the property, used to get the name of property and lookup the value
corresponding to this name in the map.\n * @return the property value.\n *\n * @throws NoSuchElementException
when the map doesn't contain value for the property name
and doesn't provide an implicit default (see [withDefault]).\n *\n\n@kotlin.internal.InlineOnly\npublic inline
operator fun <V, V1 : V> Map<in String, @Exact V>.getValue(thisRef: Any?, property: KProperty<*>): V1 =\n
@Suppress("UNCHECKED_CAST") (getOrImplicitDefault(property.name) as V1)\n\n**\n * Returns the value

```

of the property for the given object from this mutable map.

```

 * @param thisRef the object for which the value is
 requested (not used).
 * @param property the metadata for the property, used to get the name of property and
 lookup the value corresponding to this name in the map.
 * @return the property value.
 * @throws
 NoSuchElementException when the map doesn't contain value for the property name and doesn't provide an implicit
 default (see [withDefault]).
 */
@kotlin.jvm.JvmName("getVar")
@kotlin.internal.InlineOnly
public inline
operator fun <V, V1 : V> MutableMap<in String, out @Exact V>.getValue(thisRef: Any?, property:
KProperty<*>): V1 =
 @Suppress("UNCHECKED_CAST")
 (getOrImplicitDefault(property.name) as V1)

```

\* Stores the value of the property for the given object in this mutable map.

```

 * @param thisRef the object for which the value is requested (not used).
 * @param property the
 metadata for the property, used to get the name of property and store the value associated with that name in the
 map.
 * @param value the value to set.
 */
@kotlin.internal.InlineOnly
public inline operator fun <V>
MutableMap<in String, in V>.setValue(thisRef: Any?, property: KProperty<*>, value: V) {
 this.put(property.name, value)
}

```

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```

 */
@file:kotlin.jvm.JvmMultifileClass
@file:kotlin.jvm.JvmName("MapsKt")
package
kotlin.collections

```

\* Returns the value for the given key, or the implicit default value for this map.

By default no implicit value is provided for maps and a [NoSuchElementException] is thrown. To create a map with implicit default value use [withDefault] method.

```

 * @throws NoSuchElementException
 when the map doesn't contain a value for the specified key and no implicit default was provided for that map.
 */
@kotlin.jvm.JvmName("getOrImplicitDefaultNullable")
@PublishedApi
internal fun <K, V> Map<K,
V>.getOrImplicitDefault(key: K): V {
 if (this is MapWithDefault)
 return
 this.getOrImplicitDefault(key)
 return getOrElseNullable(key, { throw NoSuchElementException("Key $key
is missing in the map.") })
}

```

\* Returns a wrapper of this read-only map, having the implicit default value provided with the specified function [defaultValue].

This implicit default value is used when the original map doesn't contain a value for the key specified and a value is obtained with [Map.getValue] function, for example when properties

are delegated to the map.

When this map already has an implicit default value provided with a former call to [withDefault], it is being replaced by this call.

```

 */
public fun <K, V> Map<K, V>.withDefault(defaultValue: (key:
K) -> V): Map<K, V> =
 when (this) {
 is MapWithDefault -> this.map.withDefault(defaultValue)
 else -> MapWithDefaultImpl(this, defaultValue)
}

```

\* Returns a wrapper of this mutable map, having the implicit default value provided with the specified function [defaultValue].

This implicit default value is used when the original map doesn't contain a value for the key specified and a value is obtained with [Map.getValue] function, for example when properties are delegated to the map.

When this map already has an implicit default value provided with a former call to [withDefault], it is being replaced by this call.

```

 */
@kotlin.jvm.JvmName("withDefaultMutable")
public fun <K, V> MutableMap<K,
V>.withDefault(defaultValue:
(key: K) -> V): MutableMap<K, V> =
 when (this) {
 is MutableMapWithDefault ->
 this.map.withDefault(defaultValue)
 else -> MutableMapWithDefaultImpl(this, defaultValue)
}

```

```

}
private interface MapWithDefault<K, out V> : Map<K, V> {
 public val map: Map<K, V>
 public fun
getOrImplicitDefault(key: K): V
}
private interface MutableMapWithDefault<K, V> : MutableMap<K, V>,
MapWithDefault<K, V> {
 public override val map: MutableMap<K, V>
}
private class
MapWithDefaultImpl<K, out V>(public override val map: Map<K, V>, private val default: (key: K) -> V) :
MapWithDefault<K, V> {
 override fun equals(other: Any?): Boolean = map.equals(other)
 override fun
hashCode(): Int = map.hashCode()
 override fun toString(): String = map.toString()
 override val size: Int get()
= map.size
 override fun isEmpty(): Boolean = map.isEmpty()
 override fun containsKey(key: K): Boolean =
map.containsKey(key)
 override fun

```





```

* Removes all elements contained in the given [elements] collection from this mutable collection.\n
*\n@kotlin.internal.InlineOnly\npublic
inline operator fun <T> MutableCollection<in T>.minusAssign(elements: Iterable<T>) {\n
this.removeAll(elements)\n}\n\n/**\n * Removes all elements contained in the given [elements] array from this
mutable collection.\n *\n@kotlin.internal.InlineOnly\npublic inline operator fun <T> MutableCollection<in
T>.minusAssign(elements: Array<T>) {\n this.removeAll(elements)\n}\n\n/**\n * Removes all elements
contained in the given [elements] sequence from this mutable collection.\n *\n@kotlin.internal.InlineOnly\npublic
inline operator fun <T> MutableCollection<in T>.minusAssign(elements: Sequence<T>) {\n
this.removeAll(elements)\n}\n\n/**\n * Adds all elements of the given [elements] collection to this
[MutableCollection].\n *\npublic fun <T> MutableCollection<in T>.addAll(elements: Iterable<T>): Boolean {\n
when (elements) {\n is Collection -> return addAll(elements)\n else -> {\n var result: Boolean =
false\n
for (item in elements)\n if (add(item)) result = true\n return result\n }\n }\n}\n\n/**\n *
Adds all elements of the given [elements] sequence to this [MutableCollection].\n *\npublic fun <T>
MutableCollection<in T>.addAll(elements: Sequence<T>): Boolean {\n var result: Boolean = false\n for (item
in elements) {\n if (add(item)) result = true\n }\n return result\n}\n\n/**\n * Adds all elements of the given
[elements] array to this [MutableCollection].\n *\npublic fun <T> MutableCollection<in T>.addAll(elements:
Array<out T>): Boolean {\n return addAll(elements.asList())\n}\n\n/**\n * Removes all elements from this
[MutableCollection] that are also contained in the given [elements] collection.\n *\npublic fun <T>
MutableCollection<in T>.removeAll(elements: Iterable<T>): Boolean {\n return
removeAll(elements.convertToSetForSetOperationWith(this))\n}\n\n/**\n * Removes all elements from this
[MutableCollection] that are
also contained in the given [elements] sequence.\n *\npublic fun <T> MutableCollection<in
T>.removeAll(elements: Sequence<T>): Boolean {\n val set = elements.convertToSetForSetOperation()\n return
set.isNotEmpty() && removeAll(set)\n}\n\n/**\n * Removes all elements from this [MutableCollection] that are
also contained in the given [elements] array.\n *\npublic fun <T> MutableCollection<in T>.removeAll(elements:
Array<out T>): Boolean {\n return elements.isNotEmpty() &&
removeAll(elements.convertToSetForSetOperation())\n}\n\n/**\n * Retains only elements of this
[MutableCollection] that are contained in the given [elements] collection.\n *\npublic fun <T>
MutableCollection<in T>.retainAll(elements: Iterable<T>): Boolean {\n return
retainAll(elements.convertToSetForSetOperationWith(this))\n}\n\n/**\n * Retains only elements of this
[MutableCollection] that are contained in the given [elements] array.\n *\npublic fun <T> MutableCollection<in
T>.retainAll(elements: Array<out
T>): Boolean {\n if (elements.isNotEmpty())\n return retainAll(elements.convertToSetForSetOperation())\n
else\n return retainNothing()\n}\n\n/**\n * Retains only elements of this [MutableCollection] that are contained
in the given [elements] sequence.\n *\npublic fun <T> MutableCollection<in T>.retainAll(elements:
Sequence<T>): Boolean {\n val set = elements.convertToSetForSetOperation()\n if (set.isNotEmpty())\n
return retainAll(set)\n else\n return retainNothing()\n}\n\nprivate fun MutableCollection<*>.retainNothing():
Boolean {\n val result = isEmpty()\n clear()\n return result\n}\n\n/**\n * Removes all elements from this
[MutableIterable] that match the given [predicate].\n *\n * @return `true` if any element was removed from this
collection, or `false` when no elements were removed and collection was not modified.\n *\npublic fun <T>
MutableIterable<T>.removeAll(predicate: (T) -> Boolean): Boolean = filterInPlace(predicate,
true)\n\n/**\n * Retains only elements of this [MutableIterable] that match the given [predicate].\n *\n * @return
`true` if any element was removed from this collection, or `false` when all elements were retained and collection was
not modified.\n *\npublic fun <T> MutableIterable<T>.retainAll(predicate: (T) -> Boolean): Boolean =
filterInPlace(predicate, false)\n\nprivate fun <T> MutableIterable<T>.filterInPlace(predicate: (T) -> Boolean,
predicateResultToRemove: Boolean): Boolean {\n var result = false\n with(iterator()) {\n while
(hasNext())\n if (predicate(next()) == predicateResultToRemove) {\n remove()\n result =

```

```

true\n }\n }\n return result\n}\n\n/**\n * Removes the element at the specified [index] from this list.\n *
In Kotlin one should use the [MutableList.removeAt] function instead.\n */\n@Deprecated("Use removeAt(index)\n instead.", ReplaceWith("removeAt(index)"), level =\n DeprecationLevel.ERROR)\n@kotlin.internal.InlineOnly\npublic\n inline fun <T> MutableList<T>.remove(index: Int): T = removeAt(index)\n\n/**\n * Removes the first element\n from this mutable list and returns that removed element, or throws [NoSuchElementException] if this list is empty.\n */\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T>\n MutableList<T>.removeFirst(): T = if (isEmpty()) throw NoSuchElementException("List is empty.") else\n removeAt(0)\n\n/**\n * Removes the first element from this mutable list and returns that removed element, or\n returns `null` if this list is empty.\n */\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T>\n MutableList<T>.removeFirstOrNull(): T? = if (isEmpty()) null else removeAt(0)\n\n/**\n * Removes the last\n element from this mutable list and returns that removed element, or throws [NoSuchElementException] if this list is\n empty.\n */\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic\n fun <T> MutableList<T>.removeLast(): T = if (isEmpty()) throw NoSuchElementException("List is empty.") else\n removeAt(lastIndex)\n\n/**\n * Removes the last element from this mutable list and returns that removed element,\n or returns `null` if this list is empty.\n */\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T>\n MutableList<T>.removeLastOrNull(): T? = if (isEmpty()) null else removeAt(lastIndex)\n\n/**\n * Removes all\n elements from this [MutableList] that match the given [predicate].\n * @return `true` if any element was\n removed from this collection, or `false` when no elements were removed and collection was not modified.\n */\npublic fun <T> MutableList<T>.removeAll(predicate: (T) -> Boolean): Boolean = filterInPlace(predicate,\n true)\n\n/**\n * Retains only elements of this [MutableList] that match the given [predicate].\n * @return `true`\n if any element was removed from this collection, or `false` when all elements were retained\n and collection was not modified.\n */\npublic fun <T> MutableList<T>.retainAll(predicate: (T) -> Boolean):\n Boolean = filterInPlace(predicate, false)\n\nprivate fun <T> MutableList<T>.filterInPlace(predicate: (T) ->\n Boolean, predicateResultToRemove: Boolean): Boolean {\n if (this !is RandomAccess)\n return (this as\n MutableIterable<T>).filterInPlace(predicate, predicateResultToRemove)\n var writeIndex: Int = 0\n for (readIndex in 0..lastIndex) {\n val element = this[readIndex]\n if (predicate(element) ==\n predicateResultToRemove)\n continue\n if (writeIndex != readIndex)\n this[writeIndex] =\n element\n writeIndex++\n }\n if (writeIndex < size) {\n for (removeIndex in lastIndex downTo\n writeIndex)\n removeAt(removeIndex)\n return true\n } else {\n return false\n }\n}\n\n"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of\n this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("CollectionsKt")\npackage\n kotlin.collections\nprivate open class ReversedListReadOnly<out T>(private val delegate: List<T>) :\n AbstractList<T>() {\n override val size: Int get() = delegate.size\n override fun get(index: Int): T =\n delegate[reverseElementIndex(index)]\n}\nprivate class ReversedList<T>(private val delegate: MutableList<T>) :\n AbstractMutableList<T>() {\n override val size: Int get() = delegate.size\n override fun get(index: Int): T =\n delegate[reverseElementIndex(index)]\n override fun clear() = delegate.clear()\n override fun removeAt(index:\n Int): T = delegate.removeAt(reverseElementIndex(index))\n override fun set(index: Int, element: T): T =\n delegate.set(reverseElementIndex(index), element)\n override fun add(index: Int, element: T) {\n delegate.add(reversePositionIndex(index),\n element)\n }\n}\n\nprivate fun List<*>.reverseElementIndex(index: Int) =\n if (index in 0..lastIndex) lastIndex -\n index else throw IndexOutOfBoundsException("Element index $index must be in range\n [${0..lastIndex}].")\n\nprivate fun List<*>.reversePositionIndex(index: Int) =\n if (index in 0..size) size - index\n else throw IndexOutOfBoundsException("Position index $index must be in range [${0..size}].")\n\n\n/**\n * Returns a reversed read-only view of the original List.\n * All changes made in the original list will be reflected in

```

```

the reversed one.\n * @sample samples.collections.ReversedViews.asReversedList\n *^\npublic fun <T>
List<T>.asReversed(): List<T> = ReversedListReadOnly(this)\n\n/**\n * Returns a reversed mutable view of the
original mutable List.\n * All changes made in the original list will be reflected in the reversed one and vice versa.\n
* @sample samples.collections.ReversedViews.asReversedMutableList\n
*^\n@kotlin.jvm.JvmName("\nasReversedMutable")\n\npublic
fun <T> MutableList<T>.asReversed(): MutableList<T> = ReversedList(this)\n\n"/*\n * Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*^\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("\SequencesKt")\n@file:OptIn(Experimenta
lTypeInference::class)\n\npackage kotlin.sequences\n\nimport kotlin.coroutines.*\nimport
kotlin.coroutines.intrinsics.*\nimport kotlin.experimental.ExperimentalTypeInference\n\n/**\n * Builds a
[Sequence] lazily yielding values one by one.\n * \n * @see kotlin.sequences.generateSequence\n * \n * @sample
samples.collections.Sequences.Building.buildSequenceYieldAll\n * @sample
samples.collections.Sequences.Building.buildFibonacciSequence\n *^\n@SinceKotlin("1.3")\n\npublic fun <T>
sequence(@BuilderInference block: suspend SequenceScope<T>().() -> Unit): Sequence<T> = Sequence {
iterator(block)
}\n\n/**\n * Builds an [Iterator] lazily yielding values one by one.\n * \n * @sample
samples.collections.Sequences.Building.buildIterator\n * @sample samples.collections.Iterables.Building.iterable\n
*^\n@SinceKotlin("1.3")\n\npublic fun <T> iterator(@BuilderInference block: suspend SequenceScope<T>().() ->
Unit): Iterator<T> { \n val iterator = SequenceBuilderIterator<T>()\n iterator.nextStep =
block.createCoroutineUnintercepted(receiver = iterator, completion = iterator)\n return iterator\n}\n\n/**\n * The
scope for yielding values of a [Sequence] or an [Iterator], provides [yield] and [yieldAll] suspension functions.\n * \n
* @see sequence\n * @see iterator\n * \n * @sample
samples.collections.Sequences.Building.buildSequenceYieldAll\n * @sample
samples.collections.Sequences.Building.buildFibonacciSequence\n
*^\n@RestrictsSuspension\n@SinceKotlin("1.3")\n\npublic abstract class SequenceScope<in T> internal
constructor() {\n /**\n * Yields a value to the [Iterator]
being built and suspends\n * until the next value is requested.\n * \n * @sample
samples.collections.Sequences.Building.buildSequenceYieldAll\n * @sample
samples.collections.Sequences.Building.buildFibonacciSequence\n *^\n public abstract suspend fun yield(value:
T)\n\n /**\n * Yields all values from the `iterator` to the [Iterator] being built\n * and suspends until all these
values are iterated and the next one is requested.\n * \n * The sequence of values returned by the given iterator
can be potentially infinite.\n * \n * @sample samples.collections.Sequences.Building.buildSequenceYieldAll\n
 *^\n public abstract suspend fun yieldAll(iterator: Iterator<T>)\n\n /**\n * Yields a collections of values to
the [Iterator] being built\n * and suspends until all these values are iterated and the next one is requested.\n
 * \n * @sample samples.collections.Sequences.Building.buildSequenceYieldAll\n *^\n public
suspend fun yieldAll(elements: Iterable<T>) {\n if (elements is Collection && elements.isEmpty()) return\n
 return yieldAll(elements.iterator())\n }\n\n /**\n * Yields potentially infinite sequence of values to the
[Iterator] being built\n * and suspends until all these values are iterated and the next one is requested.\n
 * \n * The sequence can be potentially infinite.\n * \n * @sample
samples.collections.Sequences.Building.buildSequenceYieldAll\n *^\n public suspend fun yieldAll(sequence:
Sequence<T>) = yieldAll(sequence.iterator())\n}\n\nprivate typealias State = Int\nprivate const val
State_NotReady: State = 0\nprivate const val State_ManyNotReady: State = 1\nprivate const val State_ManyReady:
State = 2\nprivate const val State_Ready: State = 3\nprivate const val State_Done: State = 4\nprivate const val
State_Failed: State = 5\n\nprivate class SequenceBuilderIterator<T> : SequenceScope<T>(), Iterator<T>,
Continuation<Unit> {\n
 private var state = State_NotReady\n private var nextValue: T? = null\n private var nextIterator: Iterator<T>?
= null\n var nextStep: Continuation<Unit>? = null\n\n override fun hasNext(): Boolean {\n while (true) {\n

```

```

 when (state) {\n State_NotReady -> {\n State_ManyNotReady ->\n if
(nextIterator!!.hasNext()) {\n state = State_ManyReady\n return true\n }
else {\n nextIterator = null\n }\n State_Done -> return false\n
State_Ready, State_ManyReady -> return true\n else -> throw exceptionalState()\n }\n state
= State_Failed\n val step = nextStep!!\n nextStep = null\n step.resume(Unit)\n }\n }\n
override fun next(): T {\n when (state) {\n State_NotReady, State_ManyNotReady
-> return nextNotReady()\n State_ManyReady -> {\n state = State_ManyNotReady\n
return nextIterator!!.next()\n }\n State_Ready -> {\n state = State_NotReady\n
@Suppress("UNCHECKED_CAST")\n val result = nextValue as T\n nextValue = null\n
return result\n }\n else -> throw exceptionalState()\n }\n }\n private fun nextNotReady(): T
{\n if (!hasNext()) throw NoSuchElementException() else return next()\n }\n private fun
exceptionalState(): Throwable = when (state) {\n State_Done -> NoSuchElementException()\n State_Failed
-> IllegalStateException("Iterator has failed.")\n else -> IllegalStateException("Unexpected state of the
iterator: $state")\n }\n }\n override suspend fun yield(value: T) {\n nextValue = value\n state =
State_Ready\n return suspendCoroutineUninterceptedOrReturn
{\n c ->\n nextStep = c\n COROUTINE_SUSPENDED\n }\n }\n override suspend fun
yieldAll(iterator: Iterator<T>) {\n if (!iterator.hasNext()) return\n nextIterator = iterator\n state =
State_ManyReady\n return suspendCoroutineUninterceptedOrReturn {\n c ->\n nextStep = c\n
COROUTINE_SUSPENDED\n }\n }\n // Completion continuation implementation\n override fun
resumeWith(result: Result<Unit>) {\n result.getOrThrow() // just rethrow exception if it is there\n state =
State_Done\n }\n override val context: CoroutineContext\n get() = EmptyCoroutineContext\n }, /*\n *
Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is
governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\npackage
kotlin.collections\n\ninternal fun checkWindowSizeStep(size:
Int, step: Int) {\n require(size > 0 && step > 0) {\n if (size != step)\n "Both size $size and step $step
must be greater than zero."
 else\n "size $size must be greater than zero."
 }\n}\n\ninternal fun <T>
Sequence<T>.windowedSequence(size: Int, step: Int, partialWindows: Boolean, reuseBuffer: Boolean):
Sequence<List<T>> {\n checkWindowSizeStep(size, step)\n return Sequence { windowedIterator(iterator(),
size, step, partialWindows, reuseBuffer) }\n}\n\ninternal fun <T> windowedIterator(iterator: Iterator<T>, size: Int,
step: Int, partialWindows: Boolean, reuseBuffer: Boolean): Iterator<List<T>> {\n if (!iterator.hasNext()) return
EmptyIterator\n return iterator<List<T>> {\n val bufferInitialCapacity = size.coerceAtMost(1024)\n val
gap = step - size\n if (gap >= 0) {\n var buffer = ArrayList<T>(bufferInitialCapacity)\n var skip =
0\n for (e in iterator) {\n if (skip > 0) { skip -= 1; continue }\n buffer.add(e)\n if (buffer.size == size) {\n yield(buffer)\n if (reuseBuffer) buffer.clear() else buffer = ArrayList(size)\n skip = gap\n }\n }\n if (buffer.isNotEmpty()) {\n if (partialWindows || buffer.size == size)\n yield(buffer)\n }\n } else {\n var buffer = RingBuffer<T>(bufferInitialCapacity)\n for (e in
iterator) {\n buffer.add(e)\n if (buffer.isFull()) {\n if (buffer.size < size) { buffer =
buffer.expanded(maxCapacity = size); continue }\n yield(if (reuseBuffer) buffer else
ArrayList(buffer))\n buffer.removeFirst(step)\n }\n }\n if (partialWindows) {\n while (buffer.size > step) {\n yield(if (reuseBuffer)
buffer else ArrayList(buffer))\n buffer.removeFirst(step)\n }\n }\n if
(buffer.isNotEmpty()) yield(buffer)\n }\n }\n }\n\ninternal class MovingSubList<out E>(private val
list: List<E>) : AbstractList<E>(), RandomAccess {\n private var fromIndex: Int = 0\n private var _size: Int =
0\n\n fun move(fromIndex: Int, toIndex: Int) {\n checkRangeIndexes(fromIndex, toIndex, list.size)\n this.fromIndex = fromIndex\n this._size = toIndex - fromIndex\n }\n\n override fun get(index: Int): E {\n checkElementIndex(index, _size)\n return list[fromIndex + index]\n }\n\n override val size: Int get() =
_size\n}\n\n/*\n * Provides ring buffer implementation.\n */\n * Buffer overflow is not allowed so [add] doesn't

```

```

overwrite tail but raises an exception.\n */\nprivate class RingBuffer<T>(private val buffer: Array<Any?>,
filledSize: Int) : AbstractList<T>(), RandomAccess {\n
 init {\n require(filledSize >= 0) { \"ring buffer filled size should not be negative but it is $filledSize\" }\n
 }\n require(filledSize <= buffer.size) { \"ring buffer filled size: $filledSize cannot be larger than the buffer size:
 ${buffer.size}\" }\n }\n constructor(capacity: Int) : this(arrayOfNulls<Any?>(capacity), 0)\n private val
 capacity = buffer.size\n private var startIndex: Int = 0\n override var size: Int = filledSize\n private set{\n
 override fun get(index: Int): T {\n checkElementIndex(index, size)\n
 }\n @Suppress(\"UNCHECKED_CAST\")\n return buffer[startIndex.forward(index)] as T\n }\n fun isFull() =
 size == capacity\n override fun iterator(): Iterator<T> = object : AbstractIterator<T>() {\n private var count
 = size\n private var index = startIndex\n }\n override fun computeNext() {\n if (count == 0) {\n
 done()\n }\n else {\n @Suppress(\"UNCHECKED_CAST\")\n setNext(buffer[index] as T)\n
 index = index.forward(1)\n count--\n }\n }\n}\n\n @Suppress(\"UNCHECKED_CAST\")\n override fun <T> toArray(array: Array<T>): Array<T> {\n
 val result: Array<T?> =\n if (array.size < this.size) array.copyOf(this.size) else array as Array<T?>\n val size = this.size\n
 var widx = 0\n var idx = startIndex\n while (widx < size && idx < capacity)\n {\n result[widx] = buffer[idx] as T\n widx++\n idx++\n }\n idx = 0\n while
 (widx < size) {\n result[widx] = buffer[idx] as T\n widx++\n idx++\n }\n if (result.size
 > this.size) result[this.size] = null\n return result as Array<T>\n}\n\n override fun toArray():
 Array<Any?> {\n return toArray(arrayOfNulls(size))\n }\n\n /**\n * Creates a new
 ring buffer with the capacity equal to the minimum of [maxCapacity] and 1.5 * [capacity].\n * The returned ring
 buffer contains the same elements as this ring buffer.\n */\n fun expanded(maxCapacity: Int): RingBuffer<T>
 {\n val newCapacity = (capacity + (capacity shr 1) + 1).coerceAtMost(maxCapacity)\n val newBuffer = if
 (startIndex == 0) buffer.copyOf(newCapacity) else toArray(arrayOfNulls(newCapacity))\n return
 RingBuffer(newBuffer, size)\n }\n\n /**\n * Add [element] to the buffer or fail with [IllegalStateException] if
 no free space available in the buffer\n */\n fun add(element: T) {\n if (isFull()) {\n throw
 IllegalStateException(\"ring buffer is full\")\n }\n buffer[startIndex.forward(size)] = element\n
 size++\n }\n\n /**\n * Removes [n] first elements from the buffer or fails with [IllegalArgumentException] if
 not enough elements in the buffer to remove\n */\n fun removeFirst(n:
 Int) {\n require(n >= 0) { \"n shouldn't be negative but it is $n\" }\n require(n <= size) { \"n shouldn't be
 greater than the buffer size: n = $n, size = $size\" }\n if (n > 0) {\n val start = startIndex\n
 val end = start.forward(n)\n if (start > end) {\n buffer.fill(null, start, capacity)\n
 }\n buffer.fill(null, 0, end)\n }\n else {\n buffer.fill(null, start, end)\n
 }\n startIndex = end\n size -= n\n }\n}\n\n @Suppress(\"NOTHING_TO_INLINE\")\n private inline fun
 Int.forward(n: Int): Int = (this + n) % capacity\n}\n\n /**\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin
 Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
 found in the license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\n// UByteArray
 =====\n\n@Exp
 erimentalUnsignedTypes\nprivate
 fun partition(\n array: UByteArray, left: Int, right: Int): Int {\n var i = left\n var j = right\n val pivot =
 array[(left + right) / 2]\n while (i <= j) {\n while (array[i] < pivot)\n i++\n while (array[j] >
 pivot)\n j--\n if (i <= j) {\n val tmp = array[i]\n array[i] = array[j]\n array[j] = tmp\n
 }\n i++\n j--\n }\n return i\n }\n\n @ExperimentalUnsignedTypes\n private fun quickSort(\n
 array: UByteArray, left: Int, right: Int) {\n val index = partition(array, left, right)\n if (left < index - 1)\n quickSort(array, left, index - 1)\n if (index < right)\n quickSort(array, index, right)\n }\n\n // UShortArray
 =====\n\n@Exp
 erimentalUnsignedTypes\nprivate fun partition(\n array: UShortArray, left: Int,
 right: Int): Int {\n var i = left\n var j = right\n val pivot = array[(left + right) / 2]\n while (i <= j) {\n
 while (array[i] < pivot)\n i++\n while (array[j] > pivot)\n j--\n if (i <= j) {\n
 val tmp =

```

```

array[i]\n array[i] = array[j]\n array[j] = tmp\n i++\n j--\n }\n }\n return
i}\n}\n\n@ExperimentalUnsignedTypes\nprivate fun quickSort(\n array: UShortArray, left: Int, right: Int) {\n val
index = partition(array, left, right)\n if (left < index - 1)\n quickSort(array, left, index - 1)\n if (index <
right)\n quickSort(array, index, right)\n}\n}\n\n// UIntArray
=====
\n@Exp
erimentalUnsignedTypes\nprivate fun partition(\n array: UIntArray, left: Int, right: Int): Int {\n var i = left\n
var j = right\n val pivot = array[(left + right) / 2]\n while (i <= j)
{\n while (array[i] < pivot)\n i++\n while (array[j] > pivot)\n j--\n if (i <= j) {\n
val tmp = array[i]\n array[i] = array[j]\n array[j] = tmp\n i++\n j--\n }\n
}\n return i}\n}\n\n@ExperimentalUnsignedTypes\nprivate fun quickSort(\n array: UIntArray, left: Int, right: Int) {\n
val index = partition(array, left, right)\n if (left < index - 1)\n quickSort(array, left, index - 1)\n if (index <
right)\n quickSort(array, index, right)\n}\n}\n\n// ULongArray
=====
\n@Exp
erimentalUnsignedTypes\nprivate fun partition(\n array: ULongArray, left: Int, right: Int): Int {\n var i = left\n
var j = right\n val pivot = array[(left + right) / 2]\n while (i <= j) {\n while (array[i] < pivot)\n i++\n
 while (array[j] > pivot)\n j--\n if (i
<= j) {\n val tmp = array[i]\n array[i] = array[j]\n array[j] = tmp\n i++\n
 j--\n }\n }\n return i}\n}\n\n@ExperimentalUnsignedTypes\nprivate fun quickSort(\n array: ULongArray, left: Int,
right: Int) {\n val index = partition(array, left, right)\n if (left < index - 1)\n quickSort(array, left, index - 1)\n
 if (index < right)\n quickSort(array, index, right)\n}\n}\n\n// Interfaces
=====
\n/**\n
* Sorts the given array using qsort algorithm.\n */\n@ExperimentalUnsignedTypes\ninternal fun sortArray(array:
UByteArray, fromIndex: Int, toIndex: Int) = quickSort(array, fromIndex, toIndex -
1)\n@ExperimentalUnsignedTypes\ninternal fun sortArray(array: UShortArray, fromIndex: Int, toIndex: Int) =
quickSort(array, fromIndex, toIndex - 1)\n@ExperimentalUnsignedTypes\ninternal fun sortArray(array: UIntArray,
fromIndex: Int, toIndex:
Int) = quickSort(array, fromIndex, toIndex - 1)\n@ExperimentalUnsignedTypes\ninternal fun sortArray(array:
ULongArray, fromIndex: Int, toIndex: Int) = quickSort(array, fromIndex, toIndex - 1)","/*\n * Copyright 2010-
2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin\n\nimport
kotlin.internal.InlineOnly\n\n/**\n * Compares this object with the specified object for order. Returns zero if this
object is equal\n * to the specified [other] object, a negative number if it's less than [other], or a positive number\n *
if it's greater than [other].\n * This function delegates to [Comparable.compareTo] and allows to call it in infix
form.\n */\n@InlineOnly\n@SinceKotlin("1.6")\npublic inline infix fun <T> Comparable<T>.compareTo(other:
T): Int =\n this.compareTo(other)\n","/*\n * Copyright 2010-2018 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.contracts\n\nimport
kotlin.internal.ContractsDsl\nimport kotlin.internal.InlineOnly\n\n/**\n * This marker distinguishes the
experimental contract declaration API and is used to opt-in for that feature\n * when declaring contracts of user
functions.\n * Any usage of a declaration annotated with `@ExperimentalContracts` must be accepted either
by\n * annotating that usage with the [OptIn] annotation, e.g. `@OptIn(ExperimentalContracts::class)`,\n * or by
using the compiler argument `-opt-in=kotlin.contracts.ExperimentalContracts`.\n
*/\n@Retention(AnnotationRetention.BINARY)\n@SinceKotlin("1.3")\n@RequiresOptIn\n@MustBeDocumente
d\npublic annotation class ExperimentalContracts\n\n/**\n * Provides a scope, where the functions of the contract
DSL, such as [returns], [callsInPlace], etc.,\n * can be used to
describe the contract of a function.\n * This type is used as a receiver type of the lambda function passed to the
[contract] function.\n * @see contract\n
*/\n@ContractsDsl\n@ExperimentalContracts\n@SinceKotlin("1.3")\npublic interface ContractBuilder {\n /**\n

```

```

 * Describes a situation when a function returns normally, without any exceptions thrown.\n *\n * Use
[SimpleEffect.implies] function to describe a conditional effect that happens in such case.\n *\n *^n //
@sample samples.contracts.returnsContract\n @ContractsDsl public fun returns(): Returns\n\n /**\n *
Describes a situation when a function returns normally with the specified return [value].\n *\n * The possible
values of [value] are limited to `true`, `false` or `null`.\n *\n * Use [SimpleEffect.implies] function to describe a
conditional effect that happens in such case.\n *\n *^n // @sample samples.contracts.returnsTrueContract\n
// @sample samples.contracts.returnsFalseContract\n
 // @sample samples.contracts.returnsNullContract\n @ContractsDsl public fun returns(value: Any?):
Returns\n\n /**\n * Describes a situation when a function returns normally with any value that is not `null`.\n
*\n * Use [SimpleEffect.implies] function to describe a conditional effect that happens in such case.\n *\n
*\n *^n // @sample samples.contracts.returnsNotNullContract\n @ContractsDsl public fun returnsNotNull():
ReturnsNotNull\n\n /**\n * Specifies that the function parameter [lambda] is invoked in place.\n *\n * This
contract specifies that:\n * 1. the function [lambda] can only be invoked during the call of the owner function,\n
*\n * and it won't be invoked after that owner function call is completed;\n * 2. _(optionally)_ the function [lambda]
is invoked the amount of times specified by the [kind] parameter,\n * see the [InvocationKind] enum for possible
values.\n *\n *
A function declaring the `callsInPlace` effect must be _inline_.\n *\n *^n // @sample
samples.contracts.callsInPlaceAtMostOnceContract\n * @sample
samples.contracts.callsInPlaceAtLeastOnceContract\n * @sample
samples.contracts.callsInPlaceExactlyOnceContract\n * @sample
samples.contracts.callsInPlaceUnknownContract\n *^n @ContractsDsl public fun <R> callsInPlace(lambda:
Function<R>, kind: InvocationKind = InvocationKind.UNKNOWN): CallsInPlace\n\n /**\n * Specifies how
many times a function invokes its function parameter in place.\n *\n * See [ContractBuilder.callsInPlace] for the
details of the call-in-place function contract.\n
*\n @ContractsDsl\n @ExperimentalContracts\n @SinceKotlin("1.3")\n public enum class InvocationKind {\n
/**\n * A function parameter will be invoked one time or not invoked at all.\n *^n // @sample
samples.contracts.callsInPlaceAtMostOnceContract\n @ContractsDsl AT_MOST_ONCE,\n\n /**\n * A
function parameter
will be invoked one or more times.\n *\n *^n // @sample
samples.contracts.callsInPlaceAtLeastOnceContract\n @ContractsDsl AT_LEAST_ONCE,\n\n /**\n * A
function parameter
will be invoked exactly one time.\n *\n *^n // @sample
samples.contracts.callsInPlaceExactlyOnceContract\n @ContractsDsl EXACTLY_ONCE,\n\n /**\n * A
function parameter
is called in place, but it's unknown how many times it can be called.\n *\n *^n // @sample
samples.contracts.callsInPlaceUnknownContract\n @ContractsDsl UNKNOWN\n\n /**\n * Specifies the
contract of a function.\n *\n * The contract description must be at the beginning of a function and have at least one
effect.\n *\n * Only the top-level functions can have a contract for now.\n *\n * @param builder the lambda where
the contract of a function is described with the help of the [ContractBuilder] members.\n *\n *^n // @sample
samples.contracts.returnsContract\n * @sample samples.contracts.returnsTrueContract\n *
@sample samples.contracts.returnsFalseContract\n * @sample samples.contracts.returnsNullContract\n * @sample
samples.contracts.returnsNotNullContract\n * @sample samples.contracts.callsInPlaceAtMostOnceContract\n *
@sample samples.contracts.callsInPlaceAtLeastOnceContract\n * @sample
samples.contracts.callsInPlaceExactlyOnceContract\n * @sample
samples.contracts.callsInPlaceUnknownContract\n *^n @ContractsDsl\n @ExperimentalContracts\n @InlineOnly\n @
SinceKotlin("1.3")\n @Suppress("UNUSED_PARAMETER")\n public inline fun contract(builder:
ContractBuilder.() -> Unit) { }\n\n /**\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n *\n *^n\n package kotlin.coroutines\n\n /**\n * Marks coroutine context element that
intercepts coroutine continuations.\n * The coroutines framework uses [ContinuationInterceptor.Key] to retrieve the

```







```

}\n @Suppress("UNCHECKED_CAST")\n
 return if (this.key === key) this as E else null}\n\n/**\n * Returns empty coroutine context if the element is
associated with the given [key] in a polymorphic manner\n * or `null` otherwise.\n * This method returns empty
context if either [Element.key] is equal to the given [key] or if the [key] is associated\n * with [Element.key] via
[AbstractCoroutineContextKey].\n * See [AbstractCoroutineContextKey] for the example of usage.\n
/\n@SinceKotlin("1.3")\n@ExperimentalStdlibApi\npublic fun Element.minusPolymorphicKey(key: Key<>):
CoroutineContext {\n if (key is AbstractCoroutineContextKey<*, *>) {\n return if (key.isSubKey(this.key)
&& key.tryCast(this) != null) EmptyCoroutineContext else this\n }\n return if (this.key === key)
EmptyCoroutineContext else this}\n\n/**\n * An empty coroutine context.\n */\n@SinceKotlin("1.3")\npublic
object EmptyCoroutineContext : CoroutineContext, Serializable {\n private const val serialVersionUID:
Long = 0\n private fun readResolve(): Any = EmptyCoroutineContext\n public override fun <E : Element>
get(key: Key<E>): E? = null\n public override fun <R> fold(initial: R, operation: (R, Element) -> R): R = initial\n
public override fun plus(context: CoroutineContext): CoroutineContext = context\n public override fun
minusKey(key: Key<*>): CoroutineContext = this\n public override fun hashCode(): Int = 0\n public override
fun toString(): String = "EmptyCoroutineContext"\n}\n\n//----- internal impl -----}\n\n//
this class is not exposed, but is hidden inside implementations\n// this is a left-biased list, so that `plus` works
naturally\n@SinceKotlin("1.3")\ninternal class CombinedContext(\n private val left: CoroutineContext,\n
private val element: Element\n) : CoroutineContext, Serializable {\n override fun <E : Element> get(key:
Key<E>): E? {\n var cur = this\n while (true) {\n cur.element[key]?.let
{\n return it\n }\n val next = cur.left\n if (next is CombinedContext) {\n
 cur = next\n }\n else {\n return next[key]\n }\n }\n
}\n public override fun <R> fold(initial: R, operation:
(R, Element) -> R): R =\n operation(left.fold(initial, operation), element)\n public override fun
minusKey(key: Key<*>): CoroutineContext {\n element[key]?.let { return left }\n val newLeft =
left.minusKey(key)\n return when {\n newLeft === left -> this\n newLeft ===
EmptyCoroutineContext -> element\n else -> CombinedContext(newLeft, element)\n }\n }\n
}\n private fun size(): Int {\n var cur = this\n var size = 2\n while (true) {\n cur = cur.left as?
CombinedContext?: return size\n size++\n }\n }\n private fun contains(element: Element): Boolean
= \n get(element.key)
=== element\n private fun containsAll(context: CombinedContext): Boolean {\n var cur = context\n
while (true) {\n if (!contains(cur.element)) return false\n val next = cur.left\n if (next is
CombinedContext) {\n cur = next\n }\n else {\n return contains(next as Element)\n
 }\n }\n }\n override fun equals(other: Any?): Boolean = \n this === other || other is CombinedContext
&& other.size() == size() && other.containsAll(this)\n override fun hashCode(): Int = left.hashCode() +
element.hashCode()\n override fun toString(): String = \n "[" + fold("") { acc, element ->\n if
(acc.isEmpty()) element.toString() else "$acc, $element"\n } + "]"}\n private fun writeReplace(): Any {\n
 val n = size()\n val elements = arrayOfNulls<CoroutineContext>(n)\n var index = 0\n fold(Unit) { _,
element -> elements[index++]
= element }\n check(index == n)\n @Suppress("UNCHECKED_CAST")\n return
Serialized(elements as Array<CoroutineContext>)\n }\n private class Serialized(val elements:
Array<CoroutineContext>) : Serializable {\n companion object {\n private const val serialVersionUID:
Long = 0L\n }\n private fun readResolve(): Any = elements.fold(EmptyCoroutineContext,
CoroutineContext::plus)\n }\n}\n\n"/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*/\n\n@file:kotlin.jvm.JvmName("IntrinsicsKt")\n@file:kotlin.jvm.JvmMultifileClass\n\npackage
kotlin.coroutines.intrinsics\n\nimport kotlin.contracts.*\nimport kotlin.coroutines.*\nimport
kotlin.internal.InlineOnly\n\n/**\n * Obtains the current continuation instance inside suspend functions and either
suspends\n * currently running

```

coroutine or returns result immediately without suspension.

If the [block] returns the special [COROUTINE\_SUSPENDED] value, it means that suspend function did suspend the execution and will not return any result immediately. In this case, the [Continuation] provided to the [block] shall be resumed by invoking [Continuation.resumeWith] at some moment in the future when the result becomes available to resume the computation.

Otherwise, the return value of the [block] must have a type assignable to [T] and represents the result of this suspend function. It means that the execution was not suspended and the [Continuation] provided to the [block] shall not be invoked.

As the result type of the [block] is declared as `Any?` and cannot be correctly type-checked, its proper return type remains on the conscience of the suspend function's author.

Invocation of [Continuation.resumeWith] resumes coroutine directly in the invoker's thread without going through the [ContinuationInterceptor] that might be present in the coroutine's [CoroutineContext]. It is the invoker's responsibility to ensure that a proper invocation context is established.

[Continuation.intercepted] can be used to acquire the intercepted continuation.

Note that it is not recommended to call either [Continuation.resume] nor [Continuation.resumeWithException] functions synchronously in the same stackframe where suspension function is run. Use [suspendCoroutine] as a safer way to obtain current continuation instance.

```

@SinceKotlin("1.3")@InlineOnly@Suppress("UNUSED_PARAMETER",
"RedundantSuspendModifier")
public suspend inline fun <T>
suspendCoroutineUninterceptedOrReturn(crossinline block: (Continuation<T>) -> Any?): T {
 contract {
 callsInPlace(block, InvocationKind.EXACTLY_ONCE)
 }
 throw NotImplementedError("Implementation of
suspendCoroutineUninterceptedOrReturn is intrinsic")
}

```

This value is used as a return value of [suspendCoroutineUninterceptedOrReturn] `block` argument to state that the execution was suspended and will not return any result immediately.

Note: this value should not be used in general code. Using it outside of the context of `suspendCoroutineUninterceptedOrReturn` function return value (including, but not limited to, storing this value in other properties, returning it from other functions, etc) can lead to unspecified behavior of the code.

It is implemented as property with getter to avoid ProGuard <clinit> problem with multifile IntrinsicKt class

```

@SinceKotlin("1.3")
public val COROUTINE_SUSPENDED:
Any get() = CoroutineSingletons.COROUTINE_SUSPENDED

```

Using enum here ensures two important properties:

1. It makes SafeContinuation serializable with all kinds of serialization frameworks (since all of them natively support enums)
2. It improves debugging experience, since you clearly see toString() value of those objects and what package they come from

```

@SinceKotlin("1.3")
@PublishedApi // This class is
Published API via serialized representation of SafeContinuation, don't rename/move
internal enum class
CoroutineSingletons { COROUTINE_SUSPENDED, UNDECIDED, RESUMED }

```

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```

package kotlin.experimental

```

Performs a bitwise AND operation between the two values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public inline infix fun Byte.and(other: Byte): Byte =
(this.toInt() and other.toInt()).toByte()

```

Performs a bitwise OR operation between the two values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public inline infix fun Byte.or(other: Byte): Byte =
(this.toInt() or other.toInt()).toByte()

```

Performs a bitwise XOR operation between the two values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public inline infix fun Byte.xor(other:
Byte): Byte = (this.toInt() xor other.toInt()).toByte()

```

Inverts the bits in this value.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public inline fun Byte.inv(): Byte =
(this.toInt().inv()).toByte()

```

Performs a bitwise AND operation between the two values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public inline infix fun Short.and(other: Short): Short =
(this.toInt() and other.toInt()).toShort()

```

Performs a bitwise OR operation between the two values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public inline infix fun Short.or(other: Short): Short =
(this.toInt() or other.toInt()).toShort()

```

Performs a bitwise XOR operation between the two values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public inline infix fun Short.xor(other: Short): Short =
(this.toInt() xor other.toInt()).toShort()

```

Inverts

the bits in this value. `*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline fun Short.inv(): Short = (this.toInt().inv()).toShort()\n\n", "/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\n\npackage kotlin.experimental\n\n/**\n * The experimental marker for type inference augmenting annotations.\n *\n * Any usage of a declaration annotated with @ExperimentalTypeInference must be accepted either by\n * annotating that usage with the [OptIn] annotation, e.g. @OptIn(ExperimentalTypeInference::class),\n * or by using the compiler argument -opt-in=kotlin.experimental.ExperimentalTypeInference.\n *\n@RequiresOptIn(level = RequiresOptIn.Level.ERROR)\n@MustBeDocumented\n@Retention(AnnotationRetention.BINARY)\n@Target(AnnotationTarget.ANNOTATION_CLASS)\n@SinceKotlin("1.3")\npublic annotation class ExperimentalTypeInference\n", "/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\n\npackage kotlin.internal\n\n/**\n * Specifies that the corresponding type should be ignored during type inference.\n *\n@Target(AnnotationTarget.TYPE)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation class NoInfer\n\n/**\n * Specifies that the constraint built for the type during type inference should be an equality one.\n *\n@Target(AnnotationTarget.TYPE)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation class Exact\n\n/**\n * Specifies that a corresponding member has the lowest priority in overload resolution.\n *\n@Target(AnnotationTarget.FUNCTION, AnnotationTarget.PROPERTY, AnnotationTarget.CONSTRUCTOR)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation class LowPriorityInOverloadResolution\n\n/**\n * Specifies that the corresponding member has the highest priority in overload resolution. Effectively this means that\n * an extension annotated with this annotation will win in overload resolution over a member with the same signature.\n *\n@Target(AnnotationTarget.FUNCTION, AnnotationTarget.PROPERTY)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation class HidesMembers\n\n/**\n * The value of this type parameter should be mentioned in input types (argument types, receiver type or expected type).\n *\n@Target(AnnotationTarget.TYPE_PARAMETER)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation class OnlyInputTypes\n\n/**\n * Specifies that this function should not be called directly without inlining\n *\n@Target(AnnotationTarget.FUNCTION, AnnotationTarget.PROPERTY, AnnotationTarget.PROPERTY_GETTER, AnnotationTarget.PROPERTY_SETTER)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation class InlineOnly\n\n/**\n * Specifies that this declaration can have dynamic receiver type.\n *\n@Target(AnnotationTarget.FUNCTION, AnnotationTarget.PROPERTY)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation class DynamicExtension\n\n/**\n * The value of this parameter should be a property reference expression (this::foo), referencing a lateinit property,\n * the backing field of which is accessible at the point where the corresponding argument is passed.\n *\n@Target(AnnotationTarget.VALUE_PARAMETER)\n@Retention(AnnotationRetention.BINARY)\n@SinceKotlin("1.2")\ninternal annotation class AccessibleLateinitPropertyLiteral\n\n/**\n * Specifies that this declaration is only completely supported since the specified version.\n *\n * The Kotlin compiler of an earlier version is going to report a diagnostic on usages of this declaration.\n * The diagnostic message can be specified with [message], or via [errorCode] (takes less space, but might not be immediately clear\n * to the user). The diagnostic severity can be specified with [level]: WARNING/ERROR\n * mean that either a warning or an error\n * is going to be reported, HIDDEN means that the declaration is going to be removed from resolution completely.\n *\n * [versionKind] specifies which version should be compared with the [version] value, when compiling the usage of the annotated declaration.\n * Note that prior to 1.2, only [RequireKotlinVersionKind.LANGUAGE_VERSION] was supported, so the Kotlin compiler before 1.2 is going`

```

to\n * treat any [RequireKotlin] as if it requires the language version. Since 1.2, the Kotlin compiler supports\n *
[RequireKotlinVersionKind.LANGUAGE_VERSION], [RequireKotlinVersionKind.COMPILER_VERSION] and
[RequireKotlinVersionKind.API_VERSION].\n * If the actual value of [versionKind] is something different (e.g. a
new version kind, added in future versions of Kotlin),\n * Kotlin 1.2 is going to ignore this [RequireKotlin]
altogether, where as Kotlin before 1.2 is going to treat this as a requirement\n * on the language version.\n *\n *
This annotation is
erased at compile time; its arguments are stored in a more compact form in the Kotlin metadata.\n
*/\n@Target(AnnotationTarget.CLASS, AnnotationTarget.FUNCTION, AnnotationTarget.PROPERTY,
AnnotationTarget.CONSTRUCTOR,
AnnotationTarget.TYPEALIAS)\n@Retention(AnnotationRetention.SOURCE)\n@Repeatable\n@SinceKotlin("1.
2")\ninternal annotation class RequireKotlin(\n val version: String,\n val message: String = "",\n val level:
DeprecationLevel = DeprecationLevel.ERROR,\n val versionKind: RequireKotlinVersionKind =
RequireKotlinVersionKind.LANGUAGE_VERSION,\n val errorCode: Int = -1)\n\n/**\n * The kind of the
version that is required by [RequireKotlin].\n */\n@SinceKotlin("1.2")\ninternal enum class
RequireKotlinVersionKind {\n LANGUAGE_VERSION,\n COMPILER_VERSION,\n
API_VERSION,\n}\n\n/**\n * Specifies that this declaration is a part of special DSL, used for constructing
function's contract.\n */\n@Retention(AnnotationRetention.BINARY)\n@SinceKotlin("1.2")\ninternal
annotation class ContractsDsl\n\n"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.properties\n\nimport kotlin.reflect.KProperty\n\n/**\n * Standard
property delegates.\n */\npublic object Delegates {\n /**\n * Returns a property delegate for a read/write
property with a non-`null` value that is initialized not during\n * object construction time but at a later time.
Trying to read the property before the initial value has been\n * assigned results in an exception.\n */\n *
@sample samples.properties.Delegates.notNullDelegate\n */\n public fun <T : Any> notNull():
ReadWriteProperty<Any?, T> = NotNullVar()\n\n /**\n * Returns a property delegate for a read/write property
that calls a specified callback function when changed.\n * @param initialValue the initial
value of the property.\n * @param onChange the callback which is called after the change of the property is
made. The value of the property\n * has already been changed when this callback is invoked.\n */\n *
@sample samples.properties.Delegates.observableDelegate\n */\n public inline fun <T>
observable(initialValue: T, crossinline onChange: (property: KProperty<*>, oldValue: T, newValue: T) -> Unit):
ReadWriteProperty<Any?, T> =\n object : ObservableProperty<T>(initialValue) {\n override fun
afterChange(property: KProperty<*>, oldValue: T, newValue: T) = onChange(property, oldValue, newValue)\n
 }\n\n /**\n * Returns a property delegate for a read/write property that calls a specified callback function when
changed,\n * allowing the callback to veto the modification.\n * @param initialValue the initial value of the
property.\n * @param onChange the callback which is called before a change to the property
value is attempted.\n * The value of the property hasn't been changed yet, when this callback is invoked.\n *
If the callback returns `true` the value of the property is being set to the new value,\n * and if the callback returns
`false` the new value is discarded and the property remains its old value.\n */\n * @sample
samples.properties.Delegates.vetoableDelegate\n * @sample
samples.properties.Delegates.throwVetoableDelegate\n */\n public inline fun <T> vetoable(initialValue: T,
crossinline onChange: (property: KProperty<*>, oldValue: T, newValue: T) -> Boolean):
ReadWriteProperty<Any?, T> =\n object : ObservableProperty<T>(initialValue) {\n override fun
beforeChange(property: KProperty<*>, oldValue: T, newValue: T): Boolean = onChange(property, oldValue,
newValue)\n }\n\nprivate class NotNullVar<T : Any>(): ReadWriteProperty<Any?, T> {\n private var
value: T? = null\n\n public override fun getValue(thisRef:
Any?, property: KProperty<*>): T {\n return value ?: throw IllegalStateException("Property
${property.name} should be initialized before get.")\n }\n\n public override fun setValue(thisRef: Any?,
property: KProperty<*>, value: T) {\n this.value = value\n }\n}\n\n"/*\n * Copyright 2010-2020 JetBrains

```

```

s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.properties\n\nimport
kotlin.reflect.KProperty\n\n/**\n * Base interface that can be used for implementing property delegates of read-only
properties.\n */\n * This is provided only for convenience; you don't have to extend this interface\n * as long as your
property delegate has methods with the same signatures.\n */\n * @param T the type of object which owns the
delegated property.\n * @param V the type of the property value.\n */\n\npublic fun interface ReadOnlyProperty<in
T, out V> {\n /**\n * Returns the value of the property for the given object.\n * @param thisRef the object
for which the value is requested.\n * @param property the metadata for the property.\n * @return the property
value.\n */\n public operator fun getValue(thisRef: T, property: KProperty<*>): V\n}\n\n/**\n * Base interface
that can be used for implementing property delegates of read-write properties.\n */\n * This is provided only for
convenience; you don't have to extend this interface\n * as long as your property delegate has methods with the
same signatures.\n */\n * @param T the type of object which owns the delegated property.\n * @param V the type of
the property value.\n */\n\npublic interface ReadWriteProperty<in T, V> : ReadOnlyProperty<T, V> {\n /**\n *
Returns the value of the property for the given object.\n * @param thisRef the object for which the value is
requested.\n * @param property the metadata for the property.\n * @return the property value.\n */\n public override operator fun getValue(thisRef: T, property:
KProperty<*>): V\n\n /**\n * Sets the value of the property for the given object.\n * @param thisRef the
object for which the value is requested.\n * @param property the metadata for the property.\n * @param value
the value to set.\n */\n public operator fun setValue(thisRef: T, property: KProperty<*>, value: V)\n}\n\n/**\n *
Base interface that can be used for implementing property delegate providers.\n */\n * This is provided only for
convenience; you don't have to extend this interface\n * as long as your delegate provider has a method with the
same signature.\n */\n * @param T the type of object which owns the delegated property.\n * @param D the type of
property delegates this provider provides.\n */\n\n@SinceKotlin("1.4")\n\npublic fun interface
PropertyDelegateProvider<in T, out D> {\n /**\n * Returns the delegate of the property for the given object.\n
 *\n * This function can be used to extend the logic of creating the object (e.g. perform validation checks)\n *
to which the property implementation is delegated.\n * @param thisRef the object for which property
delegate is requested.\n * @param property the metadata for the property.\n * @return the property delegate.\n
 /\n public operator fun provideDelegate(thisRef: T, property: KProperty<>): D\n}\n\n"/*\n * Copyright 2010-
2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.properties\n\nimport
kotlin.reflect.KProperty\n\n/**\n * Implements the core logic of a property delegate for a read/write property that
calls callback functions when changed.\n * @param initialValue the initial value of the property.\n */\n\npublic
abstract class ObservableProperty<V>(initialValue: V) : ReadWriteProperty<Any?,
V> {\n private var value = initialValue\n\n /**\n * The callback which is called before a change to the
property value is attempted.\n * The value of the property hasn't been changed yet, when this callback is
invoked.\n * If the callback returns `true` the value of the property is being set to the new value,\n * and if
the callback returns `false` the new value is discarded and the property remains its old value.\n */\n protected open
fun beforeChange(property: KProperty<*>, oldValue: V, newValue: V): Boolean = true\n\n /**\n * The
callback which is called after the change of the property is made. The value of the property\n * has already been
changed when this callback is invoked.\n */\n protected open fun afterChange(property: KProperty<*>,
oldValue: V, newValue: V): Unit {}\n\n public override fun getValue(thisRef: Any?, property: KProperty<*>): V
{\n return value\n }\n\n public override fun setValue(thisRef:
Any?, property: KProperty<*>, value: V) {\n val oldValue = this.value\n if (!beforeChange(property,
oldValue, value)) {\n return\n }\n this.value = value\n afterChange(property, oldValue,
value)\n }\n}\n\n"/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this
source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n@file:Suppress("PackageDirectoryMismatch")\n\npackage kotlin\n\nimport kotlin.reflect.*\n\n/**\n * An
extension operator that allows delegating a read-only property of type [V]\n * to a property reference to a property

```





```

is negative or zero.\n
 * \n
 * @sample samples.random.Randoms.nextIntFromUntil\n
 * \n
 public open fun
nextInt(until: Int): Int = nextInt(0, until)\n
 /** \n
 * Gets the next random `Int` from the random number
generator in the specified range.\n
 * \n
 * Generates an `Int` random value uniformly
distributed between the specified [from] (inclusive) and [until] (exclusive) bounds.\n
 * \n
 * @throws
IllegalArgumentException if [from] is greater than or equal to [until].\n
 * \n
 * @sample
samples.random.Randoms.nextIntFromUntil\n
 * \n
 public open fun nextInt(from: Int, until: Int): Int {\n
checkRangeBounds(from, until)\n
 val n = until - from\n
 if (n > 0 || n == Int.MIN_VALUE) {\n
 val
rnd = if (n and -n == n) {\n
 val bitCount = fastLog2(n)\n
 nextBits(bitCount)\n
 } else {\n
 var v: Int\n
 do {\n
 val bits = nextInt().ushr(1)\n
 v = bits % n\n
 }
while (bits - v + (n - 1) < 0)\n
 v\n
 }\n
 return from + rnd\n
 } else {\n
 while (true)
{\n
 val rnd = nextInt()\n
 if (rnd in from until until) return rnd\n
 }\n
 }\n
 }\n
}\n
 /** \n
 * Gets the next random `Long` from the random number generator.\n
 * \n
 * Generates a `Long`
random value uniformly distributed between `Long.MIN_VALUE` and `Long.MAX_VALUE` (inclusive).\n
 * \n
 * @sample samples.random.Randoms.nextLong\n
 * \n
 public open fun nextLong(): Long =
nextInt().toLong().shl(32) + nextInt()\n
 /** \n
 * Gets the next random non-negative `Long` from the random
number generator less than the specified [until] bound.\n
 * \n
 * Generates a `Long` random value uniformly
distributed between `0` (inclusive) and the specified [until] bound (exclusive).\n
 * \n
 * @param until must be
positive.\n
 * \n
 * @throws IllegalArgumentException if [until] is negative or zero.\n
 * \n
 * @sample
samples.random.Randoms.nextLongFromUntil\n
 * \n
 public open fun nextLong(until: Long): Long =
nextLong(0, until)\n
 /** \n
 * Gets the next random `Long` from the random number generator in the specified
range.\n
 * \n
 * Generates a `Long` random value uniformly distributed between the specified [from] (inclusive) and
[until] (exclusive) bounds.\n
 * \n
 * @throws IllegalArgumentException if [from] is greater than or equal to
[until].\n
 * \n
 * @sample samples.random.Randoms.nextLongFromUntil\n
 * \n
 public open fun
nextLong(from: Long, until: Long): Long {\n
checkRangeBounds(from, until)\n
 val n = until - from\n
if (n > 0) {\n
 val rnd: Long\n
 if (n and -n == n) {\n
 val nLow = n.toInt()\n
 val nHigh
= (n ushr 32).toInt()\n
 rnd = when {\n
 nLow != 0 -> {\n
 val bitCount =
fastLog2(nLow)\n
 // toUInt().toLong()\n
 nextBits(bitCount).toLong() and
0xFFFF_FFFF\n
 }\n
 nHigh == 1 ->{\n
 // toUInt().toLong()\n
nextInt().toLong() and
0xFFFF_FFFF\n
 else -> {\n
 val bitCount = fastLog2(nHigh)\n
nextBits(bitCount).toLong().shl(32) + (nextInt().toLong() and 0xFFFF_FFFF)\n
 }\n
 }\n
 } else {\n
 var v: Long\n
 do {\n
 val bits = nextLong().ushr(1)\n
 v = bits %
n\n
 } while (bits - v + (n - 1) < 0)\n
 rnd = v\n
 }\n
 return from + rnd\n
 } else {\n
 while (true) {\n
 val rnd = nextLong()\n
 if (rnd in from until until) return rnd\n
 }\n
 }\n
 }\n
}\n
}\n
 /** \n
 * Gets the next random [Boolean] value.\n
 * \n
 * @sample
samples.random.Randoms.nextBoolean\n
 * \n
 public open fun nextBoolean(): Boolean = nextBits(1) != 0\n
 /** \n
 * Gets the next random [Double] value uniformly distributed between 0 (inclusive) and 1 (exclusive).\n
 * \n
 * @sample samples.random.Randoms.nextDouble\n
 * \n
 public open fun nextDouble(): Double =
doubleFromParts(nextBits(26), nextBits(27))\n
 /** \n
 * Gets the next random non-negative `Double` from the
random number generator less than the specified [until] bound.\n
 * \n
 * Generates a `Double` random value
uniformly distributed between 0 (inclusive) and [until] (exclusive).\n
 * \n
 * @throws IllegalArgumentException
if [until] is negative or zero.\n
 * \n
 * @sample samples.random.Randoms.nextDoubleFromUntil\n
 * \n
 public open fun nextDouble(until: Double): Double = nextDouble(0.0, until)\n
 /** \n
 * Gets the next random
`Double` from the random number generator in the specified range.\n
 * \n
 * Generates a `Double` random value
uniformly distributed between the specified [from] (inclusive) and [until] (exclusive) bounds.\n
 * \n
 * [from]
and [until] must be finite otherwise the behavior is unspecified.\n
 * \n

```

```

* @throws IllegalArgumentException if [from] is greater than or equal to [until].\n
*\n
* @sample
samples.random.Randoms.nextDoubleFromUntil\n
*/\n
public open fun nextDouble(from: Double, until:
Double): Double {\n
 checkRangeBounds(from, until)\n
 val size = until - from\n
 val r = if
(size.isInfinite() && from.isFinite() && until.isFinite()) {\n
 val r1 = nextDouble() * (until / 2 - from / 2)\n
 from + r1 + r1\n
 } else {\n
 from + nextDouble() * size\n
 }\n
 return if (r >= until)
until.nextDown() else r\n
}\n
/**\n
 * Gets the next random [Float] value uniformly distributed between 0
(inclusive) and 1 (exclusive).\n
*\n
* @sample samples.random.Randoms.nextFloat\n
*/\n
public open fun
nextFloat(): Float = nextBits(24) / (1 shl 24).toFloat()\n
/**\n
 * Fills a subrange of the specified byte [array]
starting from [fromIndex] inclusive and ending [toIndex] exclusive\n
*\n
* with random bytes.\n
*\n
* @return [array] with the subrange filled with random bytes.\n
*\n
*
@sample samples.random.Randoms.nextBytes\n
*/\n
public open fun nextBytes(array: ByteArray, fromIndex:
Int = 0, toIndex: Int = array.size): ByteArray {\n
 require(fromIndex in 0..array.size && toIndex in 0..array.size)
{ "\nfromIndex ($fromIndex) or toIndex ($toIndex) are out of range: 0..${array.size}." }\n
 require(fromIndex <=
toIndex) { "\nfromIndex ($fromIndex) must be not greater than toIndex ($toIndex)."}\n
 val steps = (toIndex -
fromIndex) / 4\n
 var position = fromIndex\n
 repeat(steps) {\n
 val v = nextInt()\n
array[position] = v.toByte()\n
 array[position + 1] = v.ushr(8).toByte()\n
 array[position + 2] =
v.ushr(16).toByte()\n
 array[position + 3] = v.ushr(24).toByte()\n
 position += 4\n
 }\n
 val
remainder = toIndex - position\n
 val vr =
nextBits(remainder * 8)\n
 for (i in 0 until remainder) {\n
 array[position + i] = vr.ushr(i * 8).toByte()\n
 }\n
 return array\n
}\n
/**\n
 * Fills the specified byte [array] with random bytes and returns it.\n
*\n
* @return [array] filled with random bytes.\n
*\n
* @sample samples.random.Randoms.nextBytes\n
*/\n
public open fun nextBytes(array: ByteArray): ByteArray = nextBytes(array, 0, array.size)\n
/**\n
 *
Creates a byte array of the specified [size], filled with random bytes.\n
*\n
* @sample
samples.random.Randoms.nextBytes\n
*/\n
public open fun nextBytes(size: Int): ByteArray =
nextBytes(ByteArray(size))\n
/**\n
 * The default random number generator.\n
*\n
* On JVM this
generator is thread-safe, its methods can be invoked from multiple threads.\n
*\n
* @sample
samples.random.Randoms.defaultRandom\n
*/\n
companion object Default : Random(), Serializable {\n
 private val defaultRandom: Random = defaultPlatformRandom()\n
 private object Serialized : Serializable
{\n
 private const val serialVersionUID = 0L\n
 private fun readResolve(): Any = Random\n
 }\n
 private fun writeReplace(): Any = Serialized\n
 override fun nextBits(bitCount: Int): Int =
defaultRandom.nextBits(bitCount)\n
 override fun nextInt(): Int = defaultRandom.nextInt()\n
 override fun
nextInt(until: Int): Int = defaultRandom.nextInt(until)\n
 override fun nextInt(from: Int, until: Int): Int =
defaultRandom.nextInt(from, until)\n
 override fun nextLong(): Long = defaultRandom.nextLong()\n
 override fun nextLong(until: Long): Long = defaultRandom.nextLong(until)\n
 override fun nextLong(from:
Long, until: Long): Long = defaultRandom.nextLong(from, until)\n
 override fun nextBoolean(): Boolean =
defaultRandom.nextBoolean()\n
 override fun nextDouble(): Double = defaultRandom.nextDouble()\n
 override fun
nextDouble(until: Double): Double = defaultRandom.nextDouble(until)\n
 override fun
nextDouble(from: Double, until: Double): Double = defaultRandom.nextDouble(from, until)\n
 override fun
nextFloat(): Float = defaultRandom.nextFloat()\n
 override fun nextBytes(array: ByteArray): ByteArray =
defaultRandom.nextBytes(array)\n
 override fun nextBytes(size: Int): ByteArray =
defaultRandom.nextBytes(size)\n
 override fun nextBytes(array: ByteArray, fromIndex: Int, toIndex: Int):
ByteArray =\n
 defaultRandom.nextBytes(array, fromIndex, toIndex)\n
}\n
}\n
/**\n
 * Returns a repeatable
random number generator seeded with the given [seed] `Int` value.\n
*\n
* Two generators with the same seed
produce the same sequence of values within the same version of Kotlin runtime.\n
*\n
* *Note:* Future versions of
Kotlin may change the algorithm of this seeded number generator so that it will return\n
* a sequence of values
different from the current one for a given seed.\n
*\n
* On JVM the returned generator is NOT thread-safe. Do not
invoke it from multiple threads without proper synchronization.\n
*\n
* @sample
samples.random.Randoms.seededRandom\n
*/\n
@SinceKotlin("1.3")\n
public fun Random(seed: Int): Random =

```



```

* Gets the next random [UInt] from the random number generator in the specified [range].\n * Generates a
[UInt] random value uniformly distributed in the specified [range]:\n * from `range.start` inclusive to
`range.endInclusive` inclusive.\n * @throws IllegalArgumentException if [range] is empty.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
Random.nextUInt(range: UIntRange): UInt = when {\n range.isEmpty() -> throw
IllegalArgumentException("Cannot get random in empty range: $range")\n range.last < UInt.MAX_VALUE ->
nextUInt(range.first, range.last + 1u)\n range.first > UInt.MIN_VALUE -> nextUInt(range.first - 1u, range.last) +
1u\n else -> nextUInt()\n}\n\n/**\n * Gets the next random [ULong] from the random number generator.\n * Generates a [ULong] random value uniformly distributed between [ULong.MIN_VALUE] and
[ULong.MAX_VALUE] (inclusive).\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic
fun Random.nextULong(): ULong = nextLong().toULong()\n\n/**\n * Gets the next random [ULong] from the
random number generator less than the specified [until] bound.\n * Generates a [ULong] random value
uniformly distributed between `0` (inclusive) and the specified [until] bound (exclusive).\n * @throws
IllegalArgumentException if [until] is zero.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
Random.nextULong(until: ULong): ULong = nextULong(0uL, until)\n\n/**\n * Gets the next random [ULong] from
the random number generator in the specified range.\n * Generates a [ULong] random value uniformly
distributed between the specified [from] (inclusive) and [until] (exclusive) bounds.\n * @throws
IllegalArgumentException if [from] is greater than or equal to [until].\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
Random.nextULong(from: ULong, until: ULong): ULong
{\n checkULongRangeBounds(from, until)\n val signedFrom = from.toLong() xor Long.MIN_VALUE\n val signedUntil = until.toLong() xor Long.MIN_VALUE\n val signedResult = nextLong(signedFrom,
signedUntil) xor Long.MIN_VALUE\n return signedResult.toULong()\n}\n\n/**\n * Gets the next random
[ULong] from the random number generator in the specified [range].\n * Generates a [ULong] random value
uniformly distributed in the specified [range]:\n * from `range.start` inclusive to `range.endInclusive` inclusive.\n
*\n * @throws IllegalArgumentException if [range] is empty.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
Random.nextULong(range: ULongRange): ULong = when {\n range.isEmpty() -> throw
IllegalArgumentException("Cannot get random in empty range: $range")\n range.last < ULong.MAX_VALUE -
> nextULong(range.first, range.last + 1u)\n range.first > ULong.MIN_VALUE -> nextULong(range.first - 1u,
range.last) + 1u\n else -> nextULong()\n}\n\n/**\n * Fills the specified unsigned byte [array] with random bytes and returns it.\n * @return [array] filled with random bytes.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun Random.nextUBytes(array: UByteArray): UByteArray {\n nextBytes(array.asByteArray())\n return
array\n}\n\n/**\n * Creates an unsigned byte array of the specified [size], filled with random bytes.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun Random.nextUBytes(size: Int): UByteArray
= nextBytes(size).asUByteArray()\n\n/**\n * Fills a subrange of the specified `UByte` [array] starting from
[fromIndex] inclusive and ending [toIndex] exclusive with random UBytes.\n * @return [array] with the
subrange filled with random bytes.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
Random.nextUBytes(array: UByteArray, fromIndex: Int = 0, toIndex: Int = array.size): UByteArray {\n nextBytes(array.asByteArray(), fromIndex,
toIndex)\n return array\n}\n\ninternal fun checkUIntRangeBounds(from: UInt, until: UInt) = require(until >
from) { boundsErrorMessage(from, until) }\ninternal fun checkULongRangeBounds(from: ULong, until: ULong) =
require(until > from) { boundsErrorMessage(from, until) }\n\n"/\n * Copyright 2010-2018 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.random\n\n/**\n * Random number generator,

```

using Marsaglia's "xorwow" algorithm  
 \* Cycles after 2<sup>192</sup> - 2<sup>32</sup> repetitions.  
 \* For more details, see Marsaglia, George (July 2003). "Xorshift RNGs". Journal of Statistical Software. 8 (14).

doi:10.18637/jss.v008.i14  
 \* Available at <https://www.jstatsoft.org/v08/i14/paper>  
 \* An internal class

```
XorWowRandom internal constructor(
 private var x: Int,
 private var y: Int,
 private var z: Int,
 private var
```

```
 w: Int,
 private var v: Int,
 private var addend: Int) : Random(), Serializable {
 internal
 constructor(seed1: Int, seed2: Int) :
 this(seed1, seed2, 0, 0, seed1.inv(), (seed1 shl 10) xor (seed2 ushr
4))
 init {
 require((x or y or z or w or v) != 0) { "Initial state must have at least one non-zero element."
 }
 // some trivial seeds can produce several values with zeroes in upper bits, so we discard first 64
 repeat(64) { nextInt() }
 override fun nextInt(): Int {
 // Equivalent to the xorwow algorithm
 // From Marsaglia, G. 2003. Xorshift RNGs. J. Statis. Soft. 8, 14, p. 5
 var t = x
 t = t xor (t ushr 2)
 x = y
 y = z
 z = w
 val v0 = v
 w = v0
 t = (t xor (t shl 1)) xor v0 xor (v0 shl 4)
 v = t
 addend += 362437
 return t + addend
 }
 override fun nextBits(bitCount: Int): Int =
 nextInt().takeUpperBits(bitCount)
```

```
 private companion object {
 private const val serialVersionUID: Long = 0L
 }
} // * Copyright
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 * Use of this source code is governed
by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
```

```
*
@file:kotlin.jvm.JvmMultifileClass
@file:kotlin.jvm.JvmName("RangesKt")
package
```

```
kotlin.ranges
 * Represents a range of [Comparable] values.
 *
private open class ComparableRange<T :
Comparable<T>>(
 override val start: T,
 override val endInclusive: T) : ClosedRange<T> {
 override
 fun equals(other: Any?): Boolean {
 return other is ComparableRange<*> && (isEmpty() && other.isEmpty())
 }
 start == other.start && endInclusive == other.endInclusive
 override fun hashCode(): Int
```

```
 {
 return if (isEmpty()) -1 else 31 * start.hashCode() + endInclusive.hashCode()
 }
 override
 fun toString(): String = "$start..$endInclusive"
} * Creates a range from this [Comparable] value to the
specified [that] value.
 * This value needs to be smaller than or equal to [that] value, otherwise the returned
range will be empty.
 * @sample samples.ranges.Ranges.rangeFromComparable
 *
public operator fun <T :
Comparable<T>> T.rangeTo(that: T): ClosedRange<T> = ComparableRange(this, that)
 * Represents a
range of floating point numbers.
 * Extends [ClosedRange] interface providing custom operation
```

```
[lessThanOrEquals] for comparing values of range domain type.
 * This interface is implemented by floating
point ranges returned by [Float.rangeTo] and [Double.rangeTo] operators to
 * achieve IEEE-754 comparison order
instead of total order of floating point numbers.
 *
@SinceKotlin("1.1")
public interface
```

```
ClosedFloatingPointRange<T : Comparable<T>> : ClosedRange<T> {
 override fun contains(value: T): Boolean
= lessThanOrEquals(start,
```

```
 value) && lessThanOrEquals(value, endInclusive)
 override fun isEmpty(): Boolean = !lessThanOrEquals(start,
```

```
 endInclusive)
} * Compares two values of range domain type and returns true if first is less than or
equal to second.
 *
fun lessThanOrEquals(a: T, b: T): Boolean
```

```
} * A closed range of values of
type `Double`.
 * Numbers are compared with the ends of this range according to IEEE-754.
 *
private class
```

```
ClosedDoubleRange(
 start: Double,
 endInclusive: Double) : ClosedFloatingPointRange<Double> {
 private val _start = start
 private val _endInclusive = endInclusive
 override val start: Double get() = _start
 override val endInclusive: Double get() = _endInclusive
```

```
 override fun lessThanOrEquals(a: Double, b:
Double): Boolean = a <= b
 override fun contains(value: Double): Boolean = value >= _start && value <=
_endInclusive
 override fun isEmpty(): Boolean = !(_start <= _endInclusive)
```

```
 override fun equals(other: Any?): Boolean {
 return other is ClosedDoubleRange && (isEmpty() &&
other.isEmpty() ||
 _start == other._start && _endInclusive == other._endInclusive)
 }
 override
 fun hashCode(): Int {
 return if (isEmpty()) -1 else 31 * _start.hashCode() + _endInclusive.hashCode()
 }
 override fun toString(): String = "$_start..$_endInclusive"
} * Creates a range from this [Double]
value to the specified [that] value.
 * Numbers are compared with the ends of this range according to IEEE-
754.
 * @sample samples.ranges.Ranges.rangeFromDouble
 *
@SinceKotlin("1.1")
public operator fun
```

```

Double.rangeTo(that: Double): ClosedFloatingPointRange<Double> = ClosedDoubleRange(this, that)\n\n\n/**\n *
A closed range of values of type `Float`.\n *\n * Numbers are compared with the ends of this range according to
IEEE-754.\n */\nprivate class ClosedFloatRange(\n start: Float,\n endInclusive: Float\n) :
ClosedFloatingPointRange<Float>
{
 private val _start = start\n private val _endInclusive = endInclusive\n override val start: Float get() =
_start\n override val endInclusive: Float get() = _endInclusive\n\n override fun lessThanOrEquals(a: Float, b:
Float): Boolean = a <= b\n\n override fun contains(value: Float): Boolean = value >= _start && value <=
_endInclusive\n\n override fun isEmpty(): Boolean = !(_start <= _endInclusive)\n\n override fun equals(other:
Any?): Boolean {\n return other is ClosedFloatRange && (isEmpty() && other.isEmpty()) ||\n _start
== other._start && _endInclusive == other._endInclusive\n }\n\n override fun hashCode(): Int {\n return if
(isEmpty()) -1 else 31 * _start.hashCode() + _endInclusive.hashCode()\n }\n\n override fun toString(): String =
"\$_start..\$_endInclusive"\n}\n\n\n/**\n * Creates a range from this [Float] value to the specified [that] value.\n *\n *
Numbers are compared with the ends
of this range according to IEEE-754.\n */\n@sample samples.ranges.Ranges.rangeFromFloat\n
*\n\n@SinceKotlin("1.1")\npublic operator fun Float.rangeTo(that: Float): ClosedFloatingPointRange<Float> =
ClosedFloatRange(this, that)\n\n\n/**\n * Returns `true` if this iterable range contains the specified [element].\n *\n *
Always returns `false` if the [element] is `null`.\n */\n\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic
inline operator fun <T, R> R.contains(element: T?): Boolean where T : Any, R : Iterable<T>, R : ClosedRange<T>
=\n element != null && contains(element)\n\n\ninternal fun checkStepIsPositive(isPositive: Boolean, step:
Number) {\n if (!isPositive) throw IllegalArgumentException("Step must be positive, was: $step.")\n}\n\n\n/*\n *
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governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmName("KClasses")\n@file:Suppress("UNCHECKED_CAST")\n\npackage
kotlin.reflect\n\nimport kotlin.internal.LowPriorityInOverloadResolution\n\n\n/**\n * Casts the given [value] to the
class represented by this [KClass] object.\n * Throws an exception if the value is `null` or if it is not an instance of
this class.\n *\n * This is an experimental function that behaves as a similar function from kotlin.reflect.full on
JVM.\n *\n * @see [KClass.isInstance]\n * @see [KClass.safeCast]\n
*\n\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@LowPriorityInOverloadResoluti
on\nfun <T : Any> KClass<T>.cast(value: Any?): T {\n if (!isInstance(value)) throw ClassCastException("Value
cannot be cast to $qualifiedOrSimpleName")\n return value as T\n}\n\n// TODO: replace with qualifiedName
when it is fully supported in K/JS\ninternal expect val KClass<*>.qualifiedOrSimpleName: String?\n\n\n/**\n * Casts
the given [value] to the class represented by this [KClass] object.\n * Returns
`null` if the value is `null` or if it is not an instance of this class.\n *\n * This is an experimental function that
behaves as a similar function from kotlin.reflect.full on JVM.\n *\n * @see [KClass.isInstance]\n * @see
[KClass.cast]\n
*\n\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@LowPriorityInOverloadResoluti
on\nfun <T : Any> KClass<T>.safeCast(value: Any?): T? {\n return if (isInstance(value)) value as T else
null\n}\n\n\n/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n\npackage kotlin.reflect\n\nimport kotlin.jvm.JvmField\nimport kotlin.jvm.JvmStatic\n\n\n\n/**\n * Represents
a type projection. Type projection is usually the argument to another type in a type usage.\n * For example, in the
type `Array<out Number>`, `out Number` is the covariant projection of the type represented
by the class `Number`.\n *\n * Type projection is either the star projection, or an entity consisting of a specific type
plus optional variance.\n *\n * See the [Kotlin language
documentation](https://kotlinlang.org/docs/reference/generics.html#type-projections)\n * for more information.\n
*\n\n@SinceKotlin("1.1")\npublic data class KTypeProjection constructor(\n /**\n * The use-site variance
specified in the projection, or `null` if this is a star projection.\n *\n public val variance: KVariance?,\n /**\n
* The type specified in the projection, or `null` if this is a star projection.\n *\n public val type: KType?\n)

```

```

{\n\n init {\n require((variance == null) == (type == null)) {\n if (variance == null)\n \"Star projection must have no type specified.\"\n else\n \"The projection variance $variance requires type to be specified.\"\n }\n}\n\n override fun toString(): String = when (variance) {\n null -> \"*\n KVariance.INVARIANT -> type.toString()\n KVariance.IN -> \"in $type\"\n KVariance.OUT -> \"out $type\"\n}\n\n public companion object {\n // provided for compiler access\n @JvmField\n @PublishedApi\n internal val star: KTypeProjection = KTypeProjection(null, null)\n}\n\n /**\n * Star projection, denoted by the `*` character.\n * For example, in the type `KClass<*>`, `*` is the star projection.\n * See the [Kotlin language documentation](https://kotlinlang.org/docs/reference/generics.html#star-projections) for more information.\n */\n public val STAR: KTypeProjection get() = star\n\n /**\n * Creates an invariant projection of a given type. Invariant projection is just the type itself,\n * without any use-site variance modifiers applied to it.\n * For example, in the type `Set<String>`, `String` is an invariant projection of the type represented by the class `String`.\n */\n @JvmStatic\n public fun invariant(type: KType): KTypeProjection =\n KTypeProjection(KVariance.INVARIANT, type)\n\n /**\n * Creates a contravariant projection of a given type, denoted by the `in` modifier applied to a type.\n * For example, in the type `MutableList<in Number>`, `in Number` is a contravariant projection of the type of class `Number`.\n */\n @JvmStatic\n public fun contravariant(type: KType): KTypeProjection =\n KTypeProjection(KVariance.IN, type)\n\n /**\n * Creates a covariant projection of a given type, denoted by the `out` modifier applied to a type.\n * For example, in the type `Array<out Number>`, `out Number` is a covariant projection of the type of class `Number`.\n */\n @JvmStatic\n public fun covariant(type: KType): KTypeProjection =\n KTypeProjection(KVariance.OUT, type)\n}\n}"/\n\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n\n */\n\npackage kotlin.reflect\n\n /**\n * Represents variance applied to a type parameter on the declaration site (*declaration-site variance*),\n * or to a type in a projection (*use-site variance*).

 * See the [Kotlin language documentation](https://kotlinlang.org/docs/reference/generics.html#variance) for more information.

 * @see [KTypeParameter.variance]

 * @see [KTypeProjection]

 * @SinceKotlin("1.1")\n */\nenum class KVariance {\n /**\n * The affected type parameter or type is *invariant*, which means it has no variance applied to it.

 */\n INVARIANT,\n /**\n * The affected type parameter or type is *contravariant*. Denoted by the `in` modifier in the source code.

 */\n IN,\n /**\n * The affected type parameter or type is *covariant*. Denoted by the `out` modifier in the source code.

 */\n OUT,\n}\n\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n\n */\n\npackage kotlin.reflect\n\n /**\n * Returns a runtime representation of the given reified type [T] as an instance of [KType].

 * Note that on JVM, the created type has no annotations ([KType.annotations] returns an empty list)\n * even if the type in the source code is annotated. Support for type annotations might be added in a future version.

 * @SinceKotlin("1.6")\n */\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <reified T> typeOf(): KType =\n throw UnsupportedOperationException("This function is implemented as an intrinsic on all supported platforms.")\n\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n\n */\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("StringsKt")\n\npackage kotlin.text\n\n /**\n * An object to which char sequences and values can be appended.

 * Next interface Appendable {\n /**\n * Appends the specified character [value] to this Appendable and returns this instance.

 */\n @param value the character to append.\n fun append(value: Char): Appendable\n\n /**\n * Appends the specified character sequence [value] to this Appendable and returns this instance.

 */\n @param value the character sequence to append. If [value] is `null`, then the four characters `\\null` are appended to this Appendable.

 fun append(value: CharSequence?): Appendable\n\n /**\n * Appends a subsequence of

```





```

whitespace characters (no indent at all) then the\n * common indent is 0,
and therefore this function doesn't change the indentation.\n * Doesn't preserve the original line endings.\n *
@sample samples.text.Strings.trimIndent\n * @see trimMargin\n * @see kotlin.text.isBlank\n *
\npublic fun
String.trimIndent(): String = replaceIndent("\\")\n\n/**\n * Detects a common minimal indent like it does
[trimIndent] and replaces it with the specified [newIndent].\n *
\npublic fun String.replaceIndent(newIndent: String
= "\\"): String {\n val lines = lines()\n val minCommonIndent = lines\n .filter(String::isNotBlank)\n .map(String::indentWidth)\n .minOrNull() ?: 0\n return lines.reindent(length + newIndent.length *
lines.size, getIndentFunction(newIndent), { line -> line.drop(minCommonIndent) })\n}\n\n/**\n * Prepends [indent]
to every line of the original string.\n * Doesn't preserve the original line endings.\n *
\npublic fun
String.prependIndent(indent: String = "\n\n"): String =\n lineSequence()\n .map {\n when {\n it.isBlank() -> {\n when {\n it.length < indent.length ->
indent\n else -> it\n }\n }\n else -> indent + it\n }\n }\n .joinToString("\\n")\n\nprivate fun String.indentWidth(): Int = indexOfFirst { !it.isWhitespace() }.let { if (it == -1)
length else it }\n\nprivate fun getIndentFunction(indent: String) = when {\n indent.isEmpty() -> { line: String ->
line }\n else -> { line: String -> indent + line }\n}\n\nprivate inline fun List<String>.reindent(\n resultSizeEstimate: Int,\n indentAddFunction: (String) -> String,\n indentCutFunction: (String) -> String?)\n: String {\n val lastIndex = lastIndex\n return mapIndexedNotNull { index, value ->\n if ((index == 0 || index
== lastIndex) && value.isBlank())\n null\n else\n indentCutFunction(value)?.let(indentAddFunction)
?: value\n }\n .joinTo(StringBuilder(resultSizeEstimate), "\\n")\n .toString()\n}\n\n"/*\n * Copyright
2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed
by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.text\n\n/**\n *
Defines names for Unicode symbols used in proper Typography.\n *
\npublic object Typography {\n /** The
character " \u2013 quotation mark *\n public const val quote: Char = "\u0022"\n /** The character
$ \u2013 dollar sign *\n public const val dollar: Char = "\u0024"\n /** The character & \u2013
ampersand *\n public const val amp: Char = "\u0026"\n /** The character < \u2013 less-than sign *\n
public const val less: Char = "\u003C"\n /** The character > \u2013 greater-than sign *\n public const val
greater: Char = "\u003E"\n /** The non-breaking space character *\n
 public const val nbsp: Char = "\u00A0"\n /** The character × *\n public const val times: Char =
"\u00D7"\n /** The character ¢ *\n public const val cent: Char = "\u00A2"\n /** The character £
*\n public const val pound: Char = "\u00A3"\n /** The character § *\n public const val section: Char =
"\u00A7"\n /** The character © *\n public const val copyright: Char = "\u00A9"\n /** The character
« *\n @SinceKotlin("1.6")\n public const val leftGuillemet: Char = "\u00AB"\n /** The character
» *\n @SinceKotlin("1.6")\n public const val rightGuillemet: Char = "\u00BB"\n /** The character
® *\n public const val registered: Char = "\u00AE"\n /** The character ° *\n public const val
degree: Char = "\u00B0"\n /** The character ± *\n public const val plusMinus: Char = "\u00B1"\n /**
The character ¶ *\n public const val paragraph: Char = "\u00B6"\n
 /** The character · *\n public const val middleDot: Char = "\u00B7"\n /** The character ½ *\n
public const val half: Char = "\u00BD"\n /** The character – *\n public const val ndash: Char =
"\u2013"\n /** The character — *\n public const val mdash: Char = "\u2014"\n /** The character
‘ *\n public const val leftSingleQuote: Char = "\u2018"\n /** The character ’ *\n public
const val rightSingleQuote: Char = "\u2019"\n /** The character ‚ *\n public const val
lowSingleQuote: Char = "\u201A"\n /** The character “ *\n public const val leftDoubleQuote: Char =
"\u201C"\n /** The character ” *\n public const val rightDoubleQuote: Char = "\u201D"\n /** The
character „ *\n public const val lowDoubleQuote: Char = "\u201E"\n /** The character † *\n
public const val dagger: Char = "\u2020"\n /** The character ‡ *\n public
const val doubleDagger: Char = "\u2021"\n /** The character • *\n public
const val bullet: Char = "\u2022"\n /** The character … *\n public
const val ellipsis: Char = "\u2026"\n /** The character

```

```

′ *^n public const val prime: Char = "\u2032"n /** The character ′ *^n public const val
doublePrime: Char = "\u2033"n /** The character € *^n public const val euro: Char = "\u20AC"n
/** The character ™ *^n public const val tm: Char = "\u2122"n /** The character ≈ *^n
public const val almostEqual: Char = "\u2248"n /** The character ≠ *^n public const val notEqual:
Char = "\u2260"n /** The character ≤ *^n public const val lessOrEqual: Char = "\u2264"n /** The
character ≥ *^n public const val greaterOrEqual: Char = "\u2265"n /** The character « *^n
@Deprecated("This constant has a typo in the name. Use leftGuillemet instead."),
ReplaceWith("Typography.leftGuillemet"))n @DeprecatedSinceKotlin("1.6")n public const val
leftGuillemete: Char = "\u00AB"n /** The character » *^n @Deprecated("This constant has a typo in
the name. Use rightGuillemet instead."), ReplaceWith("Typography.rightGuillemet"))n
@DeprecatedSinceKotlin("1.6")n public const val rightGuillemete: Char = "\u00BB"n },"/*n * Copyright
2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.n * Use of this source code is governed
by the Apache 2.0 license that can be found in the license/LICENSE.txt file.n */npackage kotlin.textn/n/**n *
Represents a collection of captured groups in a single match of a regular expression.n *n * This collection has size
of `groupCount + 1` where `groupCount` is the count of groups in the regular expression.n * Groups are indexed
from 1 to `groupCount` and group with the index 0 corresponds to the entire match.n *n * An element of the
collection
at the particular index can be `null`,n * if the corresponding group in the regular expression is optional andn *
there was no match captured by that group.n */npublic interface MatchGroupCollection :
Collection<MatchGroup?> {n/n /** Returns a group with the specified [index].n *n * @return An instance
of [MatchGroup] if the group with the specified [index] was matched or `null` otherwise.n *n * Groups are
indexed from 1 to the count of groups in the regular expression. A group with the index 0n * corresponds to the
entire match.n *^n public operator fun get(index: Int): MatchGroup?n }n/n/**n * Extends
[MatchGroupCollection] by introducing a way to get matched groups by name, when regex supports it.n
*/n@SinceKotlin("1.1")npublic interface MatchNamedGroupCollection : MatchGroupCollection {n /**n *
Returns a named group with the specified [name].n * @return An instance of [MatchGroup] if the group with the
specified [name] was
matched or `null` otherwise.n * @throws IllegalArgumentException if there is no group with the specified
[name] defined in the regex pattern.n * @throws UnsupportedOperationException if this match group collection
doesn't support getting match groups by name,n * for example, when it's not supported by the current platform.n
*/n public operator fun get(name: String): MatchGroup?n }n/n/**n * Represents the results from a single
regular expression match.n */npublic interface MatchResult {n /** The range of indices in the original string
where match was captured. */n public val range: IntRangen /** The substring from the input string captured by
this match. */n public val value: Stringn /**n * A collection of groups matched by the regular expression.n
*n * This collection has size of `groupCount + 1` where `groupCount` is the count of groups in the regular
expression.n * Groups are indexed from 1 to `groupCount` and group
with the index 0 corresponds to the entire match.n */n public val groups: MatchGroupCollectionn /**n *
A list of matched indexed group values.n *n * This list has size of `groupCount + 1` where `groupCount` is
the count of groups in the regular expression.n * Groups are indexed from 1 to `groupCount` and group with the
index 0 corresponds to the entire match.n *n * If the group in the regular expression is optional and there were
no match captured by that group,n * corresponding item in [groupValues] is an empty string.n *n *
@sample samples.text.Regexp.matchDestructuringToGroupValuesn */n public val groupValues:
List<String>n/n /**n * An instance of [MatchResult.Destructured] wrapper providing components for
destructuring assignment of group values.n *n * component1 corresponds to the value of the first group,
component2 \u2014 of the second, and so on.n *n * @sample
samples.text.Regexp.matchDestructuringToGroupValuesn
*/n public val destructured: Destructured get() = Destructured(this)n/n /** Returns a new [MatchResult]
with the results for the next match, starting at the positionn * at which the last match ended (at the character after

```



```

IllegalArgumentException("Unknown duration unit short name:
$shortName")\n}\n\n@SinceKotlin("1.5")\ninternal fun durationUnitByIsoChar(isoChar: Char,
isTimeComponent: Boolean): DurationUnit =\n when {\n !isTimeComponent -> {\n when (isoChar) {\n 'D' -> DurationUnit.DAYS\n else -> throw IllegalArgumentException("Invalid or
unsupported duration ISO non-time unit: $isoChar")\n }\n } else -> {\n when (isoChar) {\n 'H' -> DurationUnit.HOURS\n 'M' -> DurationUnit.MINUTES\n 'S' ->
DurationUnit.SECONDS\n else -> throw IllegalArgumentException("Invalid duration ISO time unit:
$isoChar")\n }\n }\n },"/*\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.time\n\nimport kotlin.annotation.AnnotationTarget.*\n\n/**\n * This annotation marks the experimental preview of the standard library API for measuring time and working with
durations.\n */\n * > Note that this API is in a preview state and has a very high chance of being changed in the
future.\n * Do not use it if you develop a library since your library will become binary incompatible\n * with the
future versions of the standard library.\n */\n * Any usage of a declaration annotated with `@ExperimentalTime`
must be accepted either by\n * annotating that usage with the [OptIn] annotation, e.g.
`@OptIn(ExperimentalTime::class)`,\n * or by using the compiler argument `-opt-
in=kotlin.time.ExperimentalTime`.\n */\n\n@RequiresOptIn(level
=
RequiresOptIn.Level.ERROR)\n@MustBeDocumented\n@Retention(AnnotationRetention.BINARY)\n@Target(\n
CLASS,\n ANNOTATION_CLASS,\n PROPERTY,\n FIELD,\n LOCAL_VARIABLE,\n
VALUE_PARAMETER,\n CONSTRUCTOR,\n FUNCTION,\n PROPERTY_GETTER,\n
PROPERTY_SETTER,\n TYPEALIAS)\n\n@SinceKotlin("1.3")\n\npublic annotation class
ExperimentalTime\n","/*\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.time\n\nimport kotlin.jvm.JvmInline\n\n/**\n * A source of time
for measuring time intervals.\n */\n * The only operation provided by the time source is [markNow]. It returns a
[TimeMark], which can be used to query the elapsed time later.\n */\n * @see [measureTime]\n * @see
[measureTimedValue]\n */\n\n@SinceKotlin("1.3")\n\n@ExperimentalTime\n\npublic interface TimeSource {\n /**\n
 * Marks a point in time on this time source.\n */\n * The returned [TimeMark] instance encapsulates the captured
time point and allows querying\n * the duration of time interval [elapsed][TimeMark.elapsedNow] from that
point.\n */\n * \n\n public fun markNow(): TimeMark\n\n /**\n * The most precise time source available in the
platform.\n */\n * This time source returns its readings from a source of monotonic time when it is available in a
target platform,\n * and resorts to a non-monotonic time source otherwise.\n */\n * The function [markNow]
of this time source returns the specialized [ValueTimeMark] that is an inline value class\n * wrapping a platform-
dependent time reading value.\n */\n * \n\n public object Monotonic : TimeSource {\n override fun markNow():
ValueTimeMark = MonotonicTimeSource.markNow()\n override fun toString(): String =
MonotonicTimeSource.toString()\n\n /**\n * A specialized [kotlin.time.TimeMark]
returned by [TimeSource.Monotonic].\n */\n * This time mark is implemented as an inline value class
wrapping a platform-dependent\n * time reading value of the default monotonic time source, thus allowing to
avoid additional boxing\n * of that value.\n */\n * The operations [plus] and [minus] are also
specialized to return [ValueTimeMark] type.\n */\n * \n\n @ExperimentalTime\n @SinceKotlin("1.7")\n
 @JvmInline\n public value class ValueTimeMark internal constructor(internal val reading:
ValueTimeMarkReading) : TimeMark {\n override fun elapsedNow(): Duration =
MonotonicTimeSource.elapsedFrom(this)\n override fun plus(duration: Duration): ValueTimeMark =
MonotonicTimeSource.adjustReading(this, duration)\n override fun minus(duration: Duration):
ValueTimeMark = MonotonicTimeSource.adjustReading(this, -duration)\n override fun hasPassedNow():

```



```

Duration) : TimeMark {
 override fun elapsedNow(): Duration = mark.elapsedNow() - adjustment
 override fun plus(duration: Duration): TimeMark = AdjustedTimeMark(mark, adjustment
+ duration)
}
}
"/**
 * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
package kotlin.time
@SinceKotlin("1.3")
@ExperimentalTime
internal expect object
MonotonicTimeSource : TimeSource {
 override fun markNow(): TimeSource.Monotonic.ValueTimeMark
fun elapsedFrom(timeMark: TimeSource.Monotonic.ValueTimeMark): Duration
fun adjustReading(timeMark:
TimeSource.Monotonic.ValueTimeMark, duration: Duration): TimeSource.Monotonic.ValueTimeMark
}
}
"/**
 * An abstract class used to implement time sources that return their readings as [Long] values in the specified
 [unit].
 * @property unit The unit in which this time source's readings are expressed.
 */
@SinceKotlin("1.3")
@ExperimentalTime
public abstract class AbstractLongTimeSource(protected val
unit: DurationUnit) : TimeSource {
 /**
 * This protected method should be overridden to return the current reading of the time source expressed as a
 [Long] number
 * in the unit specified by the [unit] property.
 */
 protected abstract fun read(): Long
 private class LongTimeMark(private val startedAt: Long, private val timeSource: AbstractLongTimeSource, private
val offset: Duration) : TimeMark {
 override fun elapsedNow(): Duration = (timeSource.read() -
startedAt).toDuration(timeSource.unit) - offset
 override fun plus(duration: Duration): TimeMark =
LongTimeMark(startedAt, timeSource, offset + duration)
 }
 override fun markNow(): TimeMark =
LongTimeMark(read(), this, Duration.ZERO)
}
}
"/**
 * An abstract class used to implement time sources that
return their readings as [Double] values in the specified [unit].
 * @property unit The unit in which this time
source's readings are expressed.
 */
@SinceKotlin("1.3")
@ExperimentalTime
public abstract class
AbstractDoubleTimeSource(protected
val unit: DurationUnit) : TimeSource {
 /**
 * This protected method should be overridden to return the
current reading of the time source expressed as a [Double] number
 * in the unit specified by the [unit]
property.
 */
 protected abstract fun read(): Double
 private class DoubleTimeMark(private val startedAt:
Double, private val timeSource: AbstractDoubleTimeSource, private val offset: Duration) : TimeMark {
 override fun elapsedNow(): Duration = (timeSource.read() - startedAt).toDuration(timeSource.unit) - offset
 override fun plus(duration: Duration): TimeMark = DoubleTimeMark(startedAt, timeSource, offset + duration)
 }
 override fun markNow(): TimeMark = DoubleTimeMark(read(), this, Duration.ZERO)
}
}
"/**
 * A time
source that has programmatically updatable readings. It is useful as a predictable source of time in tests.
 * The
current reading value can be advanced by the specified duration
amount with the operator [plusAssign]:
 * val timeSource = TestTimeSource()
 * timeSource +=
10.seconds
 * Implementation note: the current reading value is stored as a [Long] number of
nanoseconds,
 * thus it's capable to represent a time range of approximately 1292 years.
 * Should the
reading value overflow as the result of [plusAssign] operation, an [IllegalStateException] is thrown.
 */
@SinceKotlin("1.3")
@ExperimentalTime
public class TestTimeSource : AbstractLongTimeSource(unit =
DurationUnit.NANOSECONDS) {
 private var reading: Long = 0L
 override fun read(): Long = reading
}
"/**
 * Advances the current reading value of this time source by the specified [duration].
 * [duration]
value is rounded down towards zero when converting it to a [Long] number of nanoseconds.
 * For example, if
the duration being added is `0.6.nanoseconds`, the reading doesn't advance because
 * the duration value is
rounded to zero nanoseconds.
 * @throws IllegalStateException when the reading value overflows as the
result of this operation.
 */
public operator fun plusAssign(duration: Duration) {
 val longDelta =
duration.toLong(unit)
 reading = if (longDelta != Long.MIN_VALUE && longDelta != Long.MAX_VALUE)
 {
 // when delta fits in long, add it as long
 val newReading = reading + longDelta
 if
(reading xor longDelta >= 0 && reading xor newReading < 0) overflow(duration)
 newReading
 } else
 {
 val delta = duration.toDouble(unit)
 // when delta is greater than long, add it as double
 val newReading = reading + delta
 if (newReading > Long.MAX_VALUE || newReading <
Long.MIN_VALUE) overflow(duration)
 newReading.toLong()
 }
}
private fun

```

```

overflow(duration: Duration) {\n throw IllegalStateException("\nTestTimeSource will
overflow if its reading ${reading}ns is advanced by $duration.\n")\n }\n}\n","/*\n * Copyright 2010-2022
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.time\n\nimport
kotlin.time.Duration.Companion.milliseconds\nimport kotlin.time.Duration.Companion.nanoseconds\n\n// Long
time reading saturation math, shared between JVM and Native\n\ninternal fun saturatingAdd(longNs: Long,
duration: Duration): Long {\n val durationNs = duration.inWholeNanoseconds\n if ((longNs - 1) or 1 ==
Long.MAX_VALUE) { // MIN_VALUE or MAX_VALUE - the reading is infinite\n return
checkInfiniteSumDefined(longNs, duration, durationNs)\n }\n if ((durationNs - 1) or 1 == Long.MAX_VALUE)
{ // duration doesn't fit in Long nanos\n return saturatingAddInHalves(longNs, duration)\n }\n val result =
longNs + durationNs\n if (((longNs
xor result) and (durationNs xor result)) < 0) {\n return if (longNs < 0) Long.MIN_VALUE else
Long.MAX_VALUE\n }\n return result\n}\n\nprivate fun checkInfiniteSumDefined(longNs: Long, duration:
Duration, durationNs: Long): Long {\n if (duration.isInfinite() && (longNs xor durationNs < 0)) throw
IllegalArgumentException("Summing infinities of different signs")\n return longNs\n}\n\nprivate fun
saturatingAddInHalves(longNs: Long, duration: Duration): Long {\n val half = duration / 2\n if
((half.inWholeNanoseconds - 1) or 1 == Long.MAX_VALUE) {\n // this will definitely saturate\n return
(longNs + duration.toDouble(DurationUnit.NANOSECONDS)).toLong()\n } else {\n return
saturatingAdd(saturatingAdd(longNs, half), half)\n }\n}\n\ninternal fun saturatingDiff(valueNs: Long, originNs:
Long): Duration {\n if ((originNs - 1) or 1 == Long.MAX_VALUE) { // MIN_VALUE or MAX_VALUE\n return
-(originNs.toDuration(DurationUnit.DAYS)) // saturate
to infinity\n }\n val result = valueNs - originNs\n if ((result xor valueNs) and (result xor originNs).inv() < 0)
{\n val resultMs = valueNs / NANOS_IN_MILLIS - originNs / NANOS_IN_MILLIS\n val resultNs =
valueNs % NANOS_IN_MILLIS - originNs % NANOS_IN_MILLIS\n return resultMs.milliseconds +
resultNs.nanoseconds\n }\n return result\n}\n","/*\n * Copyright 2010-2022 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.time\n\nimport kotlin.contracts.*\n\n/**\n *
Executes the given function [block] and returns the duration of elapsed time interval.\n * The elapsed time is
measured with [TimeSource.Monotonic].\n */\n\n@SinceKotlin("1.3")\n@ExperimentalTime\npublic inline fun
measureTime(block: () -> Unit): Duration {\n contract {\n callsInPlace(block,
InvocationKind.EXACTLY_ONCE)\n }\n return TimeSource.Monotonic.measureTime(block)\n}\n\n/**\n * Executes the given function [block] and
returns the duration of elapsed time interval.\n * The elapsed time is measured with the specified `this`
[TimeSource] instance.\n */\n\n@SinceKotlin("1.3")\n@ExperimentalTime\npublic inline fun
TimeSource.measureTime(block: () -> Unit): Duration {\n contract {\n callsInPlace(block,
InvocationKind.EXACTLY_ONCE)\n }\n val mark = markNow()\n block()\n return
mark.elapsedNow()\n}\n\n/**\n * Executes the given function [block] and returns the duration of elapsed time
interval.\n * The elapsed time is measured with the specified `this` [TimeSource.Monotonic] instance.\n
*/\n\n@SinceKotlin("1.7")\n@ExperimentalTime\npublic inline fun TimeSource.Monotonic.measureTime(block: ()
-> Unit): Duration {\n contract {\n callsInPlace(block, InvocationKind.EXACTLY_ONCE)\n }\n val
mark = markNow()\n block()\n return mark.elapsedNow()\n}\n\n/**\n * Data class representing a result of executing an action, along with the duration of elapsed time interval.\n * The elapsed time is measured with the specified `this` [TimeSource.Monotonic] instance.\n */\n\n@SinceKotlin("1.3")\n@ExperimentalTime\npublic data class TimedValue<T>(val value: T, val duration:
Duration)\n\n/**\n * Executes the given function [block] and returns an instance of [TimedValue] class, containing
both\n * the result of the function execution and the duration of elapsed time interval.\n * The elapsed time is
measured with [TimeSource.Monotonic].\n */\n\n@SinceKotlin("1.3")\n@ExperimentalTime\npublic inline fun <T>
measureTimedValue(block: () -> T): TimedValue<T> {\n contract {\n callsInPlace(block,

```

```

InvocationKind.EXACTLY_ONCE)\n })\n return
TimeSource.Monotonic.measureTimedValue(block)\n}\n/**\n * Executes the given [block] and returns an
instance of [TimedValue] class, containing both\n * the result
of function execution and the duration of elapsed time interval.\n *\n * The elapsed time is measured with the
specified `this` [TimeSource] instance.\n *\n@SinceKotlin("1.3")\n@ExperimentalTime\npublic inline fun <T>
TimeSource.measureTimedValue(block: () -> T): TimedValue<T> {\n contract {\n callsInPlace(block,
InvocationKind.EXACTLY_ONCE)\n }\n\n val mark = markNow()\n val result = block()\n return
TimedValue(result, mark.elapsedNow())\n}\n}\n/**\n * Executes the given [block] and returns an instance of
[TimedValue] class, containing both\n * the result of function execution and the duration of elapsed time interval.\n
*\n * The elapsed time is measured with the specified `this` [TimeSource.Monotonic] instance.\n
*\n@SinceKotlin("1.7")\n@ExperimentalTime\npublic inline fun <T>
TimeSource.Monotonic.measureTimedValue(block: () -> T): TimedValue<T> {\n contract {\n
callsInPlace(block, InvocationKind.EXACTLY_ONCE)\n }\n\n val mark = markNow()\n
val result = block()\n return TimedValue(result, mark.elapsedNow())\n}\n}\n"/*\n * Copyright 2010-2020
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin\n\nimport
kotlin.coroutines.*\nimport kotlin.coroutines.intrinsics.*\nimport
kotlin.native.concurrent.SharedImmutable\n\n/**\n * Defines deep recursive function that keeps its stack on the
heap,\n * which allows very deep recursive computations that do not use the actual call stack.\n * To initiate a call to
this deep recursive function use its [invoke] function.\n * As a rule of thumb, it should be used if recursion goes
deeper than a thousand calls.\n *\n * The [DeepRecursiveFunction] takes one parameter of type [T] and returns a
result of type [R].\n * The [block] of code defines the body of a recursive function. In this block\n *
[callRecursive][DeepRecursiveScope.callRecursive]
function can be used to make a recursive call\n * to the declared function. Other instances of
[DeepRecursiveFunction] can be called\n * in this scope with `callRecursive` extension, too.\n *\n * For example,
take a look at the following recursive tree class and a deeply\n * recursive instance of this tree with 100K nodes:\n
*\n * ```\n * class Tree(val left: Tree? = null, val right: Tree? = null)\n * val deepTree = generateSequence(Tree()) {
Tree(it) }.take(100_000).last()\n * ```\n * A regular recursive function can be defined to compute a depth of a
tree:\n * ```\n * fun depth(t: Tree?): Int =\n * if (t == null) 0 else max(depth(t.left), depth(t.right)) + 1\n *
println(depth(deepTree)) // StackOverflowError\n * ```\n * If this `depth` function is called for a `deepTree` it
produces `StackOverflowError` because of deep recursion.\n * However, the `depth` function can be rewritten using
`DeepRecursiveFunction` in the following way, and then\n * it successfully computes
[depth(deepTree)][DeepRecursiveFunction.invoke] expression:\n * ```\n * val depth =
DeepRecursiveFunction<Tree?, Int> { t ->\n * if (t == null) 0 else max(callRecursive(t.left),
callRecursive(t.right)) + 1\n * }\n * println(depth(deepTree)) // Ok\n * ```\n * Deep recursive functions can also
mutually call each other using a heap for the stack via\n * [callRecursive][DeepRecursiveScope.callRecursive]
extension. For example, the\n * following pair of mutually recursive functions computes the number of tree nodes at
even depth in the tree.\n * ```\n * val mutualRecursion = object {\n * val even:
DeepRecursiveFunction<Tree?, Int> = DeepRecursiveFunction { t ->\n * if (t == null) 0 else
odd.callRecursive(t.left) + odd.callRecursive(t.right) + 1\n * }\n * val odd: DeepRecursiveFunction<Tree?,
Int> = DeepRecursiveFunction { t ->\n * if (t == null) 0 else even.callRecursive(t.left) +
even.callRecursive(t.right)\n * }\n * }\n * ```\n *
@param [T] the function parameter type.\n * @param [R] the function result type.\n * @param block the function
body.\n *\n@SinceKotlin("1.7")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic class
DeepRecursiveFunction<T, R>(\n internal val block: suspend DeepRecursiveScope<T, R>.(T) -> R)\n}\n/**\n *
Initiates a call to this deep recursive function, forming a root of the call tree.\n *\n * This operator should not be
used from inside of [DeepRecursiveScope] as it uses the call stack slot for\n * initial recursive invocation. From
inside of [DeepRecursiveScope] use\n * [callRecursive][DeepRecursiveScope.callRecursive].\n

```





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if (UNDEFINED_RESULT == result) {\n // call \"function\" with \"value\" using \"cont\" as completion\n val r = try {\n // This is block.startCoroutine(this, value, cont)\n function.startCoroutineUninterceptedOrReturn(this, value, cont)\n } catch (e: Throwable) {\n cont.resumeWithException(e)\n continue\n }\n // If the function returns without suspension -- calls its continuation\n immediately\n if (r != COROUTINE_SUSPENDED)\n cont.resume(r as R)\n } else\n {\n // we returned from a crossFunctionCompletion trampoline -- call resume here\n this.result =\n UNDEFINED_RESULT // reset result back\n cont.resumeWith(result)\n }\n}\n}\n}\n}"/*\n * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code\n is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n// Auto-generated\n file. DO NOT\n\nEDIT!\n\n@file:kotlin.jvm.JvmName(\"NumbersKt\")\n@file:kotlin.jvm.JvmMultifileClass\npackage\nkotlin\nimport kotlin.math.sign\n/** Divides this value by the other value, flooring the result to an integer that is\n closer to negative infinity. */\n@SinceKotlin(\"1.5\")\n@kotlin.internal.InlineOnly\npublic\n inline fun Byte.floorDiv(other: Byte): Int = \n this.toInt().floorDiv(other.toInt())\n/**\n * Calculates the\n remainder of flooring division of this value by the other value.\n * The result is either zero or has the same sign\n as the _divisor_ and has the absolute value less than the absolute value of the divisor.\n */\n@SinceKotlin(\"1.5\")\n@kotlin.internal.InlineOnly\npublic inline fun Byte.mod(other: Byte): Byte = \n this.toInt().mod(other.toInt()).toByte()\n/**\n * Divides this value by the other value, flooring the result to an integer\n that is closer to negative infinity. */\n@SinceKotlin(\"1.5\")\n@kotlin.internal.InlineOnly\npublic inline fun\n Byte.floorDiv(other: Short): Int = \n this.toInt().floorDiv(other.toInt())\n/**\n * Calculates the remainder of\n flooring division of this value by the other value.\n * The result is either zero or has the same sign as the\n _divisor_ and has the absolute value less than the\n absolute value of the divisor.\n */\n@SinceKotlin(\"1.5\")\n@kotlin.internal.InlineOnly\npublic inline fun\n Byte.mod(other: Short): Short = \n this.toInt().mod(other.toInt()).toShort()\n/**\n * Divides this value by the other\n value, flooring the result to an integer that is closer to negative infinity.\n */\n@SinceKotlin(\"1.5\")\n@kotlin.internal.InlineOnly\npublic inline fun Byte.floorDiv(other: Int): Int = \n this.toInt().floorDiv(other)\n/**\n * Calculates the remainder of flooring division of this value by the other\n value.\n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the\n absolute value of the divisor.\n */\n@SinceKotlin(\"1.5\")\n@kotlin.internal.InlineOnly\npublic inline fun\n Byte.mod(other: Int): Int = \n this.toInt().mod(other)\n/**\n * Divides this value by the other value, flooring the\n result to an integer that is closer to negative infinity.\n */\n@SinceKotlin(\"1.5\")\n@kotlin.internal.InlineOnly\npublic inline\n fun Byte.floorDiv(other: Long): Long = \n this.toLong().floorDiv(other)\n/**\n * Calculates the remainder of\n flooring division of this value by the other value.\n * The result is either zero or has the same sign as the\n _divisor_ and has the absolute value less than the absolute value of the divisor.\n */\n@SinceKotlin(\"1.5\")\n@kotlin.internal.InlineOnly\npublic inline fun Byte.mod(other: Long): Long = \n this.toLong().mod(other)\n/**\n * Divides this value by the other value, flooring the result to an integer that is closer\n to negative infinity. */\n@SinceKotlin(\"1.5\")\n@kotlin.internal.InlineOnly\npublic inline fun Short.floorDiv(other:\n Byte): Int = \n this.toInt().floorDiv(other.toInt())\n/**\n * Calculates the remainder of flooring division of this\n value by the other value.\n * The result is either zero or has the same sign as the _divisor_ and has the absolute\n value less than the absolute value of the divisor.\n */\n@SinceKotlin(\"1.5\")\n@kotlin.internal.InlineOnly\npublic\n inline fun Short.mod(other: Byte): Byte = \n this.toInt().mod(other.toInt()).toByte()\n/**\n * Divides this value by\n the other value, flooring the result to an integer that is closer to negative infinity.\n */\n@SinceKotlin(\"1.5\")\n@kotlin.internal.InlineOnly\npublic inline fun Short.floorDiv(other: Short): Int = \n this.toInt().floorDiv(other.toInt())\n/**\n * Calculates the remainder of flooring division of this value by the other\n value.\n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the\n absolute value of the divisor.\n */\n@SinceKotlin(\"1.5\")\n@kotlin.internal.InlineOnly\npublic inline fun

```

Short.mod(other: Short): Short = \n this.toInt().mod(other.toInt()).toShort()\n\n\*\* Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Short.floorDiv(other: Int): Int = \n this.toInt().floorDiv(other)\n\n**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the absolute value of the divisor.\n *\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Short.mod(other: Int): Int = \n this.toInt().mod(other)\n\n**\n Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Short.floorDiv(other: Long): Long = \n this.toLong().floorDiv(other)\n\n**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the absolute value of the divisor.\n *\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Short.mod(other: Long):
```

```
Long = \n this.toLong().mod(other)\n\n**\n Divides this value by the other value, flooring the result to an integer that is closer to negative infinity. *\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Int.floorDiv(other: Byte): Int = \n this.floorDiv(other.toInt())\n\n**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the absolute value of the divisor.\n
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Int.mod(other: Byte): Byte = \n this.mod(other.toInt()).toByte()\n\n**\n Divides this value by the other value, flooring the result to an integer that is closer to negative infinity. *\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Int.floorDiv(other: Short): Int = \n this.floorDiv(other.toInt())\n\n**\n * Calculates the remainder of flooring division of
```

```
this value by the other value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the absolute value of the divisor.\n
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Int.mod(other: Short): Short = \n this.mod(other.toInt()).toShort()\n\n**\n Divides this value by the other value, flooring the result to an integer that is closer to negative infinity. *\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Int.floorDiv(other: Int): Int {\n var q = this / other\n if (this xor other < 0 && q * other != this) q--\n return q\n}\n\n**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the absolute value of the divisor.\n *\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Int.mod(other: Int): Int {\n val r = this
```

```
% other\n return r + (other and (((r xor other) and (r or -r)) shr 31))\n}\n\n**\n Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Int.floorDiv(other: Long): Long = \n this.toLong().floorDiv(other)\n\n**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the absolute value of the divisor.\n *\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Int.mod(other: Long): Long = \n this.toLong().mod(other)\n\n**\n Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Long.floorDiv(other: Byte): Long = \n this.floorDiv(other.toLong())\n\n**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the absolute value of the divisor.\n
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Long.mod(other: Byte): Byte = \n this.mod(other.toLong()).toByte()\n\n**\n Divides this value by the other value, flooring the result to an integer that is closer to negative infinity. *\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun
```

Long.floorDiv(other: Short): Long = \n this.floorDiv(other.toLong())\n\n/\*\*\n \* Calculates the remainder of flooring division of this value by the other value.\n \* \n \* The result is either zero or has the same sign as the \_divisor\_ and has the absolute value less than the absolute value of the divisor.\n

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Long.mod(other: Short): Short = \n this.mod(other.toLong()).toShort()\n\n/**
```

Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Long.floorDiv(other: Int): Long = \n this.floorDiv(other.toLong())\n\n/**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the absolute value of the divisor.\n
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Long.mod(other: Int): Int = \n this.mod(other.toLong()).toInt()\n\n/** Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Long.floorDiv(other: Long): Long {\n var q = this / other\n if (this xor other < 0 && q * other != this) q--\n return q}\n\n/**\n * Calculates the remainder
```

of flooring division of this value by the other value.\n \* \n \* The result is either zero or has the same sign as the \_divisor\_ and has the absolute value less than the absolute value of the divisor.\n

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Long.mod(other: Long): Long {\n val r = this % other\n return r + (other and (((r xor other) and (r or -r)) shr 63))}\n\n/**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the absolute value of the divisor.\n * \n * If the result cannot be represented exactly, it is rounded to the nearest representable number. In this case the absolute value of the result can be less than or _equal to_ the absolute value of the divisor.\n
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Float.mod(other: Float): Float {\n val r = this % other\n
```

```
return if (r != 0.0.toFloat() && r.sign != other.sign) r + other else r}\n\n/**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the absolute value of the divisor.\n * \n * If the result cannot be represented exactly, it is rounded to the nearest representable number. In this case the absolute value of the result can be less than or _equal to_ the absolute value of the divisor.\n
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Float.mod(other: Double): Double = \n this.toDouble().mod(other)\n\n/**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the absolute value of the divisor.\n * \n * If the result cannot be represented exactly, it is rounded to the nearest representable
```

number. In this case the absolute value of the result can be less than or \_equal to\_ the absolute value of the divisor.\n

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Double.mod(other: Float):
```

```
Double = \n this.mod(other.toDouble())\n\n/**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the absolute value of the divisor.\n * \n * If the result cannot be represented exactly, it is rounded to the nearest representable number. In this case the absolute value of the result can be less than or _equal to_ the absolute value of the divisor.\n
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Double.mod(other:
```

```
Double): Double {\n val r = this % other\n return if (r != 0.0 && r.sign != other.sign) r + other else
```

```
r}\n\n", "/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming
```

Language contributors.\n \* Use of this source code is governed by the Apache 2.0 license that can be found in the

```
license/LICENSE.txt file.\n *\n\npackage kotlin\n\nimport kotlin.internal.InlineOnly\n\n/**\n * Returns a hash code value for the object or zero if the object is `null`.\n * \n * @see Any.hashCode\n
```

```
\n@SinceKotlin("1.3")\n@InlineOnly\npublic inline fun Any?.hashCode(): Int = this?.hashCode() ?: 0\n\n", "/\n *
```

```

Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is
governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage
kotlin\n\n/**\n * Represents a version of the Kotlin standard library.\n * [major], [minor] and [patch] are integer
components of a version,\n * they must be non-negative and not greater than 255
([MAX_COMPONENT_VALUE]).\n *\n * @constructor Creates a version from all three components.\n
*\n */\n@SinceKotlin("1.1")\npublic class KotlinVersion(val
 major: Int, val minor: Int, val patch: Int) : Comparable<KotlinVersion> {\n /**\n * Creates a version from
[major] and [minor] components, leaving [patch] component zero.\n *\n */\n public constructor(major: Int, minor:
Int) : this(major, minor, 0)\n\n private val version = versionOf(major, minor, patch)\n\n private fun
versionOf(major: Int, minor: Int, patch: Int): Int {\n require(major in 0..MAX_COMPONENT_VALUE &&
minor in 0..MAX_COMPONENT_VALUE && patch in 0..MAX_COMPONENT_VALUE) {\n "\nVersion
components are out of range: $major.$minor.$patch"\n }\n return major.shl(16) + minor.shl(8) + patch\n
}\n\n /**\n * Returns the string representation of this version\n *\n */\n override fun toString(): String =
"\n$major.$minor.$patch"\n\n override fun equals(other: Any?): Boolean {\n if (this === other) return true\n
val otherVersion = (other as? KotlinVersion) ?: return false\n return this.version == otherVersion.version\n
}\n\n override fun hashCode(): Int = version\n\n override fun compareTo(other: KotlinVersion): Int = version
- other.version\n\n /**\n * Returns `true` if this version is not less than the version specified\n * with the
provided [major] and [minor] components.\n *\n */\n public fun isAtLeast(major: Int, minor: Int): Boolean = //
this.version >= versionOf(major, minor, 0)\n this.major > major || (this.major == major &&\n
this.minor >= minor)\n\n /**\n * Returns `true` if this version is not less than the version specified\n * with
the provided [major], [minor] and [patch] components.\n *\n */\n public fun isAtLeast(major: Int, minor: Int, patch:
Int): Boolean = // this.version >= versionOf(major, minor, patch)\n this.major > major || (this.major == major
&&\n (this.minor > minor || this.minor == minor &&\n this.patch >= patch))\n\n companion object {\n /**\n
 * Maximum value a version component can have, a constant value 255.\n *\n */\n // NOTE: Must be
placed before CURRENT because its initialization requires this field being initialized in JS\n public const val
MAX_COMPONENT_VALUE = 255\n\n /**\n * Returns the current version of the Kotlin standard
library.\n *\n */\n @kotlin.jvm.JvmField\n public val CURRENT: KotlinVersion =
KotlinVersionCurrentValue.get()\n }\n\n // this class is ignored during classpath normalization when
considering whether to recompile dependencies in Kotlin build\n\n private object KotlinVersionCurrentValue {\n @kotlin.jvm.JvmStatic\n fun get(): KotlinVersion = KotlinVersion(1, 7, 10) // value is written here automatically
during build\n },"/\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n *
Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n */\n@file:kotlin.jvm.JvmName("LateinitKt")\n@file:Suppress("unused")\n\npackage
kotlin\n\nimport kotlin.internal.InlineOnly\nimport kotlin.internal.AccessibleLateinitPropertyLiteral\nimport
kotlin.reflect.KProperty0\n\n/**\n * Returns `true` if this lateinit property has been assigned a value, and `false`
otherwise.\n * Cannot be used in an inline function, to avoid binary compatibility issues.\n
*\n */\n@SinceKotlin("1.2")\n@InlineOnly\ninline val @receiver:AccessibleLateinitPropertyLiteral
KProperty0<*>.isInitialized: Boolean\n get() = throw NotImplementedError("Implementation is
intrinsic")\n},"/\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n *
Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n */\n@file:kotlin.jvm.JvmName("LazyKt")\n@file:kotlin.jvm.JvmMultifileClass\n\npackage kotlin\n\nimport
kotlin.reflect.KProperty\n\n/**\n * Represents a value with lazy initialization.\n
*\n * To create an instance of [Lazy] use the [lazy] function.\n *\n */\npublic interface Lazy<out T> {\n /**\n *
Gets the lazily initialized value of the current Lazy instance.\n * Once the value was initialized it must not change
during the rest of lifetime of this Lazy instance.\n *\n */\n public val value: T\n\n /**\n * Returns `true` if a
value for this Lazy instance has been already initialized, and `false` otherwise.\n * Once this function has returned
`true` it stays `true` for the rest of lifetime of this Lazy instance.\n *\n */\n public fun isInitialized():

```

```

Boolean\n}\n\n/**\n * Creates a new instance of the [Lazy] that is already initialized with the specified [value].\n * \npublic fun <T> lazyOf(value: T): Lazy<T> = InitializedLazyImpl(value)\n\n/**\n * An extension to delegate a read-only property of type [T] to an instance of [Lazy].\n * \n * This extension allows to use instances of Lazy for property delegation.\n * `val property: String\n * by lazy { initializer }`\n * \n@kotlin.internal.InlineOnly\npublic inline operator fun <T>\nLazy<T>.getValue(thisRef: Any?, property: KProperty<*>): T = value\n\n/**\n * Specifies how a [Lazy] instance synchronizes initialization among multiple threads.\n * \npublic enum class LazyThreadSafetyMode {\n\n /**\n * Locks are used to ensure that only a single thread can initialize the [Lazy] instance.\n * \n SYNCHRONIZED,\n\n /**\n * Initializer function can be called several times on concurrent access to uninitialized [Lazy] instance value,\n * but only the first returned value will be used as the value of [Lazy] instance.\n * \n PUBLICATION,\n\n /**\n * No locks are used to synchronize an access to the [Lazy] instance value; if the instance is accessed from multiple threads, its behavior is undefined.\n * \n * This mode should not be used unless the [Lazy] instance is guaranteed never to be initialized from more than one thread.\n * \n\n NONE,\n}\n\n\ninternal object UNINITIALIZED_VALUE\n\n// internal to be called from lazy in JS\ninternal class UnsafeLazyImpl<out T>(initializer: () -> T) : Lazy<T>, Serializable {\n\n private var initializer: (() -> T)? = initializer\n\n private var _value: Any? = UNINITIALIZED_VALUE\n\n override val value: T\n\n get() {\n\n if (_value === UNINITIALIZED_VALUE) {\n\n _value = initializer!()\n\n initializer = null\n\n }\n\n @Suppress("UNCHECKED_CAST")\n\n return _value as T\n\n }\n\n override fun\nisInitialized(): Boolean = _value !== UNINITIALIZED_VALUE\n\n override fun toString(): String = if\n(isInitialized()) value.toString() else "Lazy value not initialized yet."\n\n private fun writeReplace(): Any =\nInitializedLazyImpl(value)\n}\n\n\ninternal class InitializedLazyImpl<out T>(override val value: T) : Lazy<T>,\nSerializable {\n\n override fun isInitialized(): Boolean = true\n\n override fun\ntoString(): String = value.toString()\n}\n\n", "/*\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming\nLanguage contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the\nlicense/LICENSE.txt file.\n\n *\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("NumbersKt")\npackage kotlin\n\n/**\n * Counts the number of set bits in the binary representation of this [Int] number.\n\n *\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun\nInt.countOneBits(): Int\n\n/**\n * Counts the number of consecutive most significant bits that are zero in the binary\nrepresentation of this [Int] number.\n\n *\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun\nInt.countLeadingZeroBits(): Int\n\n/**\n * Counts the number of consecutive least significant bits that are zero in\nthe binary representation of this [Int] number.\n\n *\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic\nexpect fun Int.countTrailingZeroBits(): Int\n\n/**\n * Returns a number having a single bit set in the position of the\nmost significant set bit of this [Int] number,\n * or zero, if this number is zero.\n\n *\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun\nInt.takeHighestOneBit(): Int\n\n/**\n * Returns a number having a single bit set in the position of the least\nsignificant set bit of this [Int] number,\n * or zero, if this number is zero.\n\n *\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun\nInt.takeLowestOneBit(): Int\n\n/**\n * Rotates the binary representation of this [Int] number left by the specified\n[bitCount] number of bits.\n * The most significant bits pushed out from the left side reenter the number as the least\nsignificant bits on the right side.\n * Rotating the number left by a negative bit count is the same as rotating it\nright by the negated bit\n\n count:\n * `number.rotateLeft(-n) == number.rotateRight(n)`\n * Rotating by a multiple of [Int.SIZE_BITS]\n(32) returns the same number, or more generally\n * `number.rotateLeft(n) == number.rotateLeft(n % 32)`\n\n *\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun

```

Int.rotateLeft(bitCount: Int): Int\n\n/\*\*\n \* Rotates the binary representation of this [Int] number right by the specified [bitCount] number of bits.\n \* The least significant bits pushed out from the right side reenter the number as the most significant bits on the left side.\n \*\n \* Rotating the number right by a negative bit count is the same as rotating it left by the negated bit count:\n \* `number.rotateRight(-n) == number.rotateLeft(n)`\n \*\n \* Rotating by a multiple of [Int.SIZE\_BITS] (32) returns the same number, or more generally\n \* `number.rotateRight(n) == number.rotateRight(n % 32)`\n

\*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun Int.rotateRight(bitCount: Int): Int\n\n/\*\*\n \* Counts the number of set bits in the binary representation of this [Long] number.\n \*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun Long.countOneBits(): Int\n\n/\*\*\n \* Counts the number of consecutive most significant bits that are zero in the binary representation of this [Long] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun Long.countLeadingZeroBits(): Int\n\n/\*\*\n \* Counts the number of consecutive least significant bits that are zero in the binary representation of this [Long] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun Long.countTrailingZeroBits(): Int\n\n/\*\*\n \* Returns a number having a single bit set in the position of the most significant set bit of this [Long] number,\n \* or zero, if this number is zero.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun Long.takeHighestOneBit(): Long\n\n/\*\*\n \* Returns a number having a single bit set in the position of the least significant set bit of this [Long] number,\n \* or zero, if this number is zero.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun Long.takeLowestOneBit(): Long\n\n/\*\*\n \* Rotates the binary representation of this [Long] number left by the specified [bitCount] number of bits.\n \* The most significant bits pushed out from the left side reenter the number as the least significant bits on the right side.\n \*\n \* Rotating the number left by a negative bit count is the same as rotating it right by the negated bit count:\n \* `number.rotateLeft(-n) == number.rotateRight(n)`\n \*\n \* Rotating by a multiple of [Long.SIZE\_BITS] (64) returns the same number, or more generally\n \* `number.rotateLeft(n) == number.rotateLeft(n % 64)`\n

\*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun Long.rotateLeft(bitCount: Int): Long\n\n/\*\*\n \* Rotates the binary representation of this [Long] number right by the specified [bitCount] number of bits.\n \* The least significant bits pushed out from the right side reenter the number as the most significant bits on the left side.\n \*\n \* Rotating the number right by a negative bit count is the same as rotating it left by the negated bit count:\n \* `number.rotateRight(-n) == number.rotateLeft(n)`\n \*\n \* Rotating by a multiple of [Long.SIZE\_BITS] (64) returns the same number, or more generally\n \* `number.rotateRight(n) == number.rotateRight(n % 64)`\n

\*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun Long.rotateRight(bitCount: Int): Long\n\n/\*\*\n \* Counts the number of set bits in the binary representation of this [Byte] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun Byte.countOneBits(): Int = (toInt() and 0xFF).countOneBits()\n\n/\*\*\n \* Counts the number of consecutive most significant bits that are zero in the binary representation of this [Byte] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun Byte.countLeadingZeroBits(): Int = (toInt() and 0xFF).countLeadingZeroBits() - (Int.SIZE\_BITS - Byte.SIZE\_BITS)\n\n/\*\*\n \* Counts the number of consecutive least significant bits that are zero in the binary representation of this [Byte] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun Byte.countTrailingZeroBits(): Int = (toInt() or 0x100).countTrailingZeroBits()\n\n/\*\*\n \* Returns a number having a single bit set in the position of the most significant set bit of this [Byte] number,\n \* or zero, if this

number is zero.\n

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
```

```
c\ninline fun Byte.takeHighestOneBit(): Byte = (toInt() and 0xFF).takeHighestOneBit().toByte()\n\n/**\n * Returns a number having a single bit set in the position of the least significant set bit of this [Byte] number,\n * or zero, if this number is zero.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic\n\ninline fun Byte.takeLowestOneBit(): Byte = toInt().takeLowestOneBit().toByte()\n\n/**\n * Rotates the binary representation of this [Byte] number left by the specified [bitCount] number of bits.\n * The most significant bits pushed out from the left side reenter the number as the least significant bits on the right side.\n * Rotating the number left by a negative bit count is the same as rotating it right by the negated bit count:\n * `number.rotateLeft(-n) == number.rotateRight(n)`\n * Rotating by a multiple of [Byte.SIZE_BITS] (8) returns the same number, or more generally\n * `number.rotateLeft(n)\n == number.rotateLeft(n % 8)`\n
```

```
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun\n\nByte.rotateLeft(bitCount: Int): Byte =\n (toInt().shl(bitCount and 7) or (toInt() and 0xFF).ushr(8 - (bitCount and 7))).toByte()\n\n/**\n * Rotates the binary representation of this [Byte] number right by the specified [bitCount] number of bits.\n * The least significant bits pushed out from the right side reenter the number as the most significant bits on the left side.\n * Rotating the number right by a negative bit count is the same as rotating it left by the negated bit count:\n * `number.rotateRight(-n) == number.rotateLeft(n)`\n * Rotating by a multiple of [Byte.SIZE_BITS] (8) returns the same number, or more generally\n * `number.rotateRight(n) ==\n number.rotateRight(n % 8)`\n
```

```
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun\n\nByte.rotateRight(bitCount: Int): Byte =\n (toInt().shl(8 - (bitCount and 7)) or (toInt() and 0xFF).ushr(bitCount and 7)).toByte()\n\n/**\n * Counts the number of set bits in the binary representation of this [Short] number.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic\n\ninline fun Short.countOneBits(): Int = (toInt() and 0xFFFF).countOneBits()\n\n/**\n * Counts the number of consecutive most significant bits that are zero in the binary representation of this [Short] number.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic\n\ninline fun Short.countLeadingZeroBits(): Int =\n (toInt() and 0xFFFF).countLeadingZeroBits() - (Int.SIZE_BITS - Short.SIZE_BITS)\n\n/**\n * Counts the number of consecutive least significant bits that are zero in the binary representation of this [Short] number.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic\n\ninline fun Short.countTrailingZeroBits(): Int = (toInt()\n or 0x10000).countTrailingZeroBits()\n\n/**\n * Returns a number having a single bit set in the position of the most significant set bit of this [Short] number,\n * or zero, if this number is zero.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic\n\ninline fun Short.takeHighestOneBit(): Short = (toInt() and 0xFFFF).takeHighestOneBit().toShort()\n\n/**\n * Returns a number having a single bit set in the position of the least significant set bit of this [Short] number,\n * or zero, if this number is zero.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic\n\ninline fun Short.takeLowestOneBit(): Short = toInt().takeLowestOneBit().toShort()\n\n/**\n * Rotates the binary representation of this [Short] number left by the specified [bitCount] number of bits.\n * The most significant bits pushed out from the left side reenter the number as the least significant bits on the right side.\n * Rotating the number left by a negative bit count is the same as rotating it right by the negated bit count:\n * `number.rotateLeft(-n) == number.rotateRight(n)`\n * Rotating by a multiple of [Short.SIZE_BITS] (16) returns the same number, or more generally\n * `number.rotateLeft(n) == number.rotateLeft(n % 16)`\n
```



```

*\/n@SinceKotlin("1.6")\/n@WasExperimental(ExperimentalStdlibApi::class)\/npublic fun
Short.rotateLeft(bitCount: Int): Short =\/n (toInt().shl(bitCount and 15) or (toInt() and 0xFFFF).ushr(16 - (bitCount
and 15))).toShort()\/n\/n**\/n * Rotates the binary representation of this [Short] number right by the specified
[bitCount] number of bits.\/n * The least significant bits pushed out from the right side reenter the number as the
most significant bits on the left side.\/n *\/n * Rotating the number right by a negative bit count is the same as rotating
it left by the negated bit count:\/n * `number.rotateRight(-n) == number.rotateLeft(n)`\/n *\/n * Rotating
by a multiple of [Short.SIZE_BITS] (16) returns the same number, or more generally\/n * `number.rotateRight(n)
== number.rotateRight(n % 16)`\/n
*\/n@SinceKotlin("1.6")\/n@WasExperimental(ExperimentalStdlibApi::class)\/npublic fun
Short.rotateRight(bitCount: Int): Short =\/n (toInt().shl(16 - (bitCount and 15)) or (toInt() and
0xFFFF).ushr(bitCount and 15)).toShort()\/n", /*\/n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming
Language contributors.\/n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\/n *\/n\/npackage kotlin\/nimport kotlin.internal.RequireKotlin\/nimport
kotlin.internal.RequireKotlinVersionKind\/n\/n@kotlin.internal.InlineOnly\/n@SinceKotlin("1.2")\/n@Suppress("IN
VISIBLE_MEMBER", "INVISIBLE_REFERENCE")\/n@RequireKotlin("1.2.30", level =
DeprecationLevel.HIDDEN, versionKind = RequireKotlinVersionKind.COMPILER_VERSION)\/npublic inline fun
<R> suspend(noinline block: suspend () -> R): suspend () ->
R = block\/n", /*\/n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\/n * Use
of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\/n
*\/n\/n@file:kotlin.jvm.JvmName("TuplesKt")\/n\/npackage kotlin\/n\/n**\/n * Represents a generic pair of two
values.\/n *\/n * There is no meaning attached to values in this class, it can be used for any purpose.\/n * Pair exhibits
value semantics, i.e. two pairs are equal if both components are equal.\/n *\/n * An example of decomposing it into
values:\/n * @sample samples.misc.Tuples.pairDestructuring\/n *\/n * @param A type of the first value.\/n * @param
B type of the second value.\/n * @property first First value.\/n * @property second Second value.\/n * @constructor
Creates a new instance of Pair.\/n *\/npublic data class Pair<out A, out B>(\/n public val first: A,\/n public val
second: B) : Serializable {\/n\/n /*\/n * Returns string representation of the [Pair]
including its [first] and [second] values.\/n *\/n public override fun toString(): String = "$first,
$second)"\/n}\/n\/n**\/n * Creates a tuple of type [Pair] from this and [that].\/n *\/n * This can be useful for creating
[Map] literals with less noise, for example:\/n * @sample samples.collections.Maps.instantiation.mapFromPairs\/n
*\/npublic infix fun <A, B> A.to(that: B): Pair<A, B> = Pair(this, that)\/n\/n**\/n * Converts this pair into a list.\/n *
@sample samples.misc.Tuples.pairToList\/n *\/npublic fun <T> Pair<T, T>.toList(): List<T> = listOf(first,
second)\/n\/n**\/n * Represents a triad of values\/n *\/n * There is no meaning attached to values in this class, it can be
used for any purpose.\/n * Triple exhibits value semantics, i.e. two triples are equal if all three components are
equal.\/n * An example of decomposing it into values:\/n * @sample samples.misc.Tuples.tripleDestructuring\/n *\/n *
@param A type of the first value.\/n * @param B type of the second value.\/n * @param C type
of the third value.\/n * @property first First value.\/n * @property second Second value.\/n * @property third Third
value.\/n *\/npublic data class Triple<out A, out B, out C>(\/n public val first: A,\/n public val second: B,\/n
public val third: C) : Serializable {\/n\/n /*\/n * Returns string representation of the [Triple] including its [first],
[second] and [third] values.\/n *\/n public override fun toString(): String = "$first, $second,
$third)"\/n}\/n\/n**\/n * Converts this triple into a list.\/n * @sample samples.misc.Tuples.tripleToList\/n *\/npublic
fun <T> Triple<T, T, T>.toList(): List<T> = listOf(first, second, third)\/n", /*\/n * Copyright 2010-2022 JetBrains
s.r.o. and Kotlin Programming Language contributors.\/n * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.\/n *\/n\/n// Auto-generated file. DO NOT
EDIT!\/n\/npackage kotlin.ranges\/n\/n\/nimport kotlin.internal.*\/n\/n**\/n * A range of values of
type `UInt`.\/n *\/n@SinceKotlin("1.5")\/n@WasExperimental(ExperimentalUnsignedTypes::class)\/npublic class
UIntRange(start: UInt, endInclusive: UInt) : UIntProgression(start, endInclusive, 1), ClosedRange<UInt> {\/n
override val start: UInt get() = first\/n override val endInclusive: UInt get() = last\/n\/n override fun contains(value:
UInt): Boolean = first <= value && value <= last\/n\/n /*\/n * Checks if the range is empty.\/n *\/n * The

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range is empty if its start value is greater than the end value.\n *\n override fun isEmpty(): Boolean = first >
last\n\n override fun equals(other: Any?): Boolean =\n other is UIntRange && (isEmpty() &&
other.isEmpty()) ||\n first == other.first && last == other.last)\n\n override fun hashCode(): Int =\n if (isEmpty()) -1 else (31 * first.toInt() + last.toInt())\n\n override fun toString(): String = \"$first..$last\"\n\n companion object {\n /** An empty range of values of type
UInt. *\n public val EMPTY: UIntRange = UIntRange(UInt.MAX_VALUE, UInt.MIN_VALUE)\n
}\n}\n\n/** A progression of values of type `UInt`. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic open class
UIntProgression\n\n internal constructor(\n start: UInt,\n endInclusive: UInt,\n step: Int\n) : Iterable<UInt> {\n
 init {\n if (step == 0.toInt()) throw kotlin.IllegalArgumentException("Step must be non-zero.")\n if (step
== Int.MIN_VALUE) throw kotlin.IllegalArgumentException("Step must be greater than Int.MIN_VALUE to
avoid overflow on negation.")\n }\n\n /**\n * The first element in the progression.\n *\n public val first:
UInt = start\n\n /**\n * The last element in the progression.\n *\n public val last: UInt =
getProgressionLastElement(start, endInclusive, step)\n\n /**\n * The step of the progression.\n *\n public
val step: Int = step\n\n final override fun
iterator(): Iterator<UInt> = UIntProgressionIterator(first, last, step)\n\n /** \n * Checks if the progression is
empty.\n \n * Progression with a positive step is empty if its first element is greater than the last element.\n *
Progression with a negative step is empty if its first element is less than the last element.\n *\n public open fun
isEmpty(): Boolean = if (step > 0) first > last else first < last\n\n override fun equals(other: Any?): Boolean =\n other
is UIntProgression && (isEmpty() && other.isEmpty()) ||\n first == other.first && last == other.last
&& step == other.step)\n\n override fun hashCode(): Int =\n if (isEmpty()) -1 else (31 * (31 * first.toInt() +
last.toInt()) + step.toInt())\n\n override fun toString(): String = if (step > 0) \"$first..$last step $step\" else \"$first
downTo $last step ${-step}\"\n\n companion object {\n /**\n * Creates UIntProgression within the
specified bounds
of a closed range.\n * The progression starts with the [rangeStart] value and goes toward the [rangeEnd]
value not excluding it, with the specified [step].\n * In order to go backwards the [step] must be negative.\n
*\n * [step] must be greater than `Int.MIN_VALUE` and not equal to zero.\n *\n public fun
fromClosedRange(rangeStart: UInt, rangeEnd: UInt, step: Int): UIntProgression = UIntProgression(rangeStart,
rangeEnd, step)\n }\n}\n\n/** An iterator over a progression of values of type `UInt`. \n * @property step the
number by which the value is incremented on each step.\n\n@SinceKotlin("1.3")\nprivate class
UIntProgressionIterator(first: UInt, last: UInt, step: Int) : Iterator<UInt> {\n private val finalElement = last\n private var
hasNext: Boolean = if (step > 0) first <= last else first >= last\n private val step = step.toInt() // use 2-
complement math for negative steps\n private var next = if (hasNext)
first else finalElement\n\n override fun hasNext(): Boolean = hasNext\n\n override fun next(): UInt {\n val
value = next\n if (value == finalElement) {\n if (!hasNext) throw kotlin.NoSuchElementException()\n
 hasNext = false\n } else {\n next += step\n }\n return value\n }\n}\n\n"/\n * Copyright
2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed
by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n\n\n// Auto-generated file. DO NOT
EDIT!\n\npackage kotlin.ranges\n\nimport kotlin.internal.*\n\n/** A range of values of type `ULong`. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic class
ULongRange(start: ULong, endInclusive: ULong) : ULongProgression(start, endInclusive, 1),
ClosedRange<ULong> {\n override val start: ULong get() = first\n override val endInclusive: ULong
get() = last\n\n override fun contains(value: ULong): Boolean = first <= value && value <= last\n\n /** \n *
Checks if the range is empty.\n \n * The range is empty if its start value is greater than the end value.\n *\n
 override fun isEmpty(): Boolean = first > last\n\n override fun equals(other: Any?): Boolean =\n other
is ULongRange && (isEmpty() && other.isEmpty()) ||\n first == other.first && last == other.last)\n\n override
fun hashCode(): Int =\n if (isEmpty()) -1 else (31 * (first xor (first shr 32)).toInt() + (last xor (last shr
32)).toInt())\n\n override fun toString(): String = \"$first..$last\"\n\n companion object {\n /** An empty

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range of values of type ULong. */n public val EMPTY: ULongRange = ULongRange(ULong.MAX_VALUE,
ULong.MIN_VALUE)n }n}n/n/**n * A progression of values of type `ULong`.n
*/n@SinceKotlin("1.5")n@WasExperimental(ExperimentalUnsignedTypes::class)npublic open
class ULongProgression\ninternal constructor(\n start: ULong,\n endInclusive: ULong,\n step: Long\n):
Iterable<ULong> {\n init {\n if (step == 0.toLong()) throw kotlin.IllegalArgumentException("\nStep must be
non-zero.\n")\n if (step == Long.MIN_VALUE) throw kotlin.IllegalArgumentException("\nStep must be greater
than Long.MIN_VALUE to avoid overflow on negation.\n")\n }n\n /**n * The first element in the
progression.\n */n public val first: ULong = start\n /**n * The last element in the progression.\n */n
public val last: ULong = getProgressionLastElement(start, endInclusive, step)\n /**n * The step of the
progression.\n */n public val step: Long = step\n\n final override fun iterator(): Iterator<ULong> =
ULongProgressionIterator(first, last, step)\n /**n * Checks if the progression is empty.\n */n *
Progression with a positive step is empty if its first element is greater than the last
element.\n * Progression with a negative step is empty if its first element is less than the last element.\n */n
public open fun isEmpty(): Boolean = if (step > 0) first > last else first < last\n\n override fun equals(other: Any?):
Boolean =\n other is ULongProgression && (isEmpty() && other.isEmpty()) ||\n first == other.first
&& last == other.last && step == other.step)\n\n override fun hashCode(): Int =\n if (isEmpty()) -1 else (31 *
(31 * (first xor (first shr 32)).toInt() + (last xor (last shr 32)).toInt()) + (step xor (step ushr 32)).toInt())\n\n
override fun toString(): String = if (step > 0) "$first..$last step $step" else "$first downTo $last step ${-step}"\n\n
companion object {\n /**n * Creates ULongProgression within the specified bounds of a closed
range.\n */n * The progression starts with the [rangeStart] value and goes toward the [rangeEnd] value not
excluding it, with the specified [step].n
 * In order to go backwards the [step] must be negative.\n */n * [step] must be greater than
`Long.MIN_VALUE` and not equal to zero.\n */n public fun fromClosedRange(rangeStart: ULong,
rangeEnd: ULong, step: Long): ULongProgression = ULongProgression(rangeStart, rangeEnd, step)\n
}n}n/n/**n * An iterator over a progression of values of type `ULong`.n * @property step the number by which
the value is incremented on each step.n */n@SinceKotlin("1.3")nprivate class ULongProgressionIterator(first:
ULong, last: ULong, step: Long) : Iterator<ULong> {\n private val finalElement = last\n private var hasNext:
Boolean = if (step > 0) first <= last else first >= last\n private val step = step.toULong() // use 2-complement math
for negative steps\n private var next = if (hasNext) first else finalElement\n override fun hasNext(): Boolean =
hasNext\n\n override fun next(): ULong {\n val value = next\n if (value
== finalElement) {\n if (!hasNext) throw kotlin.NoSuchElementException()\n hasNext = false\n }
else {\n next += step\n }\n return value\n }n}n/n"/**n * Copyright 2010-2021 JetBrains s.r.o.
and Kotlin Programming Language contributors.n * Use of this source code is governed by the Apache 2.0 license
that can be found in the license/LICENSE.txt file.n */n\npackage kotlin.math\n/**n * Returns the smaller of two
values.\n */n@SinceKotlin("1.5")n@WasExperimental(ExperimentalUnsignedTypes::class)n@kotlin.internal.InlineOnly\npublic inline fun min(a: UInt, b: UInt): UInt {\n return minOf(a, b)\n}\n/n/**n * Returns the smaller of two
values.\n */n@SinceKotlin("1.5")n@WasExperimental(ExperimentalUnsignedTypes::class)n@kotlin.internal.InlineOnly\npublic inline fun min(a: ULong, b: ULong): ULong {\n return minOf(a, b)\n}\n/n/**n * Returns the greater of
two values.\n */n@SinceKotlin("1.5")n@WasExperimental(ExperimentalUnsignedTypes::class)n@kotlin.internal.InlineOnly\npublic
inline fun max(a: UInt, b: UInt): UInt {\n return maxOf(a, b)\n}\n/n/**n * Returns the greater of two values.\n */n@SinceKotlin("1.5")n@WasExperimental(ExperimentalUnsignedTypes::class)n@kotlin.internal.InlineOnly\npublic inline fun max(a: ULong, b: ULong): ULong {\n return maxOf(a, b)\n}\n"/**n * Copyright 2010-2021
JetBrains s.r.o. and Kotlin Programming Language contributors.n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n

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*\n\n@file:kotlin.jvm.JvmName("\UNumbersKt")\npackage kotlin\n\n/**\n * Counts the number of set bits in the
binary representation of this [UInt] number.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UInt.countOneBits(): Int =
toInt().countOneBits()\n\n/**\n * Counts the number of consecutive most significant
bits that are zero in the binary representation of this [UInt] number.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UInt.countLeadingZeroBits(): Int =
toInt().countLeadingZeroBits()\n\n/**\n * Counts the number of consecutive least significant bits that are zero in the
binary representation of this [UInt] number.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UInt.countTrailingZeroBits(): Int =
toInt().countTrailingZeroBits()\n\n/**\n * Returns a number having a single bit set in the position of the most
significant set bit of this [UInt] number,\n * or zero, if this number is zero.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UInt.takeHighestOneBit():
UInt = toInt().takeHighestOneBit().toUInt()\n\n/**\n * Returns a number having a single bit set in the position of
the least significant set bit of this [UInt] number,\n * or zero, if this number is zero.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UInt.takeLowestOneBit(): UInt =
toInt().takeLowestOneBit().toUInt()\n\n/**\n * Rotates the binary representation of this [UInt] number left by the
specified [bitCount] number of bits.\n * The most significant bits pushed out from the left side reenter the number as
the least significant bits on the right side.\n * Rotating the number left by a negative bit count is the same as
rotating it right by the negated bit count:\n * `number.rotateLeft(-n) == number.rotateRight(n)`\n * Rotating by a
multiple of [UInt.SIZE_BITS] (32) returns the same number, or more generally\n * `number.rotateLeft(n) ==
number.rotateLeft(n %
32)`\n *\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun UInt.rotateLeft(bitCount: Int):
UInt = toInt().rotateLeft(bitCount).toUInt()\n\n/**\n * Rotates the binary representation of this [UInt] number
right by the specified [bitCount] number of bits.\n * The least significant bits pushed out from the right side reenter
the number as the most significant bits on the left side.\n * Rotating the number right by a negative bit count is
the same as rotating it left by the negated bit count:\n * `number.rotateRight(-n) == number.rotateLeft(n)`\n *
Rotating by a multiple of [UInt.SIZE_BITS] (32) returns the same number, or more generally\n *
`number.rotateRight(n) == number.rotateRight(n % 32)`\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun UInt.rotateRight(bitCount: Int):
UInt = toInt().rotateRight(bitCount).toUInt()\n\n/**\n * Counts the number of set bits in the binary representation
of this [ULong] number.\n *\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun ULong.countOneBits(): Int =
toLong().countOneBits()\n\n/**\n * Counts the number of consecutive most significant bits that are zero in the
binary representation of this [ULong] number.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun ULong.countLeadingZeroBits(): Int =
toLong().countLeadingZeroBits()\n\n/**\n * Counts the number of consecutive least significant bits that are zero
in the binary representation of this [ULong] number.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline

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fun ULong.countTrailingZeroBits(): Int = toLong().countTrailingZeroBits()\n\n**\n * Returns a number having a
single bit set in the position of the most significant set bit of this [ULong] number,\n * or zero, if this number is
zero.\n * \n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n @kotlin.internal.InlineOnly\n public inline fun ULong.takeHighestOneBit(): ULong
= toLong().takeHighestOneBit().toULong()\n\n**\n * Returns a number having a single bit set in the position of the
least significant set bit of this [ULong] number,\n * or zero, if this number is zero.\n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n @kotlin.internal.InlineOnly\n public inline fun ULong.takeLowestOneBit(): ULong
= toLong().takeLowestOneBit().toULong()\n\n**\n * Rotates the binary representation of this [ULong] number left
by the specified [bitCount] number of bits.\n * The most significant
bits pushed out from the left side reenter the number as the least significant bits on the right side.\n * \n * Rotating
the number left by a negative bit count is the same as rotating it right by the negated bit count:\n *
`number.rotateLeft(-n) == number.rotateRight(n)`\n * \n * Rotating by a multiple of [ULong.SIZE_BITS] (64)
returns the same number, or more generally\n * `number.rotateLeft(n) == number.rotateLeft(n % 64)`\n
*\n @SinceKotlin("1.6")\n @WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n @kotlin.internal.InlineOnly\n public inline fun ULong.rotateLeft(bitCount:
Int): ULong = toLong().rotateLeft(bitCount).toULong()\n\n**\n * Rotates the binary representation of this [ULong]
number right by the specified [bitCount] number of bits.\n * The least significant bits pushed out from the right side
reenter the number as the most significant bits on the left side.\n * \n * Rotating the number right by a negative bit
count is the same as rotating it
left by the negated bit count:\n * `number.rotateRight(-n) == number.rotateLeft(n)`\n * \n * Rotating by a multiple
of [ULong.SIZE_BITS] (64) returns the same number, or more generally\n * `number.rotateRight(n) ==
number.rotateRight(n % 64)`\n * \n @SinceKotlin("1.6")\n @WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n @kotlin.internal.InlineOnly\n public inline fun ULong.rotateRight(bitCount:
Int): ULong = toLong().rotateRight(bitCount).toULong()\n\n**\n * Counts the number of set bits in the binary
representation of this [UByte] number.\n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n @kotlin.internal.InlineOnly\n public inline fun UByte.countOneBits(): Int =
toUInt().countOneBits()\n\n**\n * Counts the number of consecutive most significant bits that are zero in the
binary representation of this [UByte] number.\n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n @kotlin.internal.InlineOnly\n public inline fun UByte.countLeadingZeroBits(): Int
= toByte().countLeadingZeroBits()\n\n**\n * Counts the number of consecutive least significant bits that are zero
in the binary representation of this [UByte] number.\n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n @kotlin.internal.InlineOnly\n public inline fun UByte.countTrailingZeroBits(): Int =
toByte().countTrailingZeroBits()\n\n**\n * Returns a number having a single bit set in the position of the most
significant set bit of this [UByte] number,\n * or zero, if this number is zero.\n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n @kotlin.internal.InlineOnly\n public inline fun UByte.takeHighestOneBit(): UByte
= toInt().takeHighestOneBit().toUByte()\n\n**\n * Returns a number having a single bit set in the position of the
least significant set bit
of this [UByte] number,\n * or zero, if this number is zero.\n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n @kotlin.internal.InlineOnly\n public inline fun UByte.takeLowestOneBit(): UByte =
toInt().takeLowestOneBit().toUByte()\n\n**\n * Rotates the binary representation of this [UByte] number left by
the specified [bitCount] number of bits.\n * The most significant bits pushed out from the left side reenter the
number as the least significant bits on the right side.\n * \n * Rotating the number left by a negative bit count is the

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same as rotating it right by the negated bit count:  
`number.rotateLeft(-n) == number.rotateRight(n)`  
 Rotating by a multiple of [UByte.SIZE\_BITS] (8) returns the same number, or more generally  
`number.rotateLeft(n) == number.rotateLeft(n % 8)`

`@SinceKotlin("1.6")@WasExperimental(ExperimentalStdlibApi::class, ExperimentalUnsignedTypes::class)`  
`@kotlin.internal.InlineOnly`  
`public inline fun UByte.rotateLeft(bitCount: Int): UByte = toByte().rotateLeft(bitCount).toUByte()`  
 Rotates the binary representation of this [UByte] number right by the specified [bitCount] number of bits. The least significant bits pushed out from the right side reenter the number as the most significant bits on the left side.  
 Rotating the number right by a negative bit count is the same as rotating it left by the negated bit count:  
`number.rotateRight(-n) == number.rotateLeft(n)`  
 Rotating by a multiple of [UByte.SIZE\_BITS] (8) returns the same number, or more generally  
`number.rotateRight(n) == number.rotateRight(n % 8)`

`@SinceKotlin("1.6")@WasExperimental(ExperimentalStdlibApi::class, ExperimentalUnsignedTypes::class)`  
`@kotlin.internal.InlineOnly`  
`public inline fun UByte.rotateRight(bitCount: Int): UByte = toByte().rotateRight(bitCount).toUByte()`  
 Counts the number of set bits in the binary representation of this [UShort]

`@SinceKotlin("1.5")@WasExperimental(ExperimentalUnsignedTypes::class, ExperimentalStdlibApi::class)`  
`@kotlin.internal.InlineOnly`  
`public inline fun UShort.countOneBits(): Int = toUInt().countOneBits()`  
 Counts the number of consecutive most significant bits that are zero in the binary representation of this [UShort] number.

`@SinceKotlin("1.5")@WasExperimental(ExperimentalUnsignedTypes::class, ExperimentalStdlibApi::class)`  
`@kotlin.internal.InlineOnly`  
`public inline fun UShort.countLeadingZeroBits(): Int = toShort().countLeadingZeroBits()`  
 Counts the number of consecutive least significant bits that are zero in the binary representation of this [UShort] number.

`@SinceKotlin("1.5")@WasExperimental(ExperimentalUnsignedTypes::class, ExperimentalStdlibApi::class)`  
`@kotlin.internal.InlineOnly`  
`public inline fun UShort.countTrailingZeroBits(): Int = toShort().countTrailingZeroBits()`  
 Returns a number having a single bit set in the position of the most significant set bit of this [UShort] number, or zero, if this number is zero.

`@SinceKotlin("1.5")@WasExperimental(ExperimentalUnsignedTypes::class, ExperimentalStdlibApi::class)`  
`@kotlin.internal.InlineOnly`  
`public inline fun UShort.takeHighestOneBit(): UShort = toInt().takeHighestOneBit().toUShort()`  
 Returns a number having a single bit set in the position of the least significant set bit of this [UShort] number, or zero, if this number is zero.

`@SinceKotlin("1.5")@WasExperimental(ExperimentalUnsignedTypes::class, ExperimentalStdlibApi::class)`  
`@kotlin.internal.InlineOnly`  
`public inline fun UShort.takeLowestOneBit(): UShort = toInt().takeLowestOneBit().toUShort()`  
 Rotates the binary representation of this [UShort] number left by the specified [bitCount] number of bits. The most significant bits pushed out from the left side reenter the number as the least significant bits on the right side.  
 Rotating the number left by a negative bit count is the same as rotating it right by the negated bit count:  
`number.rotateLeft(-n) == number.rotateRight(n)`  
 Rotating by a multiple of [UShort.SIZE\_BITS] (16) returns the same number, or more generally  
`number.rotateLeft(n) == number.rotateLeft(n % 16)`

`@SinceKotlin("1.6")@WasExperimental(ExperimentalStdlibApi::class, ExperimentalUnsignedTypes::class)`  
`@kotlin.internal.InlineOnly`  
`public inline fun UShort.rotateLeft(bitCount: Int): UShort = toShort().rotateLeft(bitCount).toUShort()`  
 Rotates the binary representation of this [UShort] number right by the specified [bitCount] number of bits. The least significant bits pushed out from the right side reenter the number as the most significant bits on the left side.  
 Rotating the number right by a negative bit count is the same as rotating it left by the negated bit count:  
`number.rotateRight(-n) == number.rotateLeft(n)`  
 Rotating by a multiple of [UShort.SIZE\_BITS] (16) returns the same number, or more generally  
`number.rotateRight(n) == number.rotateRight(n % 16)`

```

ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun UShort.rotateRight(bitCount:
Int): UShort = toShort().rotateRight(bitCount).toUShort()\n", "/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n *^\n\npackage kotlin.internal\n\n// (a - b) mod c\nprivate fun
differenceModulo(a: UInt, b: UInt, c: UInt): UInt {\n val ac = a % c\n val bc = b % c\n return if (ac >= bc) ac -
bc else ac - bc + c}\n\nprivate fun differenceModulo(a: ULong, b: ULong, c: ULong): ULong {\n val ac = a %
c\n val bc = b % c\n return if (ac >= bc) ac - bc else ac - bc + c}\n\n/**\n * Calculates the final element
of a bounded arithmetic progression, i.e. the last element of the progression which is in the range\n * from [start] to
[end] in case of a positive [step], or from [end] to [start] in case of a negative\n * [step].\n * No validation on
passed parameters is performed. The given parameters should satisfy the condition:\n * - either `step > 0` and
`start <= end`,\n * - or `step < 0` and `start >= end`.\n * @param start first element of the progression\n *
@param end ending bound for the progression\n * @param step increment, or difference of successive elements in
the progression\n * @return the final element of the progression\n * @suppress\n
*/\n\n@PublishedApi\n@SinceKotlin("1.3")\ninternal fun getProgressionLastElement(start: UInt, end: UInt, step:
Int): UInt = when {\n step > 0 -> if (start >= end) end else end - differenceModulo(end, start, step.toUInt())\n
step < 0 -> if (start <= end) end else end + differenceModulo(start, end, (-step).toUInt())\n else -> throw
kotlin.IllegalArgumentException("Step is zero.")\n}\n\n/**\n * Calculates the final element of a bounded
arithmetic progression, i.e. the last element of the progression which is in the range\n * from [start] to [end] in case
of a positive [step], or from [end] to [start] in case of a negative\n * [step].\n * No validation on passed
parameters is performed. The given parameters should satisfy the condition:\n * - either `step > 0` and `start <=
end`,\n * - or `step < 0` and `start >= end`.\n * @param start first element of the progression\n * @param end
ending bound for the progression\n * @param step increment, or difference of successive elements in the
progression\n * @return the final element of the progression\n * @suppress\n
*/\n\n@PublishedApi\n@SinceKotlin("1.3")\ninternal fun getProgressionLastElement(start: ULong, end: ULong,
step: Long): ULong = when {\n step > 0 -> if (start >= end) end else end - differenceModulo(end, start,
step.toULong())\n step <
0 -> if (start <= end) end else end + differenceModulo(start, end, (-step).toULong())\n else -> throw
kotlin.IllegalArgumentException("Step is zero.")\n}\n", "/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n *^\n\n@file:kotlin.jvm.JvmName("UStringsKt") // string representation
of unsigned numbers\n\npackage kotlin.text\n\n/**\n * Returns a string representation of this [Byte] value in the
specified [radix].\n * @throws IllegalArgumentException when [radix] is not a valid radix for number to string
conversion.\n
*/\n\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly
\npublic /*inline*/ fun UByte.toString(radix: Int): String = this.toInt().toString(radix)\n\n/**\n * Returns a string
representation of this [Short] value in the specified [radix].\n * @throws IllegalArgumentException
when [radix] is not a valid radix for number to string conversion.\n
*/\n\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly
\npublic /*inline*/ fun UShort.toString(radix: Int): String = this.toInt().toString(radix)\n\n\n/**\n * Returns a string
representation of this [Int] value in the specified [radix].\n * @throws IllegalArgumentException when [radix] is
not a valid radix for number to string conversion.\n
*/\n\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly
\npublic /*inline*/ fun UInt.toString(radix: Int): String = this.toLong().toString(radix)\n\n\n/**\n * Returns a string
representation of this [Long] value in the specified [radix].\n * @throws IllegalArgumentException when [radix]
is not a valid radix for number to string conversion.\n
*/\n\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
ULong.toString(radix: Int):

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String = ulongToString(this.toLong(), checkRadix(radix))\n\n/**\n * Parses the string as a signed [UByte]
number and returns the result.\n * @throws NumberFormatException if the string is not a valid representation of a
number.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
String.toUByte(): UByte = toUByteOrNull() ?: numberFormatError(this)\n\n/**\n * Parses the string as a signed
[UByte] number and returns the result.\n * @throws NumberFormatException if the string is not a valid
representation of a number.\n * @throws IllegalArgumentException when [radix] is not a valid radix for string to
number conversion.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic
fun String.toUByte(radix: Int): UByte = toUByteOrNull(radix) ?: numberFormatError(this)\n\n/**\n * Parses the
string as a [UShort] number and returns the result.\n * @throws NumberFormatException if the string is not a valid
representation
of a number.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
String.toUShort(): UShort = toUShortOrNull() ?: numberFormatError(this)\n\n/**\n * Parses the string as a
[UShort] number and returns the result.\n * @throws NumberFormatException if the string is not a valid
representation of a number.\n * @throws IllegalArgumentException when [radix] is not a valid radix for string to
number conversion.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic
fun String.toUShort(radix: Int): UShort = toUShortOrNull(radix) ?: numberFormatError(this)\n\n/**\n * Parses the
string as an [UInt] number and returns the result.\n * @throws NumberFormatException if the string is not a valid
representation of a number.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun String.toUInt():
UInt = toUIntOrNull() ?: numberFormatError(this)\n\n/**\n * Parses the string as an [UInt] number and
returns the result.\n * @throws NumberFormatException if the string is not a valid representation of a number.\n *
@throws IllegalArgumentException when [radix] is not a valid radix for string to number conversion.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
String.toUInt(radix: Int): UInt = toUIntOrNull(radix) ?: numberFormatError(this)\n\n/**\n * Parses the string as a
[ULong] number and returns the result.\n * @throws NumberFormatException if the string is not a valid
representation of a number.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun String.toULong():
ULong = toULongOrNull() ?: numberFormatError(this)\n\n/**\n * Parses the string as a [ULong] number and
returns the result.\n * @throws NumberFormatException if the string is not a valid representation of a number.\n *
@throws IllegalArgumentException when [radix] is not a valid radix for string to number conversion.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic
fun String.toULong(radix: Int): ULong = toULongOrNull(radix) ?: numberFormatError(this)\n\n/**\n * Parses the
string as an [UByte] number and returns the result\n * or `null` if the string is not a valid representation of
a number.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
String.toUByteOrNull(): UByte? = toUByteOrNull(radix = 10)\n\n/**\n * Parses the string as an [UByte] number
and returns the result\n * or `null` if the string is not a valid representation of a number.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
String.toUByteOrNull(radix: Int): UByte? {
 val int = this.toUIntOrNull(radix) ?: return null
 if (int >
 UByte.MAX_VALUE) return null
 return int.toUByte()\n}\n\n/**\n * Parses the string
as an [UShort] number and returns the result\n * or `null` if the string is not a valid representation of a number.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
String.toUShortOrNull(): UShort? = toUShortOrNull(radix = 10)\n\n/**\n * Parses the string as an [UShort] number
and returns the result\n * or `null` if the string is not a valid representation of a number.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
String.toUShortOrNull(radix: Int): UShort? {
 val int = this.toUIntOrNull(radix) ?: return null
 if (int >
 UShort.MAX_VALUE) return null
 return int.toUShort()\n}\n\n/**\n * Parses the string as an [UInt] number and

```



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returns the result\n * or `null` if the string is not a valid representation of a number.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic
fun String.toUIntOrNull(): UInt? = toUIntOrNull(radix = 10)\n\n**\n * Parses the string as an [UInt] number and
returns the result\n * or `null` if the string is not a valid representation of a number.\n *\n * @throws
IllegalArgumentException when [radix] is not a valid radix for string to number conversion.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
String.toUIntOrNull(radix: Int): UInt? {\n checkRadix(radix)\n\n val length = this.length\n if (length == 0)
return null\n\n val limit: UInt = UInt.MAX_VALUE\n val start: Int\n\n val firstChar = this[0]\n if (firstChar
< '0') {\n if (length == 1 || firstChar != '+') return null\n start = 1\n } else {\n start = 0\n }\n\n val
limitForMaxRadix = 119304647u // limit / 36\n\n var limitBeforeMul = limitForMaxRadix\n val uradix =
radix.toUInt()\n var result = 0u\n for (i in start until length) {\n val
digit = digitOf(this[i], radix)\n\n if (digit < 0) return null\n if (result > limitBeforeMul) {\n if
(limitBeforeMul == limitForMaxRadix) {\n limitBeforeMul = limit / uradix\n\n if (result >
limitBeforeMul) {\n return null\n }\n } else {\n return null\n }\n }\n\n result *= uradix\n\n val beforeAdding = result\n result += digit.toUInt()\n if (result <
beforeAdding) return null // overflow has happened\n }\n\n return result\n}\n\n**\n * Parses the string as an
[ULong] number and returns the result\n * or `null` if the string is not a valid representation of a number.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
String.toULongOrNull(): ULong? = toULongOrNull(radix = 10)\n\n**\n * Parses the string as an [ULong] number
and returns the result\n * or `null` if the string is not a
valid representation of a number.\n *\n * @throws IllegalArgumentException when [radix] is not a valid radix for
string to number conversion.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
String.toULongOrNull(radix: Int): ULong? {\n checkRadix(radix)\n\n val length = this.length\n if (length ==
0) return null\n\n val limit: ULong = ULong.MAX_VALUE\n val start: Int\n\n val firstChar = this[0]\n if
(firstChar < '0') {\n if (length == 1 || firstChar != '+') return null\n start = 1\n } else {\n start = 0\n }\n\n val
limitForMaxRadix = 512409557603043100uL // limit / 36\n\n var limitBeforeMul =
limitForMaxRadix\n val uradix = radix.toULong()\n var result = 0uL\n for (i in start until length) {\n val
digit = digitOf(this[i], radix)\n\n if (digit < 0) return null\n if (result > limitBeforeMul) {\n if
(limitBeforeMul == limitForMaxRadix) {\n limitBeforeMul = limit / uradix\n\n if (result >
limitBeforeMul) {\n return null\n }\n } else {\n return null\n }\n }\n\n result *= uradix\n\n val beforeAdding =
result\n result += digit.toUInt()\n if (result < beforeAdding) return null // overflow has happened\n }\n\n return result\n}\n\n**\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n *
Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n@file:Suppress("INVISIBLE_REFERENCE", "INVISIBLE_MEMBER")\npackage kotlin\n\nimport
kotlin.annotation.AnnotationTarget.*\nimport kotlin.internal.RequireKotlin\nimport
kotlin.internal.RequireKotlinVersionKind\n\n**\n * Marks the API that is dependent on the experimental unsigned
types, including those types themselves.\n *\n * Usages of such API will be
reported as warnings unless an explicit opt-in with\n * the [OptIn] annotation, e.g.
`@OptIn(ExperimentalUnsignedTypes::class)`\n * or with the ` -opt-in=kotlin.ExperimentalUnsignedTypes `
compiler option is given.\n *\n * It's recommended to propagate the experimental status to the API that depends on
unsigned types by annotating it with this annotation.\n *\n@RequiresOptIn(level =
RequiresOptIn.Level.WARNING)\n@MustBeDocumented\n@Target(CLASS, ANNOTATION_CLASS,
PROPERTY, FIELD, LOCAL_VARIABLE, VALUE_PARAMETER, CONSTRUCTOR, FUNCTION,
PROPERTY_GETTER, PROPERTY_SETTER,
TYPEALIAS)\n@Retention(AnnotationRetention.BINARY)\n@RequireKotlin("1.2.50", versionKind =
RequireKotlinVersionKind.COMPILER_VERSION)\npublic annotation class ExperimentalUnsignedTypes\n", "/*\n

```

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is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass\n\n@file:kotlin.jvm.JvmName("MathKt")\n\n\npackage
kotlin.math\n\n\n// constants, can't use them from nativeMath as they are not constants there\n\n/** Ratio of the
circumference of a circle to its diameter, approximately 3.14159. *\n\n@SinceKotlin("1.2")\n\npublic const val PI:
Double = 3.141592653589793\n\n/** Base of the natural logarithms, approximately 2.71828.
*\n\n@SinceKotlin("1.2")\n\npublic const val E: Double = 2.718281828459045\n\n// region =====
Double Math =====\n\n\n/** Computes the sine of the angle [x]
given in radians.\n\n * \n\n * Special cases:\n\n * - `sin(NaN|+Inf|-Inf)` is `NaN`\n\n *\n\n\n@SinceKotlin("1.2")\n\npublic
expect fun sin(x: Double): Double\n\n\n/** Computes the cosine of the angle [x] given in radians.\n\n * \n\n * Special
cases:\n\n * - `cos(NaN|+Inf|-Inf)` is `NaN`\n\n *\n\n\n@SinceKotlin("1.2")\n\npublic expect fun cos(x: Double):
Double\n\n\n/** Computes the tangent of the angle [x] given in radians.\n\n * \n\n * Special
cases:\n\n * - `tan(NaN|+Inf|-Inf)` is `NaN`\n\n *\n\n\n@SinceKotlin("1.2")\n\npublic expect fun tan(x: Double):
Double\n\n\n/** Computes the arc sine of the value [x];\n\n * the returned value is an angle in the range from `-PI/2`
to `PI/2` radians.\n\n * \n\n * Special cases:\n\n * - `asin(x)` is `NaN`, when `abs(x) > 1` or x is `NaN`\n\n
*\n\n\n@SinceKotlin("1.2")\n\npublic expect fun asin(x: Double): Double\n\n\n/** Computes the arc cosine of the
value [x];\n\n * the returned value is an angle in the range from `0.0` to `PI` radians.\n\n * \n\n * Special cases:\n\n
* - `acos(x)` is `NaN`, when `abs(x) > 1` or x is `NaN`\n\n *\n\n\n@SinceKotlin("1.2")\n\npublic expect fun acos(x: Double):
Double\n\n\n/** Computes the arc tangent of the value [x];\n\n * the returned value is an angle in the range from `-
PI/2` to `PI/2` radians.\n\n * \n\n * Special cases:\n\n * - `atan(NaN)` is `NaN`\n\n *\n\n\n@SinceKotlin("1.2")\n\npublic
expect fun atan(x: Double): Double\n\n\n/** Returns the angle `theta` of the polar coordinates
`(r, theta)` that correspond\n\n * to the rectangular coordinates `(x, y)` by computing the arc tangent of the value [y] /
[x];\n\n * the returned value is an angle in the range from `-PI` to `PI` radians.\n\n * \n\n * Special cases:\n\n * - `atan2(0.0,
0.0)` is `0.0`\n\n * - `atan2(0.0, x)` is `0.0` for `x > 0` and `PI` for `x < 0`\n\n * - `atan2(-0.0, x)` is `-0.0` for `x >
0` and `-PI` for `x < 0`\n\n * - `atan2(y, +Inf)` is `0.0` for `0 < y < +Inf` and `-0.0` for `-Inf < y < 0`\n\n * - `atan2(y, -
Inf)` is `PI` for `0 < y < +Inf` and `-PI` for `-Inf < y < 0`\n\n * - `atan2(y, 0.0)` is `PI/2` for `y > 0` and `-PI/2` for `y
< 0`\n\n * - `atan2(+Inf, x)` is `PI/2` for finite `x`\n\n * - `atan2(-Inf, x)` is `-PI/2` for finite `x`\n\n * - `atan2(NaN,
x)` and `atan2(y, NaN)` is `NaN`\n\n *\n\n\n@SinceKotlin("1.2")\n\npublic expect fun atan2(y: Double, x: Double):
Double\n\n\n/** Computes the hyperbolic sine of the value [x].\n\n * \n\n * Special cases:\n\n * - `sinh(NaN)` is
`NaN`\n\n * - `sinh(+Inf)`
is `+Inf`\n\n * - `sinh(-Inf)` is `-Inf`\n\n *\n\n\n@SinceKotlin("1.2")\n\npublic expect fun sinh(x: Double):
Double\n\n\n/** Computes the hyperbolic cosine of the value [x].\n\n * \n\n * Special cases:\n\n * - `cosh(NaN)` is
`NaN`\n\n * - `cosh(+Inf|-Inf)` is `+Inf`\n\n *\n\n\n@SinceKotlin("1.2")\n\npublic expect fun cosh(x: Double):
Double\n\n\n/** Computes the hyperbolic tangent of the value [x].\n\n * \n\n * Special cases:\n\n * - `tanh(NaN)` is
`NaN`\n\n * - `tanh(+Inf)` is `1.0`\n\n * - `tanh(-Inf)` is `-1.0`\n\n *\n\n\n@SinceKotlin("1.2")\n\npublic expect fun tanh(x:
Double): Double\n\n\n/** Computes the inverse hyperbolic sine of the value [x].\n\n * \n\n * The returned value is `y`
such that `sinh(y) == x`.\n\n * \n\n * Special cases:\n\n * - `asinh(NaN)` is `NaN`\n\n * - `asinh(+Inf)` is `+Inf`\n\n * -
`asinh(-Inf)` is `-Inf`\n\n *\n\n\n@SinceKotlin("1.2")\n\npublic expect fun asinh(x: Double): Double\n\n\n/** Computes
the inverse hyperbolic cosine of the value [x].\n\n * \n\n * The returned value is positive
`y` such that `cosh(y) == x`.\n\n * \n\n * Special cases:\n\n * - `acosh(NaN)` is `NaN`\n\n * - `acosh(x)` is `NaN` when `x
< 1`\n\n * - `acosh(+Inf)` is `+Inf`\n\n *\n\n\n@SinceKotlin("1.2")\n\npublic expect fun acosh(x: Double):
Double\n\n\n/** Computes the inverse hyperbolic tangent of the value [x].\n\n * \n\n * The returned value is `y` such
that `tanh(y) == x`.\n\n * \n\n * Special cases:\n\n * - `tanh(NaN)` is `NaN`\n\n * - `tanh(x)` is `NaN` when `x > 1` or `x <
-1`\n\n * - `tanh(1.0)` is `+Inf`\n\n * - `tanh(-1.0)` is `-Inf`\n\n *\n\n\n@SinceKotlin("1.2")\n\npublic expect fun atanh(x:
Double): Double\n\n\n/** Computes `sqrt(x^2 + y^2)` without intermediate overflow or underflow.\n\n * \n\n *
Special cases:\n\n * - returns `+Inf` if any of arguments is infinite\n\n * - returns `NaN` if any of arguments is `NaN`
and the other is not infinite\n\n *\n\n\n@SinceKotlin("1.2")\n\npublic expect fun hypot(x: Double, y: Double):
Double\n\n\n/** Computes the positive square root of the value [x].\n\n * \n\n * Special

```

cases:  $\sqrt{x}$  is NaN when  $x < 0$  or  $x$  is NaN

`@SinceKotlin("1.2")` public expect fun sqrt(x: Double): Double

`* Computes Euler's number e raised to the power of the value [x].`

Special cases:  $e^x$  is NaN  $e^{+\infty}$  is  $+\infty$   $e^{-\infty}$  is  $0.0$

`@SinceKotlin("1.2")` public expect fun exp(x: Double): Double

`* Computes exp(x) - 1.`

This function can be implemented to produce more precise result for [x] near zero.

Special cases:  $e^{pm1}$  is NaN  $e^{pm1(+\infty)}$  is  $+\infty$   $e^{pm1(-\infty)}$  is  $-1.0$

`@see [exp] function.`

`@SinceKotlin("1.2")` public expect fun expm1(x: Double): Double

`* Computes the logarithm of the value [x] to the given [base].`

Special cases:  $\log(x, b)$  is NaN if either  $x$  or  $b$  are NaN  $\log(x, b)$  is NaN when  $x < 0$  or  $b \leq 0$  or  $b == 1.0$   $\log(+\infty, +\infty)$  is NaN  $\log(+\infty, b)$  is  $+\infty$  for  $b > 1$  and  $-\infty$  for  $b < 1$   $\log(0.0, b)$  is  $-\infty$  for  $b > 1$  and  $+\infty$  for  $b < 1$

See also logarithm functions for common fixed bases: [ln], [log10] and [log2].

`@SinceKotlin("1.2")` public expect fun log(x: Double, base: Double): Double

`* Computes the natural logarithm (base E) of the value [x].`

Special cases:  $\ln(\text{NaN})$  is NaN  $\ln(x)$  is NaN when  $x < 0.0$   $\ln(+\infty)$  is  $+\infty$   $\ln(0.0)$  is  $-\infty$

`@SinceKotlin("1.2")` public expect fun ln(x: Double): Double

`* Computes the common logarithm (base 10) of the value [x].`

`@see [ln] function for special cases.`

`@SinceKotlin("1.2")` public expect fun log10(x: Double): Double

`* Computes the binary logarithm (base 2) of the value [x].`

`@see [ln] function for special cases.`

`@SinceKotlin("1.2")` public expect fun log2(x: Double): Double

`* Computes ln(x + 1).`

This function can be implemented to produce more precise result for [x] near zero.

Special cases:  $\ln1p(\text{NaN})$  is NaN  $\ln1p(x)$  is NaN where  $x < -1.0$   $\ln1p(-1.0)$  is  $-\infty$   $\ln1p(+\infty)$  is  $+\infty$

`@see [ln] function` `@see [expm1] function`

`@SinceKotlin("1.2")` public expect fun ln1p(x: Double): Double

`* Rounds the given value [x] to an integer towards positive infinity.`

`@return the smallest double value that is greater than or equal to the given value [x] and is a mathematical integer.`

Special cases:  $\text{ceil}(x)$  is  $x$  where  $x$  is NaN or  $+\infty$  or  $-\infty$  or already a mathematical integer.

`@SinceKotlin("1.2")` public expect fun ceil(x: Double): Double

`* Rounds the given value [x] to an integer towards negative infinity.`

`@return the largest double value that is smaller than or equal to the given value [x] and is a mathematical integer.`

Special cases:  $\text{floor}(x)$  is  $x$  where  $x$  is NaN or  $+\infty$  or  $-\infty$  or already a mathematical integer.

`@SinceKotlin("1.2")` public expect fun floor(x: Double): Double

`* Rounds the given value [x] to an integer towards zero.`

`@return the value [x] having its fractional part truncated.`

Special cases:  $\text{truncate}(x)$  is  $x$  where  $x$  is NaN or  $+\infty$  or  $-\infty$  or already a mathematical integer.

`@SinceKotlin("1.2")` public expect fun truncate(x: Double): Double

`* Rounds the given value [x] towards the closest integer with ties rounded towards even integer.`

Special cases:  $\text{round}(x)$  is  $x$  where  $x$  is NaN or  $+\infty$  or  $-\infty$  or already a mathematical integer.

`@SinceKotlin("1.2")` public expect fun round(x: Double): Double

`* Returns the absolute value of the given value [x].`

Special cases:  $\text{abs}(\text{NaN})$  is NaN

`@see absoluteValue extension property for [Double]`

`@SinceKotlin("1.2")` public expect fun abs(x: Double): Double

`* Returns the sign of the given value [x]:`

- $-1.0$  if the value is negative,
- zero if the value is zero,
- $1.0$  if the value is positive

Special case:  $\text{sign}(\text{NaN})$  is NaN

`@SinceKotlin("1.2")` public expect fun sign(x: Double): Double

`* Returns the smaller of two values.`

If either value is NaN, then the result is NaN.

`@SinceKotlin("1.2")` public expect fun min(a: Double, b: Double): Double

`* Returns the greater of two values.`

If either value is NaN, then the result is NaN.

`@SinceKotlin("1.2")` public expect fun max(a: Double, b: Double): Double

`* Raises this value to the power [x].`

Special cases:  $b.\text{pow}(0.0)$  is  $1.0$   $b.\text{pow}(1.0) == b$   $b.\text{pow}(\text{NaN})$  is NaN  $\text{NaN}.\text{pow}(x)$  is NaN for  $x \neq 0.0$   $b.\text{pow}(\infty)$  is NaN for  $\text{abs}(b) == 1.0$   $b.\text{pow}(x)$  is NaN for  $b < 0$  and  $x$  is finite and not an integer

`@SinceKotlin("1.2")` public expect fun Double.pow(x: Double): Double

`* Raises this value to the integer power [n].`

See the other overload of [pow] for details.

`@SinceKotlin("1.2")` public expect fun Double.pow(n: Int): Double

`* Returns the absolute`

value of this value.  
 \* Special cases:  
 - `NaN.absoluteValue` is `NaN`  
 @see abs function  
 \*  
 @SinceKotlin("1.2")\npublic expect val Double.absoluteValue: Double  
 \* Returns the sign of this value:  
 - `1.0` if the value is negative,  
 - zero if the value is zero,  
 - `1.0` if the value is positive  
 \*  
 Special case:  
 - `NaN.sign` is `NaN`  
 \*  
 @SinceKotlin("1.2")\npublic expect val Double.sign: Double  
 \* Returns this value with the sign bit same as of the [sign] value.  
 \* If [sign] is `NaN` the sign of the result is undefined.  
 \*  
 @SinceKotlin("1.2")\npublic expect fun Double.withSign(sign: Double): Double  
 \* Returns this value with the sign bit same as of the [sign] value.  
 \*  
 @SinceKotlin("1.2")\npublic expect fun Double.withSign(sign: Int): Double  
 \* Returns the ulp (unit in the last place) of this value.  
 \* An ulp is a positive distance between this value and the next nearest [Double] value larger in magnitude.  
 \*  
 Special Cases:  
 - `NaN.ulp` is `NaN`  
 - `x.ulp` is `+Inf` when `x` is `+Inf` or `-Inf`  
 - `0.0.ulp` is `Double.MIN\_VALUE`  
 \*  
 @SinceKotlin("1.2")\npublic expect val Double.ulp: Double  
 \* Returns the [Double] value nearest to this value in direction of positive infinity.  
 \*  
 @SinceKotlin("1.2")\npublic expect fun Double.nextUp(): Double  
 \* Returns the [Double] value nearest to this value in direction of negative infinity.  
 \*  
 @SinceKotlin("1.2")\npublic expect fun Double.nextDown(): Double  
 \* Returns the [Double] value nearest to this value in direction from this value towards  
 the value [to].  
 \*  
 Special cases:  
 - `x.nextTowards(y)` is `NaN` if either `x` or `y` are `NaN`  
 - `x.nextTowards(x) == x`  
 \*  
 @SinceKotlin("1.2")\npublic expect fun Double.nextTowards(to: Double): Double  
 \* Rounds this [Double] value to the nearest integer and converts the result to [Int].  
 \* Ties are rounded towards positive infinity.  
 \*  
 Special cases:  
 - `x.roundToInt() == Int.MAX\_VALUE` when `x > Int.MAX\_VALUE`  
 - `x.roundToInt() == Int.MIN\_VALUE` when `x < Int.MIN\_VALUE`  
 \*  
 @throws IllegalArgumentException when this value is `NaN`  
 \*  
 @SinceKotlin("1.2")\npublic expect fun Double.roundToInt(): Int  
 \* Rounds this [Double] value to the nearest integer and converts the result to [Long].  
 \* Ties are rounded towards positive infinity.  
 \*  
 Special cases:  
 - `x.roundToLong() == Long.MAX\_VALUE` when `x > Long.MAX\_VALUE`  
 - `x.roundToLong() == Long.MIN\_VALUE` when `x < Long.MIN\_VALUE`  
 \*  
 @throws IllegalArgumentException when this value is `NaN`  
 \*  
 @SinceKotlin("1.2")\npublic expect fun Double.roundToLong(): Long  
 \n\n// region ===== Float Math  
 =====  
 \* Computes the sine of the angle [x] given in radians.  
 \*  
 Special cases:  
 - `sin(NaN|+Inf|-Inf)` is `NaN`  
 \*  
 @SinceKotlin("1.2")\npublic expect fun sin(x: Float): Float  
 \* Computes the cosine of the angle [x] given in radians.  
 \*  
 Special cases:  
 - `cos(NaN|+Inf|-Inf)` is `NaN`  
 \*  
 @SinceKotlin("1.2")\npublic expect fun cos(x: Float): Float  
 \* Computes the tangent of the angle [x] given in radians.  
 \*  
 Special cases:  
 - `tan(NaN|+Inf|-Inf)` is `NaN`  
 \*  
 @SinceKotlin("1.2")\npublic expect fun tan(x: Float): Float  
 \* Computes the arc sine of the value [x];  
 \* the returned value is an angle in the range from  $-\pi/2$  to  $\pi/2$  radians.  
 \*  
 Special cases:  
 - `asin(x)` is `NaN`, when `abs(x) > 1` or  
 x is `NaN`  
 \*  
 @SinceKotlin("1.2")\npublic expect fun asin(x: Float): Float  
 \* Computes the arc cosine of the value [x];  
 \* the returned value is an angle in the range from  $0.0$  to  $\pi$  radians.  
 \*  
 Special cases:  
 - `acos(x)` is `NaN`, when `abs(x) > 1` or x is `NaN`  
 \*  
 @SinceKotlin("1.2")\npublic expect fun acos(x: Float): Float  
 \* Computes the arc tangent of the value [x];  
 \* the returned value is an angle in the range from  $-\pi/2$  to  $\pi/2$  radians.  
 \*  
 Special cases:  
 - `atan(NaN)` is `NaN`  
 \*  
 @SinceKotlin("1.2")\npublic expect fun atan(x: Float): Float  
 \* Returns the angle `theta` of the polar coordinates `(r, theta)` that correspond  
 to the rectangular coordinates `(x, y)` by computing the arc tangent of the value  $y / x$ ;  
 \* the returned value is an angle in the range from  $-\pi$  to  $\pi$  radians.  
 \*  
 Special cases:  
 - `atan2(0.0, 0.0)` is  $0.0$   
 - `atan2(0.0, x)` is  $0.0$  for  $x > 0$  and  $\pi$  for  $x < 0$   
 - `atan2(0.0, x)` is  $-0.0$  for  $x > 0$  and  $-\pi$  for  $x < 0$   
 - `atan2(y, +Inf)` is  $0.0$  for  $0 < y < +Inf$  and  $-0.0$  for  $-Inf < y < 0$   
 - `atan2(y, -Inf)` is  $\pi$  for  $0 < y < +Inf$  and  $-\pi$  for  $-Inf < y < 0$   
 - `atan2(0.0, y)` is  $\pi/2$  for  $y > 0$  and  $-\pi/2$  for  $y < 0$   
 - `atan2(+Inf, x)` is  $\pi/2$  for finite  $x$   
 - `atan2(-Inf, x)`

is  $-\pi/2$  for finite  $x$  \*  $-\text{atan2}(\text{NaN}, x)$  and  $\text{atan2}(y, \text{NaN})$  is  $\text{NaN}$  \* `@SinceKotlin("1.2")\npublic`  
`expect fun atan2(y: Float, x: Float): Float\n\n/**\n * Computes the hyperbolic sine of the value [x].\n * Special`  
`cases:\n * - \sinh(\text{NaN}) is \text{NaN}\n * - \sinh(+Inf) is +Inf\n * - \sinh(-Inf) is -Inf\n`  
`*\n @SinceKotlin("1.2")\npublic expect fun sinh(x: Float): Float\n\n/**\n * Computes the hyperbolic cosine of the`  
`value [x].\n * Special cases:\n * - \cosh(\text{NaN}) is \text{NaN}\n * - \cosh(+Inf|-Inf) is +Inf\n`  
`*\n @SinceKotlin("1.2")\npublic expect fun cosh(x: Float): Float\n\n/**\n`  
`* Computes the hyperbolic tangent of the value [x].\n * Special cases:\n * - \tanh(\text{NaN}) is \text{NaN}\n * -`  
`\tanh(+Inf) is 1.0\n * - \tanh(-Inf) is -1.0\n *\n @SinceKotlin("1.2")\npublic expect fun tanh(x: Float):`  
`Float\n\n/**\n * Computes the inverse hyperbolic sine of the value [x].\n * The returned value is `y` such that`  
`\sinh(y) == x.\n * Special cases:\n * - \asinh(\text{NaN}) is \text{NaN}\n * - \asinh(+Inf) is +Inf\n * - \asinh(-Inf)`  
`is -Inf\n *\n @SinceKotlin("1.2")\npublic expect fun asinh(x: Float): Float\n\n/**\n * Computes the inverse`  
`hyperbolic cosine of the value [x].\n * The returned value is positive `y` such that \cosh(y) == x.\n * Special`  
`cases:\n * - \acosh(\text{NaN}) is \text{NaN}\n * - \acosh(x) is \text{NaN} when `x < 1`\n * - \acosh(+Inf) is +Inf\n`  
`*\n @SinceKotlin("1.2")\npublic expect fun acosh(x: Float): Float\n\n/**\n * Computes the inverse hyperbolic`  
`tangent of the value [x].\n * The returned value is `y` such that`  
`\tanh(y) == x.\n * Special cases:\n * - \tanh(\text{NaN}) is \text{NaN}\n * - \tanh(x) is \text{NaN} when `x > 1` or `x <`  
`1`\n * - \tanh(1.0) is +Inf\n * - \tanh(-1.0) is -Inf\n *\n @SinceKotlin("1.2")\npublic expect fun atanh(x:`  
`Float): Float\n\n/**\n * Computes \sqrt(x^2 + y^2) without intermediate overflow or underflow.\n * Special`  
`cases:\n * - returns +Inf if any of arguments is infinite\n * - returns NaN if any of arguments is NaN and the`  
`other is not infinite\n *\n @SinceKotlin("1.2")\npublic expect fun hypot(x: Float, y: Float): Float\n\n/**\n`  
`Computes the positive square root of the value [x].\n * Special cases:\n * - \sqrt(x) is NaN when `x < 0` or`  
``x` is NaN\n *\n @SinceKotlin("1.2")\npublic expect fun sqrt(x: Float): Float\n\n/**\n * Computes Euler's`  
`number `e` raised to the power of the value [x].\n * Special cases:\n * - \exp(\text{NaN}) is \text{NaN}\n * - \exp(+Inf)`  
`is +Inf\n * - \exp(-Inf) is 0.0\n *\n @SinceKotlin("1.2")\npublic`  
`expect fun exp(x: Float): Float\n\n/**\n * Computes \exp(x) - 1.\n * This function can be implemented to`  
`produce more precise result for [x] near zero.\n * Special cases:\n * - \expm1(\text{NaN}) is \text{NaN}\n * -`  
`\expm1(+Inf) is +Inf\n * - \expm1(-Inf) is -1.0\n *\n @see [exp] function.\n`  
`*\n @SinceKotlin("1.2")\npublic expect fun expm1(x: Float): Float\n\n/**\n * Computes the logarithm of the`  
`value [x] to the given [base].\n * Special cases:\n * - \log(x, b) is NaN if either `x` or `b` are NaN\n * -`  
`\log(x, b) is NaN when `x < 0` or `b <= 0` or `b == 1.0`\n * - \log(+Inf, +Inf) is NaN\n * - \log(+Inf, b) is`  
`+Inf for `b > 1` and -Inf for `b < 1`\n * - \log(0.0, b) is -Inf for `b > 1` and +Inf for `b > 1`\n * See also`  
`logarithm functions for common fixed bases: [ln], [log10] and [log2].\n *\n @SinceKotlin("1.2")\npublic expect`  
`fun log(x: Float, base: Float): Float\n\n/**\n * Computes the natural logarithm (base `E`) of`  
`the value [x].\n * Special cases:\n * - \ln(\text{NaN}) is \text{NaN}\n * - \ln(x) is NaN when `x < 0.0`\n * -`  
`\ln(+Inf) is +Inf\n * - \ln(0.0) is -Inf\n *\n @SinceKotlin("1.2")\npublic expect fun ln(x: Float):`  
`Float\n\n/**\n * Computes the common logarithm (base 10) of the value [x].\n * @see [ln] function for special`  
`cases.\n *\n @SinceKotlin("1.2")\npublic expect fun log10(x: Float): Float\n\n/**\n * Computes the binary`  
`logarithm (base 2) of the value [x].\n * @see [ln] function for special cases.\n *\n @SinceKotlin("1.2")\npublic`  
`expect fun log2(x: Float): Float\n\n/**\n * Computes \ln(a + 1).\n * This function can be implemented to`  
`produce more precise result for [x] near zero.\n * Special cases:\n * - \ln1p(\text{NaN}) is \text{NaN}\n * - \ln1p(x) is`  
`NaN where `x < -1.0`\n * - \ln1p(-1.0) is -Inf\n * - \ln1p(+Inf) is +Inf\n *\n @see [ln] function\n * @see`  
`[expm1] function\n *\n @SinceKotlin("1.2")\npublic expect fun ln1p(x: Float): Float\n\n/**\n`  
`* Rounds the given value [x] to an integer towards positive infinity.\n * @return the smallest Float value that is`  
`greater than or equal to the given value [x] and is a mathematical integer.\n * Special cases:\n * - \ceil(x) is `x``  
`where `x` is NaN or +Inf or -Inf or already a mathematical integer.\n *\n @SinceKotlin("1.2")\npublic expect`  
`fun ceil(x: Float): Float\n\n/**\n * Rounds the given value [x] to an integer towards negative infinity.\n * @return`  
`the largest Float value that is smaller than or equal to the given value [x] and is a mathematical integer.\n * Special`  
`cases:\n * - \floor(x) is `x` where `x` is NaN or +Inf or -Inf or already a mathematical integer.\n`

`*\n@SinceKotlin("1.2")\npublic expect fun floor(x: Float): Float\n\n/**\n * Rounds the given value [x] to an integer towards zero.\n * @return the value [x] having its fractional part truncated.\n * Special cases:\n * - truncate(x) is x where x is NaN or +Inf or -Inf or already a mathematical integer.\n */\n\n@SinceKotlin("1.2")\npublic expect fun truncate(x: Float): Float\n\n/**\n * Rounds the given value [x] towards the closest integer with ties rounded towards even integer.\n * Special cases:\n * - round(x) is x where x is NaN or +Inf or -Inf or already a mathematical integer.\n */\n\n@SinceKotlin("1.2")\npublic expect fun round(x: Float): Float\n\n/**\n * Returns the absolute value of the given value [x].\n * Special cases:\n * - abs(NaN) is NaN\n * @see absoluteValue extension property for [Float]\n */\n\n@SinceKotlin("1.2")\npublic expect fun abs(x: Float): Float\n\n/**\n * Returns the sign of the given value [x]:\n * - -1.0 if the value is negative,\n * - zero if the value is zero,\n * - 1.0 if the value is positive\n * Special case:\n * - sign(NaN) is NaN\n */\n\n@SinceKotlin("1.2")\npublic expect fun sign(x: Float): Float\n\n/**\n * Returns the smaller of two values.\n * If either value is NaN, then the result is NaN.\n */\n\n@SinceKotlin("1.2")\npublic expect fun min(a: Float, b: Float): Float\n\n/**\n * Returns the greater of two values.\n * If either value is NaN, then the result is NaN.\n */\n\n@SinceKotlin("1.2")\npublic expect fun max(a: Float, b: Float): Float\n\n// extensions\n\n/**\n * Raises this value to the power [x].\n * Special cases:\n * - b.pow(0.0) is 1.0\n * - b.pow(1.0) == b\n * - b.pow(NaN) is NaN\n * - NaN.pow(x) is NaN for x != 0.0\n * - b.pow(Inf) is NaN for abs(b) == 1.0\n * - b.pow(x) is NaN for b < 0 and x is finite and not an integer\n */\n\n@SinceKotlin("1.2")\npublic expect fun Float.pow(x: Float): Float\n\n/**\n * Raises this value to the integer power [n].\n * See the other overload of [pow] for details.\n */\n\n@SinceKotlin("1.2")\npublic expect fun Float.pow(n: Int): Float\n\n/**\n * Returns the absolute value of this value.\n * Special cases:\n * - NaN.absoluteValue is NaN\n * @see abs function\n */\n\n@SinceKotlin("1.2")\npublic expect val Float.absoluteValue: Float\n\n/**\n * Returns the sign of this value:\n * - -1.0 if the value is negative,\n * - zero if the value is zero,\n * - 1.0 if the value is positive\n * Special case:\n * - NaN.sign is NaN\n */\n\n@SinceKotlin("1.2")\npublic expect val Float.sign: Float\n\n/**\n * Returns this value with the sign bit same as of the [sign] value.\n * If [sign] is NaN the sign of the result is undefined.\n */\n\n@SinceKotlin("1.2")\npublic expect fun Float.withSign(sign: Float): Float\n\n/**\n * Returns this value with the sign bit same as of the [sign] value.\n */\n\n@SinceKotlin("1.2")\npublic expect fun Float.withSign(sign: Int): Float\n\n/**\n * Rounds this [Float] value to the nearest integer and converts the result to [Int].\n * Ties are rounded towards positive infinity.\n * Special cases:\n * - x.roundToInt() == Int.MAX_VALUE when x > Int.MAX_VALUE\n * - x.roundToInt() == Int.MIN_VALUE when x < Int.MIN_VALUE\n * @throws IllegalArgumentException when this value is NaN\n */\n\n@SinceKotlin("1.2")\npublic expect fun Float.roundToInt(): Int\n\n/**\n * Rounds this [Float] value to the nearest integer and converts the result to [Long].\n * Ties are rounded towards positive infinity.\n * Special cases:\n * - x.roundToLong() == Long.MAX_VALUE when x > Long.MAX_VALUE\n * - x.roundToLong() == Long.MIN_VALUE when x < Long.MIN_VALUE\n * @throws IllegalArgumentException when this value is NaN\n */\n\n@SinceKotlin("1.2")\npublic expect fun Float.roundToLong(): Long\n\n// endregion\n\n// region\n\n==== Integer Math ==== \n\n/**\n * Returns the absolute value of the given value [n].\n * Special cases:\n * - abs(Int.MIN_VALUE) is Int.MIN_VALUE due to an overflow\n * @see absoluteValue extension property for [Int]\n */\n\n@SinceKotlin("1.2")\npublic expect fun abs(n: Int): Int\n\n/**\n * Returns the smaller of two values.\n */\n\n@SinceKotlin("1.2")\npublic expect fun min(a: Int, b: Int): Int\n\n/**\n * Returns the greater of two values.\n */\n\n@SinceKotlin("1.2")\npublic expect fun max(a: Int, b: Int): Int\n\n/**\n * Returns the absolute value of this value.\n * Special cases:\n * - Int.MIN_VALUE.absoluteValue is Int.MIN_VALUE due to an overflow\n * @see abs function\n */\n\n@SinceKotlin("1.2")\npublic expect val Int.absoluteValue: Int\n\n/**\n * Returns the sign of this value:\n * - -1 if the value is negative,\n * - 0 if the value is zero,\n * - 1 if the value is positive\n */\n\n@SinceKotlin("1.2")\npublic expect val Int.sign: Int\n\n// endregion`



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AA,yB;;MAAA,mC;K;IAiCA,iC;MAAA,qC;K;;IAAA,6C;MAAA,4C;QAAA,2B;;MAAA,qC;K;IAEA,kC;MAAA  
,sC;K;;IAAA,8C;MAAA,6C;QAAA,4B;;MAAA,sC;K;;aCu5vBoB,gB;;cCh1uB0C,mB;;  
gBAyEvC,yB;eAAyB,wB;;uBAgBzB,gC;sBAAwB,+B;mCA4JjC,qB;mCA5ImC,qB;;kBAQ1B,2B;iBAA0B,0B;;  
;eC/gBgB,wB;sBCoBA,sB;iBCnBA,0B;;aC5P8B,e;;gCCIDhD,yC;+BCVA,uC;+BCAA,sC;;gCCyJ/B,  
+B;+BAIW,sC;gCCqwCc,+B;0BAHvB,kC;uBAR6BO,gC;yBA8WD,iC;0BACA,mC;yBA4JA,iC;gCAmZP,oC;+BA  
bc,oC;+BAEC,+B;yBAEQ,kC;;gBCr0C6C,yB;;  
;IC/ErF,kD;MAMuF,wC;K;IANvF,4CAOI,Y  
;MAAuC,8B;K;IAP3C,8E;ICGA,kD;MAQuF,wC;K;IARvF,4CASI,Y;MAAuC,8B;K;IAT3C,8E;0FbOA,qB;MAQI,  
OAAO,UAAI,CAAJ,C;K;4FAGX,qB;MAQI,OAAO,UAAI,CAAJ,C;K;4FAGX,qB;MAQI,OAAO,UAAI,CAAJ,C;  
K;4FAGX,qB;MAQI,OAAO,UAAI,CAAJ,C;K;4FAGX,qB;MAQI,OAAO,UAAI,CAAJ,C;K;4FAGX,qB;MAQI,O  
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C;MAOW,sB;;;QAobS,Q;QAAhB,iD;UAAgB,cAAhB,e;UAAsB,IApH,SAobO,CAAU,OAAV,CAAJ,C;YAAwB,q  
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mdO,QkB/mdP,ElB+mdiB,CkB/mdjB,C;;QlBindd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;MkB5nda,iB;  
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O,KlBmodO,QkBnodP,ElBmodiB,CkBnodjB,C;;QlBqodd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;MkBhp  
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CAAJ,C;;QAET,OAAO,W;O;KafX,C;4FAkBA,yB;MAAA,kC;MAAA,4C;MAAA,wE;QAQW,sC;QAAA,8C;O;  
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MAAA,yC;QAQI,2D;O;KARJ,C;8EAeA,yB;MAAA,kF;MAAA,gE;MAAA,uC;QAOW,kBAAM,eAAa,mCAAwB,  
EAAxB,CAAb,C;QAUeA,Q;QAAA,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,WAAAY,WAXEwC,SAwEpC,CA  
AU,IAAV,CAAJ,C;;QAxEhB,OAYEO,W;O;KAhFX,C;4FAUA,yB;MAAA,kF;MAAA,gE;MA+BA,wE;MA/BA,u  
C;QAOW,kBAAa,eAAa,mCAAwB,EAAxB,CAAb,C;QAgCP,gB;QADb,YAAAY,C;QACC,2B;QAAb,OAAa,cAAb,  
C;UAAa,sB;UACT,WAAAY,WAJC+C,SAiC3C,CAAU,oBAAmB,cAAnB,EAAMB,sBAAnB,UAAV,EAAuC,IAAv  
C,CAAJ,C;;QAJChB,OAKCO,W;O;KAZCX,C;0GAUA,yB;MAAA,+D;MAoSA,wE;MApSA,uC;QAOW,kBAAoB,  
gB;QAOsD,gB;QADb,YAAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UA1RsB,U;UAAA,cAVQ,SAUR,CA  
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X,C;8GAUA,yB;MA0RA,wE;MA1RA,oD;QAIsiB,gB;QADb,YAAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,s  
B;UA1RsB,U;UAAA,wBA0RT,oBAAMB,cAAnB,EAAMB,sBAAnB,UA1RS,EA0RoB,IA1RpB,W;YAA6C,6B;;;  
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B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,WAAAY,WAAI,UAAU,oBAAMB,cAAnB,EAAMB,sBAAnB,UAAV,EA  
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AsC,6B;;;QAR3D,OASO,W;O;KAhBX,C;gGAUA,yB;MAAA,oD;QAqPoB,Q;QAAA,2B;QAAhB,OAAgB,cAAh  
B,C;UAAgB,yB;UAhPK,U;UAAA,wBAGPQ,OAhPR,W;YAAAsC,6B;;;QAC3D,OAAO,W;O;KANX,C;kFASA,6C;  
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AAO,W;K;IAQiB,4C;MAAA,mB;QAAE,gC;O;K;IAL9B,gC;MAKI,OAAO,qBAAiB,6BAAjB,C;K;IAGX,+B;MA  
SI,OAA2B,SAAf,eAAL,SAAK,CAAE,C;K;4FAG/B,yB;MAAA,2D;MAAA,+D;MAAA,sC;QAYc,Q;QAFV,UAA  
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B,C;;MAGtB,OAAO,W;K;wGAGX,yC;MAUI,kBAAkB,O;MACIB,IAAI,CAAC,mBAAL,C;QACI,eAAe,+BAAa,

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ACl,sBAAO,K;cAAP,wB;;;UAGR,sBAAO,E;;;QsCxyBP,0B;O;KAPJ,C;iGAUA,yB;MAAA,sC;MIC/dA,iC;MkC+  
dA,0BAOgC,yB;QlCtehC,iC;ekCsegC,6B;UAAA,qB;YAAE,yBIC5dW,gBkC4dD,ElC5dC,CkC4dX,C;W;S;OAAF,  
C;MAPhC,uC;QAOMB,kBAAR,iB;QAAQ,uB;;UtCqyBf,0D;YACl,IsCtyB0B,UlC5dW,gBJkwCvB,YAAK,KAAL,  
CllwCuB,CkC4dX,CtCsyB1B,C;cACl,sBAAO,K;cAAP,wB;;;UAGR,sBAAO,E;;;QsC1yBP,0B;O;KAPJ,C;+FAUA  
,yB;MAAA,sC;MtCs5BA,0D;MAAA,+C;MG91CA,6B;MmCwcA,yBAO+B,yB;QnC/cB,6B;emC+c+B,6B;UAAA  
,qB;YAAE,yBnCrcM,cmCqcI,EnCrcJ,CmCqcN,C;W;S;OAAF,C;MAP/B,uC;QAOMB,kBAAR,iB;QAAQ,sB;;UtC  
m5BD,Q;UAAA,OAAQ,SAAR,wBAAQ,CAAR,W;UAAAd,OAAc,cAAd,C;YAAc,uB;YACV,IsCp5ByB,UnCrcM,c  
Hy1CjB,YAAK,KAAL,CGz1CiB,CmCqcN,CtCo5BzB,C;cACl,qBAAO,K;cAAP,uB;;;UAGR,qBAAO,E;;;QsCx5  
BP,yB;O;KAPJ,C;+FAUA,yB;MAAA,sC;MtCw5BA,0D;MAAA,+C;MmB31CA,+B;MmBmcA,yBAO+B,yB;QnB  
1c/B,+B;emB0c+B,6B;UAAA,qB;YAAE,yBnBhcS,emBgcC,EnBhcD,CmBgcT,C;W;S;OAAF,C;MAP/B,uC;QAO  
mB,kBAAR,iB;QAAQ,sB;;UtCq5BD,Q;UAAA,OAAQ,SAAR,wBAAQ,CAAR,W;UAAAd,OAAc,cAAd,C;YAAc,u  
B;YACV,IsCt5ByB,UnBhcS,enBs1CpB,YAAK,KAAL,CmBt1CoB,CmBgcT,CtCs5BzB,C;cACl,qBAAO,K;cAAP,  
uB;;;UAGR,qBAAO,E;;;QsC15BP,yB;O;KAPJ,C;+FAUA,yB;MAAA,sC;MtC02BA,0D;MAAA,+C;MEp3CA,+B;  
MoC0gBA,yBAO+B,yB;QpCjhb/B,+B;eoCihB+B,6B;UAAA,qB;YAAE,yBpCvgBS,eoCugBC,EpCvgBD,CoCugB  
T,C;W;S;OAAF,C;MAP/B,uC;QAOMB,kBAAR,iB;QAAQ,sB;;UtCu2BD,Q;UAAA,OAAQ,SAAR,wBAAQ,CAA  
R,W;UAAAd,OAAc,cAAd,C;YAAc,uB;YACV,IsCx2ByB,UpCvgBS,eF+2CpB,YAAK,KAAL,CE/2CoB,CoCugBT,  
CtCw2BzB,C;cACl,qBAAO,K;cAAP,uB;;;UAGR,qBAAO,E;;;QsC52BP,yB;O;KAPJ,C;+FAUA,yB;MAAA,sC;Mt  
C42BA,0D;MAAA,+C;Min3CA,iC;MkCugBA,yBAO+B,yB;QlC9gB/B,iC;ekC8gB+B,6B;UAAA,qB;YAAE,yBIC  
pgBY,gBkCogBF,ElCpgBE,CkCogBZ,C;W;S;OAAF,C;MAP/B,uC;QAOMB,kBAAR,iB;QAAQ,sB;;UtCy2BD,Q;  
UAAA,OAAQ,SAAR,wBAAQ,CAAR,W;UAAAd,OAAc,cAAd,C;YAAc,uB;YACV,IsC12ByB,UlCpgBY,gBJ82Cv  
B,YAAK,KAAL,Ci92CuB,CkCogBZ,CtC02BzB,C;cACl,qBAAO,K;cAAP,uB;;;UAGR,qBAAO,E;;;QsC92BP,yB;  
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C;O;KmcsevC,C;iFAcA,yB;MAAA,4C;MnB/eA,+B;MmB+eA,4B;QAWI,OnBhfsC,emBgfVb,KAAR,iBAAQ,Cn  
BhfuB,C;O;Kmbqe1C,C;iFAcA,yB;MAAA,4C;MpC1jBA,+B;MoC0jBA,4B;QAWI,OpC3jBsC,eoC2jBvB,KAAR,  
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B,mDAAvB,C;O;KafV,C;iFAkBA,yB;MAAA,+C;MAAA,iE;MAo3FI,0D;MAp3FJ,uC;QAWkB,Q;QAAA,OAAa,  
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AAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEEnC,MAAM,gCAAUb,mDAAvB,C;O;KafV,  
C;iFAkBA,yB;MAAA,+C;MAAA,iE;MA02FI,0D;MA12FJ,uC;QAWkB,Q;QAAA,OAAa,SA+1FX,YA/1FF,SA+1  
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AU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEEnC,MAAM,gCAAUb,mDAAvB,C;O;KafV,C;iFAkBA,yB;MAAA,+  
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FI,0D;MALuFJ,uC;QASkB,Q;QAAA,OAAa,SAytFX,YAZtFF,SAytFN,QAAQ,CAztFW,CAAb,W;QAAd,OAAc,c  
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BkhUnD,GnBlhU8D,KAAK,KmBkhU5D,SAAS,OAAT,CnBlhUuE,KAAx,CAAhB,C;;QmBohUvD,OAAO,G;O;  
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T+B,CAAX,C;QmBiuTrB,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,MnBriUmD,emBqiUnD,GnBriU8D,  
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B;MnBlvTA,+B;MmBkvTA,sC;QAaoB,Q;QADhB,UnBnvTqC,eAAW,oBmBmvT/B,CnBnvT+B,CAAX,C;QmBo  
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,SAAS,OAAT,CnBxjUuE,KAAx,CAAhB,C;;QmB0jUvD,OAAO,G;O;KAhBX,C;IAmBA,kC;MA2DI,WpBv8TO,  
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AN,CArDF,CAqDrB,C;;MArDT,OAuDO,I,K;IApDX,kC;MAkEI,WpB19TO,MAAO,KoB09TG,cpB19TH,EoBi6T  
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K,WA5DqB,GA4DP,sBAAK,CAAL,CA5DO,EAAAnB,KA4DqB,CAAM,CAAN,CA5DF,CA4DrB,C;;MA5DT,OA  
8DO,I,K;IA3DX,kC;MAyEI,WpB7+TO,MAAO,KoB6+TG,cpB7+TH,EoB66TH,KAgEkB,OpB7+Tf,C;MoB8+Td,  
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AAQ,SAAR,C;;MAEJ,OAAO,K;K;;IC9DX,oD;MA6CA,uC;MatCI,IAAI,SAAQ,CAAZ,C;QAAe,MAAa,gCAAyB ,wBAAzB,C;MAC5B,IAAI,SAAQ,WAAZ,C;QAA2B,MAAa,gCAAyB,wEAAzB,C;MAG5C,aAGyB,K;MAEzB,Y AGuF,OAA/D,0BAA0B,KpBcR,IoBdlB,EAAc,YpBcpB,IoBdlB,EAAyD,IAAzD,CAA+D,C;MAEvF,YAGuB,I;K ;yCAEvB,Y;MAAwC,mCAAwB,UAAxB,EAA+B,SAA/B,EAAqC,SAArC,C;K;wCAExC,Y;MAMqC,OAAI,YAA O,CAAX,GAAc,aAAQ,SAAtB,GAAgC,aAAQ,S;K;uCAE7E,iB;MACI,iDAA6B,kBAAa,KAAM,UAAAnB,KAC7B, eAAS,KAAM,MAAf,IAAwB,cAAQ,KAAM,KAAtC,IAA8C,cAAQ,KAAM,KAD/B,CAA7B,C;K;yCAGJ,Y;MAC I,OAAI,cAAJ,GAAe,EAAf,GAAwB,OAAM,OAAK,UpBRG,IoBQR,UAAkB,SpBRV,IoBQR,KAAN,SAAqC,SA ArC,I;K;yCAE5B,Y;MAAkC,OAAI,YAAO,CAAX,GAAc,oBAAE,UAAF,+BAAU,SAAV,eAAqB,SAAnC,GAA8 C,oBAAE,UAAF,qCAAgB,SAAhB,gBAA4B,CAAC,SAAD,IAA5B,C;K;IAEhF,qC;MAAA,yC;K;kEACI,sC;MA Q2F,2BAAgB,UAAhB,EAA4B,QAA5B,EAAc,IAAtC,C;K;;IAT/F,iD;MAAA,gD;QAAA,+B;;MAAA,yC;K;;IAi BA,mD;MA6CA,sC;MatCI,IAAI,SAAQ,CAAZ,C;QAAe,MAAa,gCAAyB,wBAAzB,C;MAC5B,IAAI,SAAQ,WA AZ,C;QAA2B,MAAa,gCAAyB,wEAAzB,C;MAG5C,aAGwB,K;MAExB,YAGuB,0BAA0B,KAA1B,EAAiC,YAA jC,EAA+C,IAA/C,C;MAEvB,YAGuB,I;K;wCAEvB,Y;MAAuC,kCAAuB,UAAvB,EAA8B,SAA9B,EAAoC,SAA pC,C;K;uCAEvC,Y;MAMqC,OAAI,YAAO,CAAX,GAAc,aAAQ,SAAtB,GAAgC,aAAQ,S;K;sCAE7E,iB;MACI,g DAA4B,kBAAa,KAAM,UAAAnB,KAC5B,eAAS,KAAM,MAAf,IAAwB,cAAQ,KAAM,KAAtC,IAA8C,cAAQ,KA AM,KADhC,CAA5B,C;K;wCAGJ,Y;MACI,OAAI,cAAJ,GAAe,EAAf,GAAwB,OAAM,MAAK,UAAAL,QAAa,SA Ab,IAAN,SAA2B,SAA3B,I;K;wCAE5B,Y;MAAkC,OAAI,YAAO,CAAX,GAAgB,UAAF,qBAAU,SAAV,cAAqB ,SAAnC,GAAgD,UAAF,2BAAgB,SAAhB,eAA4B,CAAC,SAAD,IAA5B,C;K;IAEhF,oC;MAAA,wC;K;iEACI,sC; MAQwF,0BAAe,UAAf,EAA2B,QAA3B,EAAqC,IAArC,C;K;;IAT5F,gD;MAAA,+C;QAAA,8B;;MAAA,wC;K;;I AiBA,oD;MA6CA,uC;MatCI,IAAI,gBAAJ,C;QAAgB,MAAa,gCAAyB,wBAAzB,C;MAC7B,IAAI,sCAAJ,C;QA A4B,MAAa,gCAAyB,yEAAzB,C;MAG7C,aAGyB,K;MAEzB,YAGwB,4BAA0B,KAA1B,EAAiC,YAAjC,EAA+ C,IAA/C,C;MAExB,YAGwB,I;K;yCAExB,Y;MAAwC,mCAAwB,UAAxB,EAA+B,SAA/B,EAAqC,SAArC,C;K; wCAExC,Y;MAMqC,OAAI,uBAAO,CAAX,GAAc,2BAAQ,SAAR,KAAd,GAAgC,2BAAQ,SAAR,K;K;uCAErE, iB;MACI,iDAA6B,kBAAa,KAAM,UAAAnB,KAC7B,mBAAS,KAAM,MAAf,KAawB,kBAAQ,KAAM,KAAd,CA AxB,IAA8C,kBAAQ,KAAM,KAAd,CADjB,CAA7B,C;K;yCAGJ,Y;MACI,OAAI,cAAJ,GAAe,EAAf,GAAwB,iC AAM,iCAAM,eAAW,8BAAW,EAAx,CAAX,CAAN,MAAoC,cAAU,6BAAU,EAAV,CAAV,CAApC,CAAN,MA AuE,cAAU,6BAAU,EAAV,CAAV,CAAvE,CAAiG,Q;K;yCAE7H,Y;MAAkC,OAAI,uBAAO,CAAX,GAAgB,UA AF,qBAAU,SAAV,yBAAqB,SAArB,WAAAd,GAAgD,UAAF,2BAAgB,SAAhB,yBAA6B,SAAD,aAA5B,W;K;IAE hF,qC;MAAA,yC;K;kEACI,sC;MAQ4F,2BAAgB,UAAhB,EAA4B,QAA5B,EAAc,IAAtC,C;K;;IAThG,iD;MA AA,gD;QAAA,+B;;MAAA,yC;K;;;6CCIKA,iB;MAGkD,+BAAS,UAAU,UAAkB,wBAAS,iBAAT,M;K;oCAEpE, Y;MAKgC,oCAAQ,iBAAR,K;K;;I7CpBd,wC;MASBiB,iC;MatBsD,2BAAgB,KAAhB,EAAuB,YAAvB,EAAqC, CAArC,C;K;kFAC7B,Y;MAAQ,8B;K;yFACD,Y;MAAQ,6B;K;2CAExC,iB;MAA8C,qBAAS,KAAT,IAAkB,SAA S,S;K;kCAEzE,Y;MAKkC,oBAAQ,S;K;iCAE1C,iB;MACI,2CAAuB,kBAAa,KAAM,UAAAnB,KACvB,eAAS,KA AM,MAAf,IAAwB,cAAQ,KAAM,KADf,CAAvB,C;K;mCAGJ,Y;MACI,OAAI,cAAJ,GAAe,EAAf,GAAwB,OA A K,UwBkBS,IxBiBd,UAAkB,SwBkBJ,IxBiBd,K;K;mCAE5B,Y;MAAkC,2BAAE,UAAF,+BAAU,SAAV,C;K;IAEI C,+B;MAAA,mC;MACI,aAC8B,cAAY,OAAF,CAAE,CAAZ,EAAwB,OAAF,CAAE,CAAxB,C;K;;IAFIC,2C;M AAA,0C;QAAA,yB;;MAAA,mC;K;;IASiB,uC;MASBjB,gC;MatBmD,0BAAe,KAAf,EAAcB,YAAtB,EAAoC,CA ApC,C;K;iFAC3B,Y;MAAQ,iB;K;wFACD,Y;MAAQ,gB;K;0CAEvC,iB;MAA6C,qBAAS,KAAT,IAAkB,SAAS,S ;K;iCAExE,Y;MAKkC,oBAAQ,S;K;gCAE1C,iB;MACI,0CAASB,kBAAa,KAAM,UAAAnB,KACtB,eAAS,KAAM, MAAf,IAAwB,cAAQ,KAAM,KADhB,CAAtB,C;K;kCAGJ,Y;MACI,OAAI,cAAJ,GAAe,EAAf,GAAwB,MAAK, UAAL,QAAa,SAAb,I;K;kCAE5B,Y;MAAkC,OAAE,UAAF,qBAAU,S;K;IAE5C,8B;MAAA,kC;MACI,aAC6B,a AAS,CAAT,EAAy,CAAZ,C;K;;IAFjC,0C;MAAA,yC;QAAA,wB;;MAAA,kC;K;;IASkB,wC;MASBiB,iC;MatBs D,2BAAgB,KAAhB,EAAuB,YAAvB,K;K;kFAC7B,Y;MAAQ,iB;K;yFACD,Y;MAAQ,gB;K;2CAExC,iB;MAA8 C,kCAAS,KAAT,UAAkB,sBAAS,SAAT,M;K;kCAEhE,Y;MAKkC,kCAAQ,SAAR,K;K;iCAEIC,iB;MACI,2CAA uB,kBAAa,KAAM,UAAAnB,KACvB,mBAAS,KAAM,MAAf,KAawB,kBAAQ,KAAM,KAAd,CADD,CAAvB,C; K;mCAGJ,Y;MACI,OAAI,cAAJ,GAAe,EAAf,GAAwB,iCAAM,eAAW,8BAAW,EAAx,CAAX,CAAN,MAAoC,c AAU,6BAAU,EAAV,CAAV,CAApC,CAA8D,Q;K;mCAE1F,Y;MAAkC,OAAE,UAAF,qBAAU,SAAV,W;K;IAEI C,+B;MAAA,mC;MACI,aAC8B,qB;K;;IAFIC,2C;MAAA,0C;QAAA,yB;;MAAA,mC;K;;I8C9EJ,gB;MAAA,oB;



B,C;K;:IAJf,mC;MACqD,kD;K;IAOE,0D;MAAA,kC;MAAS,yB;MAC5D,aAAY,C;K;0DACZ,Y;MAAyB,oBAA  
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,MAAK,GAAL,C;:UAE1B,MAAM,CAAN,IAAW,G;:MAGnB,OAAO,EAAS,OAAO,OAAM,EAAN,EAAGB,KA  
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AO,C;QACP,0BAAU,IAAV,e;UAE0B,YACX,M;UAFX,YAAU,IAAQ,CAAH,GAAG,C;UACI,SAAJ,KAAI,O;U  
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0B;MACgC,WAAS,c;MAAT,YAAhC,EAAE,MAAM,KAAiD,CAA3C,SAA2C,C;MAWrD,eAAiB,I;MAXW,OAY  
rB,K;K;IAVX,uB;MAC6B,WAAS,W;MAAT,YAAsB,IAA/C,WAA+C,CAAnC,SAAMC,C;MAQ/C,eAAiB,I;MAR  
Q,OASIB,K;K;IAPX,uB;MAC6B,WAAS,W;MAAT,YAA7B,EAAE,MAAM,KAA2C,CAArC,SAAqC,C;MAK/C,e  
AAiB,I;MALQ,OAMIB,K;K;2DAJX,uB;MAGI,eAAiB,I;MACjB,OAAO,K;K;kEG9MX,yB;MAAA,0B;MAAA,u  
B;QASI,OAAoB,OAAb,ItD0Q+B,KAAL,GAAiB,KsD1Q9B,C;O;KATxB,C;ICIqC,2C;MAAC,8C;MACIC,eAAsB  
,C;MACtB,wBAA+B,C;MAC/B,gBAA6B,I;MAC7B,mBAAsC,I;MACtC,qBAAyC,I;MAEzC,yBAAgD,yBAAmB,  
Q;MAEnE,sBAAgD,I;K;wFAFhD,Y;MAAA,6B;K;0CAIA,Y;MAEY,kBADr,M;MAAA,U;MAAA,2C;QAAA,e;:  
QAES,gBADD,2CAAQ,yCAAR,gDAawD,IAAxD,6BAAiE,I;QACzD,sB1CwEd,S;Q0C1EF,S1C2EG,S;:M0C3E  
H,a;K;iDAIJ,kB;MACI,kBAAc,IAAd,C;MACiC,oB;MCuBrB,Q;MADR,IdtBsB,MCsBtB,W;QADJ,mBACiB,I;:Q  
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+B,eC4B/B,CChDR,C;:UFqBgB,M;:K;mDAMhB,Y;MACI,kBAakB,mB;MACIB,IAAI,uBAAuB,gBAAgB,IAA3  
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,uC7CuDuE,WAA9B,C;K;+C6CpDnD,Y;MAAkC,8C;K;:IARtC,6C;MAAA,4C;QAAA,2B;:MAAA,qC;K;IGyDA,  
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EvB,mB;MAES,Q;MAAL,IAAI,eAAC,uFAAD,CAAJ,C;QAAGC,OOAO,E;MACvC,OOAmB,cAAZ,gBAAY,EA  
AY,OOAZ,C;K;;IApB/B,6B;MAII,0C;K;IAqBJ,+C;MAaI,OOAY,kBAAL,SAAK,EAakB,KAAIB,C;K;IAqBhB,0  
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C;MAWI,OOAY,cAAL,SAAK,EAAC,KAAAd,C;K;IAwHhB,sC;MAOI,OOAY,gBAAL,SAAK,C;K;IAGhB,sC;MA  
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mId,OAAO,G;K;IAGX,4B;MAMc,Q;MADV,UAAU,C;MACV,wBAAU,KAAV,gB;QAAU,QAAA,KAAV,M;QA  
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KA+Ie,GA/If,EA+IoB,CA/IpB,C;;MAgJd,OAAO,G;K;IwDvaX,iB;MAAA,qB;MAEI,0BAA0B,gBACtB,EADsB,E  
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;K;;IAMCA,+B;K;;ICvLA,oB;K;;IAIA,wB;K;;oF/DJA,qB;MAKqE,uCoCjtB,E;K;iGpCM/C,yB;MAAA,kD;MAA  
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;MAFhC,Y;K;IAKA,+B;MAAA,iD;MAGuB,aAAK,kEAAL,Q;MAHvB,Y;K;IAKA,4D;MAAA,iD;MAQ8D,qB;M/  
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AnB,C;MAA2E,wB;MAAlF,O5EvCO,S;K;;M6EjEP,uB;;kCAYCA,mB;MACl,UAAU,gBAAl,aAAI,OAAJ,EAaA,I  
AAb,C;MACd,OAAO,W;K;8BAGX,Y;MACl,gBAAl,Q;K;uCAOR,mB;MAA6D,OAAA,gBAAl,mBAAY,OAAZ,  
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D,mB;MAiCQ,oBAAM,eAAGB,eAAhB,EAaiC,UAAjC,C;MATV,Y;K;IAYA,gD;MAAA,iD;MAA2C,eAAK,eAA  
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Aa,kB;MACb,YAAO,C;K;mDAGX,e;MAAyC,uBAAS,GAAT,S;K;8CAEzC,e;MAA+B,Q;MAAA,+BAAS,GAAT  
,8B;K;+CAE/B,e;MACuB,Q;MAAA,oCAAsB,aAAS,qBAAY,GAAZ,CAA/B,C;MAAA,iB;QAAoD,OAAO,I;;MA  
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AAjB,C;;K;uDAlrB,0B;MACl,sB;;Q/FsoCY,Q;QAaHb,iD;UAAgB,cAAhB,e;UAAAsB,I+FtoCK,aAAS,gB/FsoCA,  
O+FtoCa,IAAb,M/FsoCd,C;YAAwB,qBAAO,O;YAAP,uB;;QAC9C,qBAAO,I;;M+FvoCH,yB;K;IAIO,8E;MAA  
A,wD;MACH,aAAY,E;MAEZ,YAA0B,MAAa,MAAK,qCAAL,C;MACvC,gBAAe,E;MAEf,oBAA4B,I;MAC5B,e  
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O,C;;K;mEAI,f;Y;MACl,IAAI,eAAS,EAAb,C;QACl,aAAQ,oB;MACZ,OAAO,eAAS,C;K;gEAGpB,Y;MAEoB,Q;  
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AX,MAAoB,S;K;4CAG/B,e;MACI,IAAI,0BAAJ,C;QAAoB,OAAO,I;MAC3B,YAAY,kBAAW,GAAX,C;MACZ,  
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B,CAAJ,C;QACI,cAdW,e;QAEX,MAAM,6BAAsB,OAAQ,WAA9B,C;;MoFxBE,WAAC,iB;MAGP,oCAAP,0BAA  
O,C;MACP,gCAAI,cAAO,0BAAO,IAAd,C;MAEJ,cAAO,I;K;;iDAIf,mB;MAAyD,MAAM,qCAA8B,iCAA9B,C;  
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ACL,C;UAFwE,OAEnE,+B;;UAFmE,OAGhE,iB;;K;IAGZ,oC;MAEU,IAAN,I;MAAA,Q1EhB0C,O0EgB3B,CAA  
f,C;aACI,Q;UAA6B,OAAjB,8BAAiB,Y;UAA7B,K;aACA,Q;UAAy,OAAI,CAAY,CjEbhC,GiEamC,CAAf,MAA  
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B,K;aACA,U;UAA+B,OAAjB,8BAAiB,eAAgB,CAAY,OAA5B,C;UAA/B,K;;UAGQ,6B;YAAc,OAAjB,8BAAi  
B,kB;eACtC,0B;YAAmC,OAAjB,8BAAiB,e;eACnC,0B;YAAmC,OAAjB,8BAAiB,e;eACnC,2B;YAAoC,OAAjB,  
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D,oBAAGB,KAAhB,C;CAAGD,OAAjB,8BAAiB,e;;CAE5C,CAA0B,W;cAC1B,kBAAW,OAAAX,C;;;UAxBxB,K;;  
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;QEACHB,4B;MAIkE,iBAAy,KAAZ,C;K;2EAEIE,qB;MAI8D,gB;K;ICIDb,2C;MAC7C,qBAAwC,Q;K;iDAExC,Y  
;MACmB,Q;MAAA,yB;MAAA,iB;QAAe,MAAM,6BAAsB,0CAAtB,C;;MAApC,eAAe,I;MACf,qBAAc,I;MACd,  
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B,C;MAKA,6FAGuB,CAHvB,EAG0B,IAH1B,C;MAKA,yFAGqB,CAHrB,EAGwB,IAHxB,C;MAKA,4EAGc,EA  
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,0C;K;;IAKA,iD;MAAA,yB;MAAA,yC;K;;IAKA,oD;MAAA,yB;MAAA,4C;K;;IAKA,mD;MAAA,yB;MAAA,2C  
;K;;IAKA,wD;MAAA,yB;MAAA,gD;K;;IAKA,4C;MAAA,yB;MAAA,oC;K;;IAKA,2C;MAAA,yB;MAAA,mC;K  
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;K;uDACL,oB;MAEQ,IADE,QACF,IAAG,CAAH,IADE,QACF,IAAM,EAAN,C;QADJ,OACgB,sBAAS,QAAT,C;  
WACZ,IAFE,QAEF,IAAG,EAH,IAFE,QAEF,IAAO,EAAP,C;QAFJ,OAEiB,sBAAS,WAAW,CAAX,IAAT,C;;Q  
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;IA7JJ,+B;MAAA,+yC;K;;IAAA,oC;MAAA,a;AAAA,Y;UAAA,4C;AAAA,kB;UAAA,kD;AAAA,kB;UAAA,kD;aA  
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B,gC;MAE9B,gBAAiC,YAAY,SAAhB,GAA2B,OAA3B,GAAwC,E;K;uFAGjE,Y;MAAQ,OAAO,aAAY,O;K;yC  
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,C;QAAA,OAAc,qBuGrGxB,KvGqGwB,C;;QuGrGf,MAAM,8BAA0B,mCAAYB,WAAzB,MAA1B,C;;MAAhC,  
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,OAAO,I;K;yDAGX,6B;MAIwB,Q;MAHpB,mBAAwB,C;MACxB,gBAAqB,C;MACrB,mBAAwB,C;MACJ,O3H  
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,K;MAC9B,OAAO,eAAe,CAAf,IAAoB,iBAAY,iBAAN,KAAM,CAAN,IAAmB,YAAnB,GAaKc,CAAIC,KAAN,  
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AA,mC;MAAA,sC;O;MAGI,uEAGY,GAHZ,C;MAIA,yEAGa,MAHb,C;MAIA,yEAGa,SAHb,C;MAIA,+DAGQ,  
KAHR,C;MAIA,+DAGQ,MAHR,C;MAIA,2DAGM,MAHN,C;MAIA,yDAGK,OAHL,C;K;;IAxBA,gD;MAAA,yB  
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;;IA3BJ,+B;MAAA,4Q;K;;IAAA,oC;MAAA,a;aAAA,a;UAAA,6C;aAAA,c;UAAA,8C;aAAA,c;UAAA,8C;aAAA,  
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B,C;MAEvC,0BAAsB,CAAtB,C;QACI,YAAkD,uBAArC,UAAW,cAAX,GAAMb,UAAW,cAAO,C;QACID,aAA  
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,CAAtB,C;QAA2B,iBAA8C,uBAArC,UAAW,cAAX,GAAMb,UAAW,cAAO,CAA9C,C;;QACnB,Y;MAXZ,W;K;  
;;ICxCJ,+B;MAAA,mC;MAUuB,wB;MALf,aAAR,OAAO,OAAQ,KAAI,WAAY,IAAG,OAAO,SAAX,IAAwB,C  
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A,4GACO,+B;K;4CAIf,Y;MAA+C,OAAA,mBAAa,U;K;wDAC5D,oB;MAAqE,OAAA,mBAAa,qBAAy,QAAZ,  
C;K;0DACIF,8B;MACI,OAAA,mBAAa,uBAAC,QAAAd,EAAwB,QAAXB,C;K;;IAIbRb,2C;MAAA,0C;QAAA,yB;  
;MAAA,mC;K;IA2B2B,+B;MAAC,wB;K;qCAEXB,Y;MAAwC,8CAAc,cAAQ,SAAtB,C;K;iDACxC,oB;MAEmB,  
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F,4C;MAAC,8B;K;6CAEjC,Y;MAA6B,OAAA,gBAAy,M;K;8CAEzC,Y;MAAwC,8CAAc,aAAAd,C;K;0DACxC,o  
B;MAAwE,IAAS,I;MAAnB,OtI6CZ,asI7Ca,iBAAS,QAAS,OAAT,QAAS,gBAAT,oCAAT,CtI6Cb,4B;K;4DsI5Cl  
D,8B;MAC8B,IAAS,I;MAAnC,8CAAc,YAAY,SAAS,OAAT,QAAS,gBAAT,wCAA6B,QAAS,0DAAID,CAAd,C;  
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AA,+BAAyC,K;MACtT,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,EAAE,OAAF,IAAa,K;MACb,EAAE,SA  
AF,IAAe,O;MACf,EAAE,WAAF,IAAiB,S;MACjB,EAAE,oBAAF,IAA0B,kB;MAC1B,EAAE,uBAAF,IAA6B,qB  
;MAC7B,EAAE,iCAAF,IAAuC,+B;MACvC,EAAE,8BAAF,IAAoC,4B;MACpC,OAAO,C;K;+GAw0BX,wD;MA  
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,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;6EA6CX,4B;MAE6D,iBAAY,KAAZ,C;K;6EAE7D,mC;  
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AE7D,mC;MAEoE,UAAy,KAAZ,IAAqB,K;K;6EAuBzF,4B;MAE8D,iBAAY,KAAZ,C;K;6EAE9D,mC;MAEqE,  
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B,K;K;8EAuB7F,4B;MAEKE,iBAAY,KAAZ,C;K;6EAEIE,mC;MAEyE,UAAy,KAAZ,IAAqB,K;K;6GC3oC9F,w  
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IAAkB,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;mIAiCX,+B;MAEgD,mC;QAAA,sBAAgC,K;M  
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,cAAO,kBAAY,OAAnB,I;MACnD,UAAU,IAAV,EAAGb,cAAhB,C;K;;IA5iBJ,iD;MAAA,oD;MAGwC,+B;MAP  
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b,O;;QACf,MAAM,gCAAYb,uBAAoB,eAA7C,C;MAHIB,0B;MAJJ,Y;K;IAWA,kC;MAAA,oD;MAGoB,+B;MA/  
BxB,sB;MAGCQ,sBAAc,qD;MAJIB,Y;K;IAOA,4C;MAAA,oD;MAG2C,+B;MAT/C,sB;MAuCQ,sB3JpB8D,Y2J  
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CsD,QAAM,cAAN,C;aACID,C;UADkD,OAC7C,U;aACL,C;UAFkD,gB;;UAAA,OAG1C,S;;K;oF+KtwBZ,yB;M  
AAA,8D;MAAA,8B;MAAA,qC;QAUiC,Q;QAA7B,OAA2D,CAA9B,sEAA8B,eAAO,OAAP,C;O;KAV/D,C;wFA  
YA,yB;MAAA,8D;MAAA,8B;MAAA,sC;QASiC,Q;QAA7B,OAA2D,CAA9B,sEAA8B,oBAAU,QA  
AV,C;O;KAT/D,C;4FAWA,8B;MAKI,SAK,WAAI,OAAJ,C;K;4FAGT,yB;MAAA,gD;MAAA,sC;QAKS,OAAL  
,SAK,EAAO,QAAP,C;O;KALT,C;4FAQA,yB;MAAA,gD;MAAA,sC;QAKS,OAAL,SAK,EAAO,QAAP,C;O;  
KALT,C;4FAQA,yB;MAAA,gD;MAAA,sC;QAKS,OAAL,SAK,EAAO,QAAP,C;O;KALT,C;8FAQA,8B;MAKI  
,SAK,cAAO,OAAP,C;K;8FAGT,yB;MAAA,sD;MAAA,sC;QAKS,UAAL,SAK,EAAU,QA  
AV,C;O;KALT,C;8  
FAQA,yB;MAAA,sD;MAAA,sC;QAKS,UAAL,SAK,EAAU,QA  
AV,C;O;KALT,C;8FAQA,yB;MAAA,sD;MAA  
A,sC;QAKS,UAAL,SAK,EAAU,QA  
AV,C;O;KALT,C;IAQA,qC;MAIU,IAIe,I;MAHjB,kBADE,QACF,c;QAAi  
B,OAAO,yBAAO,QAAP,C;;QAEpB,aAAsB,K;QACT,OB;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,IAAI,oBAAI,I  
AAJ,CAAJ,C;YAAe,SAAS,I;;QAC5B,OAAO,M;;K;IAKnB,uC;MAKiB,Q;MADb,aAAsB,K;MACT,OB;MAAb,O  
AAa,cAAb,C;QAAa,sB;QACT,IAAI,oBAAI,IAAJ,CAAJ,C;UAAe,SAAS,I;;MAE5B,OAAO,M;K;IAGX,uC;MAII,  
OAAO,yBAAgB,OAAT,QAAS,CAAhB,C;K;IAGX,OC;MAIW,iBAAmB,gCAAT,QAAS,EAAGC,SAAhC,C;MAI  
HG,Q;MAKH7B,OAIH2D,CAA9B,sEAA8B,oBAAU,UAAV,C;K;IAQH/D,OC;MAII,UAAmB,8BAAT,QAAS,C;M  
ACnB,OhL0EwD,CgL1EjD,GhL0EkD,UgL1EID,IAAoB,4BAAU,GA  
AV,C;K;IAG/B,OC;MAII,OtL4oPO,EsL5oP  
A,QtLokPA,YAAQ,CAwER,CsL5oPA,IAAyB,4BAAmB,8BAAT,QAAS,CAAnB,C;K;IAGpC,OC;MAIW,iBAAm  
B,gCAAT,QAAS,EAAGC,SAAhC,C;MA7HG,Q;MA6H7B,OA7H2D,CAA9B,sEAA8B,oBAAU,UAAV,C;K;IAGl/  
D,OC;MAII,ItL8nPO,EsL9nPH,QtLsjPG,YAAQ,CAwER,CsL9nPP,C;QACI,OAAO,4BAAmB,8BAAT,QAAS,CA  
AnB,C;;QAEp,OAAO,wB;K;IAGf,OC;MAII,UAAmB,8BAAT,QAAS,C;MACnB,IhL0CwD,CgL1CpD,GhL0CqD,  
UgL1CzD,C;QACI,OAAO,4BAAU,GA  
AV,C;;QAEp,OAAO,wB;K;IAGf,kC;MACI,ahLmCwD,CAAC,mB;MgLI  
CzD,iB;MACA,OAAO,M;K;IAIX,2C;MAKkF,gCAAc,SAAd,EAAYB,IAAzB,C;K;IAEIF,2C;MAKkF,gCAAc,SA  
Ad,EAAYB,KAazB,C;K;IAEIF,sE;MACI,iBAAa,KAAb,C;MrKIJgB,kBqKmJX,oB;MACD,OAAO,qBAAP,C;QA  
CI,IAAI,UAAU,kBAAV,6BAAJ,C;UACI,oB;UACA,WAAS,I;;MAGrB,OAAO,Q;K;oFAIX,4B;MAM6D,kCAAS,  
KAAT,C;K;IAE7D,gC;MAKiD,IAAI,mBAAJ,C;QAAe,MAAM,2BAAuB,gBAAvB,C;;QAArB,OAAmE,2BAAS,  
CAAT,C;K;IAEPH,sC;MAKwD,OAAI,mBAAJ,GA  
Ae,IAAf,GAAYB,2BAAS,CAAT,C;K;IAEjF,+B;MAKgD,IAA  
I,mBAAJ,C;QAAe,MAAM,2BAAuB,gBAAvB,C;;QAArB,OAAmE,2BAAS,2BAAT,C;K;IAEnH,qC;MAKuD,OA

AI,mBAAJ,GAAe,IAAf,GAAyB,2BAAS,2BAAT,C;K;IAEhF,2C;MAK8E,kCAAc,SAAd,EAAyB,IAAzB,C;K;IAE9E,2C;MAK8E,kCAAc,SAAd,EAAyB,KAazB,C;K;IAE9E,wE;MAEgB,UAGS,MAHT,EAcY,MADZ,EAc6B,M;MAfzC,IAAI,uCAAJ,C;QACI,OAAoC,cAA5B,sEAA4B,EAAC,SAAd,EAAyB,uBAAzB,C;MAExC,iBAAsB,C;MACD,oC;MAArB,qBAakB,CAAIb,mC;QACI,cAAc,sBAAK,SAAL,C;QACd,IAAI,UAAU,OAAV,MAAsB,uBAA1B,C;UACI,Q;QAEJ,IAAI,eAAc,SAAIb,C;UACI,sBAAK,UAAU,EAAMb,OAAAnB,C;QAEJ,+B;;MAEJ,IAAI,aAAa,cAAjB,C;QACwB,oC;QAAiB,mB;QAArC,oE;UACI,2BAAS,WAAT,C;QAEJ,OAAO,I;;QAEp,OAAO,K;;K;IChS+B,wC;MAAkC,uB;MAAjC,0B;K;4FACpB,Y;MAAQ,OAAA,eAAS,K;K;iDACxC,iB;MAAkC,mCAAS,0BA AoB,KAApB,CAAT,C;K;;IAGT,gC;MAAyC,8B;MAAxC,0B;K;oFACH,Y;MAAQ,OAAA,eAAS,K;K;yCACxC,i B;MAAkC,mCAAS,0BAAoB,KAApB,CAAT,C;K;mCAElC,Y;MAAuB,eAAS,Q;K;8CACHC,iB;MAAuC,OAAA, eAAS,kBAAS,0BAAoB,KAApB,CAAT,C;K;yCAEhD,0B;MAA8C,OAAA,eAAS,aAAI,0BAAoB,KAApB,CAAJ, EAAgC,OAAhC,C;K;yCACvD,0B;MACI,eAAS,aAAI,2BAAqB,KAArB,CAAJ,EAAiC,OAAjC,C;K;;IAIjB,+C;M ACoB,Q;MAAA,kC;MAAhB,IAAa,CAAT,0BAAJ,C;QAAA,OAA2B,8BAAY,KAAZ,I;;QAAuB,MAAM,8BAA0 B,mBAAgB,KAAhB,2BAA0C,gBAAG,2BAAH,CAA1C,OAA1B,C;K;IAE5D,gD;MACoB,Q;MAAA,qB;MAAhB ,IAAa,CAAT,0BAAJ,C;QAAA,OAA5B,iBAAO,KAAp,I;;QAAkB,MAAM,8BAA0B,oBAAiB,KAAjB,2BAA2C,g BAAG,cAAH,CAA3C,OAA1B,C;K;IAGID,+B;MAK+C,gCAAqB,SAArB,C;K;IAE/C,iC;MAM6D,wBAAa,SAAb ,C;K;;;I1KpC7D,oD;MAQuF,wC;K;IARvF,8CASI,Y;MAAuC,8B;K;IAT3C,gF;I2KY8G,wC;MAAA,mB;QAAE,k BAAS,aAAT,C;O;K;IAThH,yB;MASqG,oCAAS,sBAAT,C;K;IAErG,2B;MAQI,eAAe,6B;MACf,oBAA0B,+BAA N,KAAAM,EAawC,QAAxC,EAA+D,QAA/D,C;MAC1B,OAAO,Q;K;IAc+B,yB;K;+CAoBtC,kC;MAOI,IAAI,uCA A0B,QAAAS,UAAvC,C;QAAkD,M;MACID,OAAO,sBAAS,QAAAS,WAAIB,e;K;+CAGX,kC;MAQqD,6BAAS,QA AS,WAAIB,e;K;IAYzD,mC;MAA2C,wB;MACvC,eAAoB,C;MACpB,mBAA4B,I;MAC5B,sBAAyC,I;MACz C,gBAAoC,I;K;gDAEpC,Y;MACI,OAAO,IAAP,C;QACI,QAAM,YAAN,C;eACI,C;YAAA,K;eACA,C;YACI,IA AI,kCAAE,UAAAnB,C;cACI,eAAQ,C;cACR,OAAO,I;;cAEP,sBAAE,I;;YALvB,K;eAOA,C;YAAc,OAAO,K;eACr B,C;eAAA,C;YAAgC,OAAO,I;;YAC/B,MAAM,yB;;QAGIB,eAAQ,C;QACR,WAAW,4B;QACX,gBAAW,I;QAC X,I3HIFR,oBDgDQ,W4HkCY,kB5HICZ,CChDR,C;;K;6C2HsFA,Y;MACU,IASe,I;MATrB,QAAM,YAAN,C;aAC I,C;aAAA,C;UAAAS,C;OAAO,qB;aAC7C,C;UACI,eAAQ,C;UACR,OAAO,kCAAE,O;aAE1B,C;UACI,eAAQ,C;UA CR,aACa,mF;UACb,mBAAy,I;UACZ,OAAO,M;;UAEH,MAAM,yB;;K;uDAlTb,Y;MACI,IAAI,CAAC,cAAL,C; QAAgB,MAAM,6B;;QAA8B,OAAO,W;K;2DAG/D,Y;MAA4C,QAAM,YAAN,C;aACxC,C;UADwC,OAC1B,6B; aACd,C;UAFwC,OAExB,6BAAsB,sBAAtB,C;;UAFwB,OAGhC,6BAAsB,uCAAoC,YAA1D,C;;K;IAOqC,4E;MA AA,oB;QACzC,wCAAW,C;QAAX,OACA,yB;O;K;oDALR,+B;MACI,mBAAy,K;MACZ,eAAQ,C;MACR,OAA6 C,0CAAtC,c;K;IAUsC,+E;MAAA,oB;QACzC,wCAAW,C;QAAX,OACA,yB;O;K;yDANR,kC;MACI,IAAI,CAA C,QAAAS,UAAAd,C;QAAyB,M;MACzB,sBAAE,Q;MACf,eAAQ,C;MACR,OAA6C,6CAAtC,c;K;2DAMX,kB;M5H JO,Q;MADP,e4HOI,M5HPJ,C;MACO,Q4HMH,M5HNG,+D;M4HOH,eAAQ,C;K;kGAIR,Y;MAAQ,0C;K;;I3K7K hB,oD;MAQuF,wC;K;IARvF,8CASI,Y;MAAuC,8B;K;IAT3C,gF;sFAAA,yB;MAAA,kC;MAAA,0C;MAAA,kD;Q AQuF,wC;O;MARvF,4CASI,Y;QAAuC,8B;O;MAT3C,8E;MAAA,2B;QAQuF,2C;O;KARvF,C;IAiBgE,+C;MAA A,mB;QAAE,sB;O;K;IALIE,kC;MAKuD,OAakB,2CAAT,+BAAS,E;K;IAEzE,8B;MAK6D,OAAI,QbksPtD,YAA Q,CalsP0C,GAAwB,eAAxB,GAAASD,WAAT,QAAAS,C;K;IAEnH,yB;MAG8C,kC;K;IAE9C,yB;MAAA,6B;K;uCA CI,Y;MAA6C,kC;K;2CAC7C,a;MAA4B,kC;K;2CAC5B,a;MAA4B,kC;K;;IAHhC,qC;MAAA,oC;QAAA,mB;;M AAA,6B;K;oFAMA,yB;MAAA,2D;MAAA,4B;QAM4D,uCAAQ,e;O;KANpE,C;IAGb4F,mH;MAAA,wC;MAAA, 6B;MAAA,yB;MAAA,wC;MAAA,wD;MAAA,kC;K;;;kDAAA,Y;;;cACxF,eAAe,uBAAa,W;cAC5B,IAAI,QAA S,UAAb,C;gBACI,gB;gCAAA,sCAAS,QAAT,O;oBAAA,2C;yBAAA,yB;gBAAA,Q;;;cAJJ,W;;cAAA,W;;;K;IADwF,gE;MAAA,yD;uBAAA ,uG;YAAA,S;IBAAA,Q;;IBAAA,uB;O;K;IAP5F,4C;MAOmF,gBAAS,uCAAT,C;K;IAGbB,4B;MAAE,OAAA,EA AG,W;K;IAP3E,8B;MAO8D,4BAAQ,cAAR,C;K;IAUQ,8B;MAAE,OAAA,EAAG,W;K;IAR3E,8B;MAQ8D,4BA AQ,gBAAR,C;K;IAM1B,8B;MAAE,S;K;IAJtC,wC;MAEgB,Q;MADZ,IAAI,8CAAJ,C;QACI,OAA4C,CAApC,2E AAoC,kBAAQ,QAAR,C;;MAEhD,OAAO,uBAAMb,SAAnB,EAAyB,gBAAzB,EAAiC,QAAjC,C;K;IAGX,4B;M AYiB,Q;MAFb,YAAy,gB;MACZ,YAAy,gB;MACC,2B;MAAb,OAAa,cAAb,C;QAAA,sB;QACT,KAAAM,WAAI, IAAK,MAAT,C;QACN,KAAAM,WAAI,IAAK,OAAT,C;;MAEV,OAAO,UAAS,KAAT,C;K;IAGX,+B;MAQqD,6B AAS,4BAAT,C;K;IAW0B,+G;MAAA,wC;MAAA,6B;MAAA,yB;MAAA,0C;MAAA,4C;MAAA,0B;MAAA,kC;

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;IAT/E,uC;MASmE,gBAAY,kCAAZ,C;K;IAkBhC,0D;MAE/B,wB;QAAA,WAAgC,I;MADhC,0B;MACA,0B;MA  
CA,4B;K;IAGuC,0E;MAAA,oD;MACnC,gBA Ae,iCAAS,W;MACxB,iBAAqB,E;MACrB,gBAAmB,I;K;oEAEnB,  
Y;MACI,OAAO,aAAS,UAAhB,C;QACI,WAAW,aAAS,O;QACpB,IAAI,wCAAU,IAAV,MAAmB,sCAAvB,C;U  
ACI,gBAAW,I;UACX,iBAAY,C;UACZ,M;;;MAGR,iBAAY,C;K;8DAGhB,Y;MASW,Q;MARP,IAAI,mBAAa,E  
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W;K;iEACxB,Y;MACI,OAAO,6CAAy,aAAS,OAArB,C;K;oEAGX,Y;MACI,OAAO,aAAS,U;K;;8CAPxB,Y;MA  
AuC,4D;K;qDAWvC,oB;MACI,OAAO,uBAA4B,eAA5B,EAAsC,kBAAtC,EAAMd,QAAAnD,C;K;;IAUf,4D;MAA  
Y,0B;MAAmC,gC;K;IACJ,8F;MAAA,wE;MACnC,gBA Ae,2CAAS,W;MACxB,aAAY,C;K;wEACZ,Y;MAC0C,Q  
;MAAtC,OAAO,oDAAY,oBAAmB,iBAAnB,EAAMb,yBAAnB,QAAZ,EAAYC,aAAS,OAAID,C;K;2EAGX,Y;M  
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AS,W;MACxB,aAAY,C;K;6DACZ,Y;MAC2C,Q;MAAvC,OAAO,iBAAa,oBAAmB,iBAAnB,EAAMb,yBAAnB,  
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D;MACI,4B;MACA,4B;MACA,4B;K;IAEuC,sE;MAAA,gD;MACnC,iBAAgB,gCAAU,W;MAC1B,iBAAgB,gCA  
AU,W;K;4DAC1B,Y;MACI,OAAO,sCAAU,cAAU,OAApB,EAA4B,cAAU,OAAtC,C;K;+DAGX,Y;MACI,OAA  
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;QACI,MAAM,6B;MACV,OAAO,gCA Ae,O;K;kEAG1B,Y;MACI,OAAO,2B;K;+EAGX,Y;MACQ,Q;MAAJ,IAA  
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,K;;UAEP,cAAc,aAAS,O;UACvB,uBAAuB,wCAAS,2CAAy,OAAZ,CAAT,C;UACvB,IAAI,gBAAiB,UAArB,C;  
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Q,WAAjC,C;;MAFV,IAAI,EDgUQ,mBAAY,CChUpB,CAAJ,C;QACI,gBD+TyB,6CAA0C,e;QC9TnE,MAAM,gC  
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,OAAQ,gBAAW,gCAAZ,IAAyB,aAAS,U;K;wDAG7C,Y;MACI,a;MACA,IAAI,iBAAY,gCAAhB,C;QACI,MAA  
M,6B;MACV,qC;MACA,OAAO,aAAS,O;K;;qCAvxB,Y;MAA0B,mD;K;;IAgCA,uC;MAC1B,0B;MACA,oB;M  
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,C;K;8DAGhB,Y;MAMiB,Q;MALb,IAAI,mBAAa,EAAjB,C;QACI,iB;MACJ,IAAI,mBAAa,CAAjB,C;QACI,MA  
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,EAAjB,C;QACI,iB;MACJ,OAAO,mBAAa,C;K;;2CAIC5B,Y;MAAuC,yD;K;;IA2Cb,uC;MAC1B,0B;MACA,oB;  
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MACxB,iBAAqB,E;MACrB,gBAAmB,I;K;gEAEnB,Y;MACI,OAAO,aAAS,UAAhB,C;QACI,WAAW,aAAS,O;Q  
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,EAAjB,C;QACI,a;MACJ,OAAO,mBAAa,CAAb,IAAkB,aAAS,U;K;;2CAIC1C,Y;MAAuC,yD;K;;IAuCN,+C;MA  
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;MAAE,sB;MAAiC,gC;MACIE,kBAAuB,c;K;6CAEvB,Y;MACI,OAAO,aAAO,UAAAd,C;QACI,WAAW,aAAO,O  
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,U;K;kCACrE,Y;MAA+B,Q;K;kCAC/B,Y;MAAkC,W;K;gFAEX,Y;MAAQ,Q;K;iCAC/B,Y;MAAkC,W;K;wCACI  
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,C;MAC7B,eAAyB,C;K;2CAEzB,8B;MACI,+DAAkB,SAAlB,EAA6B,OAA7B,EAAsC,WAAK,KAA3C,C;MAC  
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,mB;QACA,iB;;MAGJ,MAAM,C;MACN,OAAO,OAAO,IAAd,C;QACI,OAAO,IAAP,IAAe,wBAAO,GAAP,gE;Q  
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CAAJ,yCAA5B,GAAYD,I;;MAGpE,OAAW,SAAK,IAAL,KAAa,GAAjB,GAASB,mFAATB,GAAqC,I;K;IAGhD  
,6C;MAUI,IAAI,+CAAJ,C;QACI,OAAW,GAAL,kBAAS,SAAK,IAAd,CAAJ,IAA0B,GAAL,iBAAQ,SAAR,CAAJ,  
QAA9B,GAAYD,mCAAZD,GAAoF,S;;MAE/F,OAAW,SAAK,IAAL,KAAa,GAAjB,GAASB,mCAATB,GAAiD,S;  
K;IAG5D,iC;MAAA,qC;MAKI,4B;K;oDACA,Y;MAAiC,0C;K;kDAEjC,e;MAAYD,W;K;mDACzD,8B;MAA4E,c  
;K;mDAC5E,mB;MAAwE,c;K;uDACxE,e;MAA8D,W;K;+CAC9D,Y;MAAsC,Q;K;+CACtC,Y;MAAYC,8B;K;;I  
Ab7C,6C;MAAA,4C;QAAA,2B;;MAAA,qC;K;IAqB8B,wC;MAC1B,kB;MACA,wB;K;4CAGA,e;MAGQ,Q;MAF  
J,UAAU,I;MACV,OAAO,IAAP,C;QACI,YAAA,GAAL,UAAJ,aAAY,GAAZ,W;UAAwB,W;;QACxB,WAAW,GA  
AL,O;QACf,IAAI,oCAAJ,C;UACI,MAAM,I;;UAEN,OAAO,iBAAK,GAAL,C;;K;6CAKnB,8B;MACI,iBAAU,W  
AAK,cAAK,OAAAL,EAAC,SAAd,CAAF,EAAYC,cAAzC,C;K;iDAEJ,e;UAGW,I;MAFP,+BAAQ,GAAR,U;QAAo  
B,OAAO,W;;MAC3B,cAAc,WAAK,kBAAS,GAAT,C;MAEf,gBAAY,WAAZ,C;QAAoB,W;WACpB,gBAAY,mC  
AAZ,C;QAAqC,qB;;QAC7B,2BAAgB,OAAhB,EAAYB,cAAzB,C;MAHZ,W;K;uCAOJ,Y;MAIc,IAAI,IAAJ,Q;M  
AHV,UAAU,I;MACV,WAAW,C;MACX,OAAO,IAAP,C;QACU,uBAAI,OAAJ,GAAL,OAAJ,gC;QAAA,mB;UA  
AgC,OAAO,I;;QAA7C,MAAM,M;QACN,mB;;K;2CAIR,mB;MACI,+BAAL,OAAQ,IAAZ,GAAoB,OAApB,C;K;  
8CAEJ,mB;MAQ4B,Q;MAPxB,UAAU,O;MACV,OAAO,IAAP,C;QACI,IAAI,CAAC,gBAAS,GAAL,UAAb,CAA  
L,C;UAA4B,OAAO,K;QACnC,WAAW,GAAL,O;QACf,IAAI,oCAAJ,C;UACI,MAAM,I;;UAEN,OAAO,gBAAS,0  
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;IAGZ,uD;MACX,OAAI,G9JyHoC,YAAU,C8JzHID,GAAmB,OAAQ,WAA3B,GAA6C,GAAF,UAAQ,O;K;yCAF  
3D,Y;MACI,aAAM,kBAAK,EAAL,EAAS,+BAAT,CAAN,GAEL,G;K;IAMO,8E;MAAA,6B;QAAyB,Q;QAAT,iB  
AAS,sBAAT,EAAS,8BAAT,UAAoB,O;QAAQ,W;O;K;+CAJ3D,Y;MAOsB,Q;MANIB,QAAQ,a;MACR,eAAe,gB  
AA+B,CAA/B,O;MACf,gBAAY,CAAZ,C;MACA,kBAAK,kBAAL,EAAY,oDAAX,C;MjLTFJ,IAAI,EiLuFM,YA  
AS,CjLvFf,CAAJ,C;QACI,cAdW,e;QAEX,MAAM,6BAASB,OAAQ,WAA9B,C;;MiLuFN,OAAO,+BAAW,qDAA  
X,C;K;IAGa,8C;MACpB,kD;MADqB,wB;K;IACrB,gD;MAAA,oD;MACI,4B;K;;;IADJ,4D;MAAA,2D;QAAA,0C  
;;MAAA,oD;K;yDAIA,Y;MAA0C,gBAAT,a;M/L09YrB,Q;MADhB,kB+Lz9YmD,mC;M/L09YnD,wBAAgB,SA  
hB,gB;QAAgB,cAAA,SAAhB,M;QAASB,cAAwB,yBAAa,OAAb,C;;M+L19YT,O/L29Y9B,W;K;;;Igm7oZX,oE;  
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MAK0C,oG;MAAqB,gF;MAAW,4E;K;;IAAhC,+D;MAAA,gC;MAAA,uD;K;;IAAqB,qD;MAAA,gC;MAAA,6C;K;;IAAW,md;MAAA,gC;MAAA,2C;K;;IAL1E,sC;MAAA,sJ;K;;IAAA,2C;MAAA,a;aaaa,qB;UAAA,4D;aAAA,W;UAAA,kD;aAAA,S;UAAA,gD;;UAAA,qF;;K;;6ECnDA,yB;MAAA,0B;MAAA,mC;QAGsD,OAAiC,OAA3B,SAAL,GAAuB,KAAS,C;O;KAHvF,C;2EAKA,yB;MAAA,0B;MAAA,mC;QAGqD,OAAgC,OAA1B,SAAL,GAAsB,KAAS,C;O;KAHrF,C;6EAKA,yB;MAAA,0B;MAAA,mC;QAGsD,OAAiC,OAA3B,SAAL,GAAuB,KAAS,C;O;KAHvF,C;6EAKA,yB;MAAA,0B;MAAA,4B;QAGqC,OAAqB,OAAP,CAAR,SAAe,C;O;KAH1D,C;+EAMA,yB;MAAA,4B;MAAA,mC;QAGyD,OAAiC,QAA3B,SAAL,GAAuB,KAAS,C;O;KAH1F,C;6EAKA,yB;MAAA,4B;MAAA,mC;QAGwD,OAAgC,QAA1B,SAAL,GAAsB,KAAS,C;O;KAHxF,C;+EAKA,yB;MAAA,4B;MAAA,mC;QAGyD,OAAiC,QAA3B,SAAL,GAAuB,KAAS,C;O;KAH1F,C;+EAKA,yB;MAAA,4B;MAAA,4B;QAGuC,OAAqB,QAAP,CAAR,SAAe,C;O;KAH5D,C;ICpCA,qC;K;;ICAA,mB;K;;IAOA,iB;K;;IAOA,2C;K;;IAOA,wB;K;;IAQA,0B;K;;IAOA,sB;K;;IAOA,4B;K;;IAOA,6C;K;;IA+BuC,wE;MAEnC,uB;QAAA,UAAsB,E;MACtB,qB;QAAA,8B;MACA,2B;QAAA,qE;MACA,yB;QAAA,YAAqB,E;MAJrB,sB;MACA,sB;MACA,kB;MACA,8B;MACA,0B;K;;IAGJ,iD;MAAA,e;MAAA,iB;MAAA,uB;K;IAAA,+C;MAAA,kD;O;MAKI,wG;MACA,wG;MACA,8F;K;;IAFA,iE;MAAA,qC;MAAA,yD;K;;IACA,iE;MAAA,qC;MAAA,yD;K;;IACA,4D;MAAA,qC;MAAA,oD;K;;IAPJ,2C;MAAA,6K;K;;IAAA,gD;MAAA,a;aaaa,kB;UAAA,8D;aAAA,kB;UAAA,8D;aAAA,a;UAAA,yD;;UAAA,6E;;K;;IAUA,wB;K;;ICjGA,qB;MAAA,yB;K;0CAII,Y;MAO6D,uB;K;2HAE7D,yB;MAAA,+D;MAAA,kC;MAAA,0F;MAAA,6F;MAAA,4E;QAUI,wC;QAAS,2C;O;MAVb,mEAWQ,wC;QAA6E,sBAAS,QAAT,EAAmB,QAAnB,EAA6B,QAA7B,C;O;MAXrF,oG;MAAA,yC;QAUI,wDAA+B,YAA/B,C;O;KAVJ,C;uHAcA,yB;MAAA,+D;MAAA,kC;MAAA,wF;MAAA,yF;MAAA,0E;QAcI,wC;QAAS,2C;O;MAdB,kEAeQ,wC;QAAuF,6BAAS,QAAT,EAAmB,QAAnB,EAA6B,QAA7B,C;O;MAf/F,kG;MAAA,yC;QAcI,sDAA+B,YAA/B,C;O;KAdJ,C;;IA3BJ,iC;MAAA,gC;QAAA,e;;MAAA,yB;K;IAgDiC,sB;MAC7B,eAAwB,I;K;4CAExB,6B;MACW,Q;MAAA,mB;MAAA,iB;QAAS,MAAM,6BAAsB,cAAy,QAAS,aAArB,uCAAtB,C;;MAAtB,OAAO,I;K;4CAGX,oC;MACI,eAAa,K;K;;;kDC9CjB,6B;;K;;;iEA+CA,6B;;K;;ICrDuC,0C;MACvC,uBAAoB,Y;K;wDAEpB,wC;MAM6F,W;K;uDAE7F,wC;K;ODAMA,6B;MACI,OAAO,oB;K;ODAGX,oC;MACI,eAAe,IAAK,gB;MACpB,IAAI,CAAC,0BAAa,QAAb,EAAuB,QAAvB,EAAiC,KAAjC,CAAL,C;QACI,M;;MAEJ,uBAAa,K;MACb,yBAAY,QAAZ,EAAsB,QAAtB,EAAgC,KAAhC,C;K;;4EC9BR,wC;MAqBI,OAAO,e;K;4EAGX,+C;MAuBI,cAAI,KAAJ,C;K;4EAIJ,wC;MAmBI,OAAO,cAAI,OA AJ,C;K;4EAGX,+C;MAqBI,cAAI,OAAJ,EAAa,KAAb,C;K;IC/FJ,kB;MA6PI,4B;K;+BAtoA,Y;MAOiC,6BAAS,E AAT,C;K;uCAEjC,iB;MAW2C,4BAAQ,CAAR,EAAW,KAAx,C;K;uCAE3C,uB;MAakB,Q;MAHd,iBAAiB,IAAj B,EAAuB,KAAvB,C;MACA,QAAQ,QAAQ,IAAR,I;MACR,IAAI,IAAI,CAAJ,IAAS,MAAK,WAAIB,C;QACc,IA AI,MAAM,CAAC,CAAD,IAAN,OAAy,CAAhB,C;UACN,eAAe,SAAS,CAAT,C;UACf,6BAAS,QAAT,C;;UAEA ,K;;YAEI,WAAW,cAAU,KAAK,C;YAC1B,IAAI,OAAO,CAAP,I;;UACC,gBAAO,CAAP,IAAY,CAAZ,GAAgB, CAAhB,SAAqB,CAArB,C;UACT,Q;;QATJ,c;QAWA,OAAO,OAAO,GAAP,I;;QAEP,OAAO,IAAP,C;UACI,YA AU,c;UACV,IAAW,IAAP,qBAaKB,KAAtB,C;YAA6B,OAAO,K;;K;gCAKhD,Y;MAOmC,OAAU,oBAAV,cAA U,CAAS,WAAI,EAAJ,CAAnB,yBAA6B,cAA7B,E;K;wCAEnC,iB;MAW8C,iCAAY,KAAZ,C;K;wCAE9C,uB;M AiBkB,Q;MAPd,mBAAiB,IAAjB,EAAuB,KAAvB,C;MACA,QAAQ,eAAQ,IAAR,C;MACR,IAAI,eAAI,CAAR,C ;QACI,O;QACA,IAAI,aAAO,CAAD,aAAN,GAAY,CAAZ,CAAJ,C;UACI,WAAW,CAAe,Q;UACb,YAAa,qBAA O,EAAP,CAAW,Q;UAEpB,aAAQ,CAAR,C;YACI,eAAe,SAAS,IAAT,C;YAEf,OAAMB,oBAAAnB,sBAAS,QAAT ,CAAMB,CAAnB,iB;iBAEJ,cAAS,CAAT,C;YAEI,OAAU,oBAAV,cAAU,CAAV,iB;;YAEA,iBAAe,SAAS,KAA T,C;YACf,OAAMB,oBAAAnB,sBAAS,UAAT,CAAMB,CAAS,WAAI,EAAJ,CAA5B,KAAiD,oBAAV,cAAU,CAA V,iBAAvC,C;;UAXR,U;;UAeA,K;;YAEI,WAAW,eAAW,oBAAK,CAAL,C;YACtB,IAAI,YAAO,CAAP,C;;UAC C,sBAAO,CAAP,MAAY,+BAAI,CAAJ,EAAZ,eAAqB,CAArB,C;UACT,MAAM,C;;QAEV,OAAO,SAAO,GAAP ,C;;QAEP,OAAO,IAAP,C;UACI,YAAU,e;UACV,IAAW,IAAP,0CAAKB,KAAIB,CAAJ,C;YAA6B,OAAO,K;;K; mCAKhD,Y;MAKyC,6BAAS,CAAT,MAAe,C;K;kCAExD,Y;MAKuC,uBAAgB,sBAAS,EAAT,CAAhB,EAA8B, sBAAS,EAAT,CAA9B,C;K;0CAEvC,iB;MASoD,+BAAW,GAAX,EAAgB,KAAhB,C;K;0CAEpD,uB;MACy,Q; MAFR,mBAAiB,IAAjB,EAAuB,KAAvB,C;MACA,WAAW,QAAQ,I;MACX,IAAS,WAAI,IAAK,CAAL,IAA0B, SAAL,IAAK,CAA1B,IAA8C,SAAN,KAAM,CAAI,D,C;QACJ,SAAS,qBAAgB,QAAQ,CAAR,GAAY,OAAO,CA AnC,C;QACT,cAAO,EAAp,GAAY,E;;QAEZ,cAAO,oBAAe,I;;MAJ1B,Y;MAMA,OAAW,KAAK,KAAT,GAAsB ,SAAN,KAAM,CAAtB,GAAsC,C;K;iCAGjD,Y;MAKqC,6BAAS,EAAT,IAA0B,Q;K;IAWK,oF;MAAA,mB;QAA

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C,C;;K;I4LpBc,6C;MAsCxB,oC;MA/BA,iB;MANA,Y;MACA,Y;MACA,Y;MACA,Y;MACA,sB;M5LY  
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,Y;MAAQ,2B;K;2DAE1C,gB;MAA+D,YAAK,C;K;mDAEpe,iB;MAAGD,gBAAS,aAAT,IAAmB,SAAS,oB;K;0C  
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,iB;MAA+C,gBAAS,aAAT,IAAmB,SAAS,oB;K;yCAC3E,Y;MAAkC,SAAE,iBAAU,oBAAZ,C;K;wCAEIC,iB;M  
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AAL,C;QAAwB,MAAM,uBAAmB,sC/EjBzC,oB+EiByC,CAAnB,C;;MAC9B,OAAO,sD;K;IAMX,oC;MAAkC,Q;  
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B;MAIA,gB;M/LQA,IAAI,E+LDS,iBAAy,IAAb,MAAuB,iBAAvB,C/LCR,CAAJ,C;QACI,c+LDQ,iBAAy,IAAh  
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;;MAAA,yC;K;;2CArCJ,Y;MAWI,oB;K;2CAXJ,Y;MAeI,gB;K;6CafJ,0B;MAAA,2BAWI,8CAXJ,EAeI,kCafJ,C;  
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,KAAZ,C;QAAmB,OAAO,I;MAC1B,IAAI,CAAC,UAAAL,C;QAAiB,OAAO,K;MAExB,gBAAqB,cAAL,SAAK,C;  
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uEA,Q;MAAA,6B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,WAAy,WaxTgF,uBbwTIE,IaxTkE,CbwThF,C;;MaxT  
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AQ,gE;K;IAQZ,6B;MAAQ,6D;K;IAOP,+B;MAAQ,+D;K;IAWN,+B;MAAQ,+D;K;yEAG/B,+B;MAIqE,8BAAW,  
SAAX,C;K;2EAeE,+B;MAUwE,8BAAW,SAAX,C;K;IAIxE,yC;MACI,aAAa,KAAM,O;MACnB,IAAI,WAAU,C  
AAAd,C;QAAiB,MAAM,gCAAYB,qBAazB,C;MACvB,YAAY,C;MACZ,aAAa,gCAAS,K;MACTB,qBAAqB,U;M  
ACrB,QAAM,iBAAM,KAAN,CAAN,C;aACLE;aAAA,E;UAAy,qB;UAAZ,K;;MAEJ,cAAc,QAAQ,C;MACTB,iB  
AAiB,WAAiB,aAN,KAAM,EA AW,EAAX,C;MAE9B,cAAU,KA AV,C;QACI,MAAM,gCAAYB,eAAzB,C;WA  
CV,qBAAM,KAAN,MAAGB,EA AhB,C;QACI,IAAI,mCAAW,MAAf,C;UAAuB,MAAM,+B;QAC7B,sBAAsB,K;  
QACTB,sBAAsB,K;QACTB,eAA8B,I;QAC9B,OAAO,QAAQ,MAAf,C;UACI,IAAI,iBAAM,KAAN,MAAGB,EA  
pB,C;YACI,IAAI,mBAAM,mCAAW,MAAIC,C;cAA0C,MAAM,+B;YACHD,kBAAkB,I;YACIB,Q;;UAekB,iBA  
Ae,K;UA+EjD,QAHgC,U;UAlhC,Y;YAAO,eAhFqB,KAgFjB,O;YAAJ,S;cAAc,SAAU,YAhFH,KAgFG,YAAK,C  
AAL,E;cAAV,OAhFqC,CAAM,kBAAK,EAAL,CAAN,qCAAKB,2C;;;YAgFnC,a;;UAhF7B,gBAAGB,KiB9jCgE,  
WjB0oCIF,UiB1oCkF,EjB+oCrF,CiB/oCqF,C;UjB+jChF,IAAI,SuBrhCgC,YAAU,CvBqhC9C,C;YAAyB,MAAM,  
+B;UAC/B,gBAAS,SAAU,OAA nB,I;UACqB,cAAU,K;UsBxrCpC,U;UAAA,IAAI,WAAS,CAAT,IAAc,WAAS,iB  
tBwrCP,KsBxrCO,CAA3B,C;YAAA,StBwrCoB,KsBxrCkB,YAAI,OAAJ,C;;YtBwrCO,MAAM,gCAAYB,qCAAz  
B,C;;UAA9C,qB;UACA,qB;UACA,WAAW,sBAAsB,QAAtB,EAAGC,eAAhC,C;UACX,IAAI,YAAY,IAAZ,IAAo  
B,yBAAY,IAAZ,MAAxB,C;YAA0C,MAAM,gCAAYB,yCAAzB,C;UACHD,WAAW,I;UACX,eAAyB,WAAV,SA  
AU,EAAQ,EAAR,C;UACzB,IAAI,+CAAGC,WAAW,CAA/C,C;YACI,YAAY,SiBxkCgE,WjBwkC5C,CiBxkC4C,  
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4BAAMd,aAAx,SAA9B,SiB7kCmD,WjB6kC/B,QiB7kC+B,CjB6kCrB,CAAW,EA AW,IAAX,CAANd,C;;YAEA,

4BAA+C,aAArC,0BAA0B,SAA1B,CAAqC,EAAW,IAAX,CAA/C,C;;;aAIZ,c;QACI,MAAM,+B;;QACV,IAAM,c  
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ER+xCmE,cAAe,OQ/xCIF,CR+xCJ,EAA4G,IAA5G,CAAN,C;UACI,SAAS,gCAAS,S;;UAiIB,iBAA8B,I;UAC9B,  
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8CxC,Y;gBAAO,mBA9CiB,KA8Cb,O;gBAAJ,W;kBAAc,SA9C4B,UA8CIB,YA9CP,KA8CO,YAAK,GAAL,EA9  
CkB,MAAM,E;;;gBA8Cd,iB;;cA9CzB,QA+CT,G;;YA7CK,aAAa,I;YACS,mBA Ae,K;YA0CjD,UAHgC,Y;YAIhC  
,Y;cAAO,mBA3CqB,KA2CjB,O;cAAJ,W;gBAAc,WAAU,YA3CH,KA2CG,YAAK,GAAL,E;gBAAV,SA3CqC,C  
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B,iB;;YAxC7B,eAAe,KiBtmCiE,WjB0oCIF,YiB1oCkF,EjB+oCrF,GiB/oCqF,C;YjBumChF,gBAAS,QAAS,OAAI  
B,I;YACA,aAAW,wBAAwB,QAAXB,C;YACX,IAAI,cAAY,IAAZ,IAAoB,2BAAy,MAAZ,MAAXB,C;cAAOC,M  
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B,mCAAzB,C;;cAE1B,4BAA6B,aAAT,OAAV,WAAU,CAAS,EAAW,MAAX,CAA7B,C;;;MAKhB,OAAW,UA  
AJ,GAAiB,MAAD,aAAhB,GAA6B,M;K;IAIxC,0C;MACI,aAAa,KAAM,O;MACnB,iBAAiB,C;MACjB,IAAI,SA  
AS,CAAT,IAAc,YAAY,IAAZ,mBAAM,CAAN,EAAlB,C;QAAoC,+B;;MACHc,YAAC,SAAS,UAAT,IAAD,IAA  
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;;QV/TyD,iB;;MAAhE,S;QAEI,OAAW,iBAAM,CAAN,MAAY,EAAhB,sD;;MAGX,OAAiB,WAAN,KAAM,EA  
AW,GAAX,CAAV,GAAyC,OAAR,QAAN,KAAM,EAAK,CAAL,CAAQ,CAAzC,GAA6D,OAAO,KAAM,C;K;I  
AKxE,0D;MAII,QAHgC,U;MAIhC,OAAO,IAAI,gBAAJ,IAJqC,SAIvB,CAAU,iCAAK,CAAL,EAAV,CAArB,C;  
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ACR,OAAO,IAAI,gBAAJ,IAAc,UAAU,iCAAK,CAAL,EAAV,CAArB,C;QAAyC,a;;MACzC,OAAO,C;K;;;IAM  
BX,8B;MAA+C,qCAAQ,OAAR,E;K;IAC/C,+B;MAAgD,2CAAS,OAAT,E;K;IAEHd,sC;MAAiD,oBAAS,sBAAG  
B,CAAhB,CAAT,C;K;IACjD,wC;MAAmD,oBAAU,uBAAiB,CAAjB,CAAD,yBAAuB,CAAvB,EAAT,C;K;IACn  
D,oD;MAAoE,oBAAU,sBAAGB,CAAhB,CAAD,yBAAsB,iBAAtB,EAAT,C;K;IACpE,0C;MACI,IAAI,sEAAqB,  
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hB,I;aAC5B,c;UAF4C,OAEf,I;aAC7B,c;UAH4C,OAGf,I;aAC7B,S;UAJ4C,OAIpB,G;aACxB,S;UAL4C,OAKpB,  
G;aACxB,O;UAN4C,OAMtB,G;aACtB,M;UAP4C,OAovB,G;;UtMuEwB,MAAM,6BAA8B,CsMtEnE,mBAAGB,  
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E,I;UAHoE,8C;aAIpE,G;UAJoE,yC;aAKpE,G;UALoE,yC;aAMpE,G;UANoE,uC;aAOpE,G;UAPoE,sC;;UAQ5D,  
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UAIoB,MAAM,gCAAyB,4EAAqD,OAArD,CAAzB,C;;QAIIB,QAAM,OAAO,C;eACI,E;YATZ,uC;eAUyE,YA  
VZ,yC;eAWY,E;YAXZ,yC;;YAYoB,MAAM,gCAAyB,yDAaKc,OAAIC,CAAzB,C;;;K;IC5F9B,4B;K;;;MCqDI,k  
C;;IAICA,gC;MAAA,oC;K;6CAUI,Y;MAAwC,OAAA,iCAAoB,U;K;8CAC5D,Y;MAAKC,OAAA,iCAAoB,W;K;I  
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D,aAPB,C;K;gEAC5E,Y;MAAuC,QAAC,iBAAa,a;K;mEACrD,Y;MAA0C,OAAA,iBAAa,a;K;;;4DAjB3D,Y;  
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D,G;K;;;IAbJ,4C;MAAA,2C;QAAA,0B;;MAAA,oC;K;IAkCA,gC;MAAA,oC;K;;;IAAA,4C;MAAA,2C;QAAA,0B  
;;MAAA,oC;K;;;qCA2BA,oB;MAW8D,4BAAiB,IAAjB,EAAuB,QAAvB,C;K;sCAE9D,oB;MAW+D,wBAAM,Q  
AAD,aAAL,C;K;sCAG/D,Y;MAMqC,QAAC,iBAAa,a;K;yCAEnD,Y;MAMwC,OAAA,iBAAa,a;K;;4EAIzD,yB;  
MAAA,4C;MAAA,mC;QAQuE,MAAM,WAAM,0BAAN,C;O;KAR7E,C;mFAUA,yB;MAAA,4C;MAAA,mC;QA  
QsE,MAAM,WAAM,0BAAN,C;O;KAR5E,C;IAY8B,4C;MAAC,gB;MAAoB,4B;K;4CAC/C,Y;MAAsC,OAAA,S  
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IV,sC;MAAC,gB;K;IAOf,4E;MAAC,4B;MAA6B,8B;MAAgD,sB;K;+DACpG,Y;MAAsC,OAAgC,aAA/B,iBAA  
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,+CAAA,gBAAb,EAAwB,iBAAxB,EAAoC,0BAAS,QAAT,CAApC,C;K;;+CAGtD,Y;MAAmC,+CAAA,WAAb,E  
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B;K;mEAC1G,Y;MAAsC,OAAgC,aAA/B,iBAAW,OAAx,GAAoB,gBAAW,EAAW,iBAAW,KAAtB,CAAhC,cA  
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DAGtD,Y;MAAmC,mDA Ae,WAAf,EAAuB,IAAvB,EAA6B,gCAAS,KAATC,C;K;;IAGvC,0B;MAGb8B,yE;MAC  
1B,mB;K;oCAEA,Y;MAA4B,qB;K;iDAE5B,oB;MAWc,Q;MADV,gBAAGB,QAAS,gBAAO,SAAP,C;MACf,IAA  
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B,mBAAY,UAAZ,eAAyB,CAA3D,C;UAA8D,gBAAS,QAAT,C;QAC9D,iB;;QAEA,YAAy,QAAS,kBAAS,SA  
T,C;QAErB,mBAAiB,4BAAU,K;QAC3B,IAAI,sDAA+B,kDAA nC,C;UAAgE,gBAAS,QAAT,C;QACrD,8BAAX,  
YAAW,C;;MAVf,qB;K;0CAcJ,oB;MACI,MAAM,6BAAsB,iDAA+C,cAA/C,qCAA0E,QAA1E,MAAtB,C;K;;IC9  
Fd,yC;MACI,iBAAiB,QAAS,mB;MAC1B,IAAI,OAAC,oCAAS,CAAT,EAAD,kCAAJ,C;QACI,OAAO,wBAAwB  
,MAAxB,EAAgC,QAAhC,EAA0C,UAA1C,C;;MAEX,IAAI,OAAC,wCAAA,CAAb,EAAD,kCAAJ,C;QACI,OAA  
O,sBAAsB,MAAtB,EAA8B,QAA9B,C;;MAGX,aAAa,WAAS,UAAT,C;MACb,IAAM,WAAW,MAAX,CAAD,K  
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GX,+D;MACI,IAAI,QAAS,aAAT,IAA0B,WAAW,UAAx,eAAwB,CAAtD,C;QAA0D,MAAM,gCAAYB,uCAAz  
B,C;MACHe,OAAO,M;K;IAGX,iD;MACI,WAAW,qBAAW,CAAX,C;MACX,IAAI,OAAC,IAAK,mBAAL,8BA  
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F+MjEnD,yB;MAAA,yC;MAAA,wB;QA4CI,WAAW,8B;QAjC6B,KakCx,C,E;QAIcA,OAmCO,IAAK,a;O;KA9C  
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X,O;MACA,OAAO,IAAK,a;K;IAYe,qC;MAAC,kB;MAAc,wB;K;;sCAR9C,Y;MAQgC,iB;K;sCARhC,Y;MAQ8C  
,oB;K;wCAR9C,2B;MAAA,sBAQgC,qCARhC,EAQ8C,8CAR9C,C;K;oCAAA,Y;MAAA,OAQgC,iDARhC,IAQ8  
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,8C;MAGtC,6B;MAEmD,UAMX,M;MAPxC,kBACmD,mE;MAEnD,eAC0B,K;MAE1B,cACwC,kE;MAExC,gBA  
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E,Q;QAAZ,qCAAY,8D;QACZ,sCAAA,a;QAFb,OAGA,yB;O;K;2DAJJ,+B;MAAkD,OAA5C,wDAAtC,c;K;IAOyE  
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zC,C;;UAGZ,mBAAY,kE;;QAEhB,oBAAa,e;QAZjB,OAca,yB;O;K;6DAfJ,0C;MAAQf,OAA5C,qEAAAtC,c;K;IAq

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,K;K;kFgC7NL,Y;MAAQ,OAAA,YAAQ,O;K;oCAE9C,Y;MAC8E,+BAAS,YAAT,C;K;IAExD,oC;MAAC,oB;M  
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RmC,SgO5RhB,IhO4RgB,C;MgO3RnC,cAAuB,cAAJ,GAAa,KAAb,GAAwB,mB;K;gDAE3C,Y;MAAkC,qB;K;6  
CAEIC,Y;MACI,YAAY,W;MACZ,IAAI,6BAAS,mBAAT,QAAJ,C;QACI,IAAI,CAAC,cAAL,C;UAAc,MAAA,6B  
;QAC3B,iBAAU,K;;QAEV,chOjD6C,SgOiD7C,WhOjDuD,KAAC,GgOiDpD,WhOjD+D,KAAX,IAAf,C;;MgOm  
DjD,OAAO,K;K;;IhNpHU,qB;MAErB,6B;MAFwD,gB;K;IAExD,2B;MAAA,+B;MACI,iBAGoC,a;MAEpC,iBAG  
oC,c;MAEpC,kBAGmC,C;MAEnC,iBAGkC,E;K;;IANbtC,uC;MAAA,sC;QAAA,qB;;MAAA,+B;K;sGAsBA,yB;  
MjBqRA,WAS6D,wB;MAT7D,+B;MiB7PA,gD;MAxBa,wB;QAM0D,OAYBS,aAAa,IAAK,KAAIB,EAA8B,CjB  
+P5D,eAAW,oBiBxRyB,KjBwR9B,KAAC,CAAL,UAAAN,CiB/P4D,MAA9B,C;O;KA/BnE,C;sGAQA,yB;Mf8QA,  
aAS6D,0B;MAT7D,+B;Me9PA,gD;MAhBA,wB;QAM2D,OaiBQ,aAAa,IAAK,KAAIB,EAA8B,CfgQ5D,eAAW,o  
BejR0B,KfiR/B,KAAC,CAAL,YAAN,CehQ4D,MAA9B,C;O;KA/BnE,C;sGAQA,yB;MhByRA,kBAS6D,sB;MA  
T7D,+B;MgBjRA,gD;MARA,wB;QAMyD,OASU,aAAa,IAAK,KAAIB,EAA8B,ChBmR5D,eAAW,oBgB5RwB,K  
hB4R7B,KAAC,CAAL,iBAAN,CgBnR4D,MAA9B,C;O;KAfnE,C;kGAQA,yB;MAAA,gD;MAAA,wB;QAOMe,o  
BAAa,IAAK,KAAIB,EAAwB,KAAM,KAA9B,C;O;KAPnE,C;4FASA,yB;MjBoPA,WAS6D,wB;MAT7D,+B;MiB  
pPA,wB;QAEuD,OASA,eAAM,IAAK,KAAC,KAAC,KAAC,KAAC,CjBkP7C,eAAW,oBiB3PiB,KjB2PtB,KAAC,CAAL,UAA  
N,CiBIP6C,MAAX,CAAhB,C;O;KAXvD,C;4FAGA,yB;MfkPA,aAS6D,0B;MAT7D,+B;MelPA,wB;QAEwD,OA  
MD,eAAM,IAAK,KAAC,KAAC,KAAC,CfmP7C,eAAW,oBezPkB,KfyPvB,KAAC,CAAL,YAAN,CenP6C,MAAX,CAA  
hB,C;O;KARvD,C;4FAGA,yB;MhBkQA,kBAS6D,sB;MAT7D,+B;MgBIQA,wB;QAEsD,OAGC,eAAM,IAAK,K  
AAK,KAAC,ChBsQ7C,eAAW,oBgBzQgB,KhByQrB,KAAC,CAAL,iBAAN,CgBtQ6C,MAAX,CAAhB,C;O;KA  
LvD,C;4FAGA,yB;MAAA,+B;MAAA,wB;QAEuD,sBAAM,IAAK,KAAC,KAAC,KAAM,KAAX,CAAhB,C;O;K  
AFvD,C;8FAIA,yB;MjBuOA,WAS6D,wB;MAT7D,+B;MiBvOA,wB;QAEwD,OASA,eAAM,IAAK,KAAC,UA  
Y,CjBqO/C,eAAW,oBiB9OmB,KjB8OxB,KAAC,CAAL,UAAAN,CiBrO+C,MAAZ,CAAhB,C;O;KAXxD,C;8FAG

A,yB;MfqOA,aAS6D,0B;MAT7D,+B;MerOA,wB;QAEyD,OAMD,eAAM,IAAK,KAAK,UAAy,CfsO/C,eAAW,oBe5OoB,Kf4OzB,KAAK,CAAL,YAAN,CetO+C,MAAZ,CAAhB,C;O;KARxD,C;8FAGA,yB;MhBqPA,kBAS6D,sB;MAT7D,+B;MgBrPA,wB;QAEuD,OAGC,eAAM,IAAK,KAAK,UAAy,ChByP/C,eAAW,oBgB5PkB,KhB4PvB,KAAK,CAAL,iBAAN,CgBzP+C,MAAZ,CAAhB,C;O;KALxD,C;8FAGA,yB;MAAA,+B;MAAA,wB;QAEwD,sBAAM,IAAK,KAAK,UAAy,KAAM,KAAZ,CAAhB,C;O;KAFxD,C;8FAIA,yB;MjB0NA,WAS6D,wB;MAT7D,+B;MiB1NA,wB;QAEwD,OASA,eAAM,IAAK,KAAK,UAAy,CjBwN/C,eAAW,oBiBjOmB,KjBiOxB,KAAK,CAAL,UAAy,CiBxN+C,MAAZ,CAAhB,C;O;KAXxD,C;8FAGA,yB;MfwNA,aAS6D,0B;MAT7D,+B;MexNA,wB;QAEyD,OAMD,eAAM,IAAK,KAAK,UAAy,CfyN/C,eAAW,oBe/NoB,Kf+NzB,KAAK,CAAL,YAAN,CezN+C,MAAZ,CAAhB,C;O;KARxD,C;8FAGA,yB;MhBwOA,kBAS6D,sB;MAT7D,+B;MgBxOA,wB;QAEuD,OAGC,eAAM,IAAK,KAAK,UAAy,ChB4O/C,eAAW,oBgB/OkB,KhB+OvB,KAAK,CAAL,iBAAN,CgB5O+C,MAAZ,CAAhB,C;O;KALxD,C;8FAGA,yB;MAAA,+B;MAAA,wB;QAEwD,sBAAM,IAAK,KAAK,UAAy,KAAM,KAAZ,CAAhB,C;O;KAFxD,C;0FAIA,yB;MjB6MA,WAS6D,wB;MAT7D,+B;MiBpMA,8C;MATA,wB;QAEsD,OASA,YAAy,IAAZ,EjB2MjB,eAAW,oBiBpNe,KjBoNpB,KAAK,CAAL,UAAy,CiB3MiB,C;O;KAXtD,C;0FAGA,yB;Mf2MA,aAS6D,0B;MAT7D,+B;MerMA,8C;MANA,wB;QAEuD,OAMD,YAAy,IAAZ,Ef4MjB,eAAW,oBelNgB,KfkNrB,KAAK,CAAL,YAAN,Ce5MiB,C;O;KARtD,C;0FAGA,yB;MhB2NA,kBAS6D,sB;MAT7D,+B;MgBxNA,8C;MAHA,wB;QAEqD,OAGC,YAAy,IAAZ,EhB+NjB,eAAW,oBgBIOc,KhBkOnB,KAAK,CAAL,iBAAN,CgB/NiB,C;O;KALtD,C;0FAGA,yB;MAAA,8C;MAAA,wB;QAEsD,mBAAY,IAAZ,EAAkB,KAAIB,C;O;KAFtD,C;0FAIA,yB;MjBgMA,WAS6D,wB;MAT7D,+B;MiB3KA,oD;MARBa,wB;QAMsD,OaQBA,eAAe,IAAf,EjB8KjB,eAAW,oBiBnMe,KjBmMpB,KAAK,CAAL,UAAy,CiB9KiB,C;O;KA3BtD,C;0FAOA,yB;Mf0LA,aAS6D,0B;MAT7D,+B;Me5KA,oD;MAdA,wB;QAMuD,OAcD,eAAe,IAAf,Ef+KjB,eAAW,oBe7LgB,Kf6LrB,KAAK,CAAL,YAAN,Ce/KiB,C;O;KApBtD,C;0FAOA,yB;MhBsMA,kBAS6D,sB;MAT7D,+B;MgB/LA,oD;MAPA,wB;QAMqD,OAOC,eAAe,IAAf,EhBkMjB,eAAW,oBgBzMc,KhByMnB,KAAK,CAAL,iBAAN,CgBlMiB,C;O;KAbtD,C;0FAOA,yB;MAAA,oD;MAAA,wB;QAMsD,sBA Ae,IAAf,EAAqB,KAArB,C;O;KANtD,C;oGAQA,yB;MjBmKA,WAS6D,wB;MAT7D,+B;MiBpMA,8C;MAiCA,wB;QAMkD,OArCI,YAAy,IAAZ,EjB2MjB,eAAW,oBiBtKgB,KjBsKrB,KAAK,CAAL,UAAy,CiB3MiB,C;O;KA+BtD,C;oGAOA,yB;Mf6JA,aAS6D,0B;MAT7D,+B;MerMA,8C;MAwCA,wB;QAMmD,OA5CG,YAAy,IAAZ,Ef4MjB,eAAW,oBehKiB,KfgKtB,KAAK,CAAL,YAAN,Ce5MiB,C;O;KAsCtD,C;oGAOA,yB;MhByKA,kBAS6D,sB;MAT7D,+B;MgBxNA,8C;MA+CA,wB;QAMiD,OAnDK,YAAy,IAAZ,EhB+NjB,eAAW,oBgB5Ke,KhB4KpB,KAAK,CAAL,iBAAN,CgB/NiB,C;O;KA6CtD,C;oGAOA,yB;MatDA,8C;MASDA,wB;QAMkD,OA1DI,YAAy,IAAZ,EA0DA,KA1DA,C;O;KAoDtD,C;0FAQA,yB;MjBsIA,WAS6D,wB;MAT7D,+B;MiB3KA,oD;MjB4OJ,0B;MAAA,+B;MiBvMI,wB;QAQ6C,OjB0MP,eAAW,OiBjPK,eAAe,IAAf,EjB8KjB,eAAW,oBiBvIM,KjBuIX,KAAK,CAAL,UAAy,CiB9KiB,CA4KjB,KjBqEY,SAAX,C;O;KiBINtC,C;0FASA,yB;Mf8HA,aAS6D,0B;MAT7D,+B;Me5KA,oD;Mf6OJ,4B;MAAA,iC;Me/LI,wB;QAQ+C,OfkMP,gBAAY,QelPE,eAAe,IAAf,Ef+KjB,eAAW,oBe/HQ,Kf+Hb,KAAK,CAAL,YAAN,Ce/KiB,CAsLf,Kf4Da,SAAZ,C;O;Ke1MxC,C;0FASA,yB;MhBwIA,kBAS6D,sB;MAT7D,+B;MgB/LA,oD;MhBkQJ,6B;MgB3MI,wB;QAQ2C,OhB8MP,cgBvQkB,eAAe,IAAf,EhBkMjB,eAAW,oBgBzII,KhByIT,KAAK,CAAL,iBAAN,CgBlMiB,CAGMnB,KhBuEW,QAAY,C;O;KgbtNpC,C;0FASA,yB;MAhEA,oD;MAGEA,wB;QAQ6C,OAIES,eAAe,IAAf,EAKEL,KAIEK,C;O;KA0DtD,C;0EAUA,yB;MAAA,+B;MAAA,mB;QAM0C,sBAAM,SAAK,MAAX,C;O;KAN1C,C;0EAQA,yB;MAAA,+B;MAAA,mB;QAM0C,sBAAM,SAAK,MAAX,C;O;KAN1C,C;kGAQA,yB;MAAA,gD;MAAA,wB;QAE+D,2BAAW,IAAX,EAAiB,KAAjB,C;O;KAF/D,C;0FAIA,yB;MAAA,+B;MAAA,2B;QAOoD,sBAAM,oBAAS,QAAT,CAAN,C;O;KAPpD,C;0FASA,yB;MAAA,+B;MAAA,2B;QAOoD,sBAAM,6BAAU,QAAY,CAAN,C;O;KAPpD,C;0FASA,yB;MAAA,+B;MAAA,wB;QAEuD,sBAAM,IAAK,KAAL,KAAc,KAAM,KAApB,CAAN,C;O;KAFnD,C;wFAGA,yB;MAAA,+B;MAAA,wB;QAEkD,sBAAM,IAAK,KAAL,IAAa,KAAM,KAAAnB,CAAN,C;O;KAFID,C;0FAGA,yB;MAAA,+B;MAAA,wB;QAEuD,sBAAM,IAAK,KAAL,KAAc,KAAM,KAApB,CAAN,C;O;KAFnD,C;0EAGA,yB;MAAA,+B;MAAA,mB;QAEiC,sBAAM,SAAK,MAAX,C;O;KAFjC,C;gFAIA,yB;MAAA,0B;MAAA,mB;QAUmC,OAAK,OAAL,SAAK,S;O;KAVxC,C;kFAWA,yB;MAAA,4B;MAAA,mB;QAUqC,OAAK,QAAL,SAAK,S;O;KAV1C,C;8EAWA,Y;MAUiC,OAAA,SAAK,Q;K;gFACTC,Y;MASmC,gB;K;kFAEnC,yB;MjBmEJ,0B;MAAA,+B;MiBnEI,mB;QASqC,OjBqEC,eAAW,OiBrEZ,SjBqEY,SAAX,C;O;KiB9EtC,C;oFAUA,yB;Mf0DJ,4B;MAAA,iC;Me1DI,mB;QASuC,Of4DC,gBAAY,Qe5Db,Sf4Da,SAAZ,C;O;KerExC,C;gFAUA,yB;MhBqEJ,6B;MgBrEI,mB

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O,I;QAIf,SrOnHkD,SAAE,YqOmHjE,MrOnH4D,KAAK,EqOmHvD,MrOnHmE,KAAZ,CAAF,C;QqOqHID,mBA  
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f,C;QqOiJjD,IrOnK8D,YqOmK1D,MrOnK2E,KAAjB,EqOmKjD,YrOnK8E,KAA7B,CqOmK1D,IAAJ,C;UAA2B,  
OAAO,I;MAGtC,OAAO,M;K;IAGX,kC;MAM4C,kCAAsB,EAAtB,C;K;IAE5C,2C;MASI,WAAW,KAAX,C;MA  
EA,aAAa,SAAK,O;MACiB,IAAI,WAAU,CAAd,C;QAAiB,OAAO,I;MAExB,YAAmB,6BAAM,U;MACzB,S;MA  
EA,gBAAGb,qBAAK,CAAL,C;MACHb,IAAI,YAAy,EAHb,C;QACI,IAAI,WAAU,CAAV,IAAe,cAAa,EAHb,C  
;UAAqC,OAAO,I;QAC5C,QAAQ,C;QAER,QAAQ,C;MAIZ,uBAAuB,gD;MAEvB,qBAAqB,gB;MACrB,arN0  
IqC,UAAW,oBqN1InC,KrN0ImC,CAAX,C;MqNzIrC,aAAa,2B;MACb,aAAU,KAAV,MAAsB,MAAtB,M;QACI,  
YAAy,QAAQ,qBAAK,CAAL,CAAR,EAaiB,KAAjB,C;QAEZ,IAAI,QAAQ,CAAZ,C;UAAe,OAAO,I;QACtB,Ir  
N5M+D,aqN4M3D,MrN5M6E,KAAIB,EqN4MID,crN5MgF,KAA9B,CqN4M3D,IAAJ,C;UACI,IAAI,+CAAkB,g  
BAAIB,QAAJ,C;YACI,iBrN1J0C,YqN0JzB,KrN1JyB,EqN0JjB,MrN1JiB,C;YqN4J1C,IrNhNuD,aqNgNnD,MrNh  
NqE,KAAIB,EqNgN1C,crNhNwE,KAA9B,CqNgNnD,IAAJ,C;cACI,OAAO,I;YAGX,OAAO,I;QAIf,SrNjLoD,  
UqNiLpD,MrNjL+D,KAAK,UqNiL1D,MrNjLsE,KAAZ,CAAhB,C;QqNmLpD,mBAAmB,M;QACnB,SrN9MmD,  
UqN8MnD,MrN9M8D,KAAK,KAAW,ChBsQ7C,UAAW,oBAAL,CAyDR,SqOjHrB,KrOiHqB,CAzDQ,MAAK,C  
AAL,iBAAN,CgBtQ6C,MAAX,CAAhB,C;QqN+MnD,IrN5N+D,aqN4N3D,MrN5N6E,KAAIB,EqN4NID,YrN5Ng  
F,KAA9B,CqN4N3D,IAAJ,C;UAA2B,OAAO,I;MAGtC,OAAO,M;K;I7N9RX,6B;MACkD,OAAuB,0BAAtB,KA  
AO,WAAe,EAAU,KAAO,WAAjB,C;K;IACzE,8B;MACqD,OAAC,gCAAuB,iBAAU,gCAAV,C;K;IAE7E,4B;MA  
CoD,ORiZZ,SAvGI,oBQ1SS,ER0Sd,KAAK,CAAL,iBQ1Sc,KR0ST,oBQ1SuB,ER0S5B,KAAK,CAAL,iBQ1Sc,C  
RiZH,QAAV,C;K;IQhZxC,+B;MACuD,OR+Yf,SAvGI,oBQxSY,ERwSjB,KAAK,CAAL,iBQxSiB,QRwSZ,oBQx  
S0B,ERwS/B,KAAK,CAAL,iBQxSiB,CR+YN,QAAV,C;K;IQ1YxC,6B;MAEI,eAAe,EqkSoB,K;MRjSnC,cAAc,E  
QiSqB,K;MRhSnC,IAAI,qBAAU,CAAd,C;QACI,OQ6C+D,aR7CpD,EQ6CsE,KAAIB,ER7C/C,EQ6C6E,KAA9B,  
CR7CpD,IAAJ,GAAa,aAb,GAA2B,a;MAItC,IAAI,uBAAy,CAAhB,C;QACI,OAAO,UAAm,aAAW,OAAX,CA  
AN,C;MAIX,eAAiB,4BAAc,CAAd,CAAD,KAAoB,OAAPB,CAAD,WAAkC,CAAIC,C;MACf,UAAU,kBAAW,k





AAAnB,C;yBiH5LL,C;gCAKY,eAAiB,OAAL,GAAK,CAAjB,EAAgC,OAAL,GAAK,CAAhC,EAA+C,OAAL,GA  
AK,CAA/C,E;uBAwDd,K;qB4ChHK,C;yBACI,C;sBACH,C;kBACJ,C;iBACD,C;mBACE,C;sB9KozCH,O;;;uBk  
D3zCzB,W8JmCkC,yB9JnCIC,C;;;CzEjFX,E;"}

Found

in path(s):

\* /opt/cola/permits/1439711585\_1665547209.6866746/0/kotlin-1-7-10-3-tgz/package/kotlin.js.map

# 1.110 protobuf-java 3.19.6

## 1.110.1 Available under license :

No license file was found, but licenses were detected in source scan.

Manifest-Version: 1.0

Automatic-Module-Name: com.google.protobuf

Bnd-LastModified: 1664485905970

Build-Jdk: 1.8.0\_181-google-v7

Built-By: mkruskal

Bundle-Description: Core Protocol Buffers library. Protocol Buffers are a way of encoding structured data in an efficient yet extensible format.

Bundle-DocURL: <https://developers.google.com/protocol-buffers/>

Bundle-License: <https://opensource.org/licenses/BSD-3-Clause>

Bundle-ManifestVersion: 2

Bundle-Name: Protocol Buffers [Core]

Bundle-SymbolicName: com.google.protobuf

Bundle-Version: 3.19.6

Created-By: Apache Maven Bundle Plugin

Export-Package: com.google.protobuf;version="3.19.6"

Import-Package: sun.misc;resolution:=optional,com.google.protobuf;version="[3.19,4)"

Require-Capability: osgi.ee;filter="(&(osgi.ee=JavaSE)(version=1.7))"

Tool: Bnd-3.0.0.201509101326

Found in path(s):

\* /opt/cola/permits/1444789790\_1666041710.804059/0/protobuf-java-3-19-6-jar/META-INF/MANIFEST.MF

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```
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Found in path(s):

```
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/timestamp.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/struct.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/wrappers.proto
*
/opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/type.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/empty.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/any.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/descriptor.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/duration.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/field_mask.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/compiler/plugin.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/source_context.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/api.proto
```

## 1.111 jctools-core 4.0.1

### 1.111.1 Available under license :

No license file was found, but licenses were detected in source scan.

Manifest-Version: 1.0

Bnd-LastModified: 1662622707903

Build-Jdk-Spec: 11

Bundle-Description: Java Concurrency Tools Core Library

Bundle-License: <http://www.apache.org/licenses/LICENSE-2.0.txt>

Bundle-ManifestVersion: 2

Bundle-Name: Java Concurrency Tools Core Library

Bundle-SymbolicName: org.jctools.core

Bundle-Version: 4.0.1

Created-By: Apache Maven Bundle Plugin 5.1.6

Export-Package: org.jctools.maps;version="4.0.1",org.jctools.util;uses:="sun.misc";version="4.0.1",org.jctools.queues;version="4.0.1",org.jctools.queues.atomic;uses:="org.jctools.queues";version="4.0.1",org.jctools.queues.unpadded;uses:="org.jctools.queues";version="4.0.1",org.jctools.counters;version="4.0.1"

Import-Package: sun.misc;resolution:=optional

Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.6))"

Tool: Bnd-6.2.0.202202251641

Found in path(s):

```
* /opt/cola/permits/1500645298_1670406227.9308958/0/jctools-core-4-0-1-jar/META-INF/MANIFEST.MF
```

No license file was found, but licenses were detected in source scan.

<name>Apache License, Version 2.0</name>  
<url><http://www.apache.org/licenses/LICENSE-2.0.txt></url>

Found in path(s):

\* /opt/cola/permits/1500645298\_1670406227.9308958/0/jctools-core-4-0-1-jar/META-INF/maven/org.jctools/jctools-core/pom.xml

## 1.112 rocksdbjni 7.1.2

### 1.112.1 Available under license :

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Found in path(s):

\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/RocksMutableObject.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AbstractNativeReference.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Holder.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AbstractImmutableNativeReference.java

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Found in path(s):

\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/RateLimiter.java  
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Found in path(s):

\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/VectorMemTableConfig.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AbstractTableFilter.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/MutableOptionValue.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/HashLinkedListMemTableConfig.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AbstractMutableOptions.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/TableProperties.java

```
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/util/Environment.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/MutableOptionKey.java
*
/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/SkipListMemTableConfig.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/SizeApproximationFlag.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/CompactionStopStyle.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/HashSkipListMemTableConfig.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/MutableDBOptionsInterface.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/TableFilter.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/TransactionLogIterator.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/NativeLibraryLoader.java
*
/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/InfoLogLevel.java
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```

```
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```

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```
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/StatsLevel.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ThreadStatus.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/BlockBasedTableConfig.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/HistogramType.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/RocksDBException.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/TableFormatConfig.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/CompactionOptions.java
*
/opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/ExternalFileIngestionInfo.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/CompactionJobInfo.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/OptimisticTransactionOptions.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/RocksObject.java
```

\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/SstFileWriter.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Statistics.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AbstractCompactionFilterFactory.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/DbPath.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/StatisticsCollectorCallback.java  
\*  
/opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/StateType.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/TxnDBWritePolicy.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/PersistentCache.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/WalProcessingOption.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Experimental.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Logger.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ReusedSynchronisationType.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/DBOptionsInterface.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AbstractTransactionNotifier.java  
\*  
/opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ClockCache.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ColumnFamilyMetaData.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/WALRecoveryMode.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/WriteBatchInterface.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/CompactionOptionsFIFO.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/NativeComparatorWrapper.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ThreadType.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/TtlDB.java  
\*  
/opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/MutableColumnFamilyOptionsInterface.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/LevelMetaData.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/AbstractWalFilter.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/WriteStallInfo.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/OptionsUtil.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-

jar/org/rocksdb/RocksCallbackObject.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/util/SizeUnit.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ColumnFamilyDescriptor.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/CompactionOptionsUniversal.java  
\*  
/opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/ColumnFamilyHandle.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/IngestExternalFileOptions.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Snapshot.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/MemoryUtil.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/SstFileReader.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/BackupEngine.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/CompactionStyle.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/PlainTableConfig.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/StatsCollectorInput.java  
\*  
/opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/IndexShorteningMode.java  
\* /opt/cola/permits/1515188939\_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Range.java  
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* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-jar/org/rocksdb/Checkpoint.java
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* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/CompressionOptions.java
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* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/MergeOperator.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
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jar/org/rocksdb/CassandraValueMergeOperator.java
* /opt/cola/permits/1515188939_1671567706.271915/0/rocksdbjni-7-1-2-sources-
jar/org/rocksdb/CassandraCompactionFilter.java
```

## 1.113 snake-yaml 2.6

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Manifest-Version: 1.0  
Created-By: 11.0.16.1 (Azul Systems, Inc.)  
Build-Jdk-Spec: 11  
Bnd-LastModified: 1673019830620  
Bundle-ContactAddress: <https://github.com/google/gson>  
Bundle-Description: Gson JSON library  
Bundle-Developers: google;organization=Google;organizationUrl="https://www.google.com"  
Bundle-DocURL: <https://github.com/google/gson/gson>  
Bundle-License: "Apache-2.0";link="https://www.apache.org/licenses/LICENSE-2.0.txt"  
Bundle-ManifestVersion: 2  
Bundle-Name: Gson  
Bundle-RequiredExecutionEnvironment: JavaSE-1.7, JavaSE-1.8  
Bundle-SCM: url="https://github.com/google/gson/gson",connection="scm:git:https://github.com/google/gson.git/gson",developer-connection="scm:git:git@github.com:google/gson.git/gson",tag="gson-parent-2.10.1"  
Bundle-SymbolicName: com.google.gson  
Bundle-Vendor: Google Gson Project  
Bundle-Version: 2.10.1  
Export-Package: com.google.gson;uses:="com.google.gson.reflect,com.google.gson.stream";version="2.10.1",com.google.gson.annotations;version="2.10.1",com.google.gson.reflect;version="2.10.1",com.google.gson.stream;version="2.10.1"  
Import-Package: sun.misc;resolution:=optional,com.google.gson.annotations  
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.7))"  
Tool: Bnd-6.4.0.202211291949  
Multi-Release: true

Found in path(s):

\* /opt/cola/permits/1570533427\_1676891842.8285189/0/gson-2-10-1-jar/META-INF/MANIFEST.MF

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## 1.121 commons-fileupload 1.5

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 *
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 */
```

Found in path(s):

```
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
```

jar/org/yaml/snakeyaml/representer/SafeRepresenter.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/parser/Parser.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/env/EnvScalarConstructor.java  
\*  
/opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/nodes/ScalarNode.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/tokens/ValueToken.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/events/StreamEndEvent.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/constructor/AbstractConstruct.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/events/CollectionEndEvent.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/emitter/ScalarAnalysis.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/events/AliasEvent.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/events/ScalarEvent.java  
\*  
/opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/emitter/EmitterState.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/tokens/DirectiveToken.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/events/StreamStartEvent.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/events/CommentEvent.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/tokens/AliasToken.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/constructor/Construct.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/events/ImplicitTuple.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/constructor/CustomClassLoaderConstructor.java  
\*  
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jar/org/yaml/snakeyaml/introspector/Property.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/parser/Production.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/resolver/ResolverTuple.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/scanner/Scanner.java

\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/composer/ComposerException.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/nodes/MappingNode.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/emitter/Emitable.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/tokens/FlowMappingEndToken.java  
 \*  
 /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/DumperOptions.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/tokens/FlowSequenceEndToken.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/nodes/AnchorNode.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/representer/Represent.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/nodes/Node.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/tokens/FlowMappingStartToken.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/reader/ReaderException.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/constructor/SafeConstructor.java  
 \*  
 /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/scanner/Constant.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/nodes/NodeId.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/serializer/AnchorGenerator.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/tokens/DocumentEndToken.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/parser/ParserImpl.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/tokens/ScalarToken.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/introspector/MethodProperty.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/events/CollectionStartEvent.java  
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 /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
 jar/org/yaml/snakeyaml/util/UriEncoder.java  
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 jar/org/yaml/snakeyaml/reader/UnicodeReader.java  
 \* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-

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\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/nodes/CollectionNode.java  
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\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/tokens/BlockSequenceStartToken.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
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jar/org/yaml/snakeyaml/representer/BaseRepresenter.java  
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jar/org/yaml/snakeyaml/events/SequenceEndEvent.java  
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jar/org/yaml/snakeyaml/serializer/Serializer.java  
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jar/org/yaml/snakeyaml/emitter/EmitterException.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/introspector/FieldProperty.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
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jar/org/yaml/snakeyaml/LoaderOptions.java  
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\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/serializer/SerializerException.java  
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jar/org/yaml/snakeyaml/events/DocumentEndEvent.java  
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jar/org/yaml/snakeyaml/tokens/FlowSequenceStartToken.java  
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jar/org/yaml/snakeyaml/resolver/Resolver.java  
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jar/org/yaml/snakeyaml/inspector/TagInspector.java  
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jar/org/yaml/snakeyaml/constructor/Constructor.java  
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jar/org/yaml/snakeyaml/scanner/SimpleKey.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-  
jar/org/yaml/snakeyaml/events/DocumentStartEvent.java  
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\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/serializer/NumberAnchorGenerator.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/AnchorToken.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/error/MissingEnvironmentVariableException.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/constructor/BaseConstructor.java  
\*  
/opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/StreamEndToken.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/composer/Composer.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/extensions/compactnotation/CompactData.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/introspector/PropertyUtils.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/nodes/Tag.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/events/NodeEvent.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/introspector/PropertySubstitute.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/reader/StreamReader.java  
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/opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/internal/Logger.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/events/MappingStartEvent.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/scanner/ScannerImpl.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/KeyToken.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/TagTuple.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/tokens/BlockEntryToken.java  
\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/introspector/MissingProperty.java

\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/events/Event.java

\*

/opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/constructor/DuplicateKeyException.java

\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/extensions/compactnotation/CompactConstructor.java

\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/comments/CommentType.java

\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/introspector/GenericProperty.java

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\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/external/com/google/gdata/util/common/base/Escaper.java

\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/external/com/google/gdata/util/common/base/PercentEscaper.java

\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/org/yaml/snakeyaml/external/com/google/gdata/util/common/base/UnicodeEscaper.java

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\* /opt/cola/permits/1584157893\_1677999786.1262538/0/snakeyaml-2-0-sources-jar/META-INF/maven/org.yaml/snakeyaml/pom.xml

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/**
 * A Base64 encoder/decoder.
 *
 * <p>
 * This class is used to encode and decode data in Base64 format as described in RFC 1521.
 *
 * <p>
 * Project home page: www.
 * source-code.biz/base64coder/java

 * Author: Christian d'Heureuse, Inventec Informatik AG, Zurich, Switzerland

 * Multi-licensed: EPL / LGPL / GPL / AL / BSD.
 */
```

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```
* /opt/cola/permits/1584157893_1677999786.1262538/0/snakeyaml-2-0-sources-
jar/org/yaml/snakeyaml/external/biz/base64Coder/Base64Coder.java
```

## 1.123 error\_prone\_annotations 2.18.0

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\* /opt/cola/permits/1606613656\_1679417956.422988/0/error-prone-annotations-2-18-0-1-jar/META-INF/maven/com.google.errorprone/error\_prone\_annotations/pom.xml

# 1.124 opentelemetry-proto 0.11.0

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## 1.125 swagger-annotations 2.1.7

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Found in path(s):

\* /opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/Parameter.java  
\* /opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/info/Contact.java  
\* /opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/headers/Header.java  
\*  
/opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/responses/ApiResponse.java  
\* /opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/security/SecurityScheme.java  
\* /opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/servers/Server.java  
\* /opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/Operation.java  
\* /opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/media/Schema.java  
\* /opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/responses/ApiResponses.java  
\* /opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/extensions/Extensions.java  
\*  
/opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/security/SecuritySchemes.java  
\* /opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/OpenAPIDefinition.java  
\* /opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/security/SecurityRequirements.java  
\* /opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/servers/Servers.java  
\* /opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/ExternalDocumentation.java  
\* /opt/cola/permits/1610412103\_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-jar/io/swagger/v3/oas/annotations/media/DiscriminatorMapping.java

```

*
/opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/info/Info.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/security/OAuthFlow.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/tags/Tag.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/security/SecurityRequirement.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/servers/ServerVariable.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/callbacks/Callback.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/media/Content.java
*
/opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/parameters/RequestBody.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/Hidden.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/security/OAuthFlows.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/media/Encoding.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/media/ExampleObject.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/info/License.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/links/LinkParameter.java
*
/opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/security/OAuthScope.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/tags/Tags.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/Parameters.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/callbacks/Callbacks.java
* /opt/cola/permits/1610412103_1680069080.5533648/0/swagger-annotations-2-1-7-sources-1-
jar/io/swagger/v3/oas/annotations/links/Link.java

```

## 1.126 json-smart 2.4.10

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```
* /opt/cola/permits/1619377352_1680083027.7224898/0/json-smart-2-4-10-sources-
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```

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```
* /opt/cola/permits/1619377352_1680083027.7224898/0/json-smart-2-4-10-sources-
jar/net/minidev/json/JSONUtil.java
* /opt/cola/permits/1619377352_1680083027.7224898/0/json-smart-2-4-10-sources-
jar/net/minidev/json/writer/ArraysMapper.java
* /opt/cola/permits/1619377352_1680083027.7224898/0/json-smart-2-4-10-sources-
jar/net/minidev/json/parser/JSONParserBase.java
```

```
*
```

/opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/parser/JSONParserStream.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/writer/DefaultMapperCollection.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/writer/JsonReaderI.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/writer/CompressorMapper.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/writer/FakeMapper.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/JSONStyle.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/parser/JSONParserByteArray.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/writer/JsonReader.java  
\*  
/opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/parser/ParseException.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/writer/BeansMapper.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/JSONAware.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/JSONStreamAware.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/writer/DefaultMapperOrdered.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/JSONStreamAwareEx.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/JSONValue.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/writer/CollectionMapper.java  
\*  
/opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/parser/JSONParserReader.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/JSONObject.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/parser/JSONParser.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/JSONAwareEx.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/parser/JSONParserString.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/JSONArray.java  
\* /opt/cola/permits/1619377352\_1680083027.7224898/0/json-smart-2-4-10-sources-jar/net/minidev/json/parser/JSONParserInputStream.java

```
* /opt/cola/permits/1619377352_1680083027.7224898/0/json-smart-2-4-10-sources-
jar/net/minidev/json/parser/JSONParserMemory.java
```

```
*
```

```
/opt/cola/permits/1619377352_1680083027.7224898/0/json-smart-2-4-10-sources-
jar/net/minidev/json/JStylerObj.java
```

```
* /opt/cola/permits/1619377352_1680083027.7224898/0/json-smart-2-4-10-sources-
jar/net/minidev/json/JSONNavi.java
```

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Found in path(s):

```
* /opt/cola/permits/1619377352_1680083027.7224898/0/json-smart-2-4-10-sources-jar/META-
INF/maven/net.minidev/json-smart/pom.xml
```

## 1.127 accessors-smart 2.4.9

### 1.127.1 Available under license :

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Manifest-Version: 1.0

Bnd-LastModified: 1678198115874

Build-Jdk: 11.0.18

Built-By: uriel

Bundle-Description: Java reflect give poor performance on getter setter  
r an constructor calls, accessors-smart use ASM to speed up those calls.

Bundle-DocURL: <https://urielch.github.io/>

Bundle-License: <http://www.apache.org/licenses/LICENSE-2.0.txt>

Bundle-ManifestVersion: 2

Bundle-Name: accessors-smart

Bundle-SymbolicName: net.minidev.accessors-smart

Bundle-Vendor: Chemouni Uriel

Bundle-Version: 2.4.9  
Created-By: Apache Maven Bundle Plugin  
Export-Package: net.minidev.asm;version="2.4.9";uses="org.objectweb.a  
sm",net.minidev.asm.ex;version="2.4.9"  
Import-Package: org.objectweb.asm;version="[8.0,10)",net.minidev.asm.e  
x;version="[2.4,3)"  
Require-Capability: osgi.ee;filter="(&(osgi.ee=JavaSE)(version=1.8))"  
Tool: Bnd-5.1.1.202006162103

Found in path(s):

\* /opt/cola/permits/1619377400\_1680083041.0246942/0/accessors-smart-2-4-9-jar/META-INF/MANIFEST.MF

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# 1.128 bouncycastle-fips 2.0.0

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## 1.129 bridgeutils 1.7.1-r2

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## 1.131 micronaut-json-core 3.8.7

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\* /opt/cola/permits/1638896089\_1681459408.2938023/0/micronaut-json-core-3-8-7-sources-jar/io/micronaut/json/bind/JsonBeanPropertyBinderExceptionHandler.java  
\* /opt/cola/permits/1638896089\_1681459408.2938023/0/micronaut-json-core-3-8-7-sources-jar/io/micronaut/json/tree/JsonArray.java  
\*  
/opt/cola/permits/1638896089\_1681459408.2938023/0/micronaut-json-core-3-8-7-sources-jar/io/micronaut/json/JsonConfiguration.java  
\* /opt/cola/permits/1638896089\_1681459408.2938023/0/micronaut-json-core-3-8-7-sources-jar/io/micronaut/json/tree/JsonString.java  
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- \* /opt/cola/permits/1638896089\_1681459408.2938023/0/micronaut-json-core-3-8-7-sources-jar/io/micronaut/json/convert/JsonNodeConvertibleValues.java
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- \*
- /opt/cola/permits/1638896089\_1681459408.2938023/0/micronaut-json-core-3-8-7-sources-jar/io/micronaut/json/JsonObjectSerializer.java
- \* /opt/cola/permits/1638896089\_1681459408.2938023/0/micronaut-json-core-3-8-7-sources-jar/io/micronaut/json/codec/MapperMediaTypeCodec.java
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\* /opt/cola/permits/1638896119\_1681459387.841254/0/micronaut-http-server-netty-3-8-7-sources-jar/io/micronaut/http/server/netty/HttpCompressionStrategy.java

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Found in path(s):

```

* /opt/cola/permits/1638896119_1681459387.841254/0/micronaut-http-server-netty-3-8-7-sources-
jar/io/micronaut/http/server/netty/NettyServerCustomizer.java
* /opt/cola/permits/1638896119_1681459387.841254/0/micronaut-http-server-netty-3-8-7-sources-
jar/io/micronaut/http/server/netty/handler/accesslog/HttpAccessLogHandler.java
*
/opt/cola/permits/1638896119_1681459387.841254/0/micronaut-http-server-netty-3-8-7-sources-
jar/io/micronaut/http/server/netty/ssl/CertificateProvidedSslBuilder.java
* /opt/cola/permits/1638896119_1681459387.841254/0/micronaut-http-server-netty-3-8-7-sources-
jar/io/micronaut/http/server/netty/NettyHttpServer.java
* /opt/cola/permits/1638896119_1681459387.841254/0/micronaut-http-server-netty-3-8-7-sources-
jar/io/micronaut/http/server/netty/configuration/NettyHttpServerConfiguration.java
* /opt/cola/permits/1638896119_1681459387.841254/0/micronaut-http-server-netty-3-8-7-sources-
jar/io/micronaut/http/server/netty/ssl/BuildSelfSignedCondition.java
* /opt/cola/permits/1638896119_1681459387.841254/0/micronaut-http-server-netty-3-8-7-sources-
jar/io/micronaut/http/server/netty/ssl/SslEnabledCondition.java
* /opt/cola/permits/1638896119_1681459387.841254/0/micronaut-http-server-netty-3-8-7-sources-
jar/io/micronaut/http/server/netty/handler/accesslog/element/AccessLog.java
*
/opt/cola/permits/1638896119_1681459387.841254/0/micronaut-http-server-netty-3-8-7-sources-
jar/io/micronaut/http/server/netty/HttpPipelineBuilder.java
* /opt/cola/permits/1638896119_1681459387.841254/0/micronaut-http-server-netty-3-8-7-sources-
jar/io/micronaut/http/server/netty/ssl/SelfSignedSslBuilder.java
* /opt/cola/permits/1638896119_1681459387.841254/0/micronaut-http-server-netty-3-8-7-sources-
jar/io/micronaut/http/server/netty/converters/NettyConvertersSpi.java
* /opt/cola/permits/1638896119_1681459387.841254/0/micronaut-http-server-netty-3-8-7-sources-
jar/io/micronaut/http/server/netty/CompositeNettyServerCustomizer.java

```

## 1.136 micronaut-aop 3.8.7

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```

* /opt/cola/permits/1638896142_1681459439.352847/0/micronaut-aop-3-8-7-jar/META-
INF/maven/io.micronaut/micronaut-aop/pom.xml

```

## 1.137 micronaut-jackson-core 3.8.7

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\* /opt/cola/permits/1638896051\_1681819737.443773/0/micronaut-jackson-core-3-8-7-jar/META-INF/maven/io.micronaut/micronaut-jackson-core/pom.xml

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\* /opt/cola/permits/1638896051\_1681819737.443773/0/micronaut-jackson-core-3-8-7-jar/META-INF/native-image/io.micronaut/micronaut-jackson-core/native-image.properties

## 1.138 micronaut-buffer-netty 3.8.7

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\* /opt/cola/permits/1638896240\_1681459415.019914/0/micronaut-buffer-netty-3-8-7-jar/META-INF/maven/io.micronaut/micronaut-buffer-netty/pom.xml

## 1.139 micronaut-http-server 3.8.7

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\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/CoroutineHelper.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/RouteExecutor.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/response/HateoasErrorResponseProcessor.java  
\*

/opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/response/ExecutionContext.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/response/Error.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/response/ErrorResponseProcessor.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/response/DefaultExecutionContext.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/ExecutableRouteInfo.java

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\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/util/locale/HttpLocalizedMessageSource.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/response/HateoasErrorResponseProcessorReplacement.java

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\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/UnsatisfiedRouteHandler.java  
\*  
/opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/UnsatisfiedArgumentHandler.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/types/files/StreamedFile.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/types/files/FileCustomizableResponseType.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/util/locale/HttpFixedLocaleResolver.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/cors/CorsOriginConverter.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/cors/CorsUtil.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/multipart/package-info.java  
\*  
/opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/util/locale/HttpAbstractLocaleResolver.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/util/ProxyHeaderParser.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/codec/TextStreamCodec.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/util/locale/HttpLocaleResolver.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/codec/package-info.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/DuplicateRouteHandler.java  
\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/cors/package-info.java  
\*  
/opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/types/CustomizableResponseTypeException.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/util/DefaultHttpClientAddressResolver.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/cors/CorsFilter.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/util/HttpHostResolver.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/ContentLengthExceededHandler.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/HttpServerConfiguration.java

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/opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/HttpServerException.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/types/files/package-info.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/HttpStatusHandler.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/util/package-info.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/types/files/SystemFile.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/context/ServerRequestContextInvocationInstrumenter.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/ServerStartupException.java

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/opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/binding/BasicAuthArgumentBinder.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/multipart/MultipartBody.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/util/locale/CookieLocaleResolver.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/InternalServerException.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/util/locale/HttpLocaleResolutionConfiguration.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/package-info.java

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/opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/ExceptionHandler.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/exceptions/URISyntaxHandler.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/util/locale/CompositeHttpLocaleResolver.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-jar/io/micronaut/http/server/util/locale/package-info.java

\* /opt/cola/permits/1638896264\_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-

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jar/io/micronaut/http/server/binding/LocaleArgumentBinder.java
* /opt/cola/permits/1638896264_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-
jar/io/micronaut/http/server/util/HttpClientAddressResolver.java
* /opt/cola/permits/1638896264_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-
jar/io/micronaut/http/server/util/DefaultHttpHostResolver.java
*
/opt/cola/permits/1638896264_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-
jar/io/micronaut/http/server/context/ServerRequestContextInstrumentation.java
* /opt/cola/permits/1638896264_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-
jar/io/micronaut/http/server/binding/package-info.java
* /opt/cola/permits/1638896264_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-
jar/io/micronaut/http/server/exceptions/ConversionErrorHandler.java
* /opt/cola/permits/1638896264_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-
jar/io/micronaut/http/server/types/package-info.java
* /opt/cola/permits/1638896264_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-
jar/io/micronaut/http/server/websocket/ServerWebSocketProcessor.java
* /opt/cola/permits/1638896264_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-
jar/io/micronaut/http/server/exceptions/JsonExceptionHandler.java
* /opt/cola/permits/1638896264_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-
jar/io/micronaut/http/server/package-info.java
*
/opt/cola/permits/1638896264_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-
jar/io/micronaut/http/server/cors/CorsOriginConfiguration.java
* /opt/cola/permits/1638896264_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-
jar/io/micronaut/http/server/types/CustomizableResponseType.java
* /opt/cola/permits/1638896264_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-
jar/io/micronaut/http/server/util/locale/RequestLocaleResolver.java
* /opt/cola/permits/1638896264_1681459392.7072437/0/micronaut-http-server-3-8-7-sources-
jar/io/micronaut/http/server/context/package-info.java

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## 1.140 grpc-netty 1.38.0

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\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/NettyReadableBuffer.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/NettyServerBuilder.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/NettyClientTransport.java  
\*  
/opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/NettyClientHandler.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/NettyServerStream.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/NettyServerHandler.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/NettyServerTransport.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/NettyChannelBuilder.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/NegotiationType.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/CreateStreamCommand.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/SendGrpcFrameCommand.java  
\*  
/opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/NettyServer.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/SendResponseHeadersCommand.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/CancelClientStreamCommand.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/Utils.java  
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- \* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/FixedTrustManagerFactory.java
- \* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/UnhelpfulSecurityProvider.java

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- \*/

Found in path(s):

- \* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/GrpcHttp2OutboundHeaders.java
- \* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/GrpcHttp2ConnectionHandler.java
- \* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/ForcefulCloseCommand.java
- \*
- \* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/StreamIdHolder.java
- \* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/InternalNettyChannelBuilder.java
- \* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/InternalNettyServerBuilder.java
- \* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/AbstractHttp2Headers.java
- \* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/GracefulCloseCommand.java

\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/ClientTransportLifecycleManager.java

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Found in path(s):

\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/NettySocketSupport.java

\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/InternalNettySocketSupport.java

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Found in path(s):

\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/Http2ControlFrameLimitEncoder.java

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Found in path(s):

```
 * /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/InternalNettyChannelCredentials.java
 * /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/NettySslContextChannelCredentials.java
 * /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/NettyChannelCredentials.java
 *
 * /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/NettySslContextServerCredentials.java
 * /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/InternalNettyServerCredentials.java
 * /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/InsecureFromHttp1ChannelCredentials.java
 * /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/NettyServerCredentials.java
```

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Found in path(s):

\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/MaxConnectionIdleManager.java

\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/KeepAliveEnforcer.java

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Found in path(s):

\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/GrpcHttp2HeadersUtils.java

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Found in path(s):

\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/WriteBufferingAndExceptionHandler.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/ProtocolNegotiationEvent.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/InternalWriteBufferingAndExceptionHandlerUtils.java  
\*

/opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/InternalProtocolNegotiator.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/InternalProtocolNegotiationEvent.java  
\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/InternalProtocolNegotiators.java

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Found in path(s):

\* /opt/cola/permits/1638896049\_1681459404.990106/0/grpc-netty-1-38-0-sources-

```

jar/io/grpc/netty/AbstractNettyHandler.java
* /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/NettyClientStream.java
* /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/package-
info.java
*
/opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/ProtocolNegotiators.java
* /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/CancelServerStreamCommand.java
* /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/NettyWritableBuffer.java
* /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/NettyServerProvider.java
* /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/ProtocolNegotiator.java
* /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/WriteQueue.java
* /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/GrpcSslContexts.java
* /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-jar/io/grpc/netty/JettyTlsUtil.java
* /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/NettyWritableBufferAllocator.java
*
/opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/SendPingCommand.java
* /opt/cola/permits/1638896049_1681459404.990106/0/grpc-netty-1-38-0-sources-
jar/io/grpc/netty/NettyChannelProvider.java

```

## 1.141 kafka-schema-registry-client 6.2.1

### 1.141.1 Available under license :

No license file was found, but licenses were detected in source scan.

```

<project xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="http://maven.apache.org/POM/4.0.0"
 xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/maven-v4_0_0.xsd">

 <modelVersion>4.0.0</modelVersion>

 <parent>
 <groupId>io.confluent</groupId>
 <artifactId>kafka-schema-registry-parent</artifactId>
 <version>6.2.1</version>
 </parent>

 <licenses>

```

```
<license>
 <name>Apache License 2.0</name>
 <url>http://www.apache.org/licenses/LICENSE-2.0.html</url>
 <distribution>repo</distribution>
</license>
</licenses>
```

```
<artifactId>kafka-schema-registry-client</artifactId>
<packaging>jar</packaging>
<name>kafka-schema-registry-client</name>
```

```
<dependencies>
 <dependency>
 <groupId>org.apache.kafka</groupId>
 <artifactId>kafka-clients</artifactId>
 </dependency>
 <dependency>
 <groupId>org.apache.avro</groupId>
 <artifactId>avro</artifactId>
 </dependency>
 <dependency>
 <groupId>org.apache.commons</groupId>
 <artifactId>commons-compress</artifactId>
 </dependency>
 <dependency>
 <groupId>com.fasterxml.jackson.core</groupId>
 <artifactId>jackson-databind</artifactId>
 </dependency>
 <dependency>
 <groupId>jakarta.ws.rs</groupId>
 <artifactId>jakarta.ws.rs-api</artifactId>
 </dependency>
 <dependency>
 <groupId>org.glassfish.jersey.core</groupId>
 <artifactId>jersey-common</artifactId>
 <version>${jersey.version}</version>
 </dependency>
 <dependency>
 <groupId>org.easymock</groupId>
 <artifactId>easymock</artifactId>
 <scope>test</scope>
 </dependency>
 <dependency>
 <groupId>org.powermock</groupId>
 <artifactId>powermock-module-junit4</artifactId>
 <scope>test</scope>
 </dependency>
</dependencies>
```

```

 <groupId>org.powermock</groupId>
 <artifactId>powermock-api-easymock</artifactId>
 <scope>test</scope>
</dependency>
<dependency>
 <groupId>junit</groupId>
 <artifactId>junit</artifactId>
 <scope>test</scope>
</dependency>
<dependency>
 <groupId>io.swagger</groupId>
 <artifactId>swagger-annotations</artifactId>
</dependency>
<dependency>
 <groupId>io.swagger</groupId>
 <artifactId>swagger-core</artifactId>
 <version>1.6.2</version>
 <exclusions>
 <exclusion>
 <groupId>javax.validation</groupId>
 <artifactId>validation-api</artifactId>
 </exclusion>
 </exclusions>
 <groupId>com.google.guava</groupId>
 <artifactId>guava</artifactId>
</exclusion>
</exclusions>
</dependency>
<dependency>
 <groupId>com.google.guava</groupId>
 <artifactId>guava</artifactId>
 <version>${guava.version}</version>
</dependency>
</dependencies>
</project>

```

Found in path(s):

```

* /opt/cola/permits/1638896121_1681819594.9636126/0/kafka-schema-registry-client-6-2-1-jar/META-INF/maven/io.confluent/kafka-schema-registry-client/pom.xml

```

## 1.142 micronaut-websocket 3.8.7

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Found in path(s):

\* /opt/cola/permits/1638896190\_1681459406.7503161/0/micronaut-websocket-3-8-7-jar/META-INF/maven/io.micronaut/micronaut-websocket/pom.xml

# 1.143 kafka-schema-serializer 6.2.1

## 1.143.1 Available under license :

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```
<project xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="http://maven.apache.org/POM/4.0.0"
 xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/maven-v4_0_0.xsd">
```

```
<modelVersion>4.0.0</modelVersion>
```

```
<parent>
 <groupId>io.confluent</groupId>
 <artifactId>kafka-schema-registry-parent</artifactId>
 <version>6.2.1</version>
</parent>
```

```
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 <distribution>repo</distribution>
 </license>
</licenses>
```

```
<artifactId>kafka-schema-serializer</artifactId>
<packaging>jar</packaging>
<name>kafka-schema-serializer</name>
```

```
<dependencies>
 <dependency>
 <groupId>org.apache.kafka</groupId>
 <artifactId>kafka_${kafka.scala.version}</artifactId>
 <scope>provided</scope>
 </dependency>
 <dependency>
 <groupId>io.confluent</groupId>
 <artifactId>kafka-schema-registry-client</artifactId>
 <version>${io.confluent.schema-registry.version}</version>
 </dependency>
 <dependency>
 <groupId>junit</groupId>
```

```
<artifactId>junit</artifactId>
<scope>test</scope>
</dependency>
</dependencies>
</project>
```

Found in path(s):

\* /opt/cola/permits/1638896081\_1681459386.3648345/0/kafka-schema-serializer-6-2-1-jar/META-INF/maven/io.confluent/kafka-schema-serializer/pom.xml

## 1.144 micronaut-jackson-databind 3.8.7

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Found in path(s):

\* /opt/cola/permits/1638896308\_1681459430.734724/0/micronaut-jackson-databind-3-8-7-jar/META-INF/maven/io.micronaut/micronaut-jackson-databind/pom.xml

## 1.145 micronaut-management 3.8.7

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Found in path(s):

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## 1.146 micronaut-http-client-core 3.8.7

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Found in path(s):

```
* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/bind/AnnotatedClientArgumentRequestBinder.java
* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/loadbalance/AbstractRoundRobinLoadBalancer.java
*
/opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/interceptor/configuration/package-info.java
* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/ReactiveClientResultTransformer.java
* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/exceptions/HttpClientResponseException.java
* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/exceptions/package-info.java
* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/annotation/package-info.java
* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/bind/TypedClientArgumentRequestBinder.java
* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/exceptions/HttpClientErrorDecoder.java
*
/opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/interceptor/HttpClientIntroductionAdvice.java
* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/exceptions/EmptyResponseException.java
* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/multipart/BytePart.java
* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/HttpClient.java
```

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/multipart/MultipartBody.java  
 \* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/loadbalance/DiscoveryClientRoundRobinLoadBalancer.java  
 \*  
 /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/exceptions/ContentLengthExceededException.java  
 \* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/multipart/InputStreamPart.java  
 \* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/multipart/Part.java  
 \* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/package-info.java  
 \* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/interceptor/configuration/DefaultClientVersioningConfiguration.java  
 \* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/LoadBalancerResolver.java  
 \*  
 /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/bind/HttpClientBinderRegistry.java  
 \* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/ServiceHttpClientCondition.java  
 \* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/loadbalance/ServiceInstanceListLoadBalancerFactory.java  
 \* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/loadbalance/package-info.java  
 \* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/bind/AnnotatedClientRequestBinder.java  
 \* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/loadbalance/DiscoveryClientLoadBalancerFactory.java  
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 /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/multipart/AbstractFilePart.java  
 \* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/StreamingHttpClientRegistry.java  
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 \* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/bind/ClientArgumentRequestBinder.java  
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\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/StreamingHttpClient.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/loadbalance/FixedLoadBalancer.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/BlockingHttpClient.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/filter/ClientFilterResolutionContext.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/exceptions/NoHostException.java

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/opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/ServiceHttpClientFactory.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/ProxyHttpClient.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/loadbalance/ServiceInstanceListRoundRobinLoadBalancer.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/sse/SseClient.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/exceptions/HttpClientException.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/DefaultLoadBalancerResolver.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/filters/ClientServerRequestTracingPublisher.java

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/opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/interceptor/configuration/ClientVersioningConfiguration.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/multipart/StringPart.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/HttpClientRegistry.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/exceptions/ReadTimeoutException.java

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\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/multipart/FilePart.java

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/opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/interceptor/configuration/NamedClientVersioningConfiguration.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/ProxyHttpClientRegistry.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/loadbalance/LoadBalancerConverters.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-jar/io/micronaut/http/client/HttpClientConfiguration.java

\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-

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jar/io/micronaut/http/client/multipart/package-info.java  
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\* /opt/cola/permits/1638896198\_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-  
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jar/io/micronaut/http/client/bind/binders/HeaderClientRequestBinder.java  
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* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
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* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
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/opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/ProxyHttpClientFactoryResolver.java
* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
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* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/ProxyHttpClientFactory.java
* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/HttpClientFactoryResolver.java
* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/sse/SseClientFactory.java
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* /opt/cola/permits/1638896198_1681819737.5057142/0/micronaut-http-client-core-3-8-7-sources-
jar/io/micronaut/http/client/ProxyRequestOptions.java
```

## 1.147 micronaut-core-reactive 3.8.7

### 1.147.1 Available under license :

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```
* /opt/cola/permits/1638896097_1681459433.696153/0/micronaut-core-reactive-3-8-7-jar/META-
INF/maven/io.micronaut/micronaut-core-reactive/pom.xml
```

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* /opt/cola/permits/1638896097_1681459433.696153/0/micronaut-core-reactive-3-8-7-jar/META-INF/native-image/io.micronaut/micronaut-core-reactive/native-image.properties
```

## 1.148 micronaut-router 3.8.7

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* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-jar/io/micronaut/web/router/version/RouteVersionFilter.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-jar/io/micronaut/web/router/ResourceRoute.java
*
/opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-jar/io/micronaut/web/router/version/resolution/RequestVersionResolver.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-jar/io/micronaut/web/router/AbstractRouteMatch.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-jar/io/micronaut/web/router/qualifier/package-info.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
```



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jar/io/micronaut/web/router/RouteBuilder.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
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* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/UriRoute.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
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jar/io/micronaut/web/router/version/package-info.java
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* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
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* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
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* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
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\* /opt/cola/permits/1638896206\_1681459432.1518633/0/micronaut-router-3-8-7-sources-jar/io/micronaut/web/router/BeanDefinitionFilterRoute.java  
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\* /opt/cola/permits/1638896206\_1681459432.1518633/0/micronaut-router-3-8-7-sources-jar/io/micronaut/web/router/GroovyRouteBuilder.groovy  
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\* /opt/cola/permits/1638896206\_1681459432.1518633/0/micronaut-router-3-8-7-sources-jar/io/micronaut/web/router/version/DefaultVersionProvider.java  
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jar/io/micronaut/web/router/BasicObjectRouteMatch.java
*
/opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/version/resolution/ParameterVersionResolverConfiguration.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/exceptions/UnsatisfiedPartRouteException.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/exceptions/UnsatisfiedPathVariableRouteException.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/Router.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/naming/HyphenatedUriNamingStrategy.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/MethodBasedRoute.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/version/VersionAwareRouterListener.java
*
/opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/qualifier/ConsumesMediaTypeQualifier.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/NullArgument.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/exceptions/RoutingException.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/exceptions/UnsatisfiedQueryValueRouteException.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/ErrorResponse.java
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/qualifier/ProducesMediaTypeQualifier.java
No license file was found, but licenses were detected in source scan.
```

```
/*
* Copyright 2017-2021 original authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* https://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/
```

Found in path(s):

```
* /opt/cola/permits/1638896206_1681459432.1518633/0/micronaut-router-3-8-7-sources-
jar/io/micronaut/web/router/resource/StaticResourceResolverFactory.java
```

## 1.149 micronaut-validation 3.8.7

### 1.149.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at
distributed under the License is distributed on an "AS IS" BASIS,
```

Found in path(s):

```
* /opt/cola/permits/1638896059_1681459417.20264/0/micronaut-validation-3-8-7-jar/META-INF/native-
image/io.micronaut.validation/micronaut-validation/native-image.properties
```

No license file was found, but licenses were detected in source scan.

```
<url>http://www.apache.org/licenses/LICENSE-2.0.txt</url>
```

Found in path(s):

```
* /opt/cola/permits/1638896059_1681459417.20264/0/micronaut-validation-3-8-7-jar/META-
INF/maven/io.micronaut/micronaut-validation/pom.xml
```

## 1.150 micronaut-http-netty 3.8.7

### 1.150.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
<url>http://www.apache.org/licenses/LICENSE-2.0.txt</url>
```

Found in path(s):

```
* /opt/cola/permits/1638896176_1681459401.642087/0/micronaut-http-netty-3-8-7-jar/META-
INF/maven/io.micronaut/micronaut-http-netty/pom.xml
```

## 1.151 micronaut-http 3.8.7

### 1.151.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at
distributed under the License is distributed on an "AS IS" BASIS,
```

Found in path(s):

```
* /opt/cola/permits/1638896238_1681459436.296813/0/micronaut-http-3-8-7-jar/META-INF/native-image/io.micronaut.http/micronaut-http/native-image.properties
```

No license file was found, but licenses were detected in source scan.

```
This file maps Internet media types to unique file extension(s).
Although created for httpd, this file is used by many software systems
and has been placed in the public domain for unlimited redistribution.
#
The table below contains both registered and (common) unregistered types.
A type that has no unique extension can be ignored -- they are listed
here to guide configurations toward known types and to make it easier to
identify "new" types. File extensions are also commonly used to indicate
content languages and encodings, so choose them carefully.
#
Internet media types should be registered as described in RFC 4288.
The registry is at <https://www.iana.org/assignments/media-types/>.
#
https://svn.apache.org/viewvc/httpd/httpd/trunk/docs/conf/mime.types?revision=1810121&view=co
#
MIME type (lowercased) Extensions
=====
application/1d-interleaved-parityfec
#
application/3gpdash-qoe-report+xml
application/3gpp-ims+xml
application/a2l
application/activemessage
application/alto-costmap+json
application/alto-costmapfilter+json
application/alto-directory+json
application/alto-endpointcost+json
application/alto-endpointcostparams+json
application/alto-endpointprop+json
application/alto-endpointpropparams+json
application/alto-error+json
application/alto-networkmap+json
application/alto-networkmapfilter+json
application/aml
application/andrew-inset ez
application/applefile
application/applixware aw
application/atf
application/atfx
application/atom+xml atom
application/atomcat+xml atomcat
application/atomdeleted+xml
application/atomicmail
```

application/atomsvc+xml atomsvc  
# application/atxml  
# application/auth-policy+xml  
# application/bacnet-xdd+zip  
# application/batch-smtp  
# application/beep+xml  
# application/calendar+json  
# application/calendar+xml  
# application/call-completion  
#  
application/cals-1840  
# application/cbor  
# application/ccmp+xml  
application/ccxml+xml ccxml  
# application/cdfx+xml  
application/cdmi-capability cdmia  
application/cdmi-container cdmic  
application/cdmi-domain cdmid  
application/cdmi-object cdmio  
application/cdmi-queue cdmioq  
# application/cdni  
# application/cea  
# application/cea-2018+xml  
# application/cellml+xml  
# application/cfw  
# application/cms  
# application/cnrx+xml  
# application/coap-group+json  
# application/commonground  
# application/conference-info+xml  
# application/cpl+xml  
# application/csrattrs  
# application/csta+xml  
# application/cstadata+xml  
# application/csvm+json  
application/cu-seeme cu  
# application/cybercash  
# application/dash+xml  
# application/dashdelta  
application/davmount+xml davmount  
# application/dca-rft  
# application/dcd  
# application/dec-dx  
# application/dialog-info+xml  
# application/dicom  
# application/dii  
# application/dit  
# application/dns

application/docbook+xml dbk  
# application/dskpp+xml  
application/dssc+der dssc  
application/dssc+xml xdssc  
#  
application/dvcs  
application/ecmascript ecma  
# application/edi-consent  
# application/edi-x12  
# application/edifact  
# application/efi  
# application/emergencycalldata.comment+xml  
# application/emergencycalldata.deviceinfo+xml  
# application/emergencycalldata.providerinfo+xml  
# application/emergencycalldata.serviceinfo+xml  
# application/emergencycalldata.subscriberinfo+xml  
application/emma+xml emma  
# application/emotionml+xml  
# application/encaprtpt  
# application/epp+xml  
application/epub+zip epub  
# application/eshop  
# application/example  
application/exi exi  
# application/fastinfoset  
# application/fastsoap  
# application/fdt+xml  
# application/fits  
application/font-tdpfr pfr  
# application/framework-attributes+xml  
# application/geo+json  
application/gml+xml gml  
application/gpx+xml gpx  
application/gxf gxf  
# application/gzip  
# application/h224  
# application/held+xml  
# application/http  
application/hyperstudio stk  
#  
application/ibe-key-request+xml  
# application/ibe-pkg-reply+xml  
# application/ibe-pp-data  
# application/iges  
# application/im-iscomposing+xml  
# application/index  
# application/index.cmd  
# application/index.obj

# application/index.response  
# application/index.vnd  
application/inkml+xml ink inkml  
# application/iotp  
application/ipfix ipfix  
# application/ipp  
# application/isup  
# application/its+xml  
application/java-archive jar  
application/java-serialized-object ser  
application/java-vm class  
application/javascript js  
application/javascript mjs  
# application/jose  
# application/jose+json  
# application/jrd+json  
application/json json  
# application/json-patch+json  
# application/json-seq  
application/jsonml+json jsonml  
# application/jwk+json  
# application/jwk-set+json  
# application/jwt  
# application/kpml-request+xml  
# application/kpml-response+xml  
# application/ld+json  
# application/lgr+xml  
# application/link-format  
# application/load-control+xml  
application/lost+xml lostxml  
#  
application/lostsync+xml  
# application/lxf  
application/mac-binhex40 hqx  
application/mac-compactpro cpt  
# application/macwriteii  
application/mads+xml mads  
application/marc mrc  
application/marcxml+xml mrcx  
application/mathematica ma nb mb  
application/mathml+xml mathml  
# application/mathml-content+xml  
# application/mathml-presentation+xml  
# application/mbms-associated-procedure-description+xml  
# application/mbms-deregister+xml  
# application/mbms-envelope+xml  
# application/mbms-msk+xml  
# application/mbms-msk-response+xml



```
application/mbms-protection-description+xml
application/mbms-reception-report+xml
application/mbms-register+xml
application/mbms-register-response+xml
application/mbms-schedule+xml
application/mbms-user-service-description+xml
application/mbox mbox
application/media-policy-dataset+xml
application/media_control+xml
application/mediaservercontrol+xml mscml
application/merge-patch+json
application/metalink+xml metalink
application/metalink4+xml meta4
application/mets+xml mets
#
application/mf4
application/mikey
application/mods+xml mods
application/moss-keys
application/moss-signature
application/mosskey-data
application/mosskey-request
application/mp21 m21 mp21
application/mp4 mp4s
application/mpeg4-generic
application/mpeg4-iod
application/mpeg4-iod-xmt
application/mrb-consumer+xml
application/mrb-publish+xml
application/msc-ivr+xml
application/msc-mixer+xml
application/msword doc dot
application/mxf mxf
application/nasdata
application/news-checkgroups
application/news-groupinfo
application/news-transmission
application/nlsml+xml
application/nss
application/ocsp-request
application/ocsp-response
application/octet-stream bin dms lrf mar so dist distz pkg bpk dump elc deploy
application/oda oda
application/odx
application/oebps-package+xml opf
application/ogg ogx
application/omdoc+xml omdoc
application/onenote onetoc
```

onetoc2 onetmp onepkg  
application/oxps oxps  
# application/p2p-overlay+xml  
# application/parityfec  
application/patch-ops-error+xml xer  
application/pdf pdf  
# application/pdx  
application/pgp-encrypted pgp  
# application/pgp-keys  
application/pgp-signature asc sig  
application/pics-rules prf  
# application/pidf+xml  
# application/pidf-diff+xml  
application/pkcs10 p10  
# application/pkcs12  
application/pkcs7-mime p7m p7c  
application/pkcs7-signature p7s  
application/pkcs8 p8  
application/pkix-attr-cert ac  
application/pkix-cert cer  
application/pkix-crl crl  
application/pkix-pkipath pkipath  
application/pkixcmp pki  
application/pls+xml pls  
# application/poc-settings+xml  
application/postscript ai eps ps  
# application/ppsp-tracker+json  
# application/problem+json  
# application/problem+xml  
# application/provenance+xml  
# application/prs.alvestrand.titrax-sheet  
application/prs.cww cww  
# application/prs.hpub+zip  
# application/prs.nprend  
# application/prs.plucker  
#  
application/prs.rdf+xml-crypt  
# application/prs.xsf+xml  
application/pskc+xml pskcxml  
# application/qsig  
# application/raptorfec  
# application/rdap+json  
application/rdf+xml rdf  
application/reginfo+xml rif  
application/relax-ng-compact-syntax rnc  
# application/remote-printing  
# application/reputon+json  
application/resource-lists+xml rl

application/resource-lists-diff+xml rld  
# application/rfc+xml  
# application/riscos  
# application/rlmi+xml  
application/rls-services+xml rs  
application/rpki-ghostbusters gbr  
application/rpki-manifest mft  
application/rpki-roa roa  
# application/rpki-updown  
application/rsd+xml rsd  
application/rss+xml rss  
application/rtf rtf  
# application/rtploopback  
# application/rtx  
# application/samlassertion+xml  
# application/samlmetadata+xml  
application/sbml+xml sbml  
# application/scaip+xml  
# application/scim+json  
application/scvp-cv-request scq  
application/scvp-cv-response scs  
application/scvp-vp-request spq  
application/scvp-vp-response spp  
application/sdp sdp  
#  
application/sep+xml  
# application/sep-exi  
# application/session-info  
# application/set-payment  
application/set-payment-initiation setpay  
# application/set-registration  
application/set-registration-initiation setreg  
# application/sgml  
# application/sgml-open-catalog  
application/shf+xml shf  
# application/sieve  
# application/simple-filter+xml  
# application/simple-message-summary  
# application/simplesymbolcontainer  
# application/slate  
# application/smil  
application/smil+xml smi smil  
# application/smpite336m  
# application/soap+fastinfoset  
# application/soap+xml  
application/sparql-query rq  
application/sparql-results+xml srx  
# application/spirits-event+xml

```
application/sql
application/srgs gram
application/srgs+xml grxml
application/sru+xml sru
application/ssdl+xml ssdl
application/ssml+xml ssml
application/tamp-apex-update
application/tamp-apex-update-confirm
application/tamp-community-update
application/tamp-community-update-confirm
#
application/tamp-error
application/tamp-sequence-adjust
application/tamp-sequence-adjust-confirm
application/tamp-status-query
application/tamp-status-response
application/tamp-update
application/tamp-update-confirm
application/tei+xml tei teicorpus
application/thraud+xml tfi
application/timestamp-query
application/timestamp-reply
application/timestamped-data tsd
application/ttml+xml
application/tve-trigger
application/ulpfec
application/urc-grpsheet+xml
application/urc-ressheet+xml
application/urc-targetdesc+xml
application/urc-uisocketdesc+xml
application/vcard+json
application/vcard+xml
application/vemmi
application/vividence.scriptfile
application/vnd.3gpp-prose+xml
application/vnd.3gpp-prose-pc3ch+xml
application/vnd.3gpp.access-transfer-events+xml
application/vnd.3gpp.bsf+xml
application/vnd.3gpp.mid-call+xml
application/vnd.3gpp.pic-bw-large plb
application/vnd.3gpp.pic-bw-small psb
application/vnd.3gpp.pic-bw-var pvb
#
application/vnd.3gpp.sms
application/vnd.3gpp.sms+xml
application/vnd.3gpp.srvcc-ext+xml
application/vnd.3gpp.srvcc-info+xml
application/vnd.3gpp.state-and-event-info+xml
```

# application/vnd.3gpp.ussd+xml  
# application/vnd.3gpp2.bcmcsinfo+xml  
# application/vnd.3gpp2.sms  
application/vnd.3gpp2.tcap tcap  
# application/vnd.3lightssoftware.imagescal  
application/vnd.3m.post-it-notes pwn  
application/vnd.accpac.simply.aso aso  
application/vnd.accpac.simply.imp imp  
application/vnd.acucobol acu  
application/vnd.acucorp atc acutc  
application/vnd.adobe.air-application-installer-package+zip air  
# application/vnd.adobe.flash.movie  
application/vnd.adobe.formscentral.fcdt fcdt  
application/vnd.adobe.fxp fxp fxpl  
# application/vnd.adobe.partial-upload  
application/vnd.adobe.xdp+xml xdp  
application/vnd.adobe.xfdf xfdf  
# application/vnd.aether.imp  
# application/vnd.ah-barcode  
application/vnd.ahead.space ahead  
application/vnd.airzip.filesecure.azf azf  
application/vnd.airzip.filesecure.azs azs  
application/vnd.amazon.ebook azw  
#  
application/vnd.amazon.mobi8-ebook  
application/vnd.americandynamics.acc acc  
application/vnd.amiga.ami ami  
# application/vnd.amundsen.maze+xml  
application/vnd.android.package-archive apk  
# application/vnd.anki  
application/vnd.anser-web-certificate-issue-initiation cii  
application/vnd.anser-web-funds-transfer-initiation fti  
application/vnd.antix.game-component atx  
# application/vnd.apache.thrift.binary  
# application/vnd.apache.thrift.compact  
# application/vnd.apache.thrift.json  
# application/vnd.api+json  
application/vnd.apple.installer+xml mpkg  
application/vnd.apple.mpegurl m3u8  
# application/vnd.arastra.swi  
application/vnd.aristanetworks.swi swi  
# application/vnd.artsquare  
application/vnd.astraea-software.iota iota  
application/vnd.audiograph aep  
# application/vnd.autopackage  
# application/vnd.avistar+xml  
# application/vnd.balsamiq.bmml+xml  
# application/vnd.balsamiq.bmpr

# application/vnd.bekitzur-stech+json  
# application/vnd.biopax.rdf+xml  
application/vnd.blueice.multipass mpm  
#  
application/vnd.bluetooth.ep.oob  
# application/vnd.bluetooth.le.oob  
application/vnd.bmi bmi  
application/vnd.businessobjects rep  
# application/vnd.cab-jscript  
# application/vnd.canon-cpdl  
# application/vnd.canon-lips  
# application/vnd.cendio.thinlinc.clientconf  
# application/vnd.century-systems.tcp\_stream  
application/vnd.chemdraw+xml cdxml  
# application/vnd.chess-pgn  
application/vnd.chipnuts.karaoke-mmd mmd  
application/vnd.cinderella cdy  
# application/vnd.cirpack.isdn-ext  
# application/vnd.citationstyles.style+xml  
application/vnd.claymore cla  
application/vnd.cloanto.rp9 rp9  
application/vnd.clonk.c4group c4g c4d c4f c4p c4u  
application/vnd.cluetrust.cartomobile-config c11amc  
application/vnd.cluetrust.cartomobile-config-pkg c11amz  
# application/vnd.coffeescript  
# application/vnd.collection+json  
# application/vnd.collection.doc+json  
# application/vnd.collection.next+json  
# application/vnd.comicbook+zip  
#  
application/vnd.commerce-battelle  
application/vnd.commonspace csp  
application/vnd.contact.cmsg cdbcmsg  
# application/vnd.coreos.ignition+json  
application/vnd.cosmocaller cmc  
application/vnd.crick.clicker clkx  
application/vnd.crick.clicker.keyboard clkk  
application/vnd.crick.clicker.palette clkp  
application/vnd.crick.clicker.template clkt  
application/vnd.crick.clicker.wordbank clkw  
application/vnd.criticaltools.wbs+xml wbs  
application/vnd.ctc-posml pml  
# application/vnd.ctct.ws+xml  
# application/vnd.cups-pdf  
# application/vnd.cups-postscript  
application/vnd.cups-ppd ppd  
# application/vnd.cups-raster  
# application/vnd.cups-raw

```
application/vnd.curl
application/vnd.curl.car car
application/vnd.curl.pcurl pcurl
application/vnd.cyan.dean.root+xml
application/vnd.cybank
application/vnd.dart dart
application/vnd.data-vision.rdz rdz
application/vnd.debian.binary-package
application/vnd.dece.data uvf uvvf uvd uvvd
application/vnd.dece.ttml+xml uvt uvvt
application/vnd.dece.unsigned uvx
uvvx
application/vnd.dece.zip uvz uvvz
application/vnd.denovo.fcslayout-link fe_launch
application/vnd.desmume.movie
application/vnd.dir-bi.plate-dl-nosuffix
application/vnd.dm.delegation+xml
application/vnd.dna dna
application/vnd.document+json
application/vnd.dolby.mlp mlp
application/vnd.dolby.mobile.1
application/vnd.dolby.mobile.2
application/vnd.doremir.scorecloud-binary-document
application/vnd.dpgraph dpg
application/vnd.dreamfactory dfac
application/vnd.drive+json
application/vnd.ds-keypoint kpxx
application/vnd.dtg.local
application/vnd.dtg.local.flash
application/vnd.dtg.local.html
application/vnd.dvb.ait ait
application/vnd.dvb.dvbj
application/vnd.dvb.esgcontainer
application/vnd.dvb.ipdcdftnotifaccess
application/vnd.dvb.ipdcesgaccess
application/vnd.dvb.ipdcesgaccess2
application/vnd.dvb.ipdcesgpdd
application/vnd.dvb.ipdcroaming
application/vnd.dvb.iptv.alfec-base
application/vnd.dvb.iptv.alfec-enhancement
#
application/vnd.dvb.notif-aggregate-root+xml
application/vnd.dvb.notif-container+xml
application/vnd.dvb.notif-generic+xml
application/vnd.dvb.notif-ia-msglist+xml
application/vnd.dvb.notif-ia-registration-request+xml
application/vnd.dvb.notif-ia-registration-response+xml
application/vnd.dvb.notif-init+xml
```

```
application/vnd.dvb.pfr
application/vnd.dvb.service svc
application/vnd.dxr
application/vnd.dynageo geo
application/vnd.dzr
application/vnd.easykaraoke.cdgdownload
application/vnd.ecdis-update
application/vnd.ecowin.chart mag
application/vnd.ecowin.filerequest
application/vnd.ecowin.fileupdate
application/vnd.ecowin.series
application/vnd.ecowin.seriesrequest
application/vnd.ecowin.seriesupdate
application/vnd.emclient.accessrequest+xml
application/vnd.enliven nml
application/vnd.enphase.envoy
application/vnd.eprints.data+xml
application/vnd.epson.esf esf
application/vnd.epson.msf msf
application/vnd.epson.quickanime qam
application/vnd.epson.salt slt
application/vnd.epson.ssf ssf
#
application/vnd.ericsson.quickcall
application/vnd.eszigno3+xml es3 et3
application/vnd.etsi.aoc+xml
application/vnd.etsi.asic-e+zip
application/vnd.etsi.asic-s+zip
application/vnd.etsi.cug+xml
application/vnd.etsi.iptvcommand+xml
application/vnd.etsi.iptvdiscovery+xml
application/vnd.etsi.iptvprofile+xml
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application/vnd.quark.quarkxpress qxd  
qxt qwd qwt qxl qxb  
# application/vnd.quobject-quoxdocument  
# application/vnd.radisys.moml+xml  
# application/vnd.radisys.msml+xml  
# application/vnd.radisys.msml-audit+xml  
# application/vnd.radisys.msml-audit-conf+xml  
# application/vnd.radisys.msml-audit-conn+xml  
# application/vnd.radisys.msml-audit-dialog+xml  
# application/vnd.radisys.msml-audit-stream+xml  
# application/vnd.radisys.msml-conf+xml  
# application/vnd.radisys.msml-dialog+xml  
# application/vnd.radisys.msml-dialog-base+xml  
# application/vnd.radisys.msml-dialog-fax-detect+xml  
# application/vnd.radisys.msml-dialog-fax-sendrecv+xml  
# application/vnd.radisys.msml-dialog-group+xml  
# application/vnd.radisys.msml-dialog-speech+xml  
# application/vnd.radisys.msml-dialog-transform+xml  
# application/vnd.rainstor.data  
# application/vnd.rapid  
# application/vnd.rar  
application/vnd.realvnc.bed bed  
application/vnd.recordare.musicxml mxl  
application/vnd.recordare.musicxml+xml musicxml  
# application/vnd.renlearn.rlprint  
application/vnd.rig.cryptonote cryptonote  
application/vnd.rim.cod cod  
application/vnd.rn-realmedia rm  
application/vnd.rn-realmedia-vbr rmvb  
application/vnd.route66.link66+xml link66  
#

application/vnd.rs-274x  
# application/vnd.ruckus.download  
# application/vnd.s3sms  
application/vnd.sailingtracker.track st  
# application/vnd.sbm.cid  
# application/vnd.sbm.mid2  
# application/vnd.scribus  
# application/vnd.sealed.3df  
# application/vnd.sealed.csf  
# application/vnd.sealed.doc  
# application/vnd.sealed.eml  
# application/vnd.sealed.mht  
# application/vnd.sealed.net  
# application/vnd.sealed.ppt  
# application/vnd.sealed.tiff  
# application/vnd.sealed.xls  
# application/vnd.sealedmedia.softseal.html  
# application/vnd.sealedmedia.softseal.pdf  
application/vnd.seemail see  
application/vnd.sema sema  
application/vnd.semd semd  
application/vnd.semf semf  
application/vnd.shana.informed.formdata ifm  
application/vnd.shana.informed.formtemplate itp  
application/vnd.shana.informed.interchange iif  
application/vnd.shana.informed.package ipk  
application/vnd.simtech-mindmapper twd  
twds  
# application/vnd.siren+json  
application/vnd.smaf mmf  
# application/vnd.smart.notebook  
application/vnd.smart.teacher teacher  
# application/vnd.software602.filler.form+xml  
# application/vnd.software602.filler.form-xml-zip  
application/vnd.solent.sdkm+xml sdkm sdkd  
application/vnd.spotfire.dxp dxp  
application/vnd.spotfire.sfs sfs  
# application/vnd.sss-cod  
# application/vnd.sss-dtf  
# application/vnd.sss-ntf  
application/vnd.stardivision.calc sdc  
application/vnd.stardivision.draw sda  
application/vnd.stardivision.impress sdd  
application/vnd.stardivision.math smf  
application/vnd.stardivision.writer sdw vor  
application/vnd.stardivision.writer-global sgl  
application/vnd.stepmania.package smzip  
application/vnd.stepmania.stepchart sm

```
application/vnd.street-stream
application/vnd.sun.wadl+xml
application/vnd.sun.xml.calc sxc
application/vnd.sun.xml.calc.template stc
application/vnd.sun.xml.draw sxd
application/vnd.sun.xml.draw.template std
application/vnd.sun.xml.impress sxi
application/vnd.sun.xml.impress.template sti
application/vnd.sun.xml.math sxm
application/vnd.sun.xml.writer sxw
application/vnd.sun.xml.writer.global sxg
application/vnd.sun.xml.writer.template stw
application/vnd.sus-calendar sus
susp
application/vnd.svd svd
application/vnd.swiftview-ics
application/vnd.symbian.install sis six
application/vnd.syncml+xml xsm
application/vnd.syncml.dm+wbxml bdm
application/vnd.syncml.dm+xml xdm
application/vnd.syncml.dm.notification
application/vnd.syncml.dmddf+wbxml
application/vnd.syncml.dmddf+xml
application/vnd.syncml.dmtnds+wbxml
application/vnd.syncml.dmtnds+xml
application/vnd.syncml.ds.notification
application/vnd.tao.intent-module-archive tao
application/vnd.tcpdump.pcap pcap cap dmp
application/vnd.tmd.mediaflex.api+xml
application/vnd.tml
application/vnd.tmobile-livetv tmo
application/vnd.trid.tpt tpt
application/vnd.triscape.mxs mxs
application/vnd.trueapp tra
#
application/vnd.truedoc
application/vnd.ubisoft.webplayer
application/vnd.ufdl ufd ufdl
application/vnd.uiq.theme utz
application/vnd.umajin umj
application/vnd.unity unityweb
application/vnd.uoml+xml uoml
application/vnd.uplanet.alert
application/vnd.uplanet.alert-wbxml
application/vnd.uplanet.bearer-choice
application/vnd.uplanet.bearer-choice-wbxml
application/vnd.uplanet.cacheop
application/vnd.uplanet.cacheop-wbxml
```

# application/vnd.uplanet.channel  
# application/vnd.uplanet.channel-wbxml  
# application/vnd.uplanet.list  
# application/vnd.uplanet.list-wbxml  
# application/vnd.uplanet.listcmd  
# application/vnd.uplanet.listcmd-wbxml  
# application/vnd.uplanet.signal  
# application/vnd.uri-map  
# application/vnd.valve.source.material  
application/vnd.vcx vcx  
# application/vnd.vd-study  
# application/vnd.vectorworks  
# application/vnd.vel+json  
# application/vnd.verimatrix.vcas  
# application/vnd.vidsoft.vidconference  
application/vnd.visio vsd  
vst vss vsw  
application/vnd.visionary vis  
# application/vnd.vividence.scriptfile  
application/vnd.vsf vsf  
# application/vnd.wap.sic  
# application/vnd.wap.slc  
application/vnd.wap.wbxml wbxml  
application/vnd.wap.wmlc wmlc  
application/vnd.wap.wmlscriptc wmlsc  
application/vnd.webturbo wtb  
# application/vnd.wfa.p2p  
# application/vnd.wfa.wsc  
# application/vnd.windows.devicepairing  
# application/vnd.wmc  
# application/vnd.wmf.bootstrap  
# application/vnd.wolfram.mathematica  
# application/vnd.wolfram.mathematica.package  
application/vnd.wolfram.player nbp  
application/vnd.wordperfect wpd  
application/vnd.wqd wqd  
# application/vnd.wrq-hp3000-labelled  
application/vnd.wt.stf stf  
# application/vnd.wv.csp+wbxml  
# application/vnd.wv.csp+xml  
# application/vnd.wv.ssp+xml  
# application/vnd.xacml+json  
application/vnd.xara xar  
application/vnd.xfdl xfdl  
# application/vnd.xfdl.webform  
# application/vnd.xmi+xml  
# application/vnd.xmpie.cpkg  
#

application/vnd.xmpie.dpkg  
# application/vnd.xmpie.plan  
# application/vnd.xmpie.ppkg  
# application/vnd.xmpie.xlim  
application/vnd.yamaha.hv-dic hvd  
application/vnd.yamaha.hv-script hvs  
application/vnd.yamaha.hv-voice hvp  
application/vnd.yamaha.openscoreformat osf  
application/vnd.yamaha.openscoreformat.osfpvg+xml osfpvg  
# application/vnd.yamaha.remote-setup  
application/vnd.yamaha.smaf-audio saf  
application/vnd.yamaha.smaf-phrase spf  
# application/vnd.yamaha.through-ngn  
# application/vnd.yamaha.tunnel-udpencap  
# application/vnd.yaoweme  
application/vnd.yellowriver-custom-menu cmp  
application/vnd.zul zir zirz  
application/vnd.zzazz.deck+xml zaz  
application/voicexml+xml vxml  
# application/vq-rtcpvr  
# application/watcherinfo+xml  
# application/whoispp-query  
# application/whoispp-response  
application/widget wgt  
application/winhelp hlp  
# application/wita  
# application/wordperfect5.1  
application/wsdl+xml wsdl  
application/wspolicy+xml wspolicy  
application/x-7z-compressed 7z  
application/x-abiword abw  
application/x-ace-compressed ace  
#  
application/x-amf  
application/x-apple-diskimage dmg  
application/x-authorware-bin aab x32 u32 vox  
application/x-authorware-map aam  
application/x-authorware-seg aas  
application/x-bcpio bcpio  
application/x-bittorrent torrent  
application/x-blorb blb blorb  
application/x-bzip bz  
application/x-bzip2 bz2 boz  
application/x-cbr cbr cba cbt cbz cb7  
application/x-cdlink vcd  
application/x-cfs-compressed cfs  
application/x-chat chat  
application/x-chess-pgn pgn

```
application/x-compress
application/x-conference nsc
application/x-cpio cpio
application/x-csh csh
application/x-debian-package deb udeb
application/x-dgc-compressed dgc
application/x-director dir dcr dxr cst cct cxt w3d fgd swa
application/x-doom wad
application/x-dtbncx+xml ncx
application/x-dtbook+xml dtb
application/x-dtbresource+xml res
application/x-dvi dvi
application/x-envoy evy
application/x-eva eva
application/x-font-bdf bdf
#
application/x-font-dos
application/x-font-framemaker
application/x-font-ghostscript gsf
application/x-font-libgrx
application/x-font-linux-psf psf
application/x-font-pcf pcf
application/x-font-snf snf
application/x-font-speedo
application/x-font-sunos-news
application/x-font-type1 pfa pfb pfm afm
application/x-font-vfont
application/x-freearc arc
application/x-futuresplash spl
application/x-gca-compressed gca
application/x-glulx ulx
application/x-gnumeric gnumeric
application/x-gramps-xml gramps
application/x-gtar gtar
application/x-gzip
application/x-hdf hdf
application/x-install-instructions install
application/x-iso9660-image iso
application/x-java-jnlp-file jnlp
application/x-latex latex
application/x-lzh-compressed lzh lha
application/x-mie mie
application/x-mobipocket-ebook prc mobi
application/x-ms-application application
application/x-ms-shortcut lnk
application/x-ms-wmd wmd
application/x-ms-wmz wmz
application/x-ms-xbap xbap
```



application/x-msaccess mdb  
application/x-msbinder obd  
application/x-mscardfile crd  
application/x-msclip clp  
application/x-msdownload exe  
dll com bat msi  
application/x-msmediaview mvb m13 m14  
application/x-msmetafile wmf wmz emf emz  
application/x-msmoney mny  
application/x-mspublisher pub  
application/x-msschedule scd  
application/x-msterial trm  
application/x-mswrite wri  
application/x-netcdf nc cdf  
application/x-nzb nzb  
application/x-pkcs12 p12 pfx  
application/x-pkcs7-certificates p7b spc  
application/x-pkcs7-certreqresp p7r  
application/x-rar-compressed rar  
application/x-research-info-systems ris  
application/x-sh sh  
application/x-shar shar  
application/x-shockwave-flash swf  
application/x-silverlight-app xap  
application/x-sql sql  
application/x-stuffit sit  
application/x-stuffitx sitx  
application/x-subrip srt  
application/x-sv4cpio sv4cpio  
application/x-sv4crc sv4crc  
application/x-t3vm-image t3  
application/x-tads gam  
application/x-tar tar  
application/x-tcl tcl  
application/x-tex tex  
application/x-tex-tfm tfm  
application/x-texinfo texinfo  
texi  
application/x-tgif obj  
application/x-ustar ustar  
application/x-wais-source src  
# application/x-www-form-urlencoded  
application/x-x509-ca-cert der crt  
application/x-xfig fig  
application/x-xliff+xml xlf  
application/x-xpinstall xpi  
application/x-xz xz  
application/x-zmachine z1 z2 z3 z4 z5 z6 z7 z8

# application/x400-bp  
# application/xacml+xml  
application/xaml+xml xaml  
# application/xcap-att+xml  
# application/xcap-caps+xml  
application/xcap-diff+xml xdf  
# application/xcap-el+xml  
# application/xcap-error+xml  
# application/xcap-ns+xml  
# application/xcon-conference-info+xml  
# application/xcon-conference-info-diff+xml  
application/xenc+xml xenc  
application/xhtml+xml xhtml xht  
# application/xhtml-voice+xml  
application/xml xml xsl  
application/xml-dtd dtd  
#  
application/xml-external-parsed-entity  
# application/xml-patch+xml  
# application/xmpp+xml  
application/xop+xml xop  
application/xproc+xml xpl  
application/xslt+xml xslt  
application/xspf+xml xspf  
application/xv+xml mxml xhvm xvml xvm  
application/yang yang  
application/yin+xml yin  
application/zip zip  
# application/zlib  
# audio/1d-interleaved-parityfec  
# audio/32kadpcm  
# audio/3gpp  
# audio/3gpp2  
# audio/ac3  
audio/adpcm adp  
# audio/amr  
# audio/amr-wb  
# audio/amr-wb+  
# audio/aptx  
# audio/asc  
# audio/atrac-advanced-lossless  
# audio/atrac-x  
# audio/atrac3  
audio/basic au snd  
# audio/bv16  
# audio/bv32  
# audio/clearmode  
# audio/cn

# audio/dat12  
# audio/dls  
# audio/dsr-es201108  
# audio/dsr-es202050  
# audio/dsr-es202211  
# audio/dsr-es202212  
# audio/dv  
# audio/dvi4  
# audio/eac3  
# audio/encaprtsp  
# audio/evrc  
# audio/evrc-qcp  
# audio/evrc0  
# audio/evrc1  
# audio/evrcb  
# audio/evrcb0  
# audio/evrcb1  
# audio/evrcnw  
# audio/evrcnw0  
# audio/evrcnw1  
# audio/evrcwb  
# audio/evrcwb0  
#  
  audio/evrcwb1  
# audio/evs  
# audio/example  
# audio/fwdred  
# audio/g711-0  
# audio/g719  
# audio/g722  
# audio/g7221  
# audio/g723  
# audio/g726-16  
# audio/g726-24  
# audio/g726-32  
# audio/g726-40  
# audio/g728  
# audio/g729  
# audio/g7291  
# audio/g729d  
# audio/g729e  
# audio/gsm  
# audio/gsm-efr  
# audio/gsm-hr-08  
# audio/ilbc  
# audio/ip-mr\_v2.5  
# audio/isac  
# audio/116

# audio/120  
# audio/124  
# audio/18  
# audio/lpc  
audio/midi mid midi kar rmi  
# audio/mobile-xmf  
audio/mp4 m4a mp4a  
# audio/mp4a-latm  
# audio/mpa  
# audio/mpa-robust  
audio/mpeg mpga mp2 mp2a mp3 m2a m3a  
# audio/mpeg4-generic  
# audio/musepack  
audio/ogg oga ogg spx  
# audio/opus  
# audio/parityfec  
# audio/pcma  
# audio/pcma-wb  
# audio/pcmu  
# audio/pcmu-wb  
# audio/prs.sid  
# audio/qcelp  
# audio/raptorfec  
# audio/red  
# audio/rtp-enc-aescm128  
# audio/rtp-midi  
# audio/rtploopback  
# audio/rtx  
audio/s3m s3m  
audio/silk sil  
# audio/smv  
# audio/smv-qcp  
# audio/smv0  
# audio/sp-midi  
# audio/speex  
# audio/t140c  
# audio/t38  
#  
audio/telephone-event  
# audio/tone  
# audio/uemclip  
# audio/ulpfec  
# audio/vdvi  
# audio/vmr-wb  
# audio/vnd.3gpp.iufp  
# audio/vnd.4sb  
# audio/vnd.audiokoz  
# audio/vnd.celp

```
audio/vnd.cisco.nse
audio/vnd.cmles.radio-events
audio/vnd.cns.anp1
audio/vnd.cns.infl
audio/vnd.dece.audio uva uvva
audio/vnd.digital-winds eol
audio/vnd.dlna.adts
audio/vnd.dolby.heaac.1
audio/vnd.dolby.heaac.2
audio/vnd.dolby.mlp
audio/vnd.dolby.mps
audio/vnd.dolby.pl2
audio/vnd.dolby.pl2x
audio/vnd.dolby.pl2z
audio/vnd.dolby.pulse.1
audio/vnd.dra dra
audio/vnd.dts dts
audio/vnd.dts.hd dtshd
audio/vnd.dvb.file
audio/vnd.everad.plj
audio/vnd.hns.audio
audio/vnd.lucent.voice lvp
audio/vnd.ms-playready.media.pya pya
audio/vnd.nokia.mobile-xmf
audio/vnd.nortel.vbk
audio/vnd.nuera.ecelp4800 ecelp4800
audio/vnd.nuera.ecelp7470 ecelp7470
audio/vnd.nuera.ecelp9600 ecelp9600
audio/vnd.octel.sbc
audio/vnd.qcelp
audio/vnd.rhetorex.32kadpcm
audio/vnd.rip rip
#
 audio/vnd.sealedmedia.softseal.mpeg
audio/vnd.vmx.cvsd
audio/vorbis
audio/vorbis-config
audio/webm weba
audio/x-aac aac
audio/x-aiff aif aiff aifc
audio/x-caf caf
audio/x-flac flac
audio/x-matroska mka
audio/x-mpegurl m3u
audio/x-ms-wax wax
audio/x-ms-wma wma
audio/x-pn-realaudio ram ra
audio/x-pn-realaudio-plugin rmp
```

```
audio/x-tta
audio/x-wav wav
audio/xm xm
chemical/x-cdx cdx
chemical/x-cif cif
chemical/x-cmdf cmdf
chemical/x-cml cml
chemical/x-csml csml
chemical/x-pdb
chemical/x-xyz xyz
font/collection ttc
font/otf otf
font/sfnt
font/ttf ttf
font/woff woff
font/woff2 woff2
image/bmp bmp
image/cgm cgm
image/dicom-rle
image/emf
image/example
image/fits
image/g3fax g3
image/gif gif
image/ief ief
image/jls
image/jp2
image/jpeg jpeg jpg jpe
image/jpm
image/jpx
image/ktx ktx
image/naplps
image/png png
image/prs.btif btif
image/prs.pti
#
image/pwg-raster
image/sgi sgi
image/svg+xml svg svgz
image/t38
image/tiff tiff tif
image/tiff-fx
image/vnd.adobe.photoshop psd
image/vnd.airzip.accelerator.azv
image/vnd.cns.inf2
image/vnd.dece.graphic uvi uvvi uvg uvvg
image/vnd.djvu djvu djv
image/vnd.dvb.subtitle sub
```

image/vnd.dwg dwg  
image/vnd.dxf dxf  
image/vnd.fastbidsheet fbs  
image/vnd.fpx fpx  
image/vnd.fst fst  
image/vnd.fujixerox.edmics-mmr mmr  
image/vnd.fujixerox.edmics-rlc rlc  
# image/vnd.globalgraphics.pgb  
# image/vnd.microsoft.icon  
# image/vnd.mix  
# image/vnd.mozilla.apng  
image/vnd.ms-modi mdi  
image/vnd.ms-photo wdp  
image/vnd.net-fpx npx  
# image/vnd.radiance  
# image/vnd.sealed.png  
# image/vnd.sealedmedia.softseal.gif  
# image/vnd.sealedmedia.softseal.jpg  
# image/vnd.svf  
# image/vnd.tencent.tap  
# image/vnd.valve.source.texture  
image/vnd.wap.wbmp wbmp  
image/vnd.xiff xif  
# image/vnd.zbrush.pcx  
image/webp webp  
# image/wmf  
image/x-3ds 3ds  
image/x-cmu-raster ras  
image/x-cmx cmx  
image/x-freehand fh  
fhc fh4 fh5 fh7  
image/x-icon ico  
image/x-mrsid-image sid  
image/x-pcx pcx  
image/x-pict pic pct  
image/x-portable-anymap pnm  
image/x-portable-bitmap pbm  
image/x-portable-graymap pgm  
image/x-portable-pixmap ppm  
image/x-rgb rgb  
image/x-tga tga  
image/x-xbitmap xbm  
image/x-xpixmap xpm  
image/x-xwindowdump xwd  
# message/cpim  
# message/delivery-status  
# message/disposition-notification  
# message/example

```
message/external-body
message/feedback-report
message/global
message/global-delivery-status
message/global-disposition-notification
message/global-headers
message/http
message/imdn+xml
message/news
message/partial
message/rfc822 eml mime
message/s-http
message/sip
message/sipfrag
message/tracking-status
message/vnd.si.simp
message/vnd.wfa.wsc
model/example
model/gltf+json
model/iges igs iges
model/mesh msh mesh silo
model/vnd.collada+xml dae
model/vnd.dwf dwf
#
 model/vnd.flatland.3dml
model/vnd.gdl gdl
model/vnd.gs-gdl
model/vnd.gs.gdl
model/vnd.gtw gtw
model/vnd.moml+xml
model/vnd.mts mts
model/vnd.opengex
model/vnd.parasolid.transmit.binary
model/vnd.parasolid.transmit.text
model/vnd.rosette.annotated-data-model
model/vnd.valve.source.compiled-map
model/vnd.vtu vtu
model/vrml wrl vrml
model/x3d+binary x3db x3dbz
model/x3d+fastinfoset
model/x3d+vrml x3dv x3dvz
model/x3d+xml x3d x3dz
model/x3d-vrml
multipart/alternative
multipart/appledouble
multipart/byteranges
multipart/digest
multipart/encrypted
```



# multipart/example  
# multipart/form-data  
# multipart/header-set  
# multipart/mixed  
# multipart/parallel  
# multipart/related  
# multipart/report  
# multipart/signed  
# multipart/voice-message  
# multipart/x-mixed-replace  
# text/1d-interleaved-parityfec  
text/cache-manifest appcache  
text/calendar ics ifb  
text/css css  
text/csv csv  
# text/csv-schema  
#  
text/directory  
# text/dns  
# text/ecmascript  
# text/encaprtf  
# text/enriched  
# text/example  
# text/fwdred  
# text/grammar-ref-list  
text/html html htm  
# text/javascript  
# text/jcr-cnd  
# text/markdown  
# text/mizar  
text/n3 n3  
# text/parameters  
# text/parityfec  
text/plain txt text conf def list log in  
# text/provenance-notation  
# text/prs.fallenstein.rst  
text/prs.lines.tag dsc  
# text/prs.prop.logic  
# text/raptorfec  
# text/red  
# text/rfc822-headers  
text/richtext rtx  
# text/rtf  
# text/rtp-enc-aescm128  
# text/rtploopback  
# text/rtx  
text/sgml sgml sgm  
# text/t140

text/tab-separated-values tsv  
text/troff t tr roff man me ms  
text/turtle ttl  
# text/ulpfec  
text/uri-list uri uris urls  
text/vcard vcard  
# text/vnd.a  
# text/vnd.abc  
text/vnd.curl curl  
text/vnd.curl.dcurl dcurl  
text/vnd.curl.mcurl mcurl  
text/vnd.curl.scurl scurl  
# text/vnd.debian.copyright  
# text/vnd.dmclientscript  
text/vnd.dvb.subtitle sub  
# text/vnd.esmertec.theme-descriptor  
text/vnd.fly fly  
text/vnd.fmi.flexstor flx  
text/vnd.graphviz gv  
text/vnd.in3d.3dml 3dml  
text/vnd.in3d.spot spot  
#  
text/vnd.iptc.newsml  
# text/vnd.iptc.nitf  
# text/vnd.latex-z  
# text/vnd.motorola.reflex  
# text/vnd.ms-mediapackage  
# text/vnd.net2phone.commcenter.command  
# text/vnd.radisys.msml-basic-layout  
# text/vnd.si.uricatalogue  
text/vnd.sun.j2me.app-descriptor jad  
# text/vnd.trolltech.linguist  
# text/vnd.wap.si  
# text/vnd.wap.sl  
text/vnd.wap.wml wml  
text/vnd.wap.wmlscript wmls  
text/x-asm s asm  
text/x-c c cc cxx cpp h hh dic  
text/x-fortran f for f77 f90  
text/x-java-source java  
text/x-nfo nfo  
text/x-opml opml  
text/x-pascal p pas  
text/x-setext etx  
text/x-sfv sfv  
text/x-uencode uu  
text/x-vcalendar vcs  
text/x-vcard vcf

# text/xml  
# text/xml-external-parsed-entity  
# video/1d-interleaved-parityfec  
video/3gpp 3gp  
# video/3gpp-tt  
video/3gpp2 3g2  
# video/bmpeg  
# video/bt656  
# video/celb  
# video/dv  
# video/encaprtsp  
# video/example  
video/h261 h261  
video/h263 h263  
#  
video/h263-1998  
# video/h263-2000  
video/h264 h264  
# video/h264-rcdo  
# video/h264-svc  
# video/h265  
# video/iso.segment  
video/jpeg jpgv  
# video/jpeg2000  
video/jpm jpm jpgm  
video/mj2 mj2 mjp2  
# video/mp1s  
# video/mp2p  
# video/mp2t  
video/mp4 mp4 mp4v mpg4  
# video/mp4v-es  
video/mpeg mpeg mpg mpe m1v m2v  
# video/mpeg4-generic  
# video/mpv  
# video/nv  
video/ogg ogv  
# video/parityfec  
# video/pointer  
video/quicktime qt mov  
# video/raptorfec  
# video/raw  
# video/rtp-enc-aescm128  
# video/rtploopback  
# video/rtx  
# video/smpte292m  
# video/ulpfec  
# video/vcl  
# video/vnd.cctv

video/vnd.dece.hd uvh uvvh  
video/vnd.dece.mobile uvm uvvm  
# video/vnd.dece.mp4  
video/vnd.dece.pd uvp uvvp  
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video/vnd.dece.video uvv uvvv  
# video/vnd.directv.mpeg  
# video/vnd.directv.mpeg-tts  
# video/vnd.dlna.mpeg-tts  
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# video/vnd.hns.video  
# video/vnd.iptvforum.1dparityfec-1010  
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# video/vnd.iptvforum.2dparityfec-1010  
# video/vnd.iptvforum.2dparityfec-2005  
# video/vnd.iptvforum.ttsavc  
# video/vnd.iptvforum.ttsmpeg2  
# video/vnd.motorola.video  
# video/vnd.motorola.videop  
video/vnd.mpegurl mxu m4u  
video/vnd.ms-playready.media.pyv pyv  
# video/vnd.nokia.interleaved-multimedia  
# video/vnd.nokia.videovoip  
# video/vnd.objectvideo  
# video/vnd.radgamettools.bink  
# video/vnd.radgamettools.smacker  
# video/vnd.sealed.mpeg1  
# video/vnd.sealed.mpeg4  
# video/vnd.sealed.swf  
# video/vnd.sealedmedia.softseal.mov  
video/vnd.uvu.mp4 uvu uvvu  
video/vnd.vivo viv  
# video/vp8  
video/webm webm  
video/x-f4v f4v  
video/x-fli fli  
video/x-flv flv  
video/x-m4v m4v  
video/x-matroska mkv mk3d mks  
video/x-mng mng  
video/x-ms-asf asf asx  
video/x-ms-vob vob  
video/x-ms-wm wm  
video/x-ms-wmv wmv  
video/x-ms-wmx wmx  
video/x-ms-wvx wvx

video/x-msvideo avi  
video/x-sgi-movie movie  
video/x-smv smv  
x-conference/x-cooltalk ice

Found

in path(s):

\* /opt/cola/permits/1638896238\_1681459436.296813/0/micronaut-http-3-8-7-jar/META-INF/http/mime.types  
No license file was found, but licenses were detected in source scan.

<url><http://www.apache.org/licenses/LICENSE-2.0.txt></url>

Found in path(s):

\* /opt/cola/permits/1638896238\_1681459436.296813/0/micronaut-http-3-8-7-jar/META-INF/maven/io.micronaut/micronaut-http/pom.xml

## 1.152 micronaut-context 3.8.7

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Found in path(s):

\* /opt/cola/permits/1638896073\_1681819737.5329874/0/micronaut-context-3-8-7-jar/META-INF/maven/io.micronaut/micronaut-context/pom.xml

## 1.153 kafka-avro-serializer 6.2.1

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```
<project xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="http://maven.apache.org/POM/4.0.0"
 xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/maven-v4_0_0.xsd">
```

```
<modelVersion>4.0.0</modelVersion>
```

```
<parent>
```

```
 <groupId>io.confluent</groupId>
```

```
 <artifactId>kafka-schema-registry-parent</artifactId>
```

```
 <version>6.2.1</version>
```

```
</parent>
```

```
<licenses>
```

```
 <license>
```

```
<name>Apache License 2.0</name>
<url>http://www.apache.org/licenses/LICENSE-2.0.html</url>
<distribution>repo</distribution>
</license>
</licenses>
```

```
<artifactId>kafka-avro-serializer</artifactId>
<packaging>jar</packaging>
<name>kafka-avro-serializer</name>
```

```
<dependencies>
 <dependency>
 <groupId>org.apache.kafka</groupId>
 <artifactId>kafka_${kafka.scala.version}</artifactId>
 <scope>provided</scope>
 </dependency>
 <dependency>
 <groupId>org.apache.avro</groupId>
 <artifactId>avro</artifactId>
 </dependency>
 <dependency>
 <groupId>org.apache.commons</groupId>
 <artifactId>commons-compress</artifactId>
 </dependency>
 <dependency>
 <groupId>io.confluent</groupId>
 <artifactId>kafka-schema-serializer</artifactId>
 <version>${io.confluent.schema-registry.version}</version>
 </dependency>
 <dependency>
 <groupId>io.confluent</groupId>
 <artifactId>kafka-schema-registry-client</artifactId>
 <version>${io.confluent.schema-registry.version}</version>
 </dependency>
 <dependency>
 <groupId>com.google.guava</groupId>
 <artifactId>guava</artifactId>
 <scope>test</scope>
 </dependency>
 <dependency>
 <groupId>junit</groupId>
 <artifactId>junit</artifactId>
 <scope>test</scope>
 </dependency>
 <dependency>
 <groupId>org.slf4j</groupId>
 <artifactId>slf4j-log4j12</artifactId>
```

```

 <scope>test</scope>
 </dependency>
</dependency>
 <groupId>io.confluent</groupId>
 <artifactId>confluent-log4j</artifactId>
 <scope>test</scope>
</dependency>
</dependencies>

<build>
 <plugins>
 <plugin>
 <groupId>org.apache.avro</groupId>
 <artifactId>avro-maven-plugin</artifactId>
 <executions>
 <execution>
 <phase>generate-sources</phase>
 <goals>
 <goal>schema</goal>
 </goals>
 <configuration>
 <testSourceDirectory>${project.basedir}/src/test/avro</testSourceDirectory>
 </configuration>
 </execution>
 </executions>
 </plugin>
 </plugins>
</build>
</project>

```

Found in path(s):

\* /opt/cola/permits/1638896301\_1681459399.8776171/0/kafka-avro-serializer-6-2-1-jar/META-INF/maven/io.confluent/kafka-avro-serializer/pom.xml

# 1.154 micronaut-core 3.8.7

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## 1.155 zstd 1.4.9

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Version 2, June 1991

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## 1.162 Icms 2.14-r0

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```
* /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/OnDealloc.java
* /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/J2ObjCIncompatible.java
* /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/LoopTranslation.java
*
/opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/RetainedLocalRef.java
* /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/ReflectionSupport.java
* /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/Property.java
* /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/WeakOuter.java
* /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/RetainedWith.java
* /opt/cola/permits/1704412778_1685746927.655543/0/j2objc-annotations-2-8-sources-
jar/com/google/j2objc/annotations/ObjectiveCName.java
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Found in path(s):

- \* /opt/cola/permits/1704412778\_1685746927.655543/0/j2objc-annotations-2-8-sources-jar/com/google/j2objc/annotations/Weak.java
- \* /opt/cola/permits/1704412778\_1685746927.655543/0/j2objc-annotations-2-8-sources-jar/com/google/j2objc/annotations/AutoreleasePool.java

## 1.164 tre 0.8.0-r2

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Upstream-Name: liblz4

Upstream-Contact: Yann Collet <[Cyan4973@github.com](mailto:Cyan4973@github.com)>

Source: <https://github.com/lz4/lz4>

Files: \*

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# 1.167 guava 32.0.1-jre

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```
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```

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## 1.169 pax-utils 1.3.7-r2

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```

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## 1.170 opentelemetry-api 1.22.0

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## 1.171 opentelemetry-sdk-extension-autoconfigure-spi 1.22.0

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## 1.172 opentelemetry-semconv 1.22.0-alpha

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## 1.176 error\_prone\_annotations 2.20.0

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Found in path(s):

\* /opt/cola/permits/1743275143\_1689175756.0938716/0/error-prone-annotations-2-20-0-jar/META-INF/maven/com.google.errorprone/error\_prone\_annotations/pom.xml

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Manifest-Version: 1.0

Created-By: Maven JAR Plugin 3.2.2

Build-Jdk-Spec: 17

Automatic-Module-Name: com.google.errorprone.annotations

Bundle-Description: Error Prone is a static analysis tool for Java that catches common programming mistakes at compile-time.

Bundle-DocURL: [https://errorprone.info/error\\_prone\\_annotations](https://errorprone.info/error_prone_annotations)

Bundle-License: "Apache 2.0";link="http://www.apache.org/licenses/LICENSE-2.0.txt"

Bundle-ManifestVersion: 2

Bundle-Name: error-prone annotations

Bundle-SCM: url="https://github.com/google/error-prone/error\_prone\_annotations",connection="scm:git:https://github.com/google/error-prone.git/error\_prone\_annotations",developer-connection="scm:git:git@github.com:google/error-prone.git/error\_prone\_annotations",tag=HEAD

Bundle-SymbolicName: com.google.errorprone.annotations

Bundle-Vendor: Google LLC

Bundle-Version: 2.20.0

Export-Package: com.google.errorprone.annotations;uses:="javax.lang.model.element";version="2.20.0",com.google.errorprone.annotations.concurrent;version="2.20.0"

Import-Package: javax.lang.model.element

Require-Capability: osgi.ee;filter="(&(osgi.ee=JavaSE)(version=1.8))"

Found in path(s):

\* /opt/cola/permits/1743275143\_1689175756.0938716/0/error-prone-annotations-2-20-0-jar/META-INF/MANIFEST.MF

# 1.177 jackson-jr-annotation-support 2.15.2

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# 1.178 jackson-jr-objects 2.15.2

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## 1.179 classgraph 4.8.158

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```
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 *
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 *
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 *
 * --
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\* Author: Luke Hutchison

\*

\* Hosted at: <https://github.com/classgraph/classgraph>

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\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/fileslice/reader/RandomAccessReader.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/fileslice/ArraySlice.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/fileslice/PathSlice.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/fileslice/reader/RandomAccessArrayReader.java  
\*  
/opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/fileslice/reader/RandomAccessFileChannelReader.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/fileslice/reader/SequentialReader.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/fileslice/FileSlice.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/fileslice/reader/ClassfileReader.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/fileslice/reader/RandomAccessByteBufferReader.java  
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\* Author: Luke Hutchison

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\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/AnnotationParameterValue.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/MethodTypeSignature.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/Resource.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/fastzipfilereader/LogicalZipFile.java  
\*  
/opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/scanspec/ScanSpec.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/AnnotationInfo.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classpath/ClasspathOrder.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/MethodParameterInfo.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/ClassRefOrTypeVariableSignature.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/MappableInfoList.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/ModuleInfoList.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/GraphvizDotfileGenerator.java  
\*  
/opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/recycler/RecycleOnClose.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classloaderhandler/PlexusClassWorldsClassRealmClassLoaderHandler.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classpath/ClassLoaderOrder.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/json/JSONDeserializer.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/BaseTypeSignature.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classloaderhandler/ClassLoaderHandler.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/json/JSONUtils.java  
\*  
/opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/Classfile.java



\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/ClasspathElement.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/Scanner.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/utils/CollectionUtils.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classloaderhandler/EquinoxContextFinderClassLoaderHandler.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/ModuleReaderProxy.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/PackageInfo.java

\*

/opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/ClassGraphException.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/json/ReferenceEqualityKey.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classloaderhandler/ParentLastDelegationOrderTestClassLoaderHandler.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classloaderhandler/WeblogicClassLoaderHandler.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classpath/SystemJarFinder.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/ClasspathElementDir.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/reflection/ReflectionUtils.java

\*

/opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classloaderhandler/ClassGraphClassLoaderHandler.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/ModulePathInfo.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/InfoList.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/ScanResult.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/HasName.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/json/JSONArray.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classpath/ClassLoaderFinder.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/ArrayTypeSignature.java

\*

/opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/json/JSONReference.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-

jar/nonapi/io/github/classgraph/json/ClassFieldCache.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/concurrency/SingletonMap.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/classloaderhandler/JPMSCClassLoaderHandler.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/io/github/classgraph/ClassGraph.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/classloaderhandler/ClassLoaderHandlerRegistry.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/io/github/classgraph/FieldInfoList.java  
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/opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/fastzipfilereader/ZipFileSlice.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/types/ParseException.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/io/github/classgraph/ScanResultObject.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/io/github/classgraph/AnnotationEnumValue.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/types/Parser.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/Utils/LogNode.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/io/github/classgraph/TypeArgument.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/classloaderhandler/OSGiDefaultClassLoaderHandler.java  
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/opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/Utils/VersionFinder.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/recycler/Resetable.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/io/github/classgraph/AnnotationInfoList.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/io/github/classgraph/ClassMemberInfo.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/Utils/ProxyingInputStream.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/io/github/classgraph/ArrayClassInfo.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/io/github/classgraph/MethodInfo.java  
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/opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/fastzipfilereader/PhysicalZipFile.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/classloaderhandler/EquinoxClassLoaderHandler.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/types/TypeUtils.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/fastzipfilereader/FastZipEntry.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/utills/StringUtils.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/AnnotationParameterValueList.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/ClassRefTypeSignature.java

\*

/opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classloaderhandler/FallbackClassLoaderHandler.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/ClasspathElementZip.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/recycler/Recycler.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/TypeParameter.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classloaderhandler/URLClassLoaderHandler.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/json/ParameterizedTypeImpl.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/json/JSONSerializer.java

\*

/opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classpath/CallStackReader.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/json/Id.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/utills/FastPathResolver.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/ClasspathElementModule.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classpath/ClasspathFinder.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/json/JSONParser.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/TypeSignature.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/utills/JarUtils.java

\*

/opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/ObjectTypedValueWrapper.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/io/github/classgraph/FieldInfo.java

\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-

jar/io/github/classgraph/PotentiallyUnmodifiableList.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/io/github/classgraph/PackageInfoList.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/nonapi/io/github/classgraph/Utils/FileUtils.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/nonapi/io/github/classgraph/fastzipfilereader/NestedJarHandler.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/nonapi/io/github/classgraph/json/JSONObject.java  
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 /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/io/github/classgraph/HierarchicalTypeSignature.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/nonapi/io/github/classgraph/classpath/ModuleFinder.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/nonapi/io/github/classgraph/concurrency/WorkQueue.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/io/github/classgraph/ModuleInfo.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/nonapi/io/github/classgraph/concurrency/InterruptedException.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/io/github/classgraph/ClassTypeSignature.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/io/github/classgraph/ClassInfoList.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/nonapi/io/github/classgraph/classloaderhandler/TomcatWebappClassLoaderBaseHandler.java  
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 /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/nonapi/io/github/classgraph/classloaderhandler/UnoOneJarClassLoaderHandler.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/nonapi/io/github/classgraph/scanspec/AcceptReject.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/io/github/classgraph/MethodInfoList.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/io/github/classgraph/TypeVariableSignature.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/io/github/classgraph/ModuleRef.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/nonapi/io/github/classgraph/json/ClassFields.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
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 /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/nonapi/io/github/classgraph/json/FieldTypeInfo.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/nonapi/io/github/classgraph/Utils/URLPathEncoder.java  
 \* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
 jar/io/github/classgraph/ReferenceTypeSignature.java

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* /opt/cola/permits/1756038422_1690862953.5822532/0/classgraph-4-8-158-sources-
jar/io/github/classgraph/ClassInfo.java
* /opt/cola/permits/1756038422_1690862953.5822532/0/classgraph-4-8-158-sources-
jar/io/github/classgraph/AnnotationClassRef.java
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```

```
/*
* This file is part of ClassGraph.
*
* Author: @jacobg on GitHub
*
* Hosted at: https://github.com/classgraph/classgraph
*
* --
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* /opt/cola/permits/1756038422_1690862953.5822532/0/classgraph-4-8-158-sources-
jar/nonapi/io/github/classgraph/classloaderhandler/AntClassLoaderHandler.java
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```

```
/*
* This file is part of ClassGraph.
*
* Author: Johnno Crawford (johnno@sulake.com)
```

\*  
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jar/nonapi/io/github/classgraph/concurrency/AutoCloseableExecutorService.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/concurrency/SimpleThreadFactory.java  
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\*  
\* Author: Luke Hutchison  
\*  
\* Hosted at: <https://github.com/classgraph/classgraph>  
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jar/io/github/classgraph/CloseableByteBuffer.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/classloaderhandler/CxfContainerClassLoaderHandler.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/reflection/ReflectionDriver.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/reflection/NarcissusReflectionDriver.java  
\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/reflection/JVMDriverReflectionDriver.java  
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/opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-  
jar/nonapi/io/github/classgraph/reflection/StandardReflectionDriver.java

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\* This file is part of ClassGraph.  
\*  
\* Author: Luke Hutchison (luke.hutch@gmail.com)  
\*  
\* Hosted at: <https://github.com/classgraph/classgraph>  
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jar/io/github/classgraph/ResourceList.java

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\* /opt/cola/permits/1756038422\_1690862953.5822532/0/classgraph-4-8-158-sources-jar/nonapi/io/github/classgraph/classloaderhandler/WebsphereTraditionalClassLoaderHandler.java  
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# 1.180 guava 32.1.2-jre

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## 1.183 guava 32.0.1-android

### 1.183.1 Available under license :

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```

Found in path(s):

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/base/MoreObjects.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/util/concurrent/TrustedListenableFutureTask.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/eventbus/SubscriberRegistry.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/eventbus/Dispatcher.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/math/Quantiles.java
```

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/eventbus/Subscriber.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ListenerCallQueue.java  
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Found in path(s):

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/package-info.java

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\*/

/\*\*

\* Holder for extra methods of { @code Objects } only in web. Intended to be empty for regular  
\* version.

\*/

Found in path(s):

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/ExtraObjectsMethodsForWeb.java

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 */
```

Found in path(s):

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/net/InetAddresses.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/primitives/Ints.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/io/MultiReader.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/primitives/Longs.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/io/FileBackedOutputStream.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/util/concurrent/ListenableFutureTask.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/primitives/Booleans.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/primitives/Floats.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/thirdparty/publicsuffix/TrieParser.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/base/Stopwatch.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/primitives/Bytes.java
*
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/primitives/Chars.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/FluentIterable.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/base/Converter.java
```

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Joiner.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/escape/Escaper.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/Doubles.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/net/PercentEscaper.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/internal/Finalizer.java  
\*

/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/Shorts.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/CharMatcher.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/SequentialExecutor.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/escape/UnicodeEscaper.java

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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableCollection.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableSortedSet.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/RegularImmutableBiMap.java

\*

/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/PeekingIterator.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/collect/Range.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ImmutableMultimap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/RegularImmutableMap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ImmutableMultiset.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/TreeBasedTable.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/thirdparty/publicsuffix/PublicSuffixPatterns.java  
\*  
/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/UnmodifiableIterator.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/StandardTable.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ImmutableEntry.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/StandardRowSortedTable.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/HashBasedTable.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/Platform.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/EmptyImmutableListMultimap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ImmutableMapValues.java  
\*  
/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ImmutableBiMap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/Tables.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ImmutableMap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ImmutableMapEntrySet.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/Serialization.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ImmutableListMultimap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/Table.java  
\*  
/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ImmutableMapKeySet.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/Collections2.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/CollectPreconditions.java

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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ServiceManagerBridge.java

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/\*\*

\* Returns an array containing all of the elements in the specified collection. This method

\* returns the elements in the order they are returned by the collection's iterator. The returned

\* array is "safe" in that no references to it are maintained by the collection. The caller is

\* thus free to modify the returned

array.

\*

\* <p>This method assumes that the collection size doesn't change while the method is running.

\*  
\* <p>TODO(kevinb): support concurrently modified collections?  
\*  
\* @param c the collection for which to return an array of elements  
\*/

Found in path(s):

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ObjectArrays.java

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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/AbstractHashFunction.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ForwardingCondition.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/ImmutableLongArray.java

\*

/\*  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/ImmutableIntArray.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ForwardingLock.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/ImmutableDoubleArray.java

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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/base/CommonMatcher.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/base/JdkPattern.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/base/PatternCompiler.java  
\*

/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/base/CommonPattern.java

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jar/com/google/common/util/concurrent/ForwardingBlockingDeque.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/CompactLinkedHashSet.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ForwardingDeque.java  
\*

/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/AbstractNavigableMap.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/collect/AllEqualOrdering.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/collect/FilteredKeySetMultimap.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/collect/TransformedIterator.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/collect/DescendingImmutableSortedSet.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/collect/RegularImmutableAsList.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/collect/FilteredMultimap.java  
 \*  
 /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/collect/FilteredKeyListMultimap.java  
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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/net/package-info.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/package-info.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ListeningExecutorService.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/annotations/package-info.java

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/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/UncaughtExceptionHandler.java

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 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Objects.java

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jar/com/google/common/io/PatternFilenameFilter.java  
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jar/com/google/common/util/concurrent/ImmediateFuture.java  
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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/util/concurrent/AbstractExecutionThreadService.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/reflect/TypeResolver.java  
\*  
/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/util/concurrent/Callables.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/MapMaker.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/escape/ArrayBasedUnicodeEscaper.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/net/UrlEscapers.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/net/InternetDomainName.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/util/concurrent/JdkFutureAdapters.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/util/concurrent/SettableFuture.java  
\*  
/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/escape/Platform.java  
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```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/hash/ImmutableSupplier.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/util/concurrent/ExecutionSequencer.java
```

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```
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jar/com/google/common/graph/package-info.java
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*/
/*
* This method was rewritten in Java from an intermediate step of the Murmur hash function in
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*/
```

Found in path(s):

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/Hashing.java
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jar/com/google/common/reflect/TypeCapture.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/hash/LongAddable.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/io/BaseEncoding.java
*
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/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/MutableTypeToInstanceMap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/PairedStats.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/ClassPath.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableRangeMap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/TypeToInstanceMap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/ChecksumHashFunction.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/LongAddables.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/PairedStatsAccumulator.java  
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/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/ByteSource.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/Invokable.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/ImmutableTypeToInstanceMap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/FileWriteMode.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/AbstractByteHasher.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/html/package-info.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ServiceManager.java  
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/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/CharSink.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/StatsAccumulator.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/escape/package-info.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/CharSource.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/AbstractInvocationHandler.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/LinearTransformation.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/LongAddable.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/LongAddables.java

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/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ListenableScheduledFuture.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/CartesianList.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/SipHashFunction.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/FilteredKeyMultimap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/ByteSink.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/Closer.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/package-info.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/Stats.java  
\*

/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/StandardSystemProperty.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/SmoothRateLimiter.java  
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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableRangeSet.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/Parameter.java  
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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/LongAdder.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/AtomicDoubleArray.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/hash/LongAdder.java

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jar/com/google/common/cache/CacheBuilderSpec.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/hash/BloomFilter.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/cache/package-info.java

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/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/base/Enums.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/AbstractSortedMultiset.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/hash/Crc32cHashFunction.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/math/MathPreconditions.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/RegularImmutableMultiset.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/hash/Hashing.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/reflect/Types.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/hash/AbstractCompositeHashFunction.java

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/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/base/Present.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/base/FunctionalEquivalence.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/primitives/ParseRequest.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/net/HttpHeaders.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/math/LongMath.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/base/Optional.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/base/Absent.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/util/concurrent/CycleDetectingLockFactory.java  
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 jar/com/google/common/collect/TreeRangeSet.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/hash/HashingOutputStream.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/cache/RemovalListeners.java  
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 jar/com/google/common/cache/ForwardingCache.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/util/concurrent/AbstractListeningExecutorService.java  
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 jar/com/google/common/net/MediaType.java  
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 /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/util/concurrent/ExecutionError.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/primitives/UnsignedLong.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/hash/Murmur3\_32HashFunction.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/util/concurrent/UncheckedExecutionException.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
 jar/com/google/common/hash/HashCode.java  
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 jar/com/google/common/math/DoubleUtils.java  
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 jar/com/google/common/cache/Weigher.java  
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 jar/com/google/common/collect/BoundType.java

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 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/LoadingCache.java  
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 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/RemovalNotification.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/primitives/UnsignedInteger.java  
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 /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ListeningScheduledExecutorService.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/ForwardingLoadingCache.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/cache/CacheStats.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/PairwiseEquivalence.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/FutureCallback.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/HashFunction.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/Murmur3\_128HashFunction.java  
 \*  
 /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/math/IntMath.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Ticker.java  
 \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-



jar/com/google/common/util/concurrent/AtomicLongMap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/DescendingImmutableSortedMultiset.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/hash/Hasher.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/cache/Cache.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/RegularContiguousSet.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/cache/AbstractLoadingCache.java  
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/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/util/concurrent/ForwardingExecutorService.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/hash/Funnels.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/hash/AbstractStreamingHasher.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/math/BigIntegerMath.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/cache/CacheLoader.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/hash/MessageDigestHashFunction.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/util/concurrent/WrappingExecutorService.java  
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/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/hash/BloomFilterStrategies.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/util/concurrent/AbstractScheduledService.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/util/concurrent/ForwardingListeningExecutorService.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/util/concurrent/AsyncFunction.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/net/HostAndPort.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/hash/AbstractNonStreamingHashFunction.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/EmptyContiguousSet.java  
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jar/com/google/common/reflect/IgnoreJRERequirement.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/io/IgnoreJRERequirement.java

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jar/com/google/common/primitives/Platform.java

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- \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ObjectCountLinkedHashMap.java
- \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/ClosingFuture.java
- \*

- /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ObjectCountHashMap.java
- \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/graph/AbstractBaseGraph.java
- \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/graph/BaseGraph.java

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- \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/VerifyException.java
- \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/thirdparty/publicsuffix/PublicSuffixType.java
- \*

- /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/util/concurrent/WrappingScheduledExecutorService.java

- \* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Utf8.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/TypeVisitor.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/io/CharSequenceReader.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/eventbus/SubscriberExceptionContext.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/hash/HashingInputStream.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/FilteredMultimapValues.java  
\*

/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/eventbus/SubscriberExceptionHandler.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/base/Verify.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/AbstractTable.java

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*/
/**
 * Not supported. You are attempting to create a map that may contain a non-{@code Comparable}
 * key. Proper calls will resolve to the version in {@code ImmutableSortedMap}, not this dummy
 * version.
 *
 * @throws UnsupportedOperationException always
 * @deprecated Pass a key of type {@code Comparable}
to use {@link
 * ImmutableSortedMap#of(Comparable, Object)}.
*/
```

Found in path(s):

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ImmutableSortedMapFauxverideShim.java
```

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/**
 * Holder for web specializations of methods of {@code Doubles}. Intended to be empty for regular
 * version.
*/
```

Found in path(s):

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/primitives/DoublesMethodsForWeb.java
```

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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/SetMultimap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/LinkedListMultimap.java  
\*  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ForwardingIterator.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/Multimap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/RegularImmutableSet.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/Multiset.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/NullsFirstOrdering.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ForwardingMapEntry.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/Iterators.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/LinkedHashMultiset.java  
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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/AbstractIterator.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ByFunctionOrdering.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/HashMultimap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ForwardingSortedMap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-

jar/com/google/common/collect/ImmutableList.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/package-info.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/HashMultiset.java  
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jar/com/google/common/collect/LexicographicalOrdering.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ForwardingObject.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ReverseNaturalOrdering.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
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jar/com/google/common/collect/NullsLastOrdering.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/Multisets.java  
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jar/com/google/common/collect/MapDifference.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ListMultimap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/TreeMultimap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
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jar/com/google/common/collect/Lists.java  
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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ComparatorOrdering.java

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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ConcurrentHashMultiset.java  
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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ForwardingCollection.java  
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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/AbstractMapEntry.java  
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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/SortedSetMultimap.java  
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/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/Synchronized.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ForwardingConcurrentMap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ForwardingMultimap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ClassToInstanceMap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-



jar/com/google/common/collect/ForwardingSet.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/AbstractSortedSetMultimap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/Ordering.java  
\*  
/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/AbstractBiMap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ForwardingList.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/SingletonImmutableSet.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/Iterables.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/EnumHashBiMap.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/MutableClassToInstanceMap.java  
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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/graph/MutableGraph.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/graph/MutableNetwork.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/TopKSelector.java  
\*  
/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/graph/Graph.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/graph/Network.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/graph/SuccessorsFunction.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/graph/Graphs.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/graph/PredecessorsFunction.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/graph/ImmutableGraph.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/graph/ImmutableNetwork.java  
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/\*\*

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\* version.  
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Found in path(s):

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/primitives/ShortsMethodsForWeb.java

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jar/com/google/common/primitives/FloatsMethodsForWeb.java

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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/SortedIterables.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/SortedIterable.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/AbstractRangeSet.java  
\*  
/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ForwardingSortedMultiset.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/RegularImmutableSortedMultiset.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/RangeSet.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/GeneralRange.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ImmutableSortedMultiset.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/Count.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ImmutableSortedMultisetFauxverideShim.java  
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```
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*
* As of 2010/06/11, this method is identical to the (package private) hash method in OpenJDK 7's
* java.util.HashMap
class.
*/
```

Found in path(s):

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/util/concurrent/Striped.java
```

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```

```
*/
```

```
/**
```

```
* Holder for web specializations of methods of { @code Ints }. Intended to be empty for regular
* version.
```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/primitives/IntsMethodsForWeb.java
```

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*/
/*
 * This method was rewritten in Java from an intermediate step of the Murmur hash function in
 * http://code.google.com/p/smhasher/source/browse/trunk/MurmurHash3.cpp, which contained the
 * following header:
 *
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*/
```

Found in path(s):

```
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jar/com/google/common/base/SmallCharMatcher.java
```

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Found in path(s):

```
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jar/com/google/common/util/concurrent/ElementTypesAreNonnullByDefault.java
```

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/primitives/ElementTypesAreNonnullByDefault.java
```

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/graph/ElementTypesAreNonnullByDefault.java
*
```

```
/opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/net/ElementTypesAreNonnullByDefault.java
```

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/math/ParametricNullness.java
```

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/eventbus/ElementTypesAreNonnullByDefault.java
```

```
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
```

jar/com/google/common/primitives/ParametricNullness.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ParametricNullness.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/xml/ElementTypesAreNonnullByDefault.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/net/ParametricNullness.java  
\*  
/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/collect/ElementTypesAreNonnullByDefault.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/math/ElementTypesAreNonnullByDefault.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/cache/ElementTypesAreNonnullByDefault.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/html/ElementTypesAreNonnullByDefault.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/html/ParametricNullness.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/graph/ParametricNullness.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/base/ParametricNullness.java  
\*  
/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/hash/ElementTypesAreNonnullByDefault.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/eventbus/ParametricNullness.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/reflect/ParametricNullness.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/io/ParametricNullness.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/escape/ParametricNullness.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/xml/ParametricNullness.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/hash/ParametricNullness.java  
\*  
/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/base/ElementTypesAreNonnullByDefault.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/escape/ElementTypesAreNonnullByDefault.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/util/concurrent/ParametricNullness.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/cache/ParametricNullness.java  
\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-  
jar/com/google/common/io/ElementTypesAreNonnullByDefault.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/reflect/ElementTypesAreNonnullByDefault.java

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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableSortedMap.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableSortedSetFauxverideShim.java

\*

/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableTable.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableClassToInstanceMap.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableSetMultimap.java

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\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ForwardingTable.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/RegularImmutableSortedSet.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ArrayTable.java

\*

/opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/SingletonImmutableTable.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-jar/com/google/common/collect/ImmutableAsList.java

\* /opt/cola/permits/1779683696\_1693137085.7490354/0/guava-32-0-1-android-sources-



```
jar/com/google/common/collect/AbstractIndexedListIterator.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/RegularImmutableList.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ComparisonChain.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/DiscreteDomain.java
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/collect/ComputationException.java
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* the License.
*/
/**
* Outer class that exists solely to let us write {@code Partially.GwtIncompatible} instead of plain
* {@code GwtIncompatible}. This is more accurate for {@link Futures#catching}, which is available
* under GWT but with a slightly different signature.
*
*

We can't use {@code PartiallyGwtIncompatible} because then the GWT compiler
wouldn't recognize
* it as a {@code GwtIncompatible} annotation. And for {@code Futures.catching}, we need the GWT
* compiler to autostrip the normal server method in order to expose the special, inherited GWT
* version.
*/


```

```
Found in path(s):
* /opt/cola/permits/1779683696_1693137085.7490354/0/guava-32-0-1-android-sources-
jar/com/google/common/util/concurrent/Partially.java
```

## 1.184 okio 3.5.0

### 1.184.1 Available under license :

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```
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Found in path(s):

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/nativeMain/okio/SizetVariant.kt  
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Found in path(s):

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/nativeMain/okio/FileSystem.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/unixMain/okio/UnixFileHandle.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/FileHandle.kt  
\*  
/opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/internal/FileSystem.kt  
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\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/SegmentedByteString.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/nonAppleMain/okio/SegmentedByteString.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/appleMain/okio/SegmentedByteString.kt

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Found in path(s):

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/nonJvmMain/okio/RealBufferedSource.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/Segment.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/SegmentPool.kt

\*

/opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/ForwardingSource.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-

jar/nonJvmMain/okio/SegmentPool.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-

jar/nonJvmMain/okio/ForwardingSource.kt

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\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-

jar/hashFunctions/okio/internal/HashFunction.kt

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jar/commonMain/okio/HashingSink.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/nativeMain/okio/PosixVariant.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-

jar/nonJvmMain/okio/HashingSink.kt

\*  
/opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/appleMain/okio/ApplePosixVariant.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/nonJvmMain/okio/Path.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/FileSystem.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/ForwardingFileSystem.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/HashingSource.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/nativeMain/okio/FileSource.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/nonJvmMain/okio/HashingSource.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/FileMetadata.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/ExperimentalFileSystem.kt  
\*

/opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/nativeMain/okio/FileSink.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/unixMain/okio/UnixPosixVariant.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/nativeMain/okio/PosixFileSystem.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/nativeMain/okio/Cinterop.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/Path.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/hashFunctions/okio/internal/Hmac.kt  
\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/internal/Path.kt

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jar/commonMain/okio/PeekSource.kt

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\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/internal/RealBufferedSink.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/internal/RealBufferedSource.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/internal/SegmentedByteString.kt

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```
* /opt/cola/permits/1779742482_1693226770.6289008/0/okio-3-5-0-sources-1-
jar/hashFunctions/okio/internal/Sha1.kt
* /opt/cola/permits/1779742482_1693226770.6289008/0/okio-3-5-0-sources-1-
jar/hashFunctions/okio/internal/Sha512.kt
* /opt/cola/permits/1779742482_1693226770.6289008/0/okio-3-5-0-sources-1-
jar/hashFunctions/okio/internal/Sha256.kt
*
/opt/cola/permits/1779742482_1693226770.6289008/0/okio-3-5-0-sources-1-
jar/hashFunctions/okio/internal/Md5.kt
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```
* /opt/cola/permits/1779742482_1693226770.6289008/0/okio-3-5-0-sources-1-
```

jar/nonAppleMain/okio/ByteString.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-

jar/commonMain/okio/CommonPlatform.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/internal/Utf8.kt

\*

/opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-

jar/nonJvmMain/okio/NonJvmPlatform.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-

jar/commonMain/okio/internal/ByteString.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/ByteString.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/Util.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/appleMain/okio/ByteString.kt

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jar/commonMain/okio/RealBufferedSink.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/Buffer.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/Sink.kt

\*

/opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/Okio.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-

jar/nonJvmMain/okio/BufferedSource.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-

jar/nonJvmMain/okio/RealBufferedSink.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/Source.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/nonJvmMain/okio/Sink.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/commonMain/okio/Timeout.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-

jar/commonMain/okio/internal/Buffer.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-

jar/commonMain/okio/BufferedSink.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-

jar/commonMain/okio/RealBufferedSource.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/nonJvmMain/okio/Timeout.kt

\*

/opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-jar/nonJvmMain/okio/BufferedSink.kt

\* /opt/cola/permits/1779742482\_1693226770.6289008/0/okio-3-5-0-sources-1-

jar/commonMain/okio/BufferedSource.kt

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- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/internal/Path.kt
- \*
- /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/linuxMain/okio/LinuxPosixVariant.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nativeMain/okio/PosixFileSystem.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/hashFunctions/okio/internal/Hmac.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nativeMain/okio/PosixVariant.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/HashingSource.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nativeMain/okio/FileSource.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/appleMain/okio/ApplePosixVariant.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nativeMain/okio/FileSink.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/FileSystem.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/HashingSink.kt
- \*
- /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/FileMetadata.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nonJvmMain/okio/Path.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nonJvmMain/okio/HashingSink.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/ForwardingFileSystem.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/ExperimentalFileSystem.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nonJvmMain/okio/HashingSource.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/Path.kt

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\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/internal/-Utf8.kt  
\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nonAppleMain/okio/ByteString.kt  
\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/Util.kt  
\*  
/opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/CommonPlatform.kt  
\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/internal/ByteString.kt  
\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nonJvmMain/okio/NonJvmPlatform.kt  
\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/ByteString.kt  
\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/appleMain/okio/ByteString.kt  
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\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/internal/FileSystem.kt  
\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/FileHandle.kt  
\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/unixMain/okio/UnixFileHandle.kt  
\*  
/opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nativeMain/okio/FileSystem.kt  
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- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/Okio.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/Timeout.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nonJvmMain/okio/RealBufferedSink.kt
- \*
- /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nonJvmMain/okio/Buffer.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/BufferedSink.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nonJvmMain/okio/Timeout.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/Buffer.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nonJvmMain/okio/BufferedSink.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nonJvmMain/okio/Sink.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nonJvmMain/okio/BufferedSource.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/internal/Buffer.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/RealBufferedSource.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/Sink.kt
- \*
- /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/Source.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/BufferedSource.kt
- \* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/RealBufferedSink.kt

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\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nonJvmMain/okio/RealBufferedSource.kt  
\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/Segment.kt  
\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/SegmentPool.kt  
\*  
/opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/ForwardingSource.kt  
\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nonJvmMain/okio/SegmentPool.kt  
\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/nonJvmMain/okio/ForwardingSource.kt  
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\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/Utf8.kt  
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\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/hashFunctions/okio/internal/HashFunction.kt

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\* /opt/cola/permits/1825538429\_1697657800.9267037/0/okio-3-6-0-sources-jar/commonMain/okio/Options.kt

# 1.195 libcxxabi 1.1.10.5

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Manifest-Version: 1.0

Bnd-LastModified: 1695799258578

Bundle-ActivationPolicy: lazy

Bundle-Activator: org.xerial.snappy.SnappyBundleActivator

Bundle-Description: snappy-java: A fast compression/decompression library

Bundle-DocURL: <http://www.xerial.org/>

Bundle-License: <http://www.apache.org/licenses/LICENSE-2.0.txt>

Bundle-ManifestVersion: 2

Bundle-Name: snappy-java: A fast compression/decompression library

Bundle-NativeCode: org/xerial/snappy/native/Windows/x86\_64/snappyjava.

dll;osname=win32;processor=x86-64,org/xerial/snappy/native/Windows/x8

6\_64/snappyjava.dll;osname=win32;processor=x64,org/xerial/snappy/nati

ve/Windows/x86\_64/snappyjava.dll;osname=win32;processor=amd64,org/xer

ial/snappy/native/Windows/x86/snappyjava.dll;osname=win32;processor=x

86,org/xerial/snappy/native/Mac/x86/libsnappyjava.jnilib;osname=macos

x;processor=x86,org/xerial/snappy/native/Mac/x86\_64/libsnappyjava.dyl

ib;osname=macosx;processor=x86-64,org/xerial/snappy/native/Mac/aarch6

4/libsnappyjava.dylib;osname=macosx;processor=aarch64,org/xerial/snappy/native/Linux/x86\_64/libsnappyjava.so;osname=linux;processor=x86-64,org/xerial/snappy/native/Linux/x86\_64/libsnappyjava.so;osname=linux;processor=x64,org/xerial/snappy/native/Linux/x86\_64/libsnappyjava.so;osname=linux;processor=amd64,org/xerial/snappy/native/Linux/x86/libsnappyjava.so;osname=linux;processor=x86,org/xerial/snappy/native/Linux/aarch64/libsnappyjava.so;osname=linux;processor=aarch64,org/xerial/snappy/native/Linux/riscv64/libsnappyjava.so;osname=linux;processor=riscv64,org/xerial/snappy/native/Linux/arm/libsnappyjava.so;osname=linux;processor=arm,org/xerial/snappy/native/Linux/armv7/libsnappyjava.so;osname=linux;processor=arm\_le,org/xerial/snappy/native/Linux/ppc64/libsnappyjava.so;osname=linux;processor=ppc64le,org/xerial/snappy/native/Linux/s390x/libsnappyjava.so;osname=linux;processor=s390x,org/xerial/snappy/native/AIX/ppc/libsnappyjava.a;osname=aix;processor=ppc,org/xerial/snappy/native/AIX/ppc64/libsnappyjava.a;osname=aix;processor=ppc64,org/xerial/snappy/native/SunOS/x86/libsnappyjava.so;osname=sunos;processor=x86,org/xerial/snappy/native/SunOS/x86\_64/libsnappyjava.so;osname=sunos;processor=x86-64,org/xerial/snappy/native/SunOS/sparc/libsnappyjava.so;osname=sunos;processor=sparc

Bundle-SymbolicName: org.xerial.snappy.snappy-java  
Bundle-Vendor: xerial.org  
Bundle-Version: 1.1.10.5  
Created-By: 11.0.20 (Azul Systems, Inc.)  
Export-Package: org.xerial.snappy;uses:="org.osgi.framework,org.xerial.snappy.buffer,org.xerial.snappy.pool";version="1.1.10",org.xerial.snappy.buffer;version="1.1.10",org.xerial.snappy.pool;version="1.1.10"  
Implementation-Title: snappy-java  
Implementation-URL: <https://github.com/xerial/snappy-java>  
Implementation-Vendor: xerial.org  
Implementation-Vendor-Id: org.xerial.snappy  
Implementation-Version: 1.1.10.5  
Import-Package: org.osgi.framework;version="[1.5,2)"  
Private-Package: org.xerial.snappy.native.AIX.ppc,org.xerial.snappy.native.AIX.ppc64,org.xerial.snappy.native.FreeBSD.x86\_64,org.xerial.snappy.native.Linux.aarch64,org.xerial.snappy.native.Linux.android-aarch64,org.xerial.snappy.native.Linux.android-arm,org.xerial.snappy.native.Linux.arm,org.xerial.snappy.native.Linux.armv6,org.xerial.snappy.native.Linux.armv7,org.xerial.snappy.native.Linux.ppc,org.xerial.snappy.native.Linux.ppc64,org.xerial.snappy.native.Linux.ppc64le,org.xerial.snappy.native.Linux.riscv64,org.xerial.snappy.native.Linux.s390x,org.xerial.snappy.native.Linux.x86,org.xerial.snappy.native.Linux.x86\_64,org.xerial.snappy.native.Mac.aarch64,org.xerial.snappy.native.Mac.x86\_64,org.xerial.snappy.native.Mac.x86\_64,org.xerial.snappy.native,org.xerial.snappy.native.SunOS.sparc,org.xerial.snappy.native.SunOS.x86,org.xerial.snappy.native.SunOS.x86\_64,org.xerial.snappy.native.Windows.aarch64,org.xerial.snappy.native.Windows.x86,org.xerial.snappy.native.Windows.x86\_64

Require-Capability:

osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.7))"

Specification-Title: snappy-java

Specification-Vendor: xerial.org

Specification-Version: 1.1.10.5

Tool: Bnd-5.1.2.202007211702

Found in path(s):

\* /opt/cola/permits/1825539415\_1697666805.4214594/0/snappy-java-1-1-10-5-jar/META-INF/MANIFEST.MF

# 1.196 proto-google-common-protos 2.22.0

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\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/launch\_stage.proto

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\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/monitoring.proto

\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/expr.proto

\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/resource.proto

\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/visibility.proto

\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/money.proto

\*

/opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/color.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/logging.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/backend.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/dayofweek.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/quaternion.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/auth.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/month.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/billing.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/annotations.proto  
\*  
/opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/timeofday.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/consumer.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/distribution.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/documentation.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/latlng.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/cloud/audit/audit\_log.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/label.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/rpc/error\_details.proto  
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/opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/date.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/routing.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/endpoint.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/rpc/code.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/rpc/status.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/rpc/context/attribute\_context.proto

\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/quota.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/postal\_address.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/error\_reason.proto  
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\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/logging/type/log\_severity.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/config\_change.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/client.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/field\_behavior.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/usage.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/monitored\_resource.proto  
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\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/rpc/context/audit\_context.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/source\_info.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/http.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/localized\_text.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/service.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/datetime.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/log.proto  
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/opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/metric.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/longrunning/operations.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/calendar\_period.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-

jar/google/type/phone\_number.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/cloud/extended\_operations.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/context.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/httpbody.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/decimal.proto  
\* /opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/type/interval.proto  
\*  
/opt/cola/permits/1827301020\_1697881535.137695/0/proto-google-common-protos-2-22-0-jar/google/api/control.proto

## 1.197 grpc-protobuf 1.58.0

### 1.197.1 Available under license :

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## 1.198 jetty-continuation 9.4.53.v20231009

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## Eclipse

The following artifacts are EPL.

- \* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.

- \* org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.

- \* org.eclipse.jetty.orbit:javax.mail.glassfish

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## Oracle

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<https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html>

- \* javax.servlet:javax.servlet-api
- \* javax.annotation:javax.annotation-api
- \* javax.transaction:javax.transaction-api
- \* javax.websocket:javax.websocket-api

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## Oracle OpenJDK

If ALPN is used to negotiate HTTP/2 connections, then the following artifacts may be included in the distribution or downloaded when ALPN module is selected.

- \* java.sun.security.ssl

These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions.

<http://openjdk.java.net/legal/gplv2+ce.html>

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## OW2

The following artifacts are licensed by the OW2 Foundation according to the terms of <http://asm.ow2.org/license.html>

- org.ow2.asm:asm-commons
- org.ow2.asm:asm

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Apache

The following artifacts are ASL2 licensed.

org.apache.taglibs:taglibs-standard-spec  
org.apache.taglibs:taglibs-standard-impl

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MortBay

The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed.

org.mortbay.jasper:apache-jsp  
org.apache.tomcat:tomcat-jasper  
org.apache.tomcat:tomcat-juli  
org.apache.tomcat:tomcat-jsp-api  
org.apache.tomcat:tomcat-el-api  
org.apache.tomcat:tomcat-jasper-el  
org.apache.tomcat:tomcat-api  
org.apache.tomcat:tomcat-util-scan  
org.apache.tomcat:tomcat-util

org.mortbay.jasper:apache-el  
org.apache.tomcat:tomcat-jasper-el  
org.apache.tomcat:tomcat-el-api

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Mortbay

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<https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html>

org.eclipse.jetty.toolchain:jetty-schemas

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Assorted

The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville.

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# 1.202 jetty-servlets 11.0.18

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## 1.204 netty-resolver 4.1.101.Final

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Found in path(s):

```
* /opt/cola/permits/1845710476_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-
jar/io/netty/resolver/NameResolver.java
* /opt/cola/permits/1845710476_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-
jar/io/netty/resolver/NoopAddressResolverGroup.java
* /opt/cola/permits/1845710476_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-
jar/io/netty/resolver/SimpleNameResolver.java
*
/opt/cola/permits/1845710476_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-
jar/io/netty/resolver/NoopAddressResolver.java
* /opt/cola/permits/1845710476_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-
jar/io/netty/resolver/package-info.java
* /opt/cola/permits/1845710476_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-
jar/io/netty/resolver/AddressResolverGroup.java
```

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\* /opt/cola/permits/1845710476\_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-jar/io/netty/resolver/RoundRobinInetAddressResolver.java

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\* /opt/cola/permits/1845710476\_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-jar/io/netty/resolver/DefaultNameResolver.java

\* /opt/cola/permits/1845710476\_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-jar/io/netty/resolver/DefaultHostsFileEntriesResolver.java

\*

/opt/cola/permits/1845710476\_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-jar/io/netty/resolver/AddressResolver.java

\* /opt/cola/permits/1845710476\_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-jar/io/netty/resolver/AbstractAddressResolver.java

\* /opt/cola/permits/1845710476\_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-jar/io/netty/resolver/HostsFileEntriesResolver.java

\* /opt/cola/permits/1845710476\_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-jar/io/netty/resolver/InetSocketAddressResolver.java

\* /opt/cola/permits/1845710476\_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-jar/io/netty/resolver/InetNameResolver.java

\* /opt/cola/permits/1845710476\_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-jar/io/netty/resolver/CompositeNameResolver.java

\* /opt/cola/permits/1845710476\_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-jar/io/netty/resolver/DefaultAddressResolverGroup.java

\* /opt/cola/permits/1845710476\_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-jar/io/netty/resolver/HostsFileParser.java

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```
* /opt/cola/permits/1845710476_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-
jar/io/netty/resolver/ResolvedAddressTypes.java
* /opt/cola/permits/1845710476_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-
jar/io/netty/resolver/HostsFileEntries.java
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```
* /opt/cola/permits/1845710476_1699909673.9453893/0/netty-resolver-4-1-101-final-sources-
jar/io/netty/resolver/HostsFileEntriesProvider.java
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## 1.205 netty-codec 4.1.101.Final

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 */
/*
 * Written by Robert Harder and released to the public domain, as explained at
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 */
/**
 * Utility class for {@link ByteBuf} that encodes and decodes to and from
 * Base64 notation.
 *
 *

The encoding and decoding algorithm in this class has been derived from
 * http://iharder.sourceforge.net/current/java/base64/ Robert Harder's Public Domain
 * Base64 Encoder/Decoder.

 */
```

\*/

Found in path(s):

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/base64/Base64.java

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\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Bzip2Decoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/LzfEncoder.java

\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Bzip2MoveToFrontTable.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Bzip2Rand.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Crc32.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Bzip2BitWriter.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/LzfDecoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/json/JsonObjectDecoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/SnappyFramedEncoder.java

\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Bzip2Constants.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/DecoderResultProvider.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/SnappyFramedDecoder.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/FastLzFrameEncoder.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Lz4FrameEncoder.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Bzip2BitReader.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/json/package-info.java  
\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/FastLz.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Bzip2MTFAndRLE2StageEncoder.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Bzip2Encoder.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/AsciiHeadersEncoder.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Bzip2HuffmanAllocator.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Lz4Constants.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Bzip2DivSufSort.java  
\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Lz4FrameDecoder.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Bzip2HuffmanStageDecoder.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Bzip2HuffmanStageEncoder.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/MessageAggregationException.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Bzip2BlockDecompressor.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/LzmaFrameEncoder.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Bzip2BlockCompressor.java  
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/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/FastLzFrameDecoder.java

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\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/ZlibCodecFactory.java

\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/LengthFieldPrepender.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/JdkZlibEncoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/ByteToMessageCodec.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/ReplayingDecoderByteBuf.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/ZlibEncoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/marshalling/package-info.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/serialization/ObjectDecoderInputStream.java

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\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/serialization/SoftReferenceMap.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/serialization/CachingClassResolver.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/ZlibWrapper.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/MessageToByteEncoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/UnsupportedMessageTypeException.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/MessageToMessageEncoder.java

\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/ZlibUtil.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/serialization/ReferenceMap.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/marshalling/MarshallerProvider.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/serialization/CompactObjectInputStream.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/MessageAggregator.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/LineBasedFrameDecoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/string/StringDecoder.java

\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/bytes/ByteArrayEncoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/base64/package-info.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/marshalling/CompatibleMarshallingEncoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/bytes/ByteArrayDecoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/JZlibEncoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/marshalling/ThreadLocalMarshallerProvider.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/CodecException.java

\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/ZlibDecoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/ReplayingDecoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/MessageToMessageCodec.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-

jar/io/netty/handler/codec/compression/JZlibDecoder.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/serialization/ObjectEncoderOutputStream.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/protobuf/package-info.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/serialization/ObjectEncoder.java  
 \*  
 /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/marshalling/LimitingByteInput.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/FixedLengthFrameDecoder.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/compression/Snappy.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/Delimiters.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/serialization/CompactObjectOutputStream.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/DelimiterBasedFrameDecoder.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/base64/Base64Decoder.java  
 \*  
 /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/TooLongFrameException.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/marshalling/ChannelBufferByteInput.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/MessageToMessageDecoder.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/marshalling/MarshallingEncoder.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/string/package-info.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/compression/package-info.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/serialization/WeakReferenceMap.java  
 \*  
 /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/DecoderException.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/marshalling/ChannelBufferByteOutput.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/PrematureChannelClosureException.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/serialization/CompatibleObjectEncoder.java  
 \* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
 jar/io/netty/handler/codec/compression/SnappyFrameDecoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/marshalling/CompatibleMarshallingDecoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/ByteToMessageDecoder.java

\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/serialization/ObjectDecoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/serialization/ClassLoaderClassResolver.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/string/StringEncoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/marshalling/DefaultMarshallerProvider.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/package-info.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/CorruptedFrameException.java

\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/serialization/ClassResolver.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/base64/Base64Encoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/EncoderException.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/bytes/package-info.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/marshalling/UnmarshallerProvider.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/xml/package-info.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/serialization/ClassResolvers.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/CompressionException.java

\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/marshalling/ContextBoundUnmarshallerProvider.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/marshalling/ThreadLocalUnmarshallerProvider.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/serialization/package-info.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/marshalling/MarshallingDecoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/marshalling/DefaultUnmarshallerProvider.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/DecoderResult.java

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\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
jar/io/netty/handler/codec/DefaultHeadersImpl.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
jar/io/netty/handler/codec/CharSequenceValueConverter.java

\*

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
jar/io/netty/handler/codec/ValueConverter.java

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\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
jar/io/netty/handler/codec/compression/EncoderUtil.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-



jar/io/netty/handler/codec/compression/SnappyOptions.java

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\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/protobuf/ProtobufVarint32LengthFieldPrepender.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/protobuf/ProtobufDecoderNano.java

\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/protobuf/ProtobufEncoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/protobuf/ProtobufDecoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/HeadersUtils.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/ProtocolDetectionResult.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/protobuf/ProtobufEncoderNano.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/protobuf/ProtobufVarint32FrameDecoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/UnsupportedValueConverter.java

\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/ProtocolDetectionState.java

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*/
/*
* Written by Robert Harder and released to the public domain, as explained at
* https://creativecommons.org/licenses/publicdomain
*/
/**
* Enumeration of supported Base64 dialects.
* <p>
* The internal lookup tables in this class has been derived from
* Robert
 Harder's Public Domain
* Base64 Encoder/Decoder.
*/
```

Found in path(s):

```
*/opt/cola/permits/1845709715_1699909368.4920034/0/netty-codec-4-1-101-final-sources-
jar/io/netty/handler/codec/base64/Base64Dialect.java
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*/opt/cola/permits/1845709715_1699909368.4920034/0/netty-codec-4-1-101-final-sources-
jar/io/netty/handler/codec/compression/GzipOptions.java
```

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/ZstdConstants.java

\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Brotli.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/BrotliOptions.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/ZstdOptions.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/DeflateOptions.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/BrotliEncoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/CompressionOptions.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Zstd.java

\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/BrotliDecoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/ZstdEncoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/StandardCompressionOptions.java

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\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/Lz4XXHash32.java

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*/
/**
* A decoder that splits the received {@link ByteBuf}s dynamically by the
* value of the length field in the message. It is particularly useful when you
* decode a binary message which has an integer header field that represents the
* length of the message body or the whole message.
*
* <p>
* {@link LengthFieldBasedFrameDecoder} has many configuration parameters so
* that it can decode any message with a length field, which is often seen in
* proprietary client-server protocols. Here are some example that will give
* you the basic idea on which option does what.
*
* <h3>2 bytes length field at offset 0, do not strip header</h3>
*
* The value of the length field in this example is <tt>12 (0x0C)</tt> which
* represents the length of "HELLO, WORLD". By default, the decoder assumes
* that the length field represents the number of the bytes that follows the
* length field. Therefore, it can be decoded with the simplistic parameter
* combination.
* <pre>
* lengthFieldOffset = 0
* lengthFieldLength = 2
* lengthAdjustment = 0
* initialBytesToStrip = 0 (= do not strip header)
*
* BEFORE DECODE (14 bytes) AFTER DECODE (14 bytes)
* +-----+-----+ +-----+-----+
* | Length | Actual Content
* |---->| Length | Actual Content |
* | 0x000C | "HELLO, WORLD" | | 0x000C | "HELLO, WORLD" |
* +-----+-----+ +-----+-----+
* </pre>
*
* <h3>2 bytes length field at offset 0, strip header</h3>

```

```

*
* Because we can get the length of the content by calling
* {@link ByteBuf#readableBytes()}, you might want to strip the length
* field by specifying <tt>initialBytesToStrip</tt>. In this example, we
* specified <tt>2</tt>, that is same with the length of the length field, to
* strip the first two bytes.
* <pre>
* lengthFieldOffset = 0
* lengthFieldLength = 2
* lengthAdjustment = 0
* initialBytesToStrip = 2 (= the length of the Length field)
*
* BEFORE DECODE (14 bytes) AFTER DECODE (12 bytes)
* +-----+-----+ +-----+
* | Length | Actual Content |---->| Actual Content |
* | 0x000C | "HELLO, WORLD" | | "HELLO, WORLD" |
* +-----+-----+ +-----+
* </pre>
*
* <h3>2 bytes length field at offset 0, do not strip header, the length field
* represents the length of the whole message</h3>
*
* In most cases, the length field represents the length of the message body
* only, as shown in the previous examples. However, in some protocols, the
* length field represents the length of the whole message, including the
* message header. In such a case, we specify a non-zero
* <tt>lengthAdjustment</tt>. Because the length value in this example message
* is always greater than the body length by <tt>2</tt>, we specify <tt>-2</tt>
* as <tt>lengthAdjustment</tt> for compensation.
* <pre>
* lengthFieldOffset = 0
* lengthFieldLength = 2
* lengthAdjustment = -2 (= the length of the Length field)
* initialBytesToStrip = 0
*
* BEFORE DECODE (14 bytes) AFTER DECODE (14 bytes)
* +-----+-----+ +-----+-----+
* | Length | Actual Content |---->| Length | Actual
* Content |
* | 0x000E | "HELLO, WORLD" | | 0x000E | "HELLO, WORLD" |
* +-----+-----+ +-----+-----+
* </pre>
*
* <h3>3 bytes length field at the end of 5 bytes header, do not strip header</h3>
*
* The following message is a simple variation of the first example. An extra
* header value is prepended to the message. <tt>lengthAdjustment</tt> is zero
* again because the decoder always takes the length of the prepended data into

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```

* account during frame length calculation.
* <pre>
* lengthFieldOffset = 2 (= the length of Header 1)
* lengthFieldLength = 3
* lengthAdjustment = 0
* initialBytesToStrip = 0
*
* BEFORE DECODE (17 bytes) AFTER DECODE (17 bytes)
* +-----+-----+-----+ +-----+-----+-----+
* | Header 1 | Length | Actual Content |----->| Header 1 | Length | Actual Content |
* | 0xCAFE | 0x00000C | "HELLO, WORLD" | | 0xCAFE | 0x00000C | "HELLO, WORLD" |
* +-----+-----+-----+ +-----+-----+-----+
* </pre>
*
* <h3>3 bytes length field at the beginning of 5 bytes header, do not strip header</h3>
*
* This is an advanced example that shows the case where there is an extra
* header between the length field and the message body. You have to specify a
* positive <tt>lengthAdjustment</tt> so that the decoder counts the extra
* header into the frame length calculation.
* <pre>
* lengthFieldOffset = 0
* lengthFieldLength = 3
* lengthAdjustment = 2 (= the length of Header 1)
* initialBytesToStrip = 0
*
* BEFORE DECODE (17 bytes) AFTER DECODE (17 bytes)
* +-----+-----+-----+ +-----+-----+-----+
* | Length | Header 1 | Actual Content |----->| Length | Header 1 | Actual Content |
* | 0x00000C | 0xCAFE | "HELLO, WORLD" | | 0x00000C | 0xCAFE | "HELLO,
* WORLD" |
* +-----+-----+-----+ +-----+-----+-----+
* </pre>
*
* <h3>2 bytes length field at offset 1 in the middle of 4 bytes header,
* strip the first header field and the length field</h3>
*
* This is a combination of all the examples above. There are the prepended
* header before the length field and the extra header after the length field.
* The prepended header affects the <tt>lengthFieldOffset</tt> and the extra
* header affects the <tt>lengthAdjustment</tt>. We also specified a non-zero
* <tt>initialBytesToStrip</tt> to strip the length field and the prepended
* header from the frame. If you don't want to strip the prepended header, you
* could specify <tt>0</tt> for <tt>initialBytesToSkip</tt>.
* <pre>
* lengthFieldOffset = 1 (= the length of HDR1)
* lengthFieldLength = 2

```

```

* lengthAdjustment = 1 (= the length of HDR2)
* initialBytesToStrip = 3 (= the length of HDR1 +
LEN)
*
* BEFORE DECODE (16 bytes) AFTER DECODE (13 bytes)
* +-----+-----+-----+-----+ +-----+-----+
* | HDR1 | Length | HDR2 | Actual Content |---->| HDR2 | Actual Content |
* | 0xCA | 0x000C | 0xFE | "HELLO, WORLD" | | 0xFE | "HELLO, WORLD" |
* +-----+-----+-----+-----+ +-----+-----+
* </pre>
*
* <h3>2 bytes length field at offset 1 in the middle of 4 bytes header,
* strip the first header field and the length field, the length field
* represents the length of the whole message</h3>
*
* Let's give another twist to the previous example. The only difference from
* the previous example is that the length field represents the length of the
* whole message instead of the message body, just like the third example.
* We have to count the length of HDR1 and Length into <tt>lengthAdjustment</tt>.
* Please note that we don't need to take the length of HDR2 into account
* because
the length field already includes the whole header length.
* <pre>
* lengthFieldOffset = 1
* lengthFieldLength = 2
* lengthAdjustment = -3 (= the length of HDR1 + LEN, negative)
* initialBytesToStrip = 3
*
* BEFORE DECODE (16 bytes) AFTER DECODE (13 bytes)
* +-----+-----+-----+-----+ +-----+-----+
* | HDR1 | Length | HDR2 | Actual Content |---->| HDR2 | Actual Content |
* | 0xCA | 0x0010 | 0xFE | "HELLO, WORLD" | | 0xFE | "HELLO, WORLD" |
* +-----+-----+-----+-----+ +-----+-----+
* </pre>
* @see LengthFieldPrepender
*/

```

Found in path(s):

```

* /opt/cola/permits/1845709715_1699909368.4920034/0/netty-codec-4-1-101-final-sources-
jar/io/netty/handler/codec/LengthFieldBasedFrameDecoder.java

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\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
jar/io/netty/handler/codec/EmptyHeaders.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
jar/io/netty/handler/codec/DefaultHeaders.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
jar/io/netty/handler/codec/Headers.java

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\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
jar/io/netty/handler/codec/compression/JdkZlibDecoder.java  
\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
jar/io/netty/handler/codec/compression/Crc32c.java  
\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-  
jar/io/netty/handler/codec/xml/XmlFrameDecoder.java

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\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/META-INF/maven/io.netty/netty-codec/pom.xml

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\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/string/LineEncoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/ByteBufChecksum.java

\*

/opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/CodecOutputList.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/DatagramPacketEncoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/DatagramPacketDecoder.java

\* /opt/cola/permits/1845709715\_1699909368.4920034/0/netty-codec-4-1-101-final-sources-jar/io/netty/handler/codec/compression/CompressionUtil.java

```
* /opt/cola/permits/1845709715_1699909368.4920034/0/netty-codec-4-1-101-final-sources-
jar/io/netty/handler/codec/string/LineSeparator.java
* /opt/cola/permits/1845709715_1699909368.4920034/0/netty-codec-4-1-101-final-sources-
jar/io/netty/handler/codec/DateFormatter.java
```

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```
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/bootstrap/ChannelInitializerExtensions.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/bootstrap/ChannelInitializerExtension.java
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\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/SelectStrategy.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/PreferHeapByteBufAllocator.java

\*

/opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/bootstrap/BootstrapConfig.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/bootstrap/ServerBootstrapConfig.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/DefaultSelectStrategyFactory.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/SelectStrategyFactory.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/WriteBufferWaterMark.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/DuplexChannel.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/bootstrap/AbstractBootstrapConfig.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/group/VoidChannelGroupFuture.java

\*

/opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelOutboundInvoker.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/DefaultSelectStrategy.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelInboundInvoker.java

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- \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/group/ChannelGroupFuture.java
- \*
- /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/local/LocalServerChannel.java
- \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/FileRegion.java
- \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/oio/OioEventLoopGroup.java
- \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelPromise.java
- \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/DefaultServerSocketChannelConfig.java
- \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/EventLoopGroup.java
- \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/package-info.java
- \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/oio/AbstractOioByteChannel.java
- \*
- /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/SucceededChannelFuture.java
- \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/nio/AbstractNioByteChannel.java
- \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/EventLoopException.java
- \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelPromiseNotifier.java
- \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/nio/AbstractNioChannel.java
- \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/DatagramChannel.java
- \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/DefaultChannelPromise.java

```

*
/opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/ChannelMetadata.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/ChannelFutureListener.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/MultithreadEventLoopGroup.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/SingleThreadEventLoop.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/FailedChannelFuture.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/bootstrap/AbstractBootstrap.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/socket/oio/OioSocketChannel.java
*
/opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/Channel.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/local/LocalChannelRegistry.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/DefaultChannelConfig.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/socket/InternetProtocolFamily.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/ChannelDuplexHandler.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/FixedRecvByteBufAllocator.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/socket/nio/NioServerSocketChannel.java
*
/opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/ThreadPerChannelEventLoopGroup.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/embedded/package-info.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/local/LocalChannel.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/local/package-info.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/socket/oio/OioServerSocketChannel.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/CombinedChannelDuplexHandler.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/DefaultChannelPipeline.java
*
/opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/AdaptiveRecvByteBufAllocator.java

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\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/oio/AbstractOioChannel.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/DefaultDatagramChannelConfig.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/nio/NioEventLoop.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/AbstractChannelHandlerContext.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelInitializer.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/embedded/EmbeddedChannel.java  
 \*  
 /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelFlushPromiseNotifier.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/DatagramPacket.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/bootstrap/Bootstrap.java  
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 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelPipeline.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/AbstractChannel.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/ChannelInputShutdownEvent.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelOption.java  
 \*  
 /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelPipelineException.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/group/DefaultChannelGroupFuture.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/CompleteChannelFuture.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/EventLoop.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/local/LocalEventLoopGroup.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/oio/AbstractOioMessageChannel.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/nio/NioEventLoopGroup.java  
 \*  
 /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelInboundHandlerAdapter.java  
 \* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-

jar/io/netty/bootstrap/package-info.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/local/LocalAddress.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/VoidChannelPromise.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/nio/NioTask.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelPromiseAggregator.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelFuture.java  
\*  
/opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/oio/package-info.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/SocketChannel.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/AbstractServerChannel.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/package-info.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelOutboundHandlerAdapter.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/DefaultEventLoopGroup.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/oio/package-info.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/DefaultSocketChannelConfig.java  
\*  
/opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/embedded/EmbeddedEventLoop.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/RecvByteBufAllocator.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/nio/AbstractNioMessageChannel.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/DefaultEventLoop.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/group/CombinedIterator.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelConfig.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/ServerSocketChannel.java  
\*  
/opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/nio/NioDatagramChannelConfig.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/nio/ProtocolFamilyConverter.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/group/package-info.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelHandlerContext.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/embedded/EmbeddedSocketAddress.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/DefaultFileRegion.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/nio/NioDatagramChannel.java  
\*  
/opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/oio/OioDatagramChannel.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/bootstrap/ServerBootstrap.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/DatagramChannelConfig.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/nio/package-info.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ServerChannel.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelInboundHandler.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/group/ChannelGroupFutureListener.java  
\*  
/opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelException.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/nio/NioSocketChannel.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelOutboundHandler.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/ServerSocketChannelConfig.java  
\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ThreadPerChannelEventLoop.java

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\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/StacklessClosedChannelException.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/DuplexChannelConfig.java

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/\*\*

\* Handles an I/O event or intercepts an I/O operation, and forwards it to its next handler in

\* its { @link ChannelPipeline }.

\*

\* <h3>Sub-types</h3>

\* <p>

\* { @link ChannelHandler } itself does not provide many methods, but you usually have to implement one of its subtypes:

\* <ul>

\* <li>{ @link

ChannelInboundHandler } to handle inbound I/O events, and</li>

\* <li>{ @link ChannelOutboundHandler } to handle outbound I/O operations.</li>

\* </ul>

\* </p>

\* <p>

\* Alternatively, the following adapter classes are provided for your convenience:

\* <ul>

\* <li>{ @link ChannelInboundHandlerAdapter } to handle inbound I/O events,</li>

\* <li>{ @link ChannelOutboundHandlerAdapter } to handle outbound I/O operations, and</li>

\* <li>{ @link ChannelDuplexHandler } to handle both inbound and outbound events</li>

\* </ul>

\* </p>

\* <p>

\* For more information, please refer to the documentation of each subtype.

\* </p>

\*

\* <h3>The context object</h3>

\* <p>

\* A { @link ChannelHandler } is provided with a { @link ChannelHandlerContext }

\* object. A { @link ChannelHandler } is supposed to interact with the

\* { @link ChannelPipeline } it belongs to via a context object. Using the

\* context object, the { @link ChannelHandler } can pass events upstream or

\* downstream, modify the pipeline dynamically,

or store the information

\* (using { @link AttributeKey }s) which is specific to the handler.

\*

\* <h3>State management</h3>

\*

\* A { @link ChannelHandler } often needs to store some stateful information.

\* The simplest and recommended approach is to use member variables:

\* <pre>

\* public interface Message {

\* // your methods here

\* }

\*

\* public class DataServerHandler extends { @link SimpleChannelInboundHandler }&lt;Message> {

\*

\* <b>private boolean loggedIn;</b>

\*

\* { @code @Override }

\* public void channelRead0({ @link ChannelHandlerContext } ctx, Message message) {

\* if (message instanceof LoginMessage) {

\* authenticate((LoginMessage) message);

\* <b>loggedIn = true;</b>

\* } else (message instanceof GetDataMessage) {

\* if (<b>loggedIn</b>) {

\* ctx.writeAndFlush(fetchSecret((GetDataMessage) message));

\* } else {

\* fail();

\* }

\*

}

\* }

\* ...

\* }

\* </pre>

\* Because the handler instance has a state variable which is dedicated to

\* one connection, you have to create a new handler instance for each new

\* channel to avoid a race condition where an unauthenticated client can get

\* the confidential information:

\* <pre>

\* // Create a new handler instance per channel.

\* // See { @link ChannelInitializer#initChannel(Channel) }.

\* public class DataServerInitializer extends { @link ChannelInitializer }&lt;{ @link Channel }&gt; {

```

* { @code @Override }
* public void initChannel({ @link Channel } channel) {
* channel.pipeline().addLast("handler", new DataServerHandler());
* }
* }
*
* </pre>
*
* <h4>Using { @link AttributeKey }s</h4>
*
* Although it's recommended to use member variables to store the state of a
* handler, for some reason you might not want to create many handler instances.
* In such a case, you can use { @link AttributeKey }s which is provided by
* { @link ChannelHandlerContext }:
*
* <pre>
* public interface Message {
* // your methods here
* }
*
* { @code @Sharable }
* public class DataServerHandler extends { @link SimpleChannelInboundHandler }<Message> {
* private final { @link AttributeKey }<{ @link Boolean }> auth =
* { @link AttributeKey#valueOf(String) AttributeKey.valueOf("auth") };
*
* { @code @Override }
* public void channelRead({ @link ChannelHandlerContext } ctx, Message message) {
* { @link Attribute }<{ @link Boolean }> attr = ctx.attr(auth);
* if (message instanceof LoginMessage) {
* authenticate((LoginMessage) o);
* attr.set(true);
* } else (message instanceof GetDataMessage) {
* if (Boolean.TRUE.equals(attr.get())) {
* ctx.writeAndFlush(fetchSecret((GetDataMessage) o));
* } else {
* fail();
* }
* }
* }
* }
* ...
* }
* </pre>
*
* Now that the
* state of the handler is attached to the { @link ChannelHandlerContext }, you can add the
* same handler instance to different pipelines:
*
* <pre>
* public class DataServerInitializer extends { @link ChannelInitializer }<{ @link Channel }> {
*
* private static final DataServerHandler SHARED = new DataServerHandler();

```

```

*
* { @code @Override}
* public void initChannel({ @link Channel} channel) {
* channel.pipeline().addLast("handler", SHARED);
* }
* }
* </pre>
*
*
* <h4>The { @code @Sharable} annotation</h4>
* <p>
* In the example above which used an { @link AttributeKey},
* you might have noticed the { @code @Sharable} annotation.
* <p>
* If a { @link ChannelHandler} is annotated with the { @code @Sharable}
* annotation, it means you can create an instance of the handler just once and
* add it to one or more { @link ChannelPipeline}s multiple times without
* a race condition.
* <p>
* If this annotation is not specified, you have to create
* a new handler
* instance every time you add it to a pipeline because it has unshared state
* such as member variables.
* <p>
* This annotation is provided for documentation purpose, just like
* the JCIP annotations.
*
* <h3>Additional resources worth reading</h3>
* <p>
* Please refer to the { @link ChannelHandler}, and
* { @link ChannelPipeline} to find out more about inbound and outbound operations,
* what fundamental differences they have, how they flow in a pipeline, and how to handle
* the operation in your application.
*/

```

Found in path(s):

```

* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/ChannelHandler.java

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\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/DefaultMaxMessagesRecvByteBufAllocator.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/DefaultMaxBytesRecvByteBufAllocator.java

\*

/opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/MaxMessagesRecvByteBufAllocator.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/pool/ChannelPoolMap.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/pool/FixedChannelPool.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/pool/package-info.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/pool/ChannelHealthChecker.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/pool/AbstractChannelPoolMap.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/MaxBytesRecvByteBufAllocator.java

\*

/opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/pool/ChannelPool.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/pool/AbstractChannelPoolHandler.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/pool/SimpleChannelPool.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/pool/ChannelPoolHandler.java

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\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/CoalescingBufferQueue.java

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* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/embedded/EmbeddedChannelId.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/ReflectiveChannelFactory.java
*
/opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/AbstractEventLoop.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/PendingWriteQueue.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
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* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
```

```
jar/io/netty/channel/socket/ChannelOutputShutdownException.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/PendingBytesTracker.java
*
/opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/internal/ChannelUtils.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/internal/package-info.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/socket/oio/OioDatagramChannelConfig.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/DelegatingChannelPromiseNotifier.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/nio/SelectedSelectionKeySetSelector.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/socket/ChannelOutputShutdownEvent.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/socket/ChannelInputShutdownReadComplete.java
*
/opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/socket/oio/DefaultOioDatagramChannelConfig.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/bootstrap/FailedChannel.java
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```

Found in path(s):

```
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/ExtendedClosedChannelException.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/ChannelHandlerMask.java
*
```

/opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/EventLoopTaskQueueFactory.java

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Found in path(s):

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/MessageSizeEstimator.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/group/ChannelMatcher.java

\*

/opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ConnectTimeoutException.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/bootstrap/ChannelFactory.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/ChannelId.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/DefaultAddressedEnvelope.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/group/ChannelMatchers.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/oio/OioSocketChannelConfig.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/socket/oio/OioServerSocketChannelConfig.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/DefaultMessageSizeEstimator.java

\*

/opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/DefaultChannelProgressivePromise.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-jar/io/netty/channel/AddressedEnvelope.java

\* /opt/cola/permits/1845710023\_1699909357.2160501/0/netty-transport-4-1-101-final-sources-

```
jar/io/netty/channel/DefaultChannelId.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/ChannelOutboundBuffer.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/ChannelProgressivePromise.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/socket/oio/DefaultOioSocketChannelConfig.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/nio/SelectedSelectionKeySet.java
*
/opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/group/ChannelGroupException.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/ChannelProgressiveFutureListener.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/group/DefaultChannelGroup.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/group/ChannelGroup.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/AbstractEventLoopGroup.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/socket/oio/DefaultOioServerSocketChannelConfig.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/SimpleChannelInboundHandler.java
*
/opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/ChannelHandlerAdapter.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/ChannelProgressiveFuture.java
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Found in path(s):

```
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/socket/nio/NioChannelOption.java
* /opt/cola/permits/1845710023_1699909357.2160501/0/netty-transport-4-1-101-final-sources-
jar/io/netty/channel/SimpleUserEventChannelHandler.java
```

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Found in path(s):

```
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/internal/ResourcesUtil.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/ByteProcessorUtils.java
```

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xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/maven-v4_0_0.xsd">
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```

```
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```

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```

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</plugin>
</plugins>
</build>

<distributionManagement>
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 <url>https://api.bintray.com/maven/jctools/jctools/jctools-core/;publish=1</url>
 </repository>
</distributionManagement>

<url>https://github.com/JCTools</url>
<inceptionYear>2013</inceptionYear>

<licenses>
 <license>
 <name>Apache
 License, Version 2.0</name>
 <url>http://www.apache.org/licenses/LICENSE-2.0.txt</url>
 <distribution>repo</distribution>
 </license>

```

```
</licenses>

<scm>
 <url>https://github.com/JCTools/JCTools</url>
 <connection>scm:git:https://github.com/JCTools/JCTools</connection>
 <tag>HEAD</tag>
</scm>

<developers>
 <developer>
 <url>https://github.com/nitsanw</url>
 </developer>
 <developer>
 <url>https://github.com/mjpt777</url>
 </developer>
 <developer>
 <url>https://github.com/RichardWarburton</url>
 </developer>
 <developer>
 <url>https://github.com/kay</url>
 </developer>
 <developer>
 <url>https://github.com/franz1981</url>
 </developer>
</developers>

<prerequisites>
 <maven>3.5.0</maven>
</prerequisites>

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 <java.test.version>1.8</java.test.version>

 <maven.compiler.source>${java.version}</maven.compiler.source>
 <maven.compiler.target>${java.version}</maven.compiler.target>
 <maven.compiler.testSource>${java.test.version}</maven.compiler.testSource>
 <maven.compiler.testTarget>${java.test.version}</maven.compiler.testTarget>

 <hamcrest.version>1.3</hamcrest.version>
 <junit.version>4.12</junit.version>
 <guava-testlib.version>21.0</guava-testlib.version>
</properties>
</project>
```

Found



in path(s):

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/META-INF/maven/org.jctools/jctools-core/pom.xml

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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/logging/Log4J2LoggerFactory.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/concurrent/OrderedEventExecutor.java  
 \*  
 /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/concurrent/RejectedExecutionHandlers.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/ResourceLeakTracker.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/MacAddressUtil.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/BooleanSupplier.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/concurrent/NonStickyEventExecutorGroup.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/concurrent/EventExecutorChooserFactory.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/OutOfDirectMemoryError.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/DomainNameMappingBuilder.java  
 \*  
 /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/PromiseNotificationUtil.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/concurrent/DefaultEventExecutorChooserFactory.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/IntSupplier.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/logging/Log4J2Logger.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/UnstableApi.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/concurrent/UnaryPromiseNotifier.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/SocketUtils.java  
 \*  
 /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/ConstantTimeUtils.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/concurrent/RejectedExecutionHandler.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/NativeLibraryUtil.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/ThrowableUtil.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/concurrent/UnorderedThreadPoolEventExecutor.java  
 \* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-

jar/io/netty/util/ResourceLeakDetectorFactory.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/concurrent/PromiseCombiner.java  
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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/META-INF/maven/io.netty/netty-common/pom.xml  
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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/HashingStrategy.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/AsyncMapping.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-

jar/io/netty/util/internal/DefaultPriorityQueue.java

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jar/io/netty/util/concurrent/ThreadProperties.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-

jar/io/netty/util/DomainMappingBuilder.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-

jar/io/netty/util/internal/LongCounter.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-

jar/io/netty/util/internal/PriorityQueueNode.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-

jar/io/netty/util/concurrent/AbstractScheduledEventExecutor.java

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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-

jar/io/netty/util/concurrent/FastThreadLocalThread.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-

jar/io/netty/util/internal/CleanerJava6.java

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jar/io/netty/util/ByteProcessor.java  
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jar/io/netty/util/internal/MathUtil.java

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jar/io/netty/util/concurrent/FastThreadLocalRunnable.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/Cleaner.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/CleanerJava9.java

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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/shaded/org/jctools/queues/MpmcArrayQueue.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/shaded/org/jctools/queues/BaseLinkedQueue.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/shaded/org/jctools/queues/ConcurrentCircularArrayQueue.java

\*

/opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/shaded/org/jctools/maps/ConcurrentAutoTable.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/shaded/org/jctools/queues/atomic/MpmcAtomicArrayQueue.java

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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/shaded/org/jctools/maps/NonBlockingHashMap.java

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/opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/shaded/org/jctools/queues/package-info.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/shaded/org/jctools/queues/atomic/AtomicReferenceArrayQueue.java

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jar/io/netty/util/internal/shaded/org/jctools/util/Pow2.java  
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jar/io/netty/util/internal/shaded/org/jctools/maps/NonBlockingSetInt.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
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jar/io/netty/util/internal/shaded/org/jctools/util/UnsafeRefArrayAccess.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/shaded/org/jctools/queues/MpscCompoundQueue.java  
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jar/io/netty/util/internal/shaded/org/jctools/queues/MpscUnboundedXaddChunk.java  
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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/shaded/org/jctools/queues/spec/ConcurrentQueueSpec.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/shaded/org/jctools/queues/ConcurrentSequencedCircularArrayQueue.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/shaded/org/jctools/util/InternalAPI.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/shaded/org/jctools/queues/atomic/BaseLinkedAtomicQueue.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/shaded/org/jctools/util/PortableJvmInfo.java  
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jar/io/netty/util/internal/shaded/org/jctools/queues/SupportsIterator.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/shaded/org/jctools/queues/MpscBlockingConsumerArrayQueue.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
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jar/io/netty/util/internal/shaded/org/jctools/queues/atomic/SpSCUnboundedAtomicArrayQueue.java  
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jar/io/netty/util/internal/shaded/org/jctools/queues/IndexedQueueSizeUtil.java  
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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/shaded/org/jctools/queues/MessagePassingQueueUtil.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-



jar/io/netty/util/internal/shaded/org/jctools/queues/atomic/BaseSpscLinkedAtomicArrayQueue.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/shaded/org/jctools/queues/MessagePassingQueue.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/shaded/org/jctools/queues/MpmcUnboundedXaddArrayQueue.java  
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jar/io/netty/util/concurrent/PromiseNotifier.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/concurrent/FastThreadLocal.java
*
/opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/internal/NativeLibraryLoader.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/DomainNameMapping.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/ResourceLeakHint.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/AsciiString.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
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* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
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* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
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* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/ThreadDeathWatcher.java
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/opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/UnpaddedInternalThreadLocalMap.java

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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/ThreadExecutorMap.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/svm/PlatformDependent0Substitution.java

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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/svm/UnsafeRefArrayAccessSubstitution.java

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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/svm/PlatformDependentSubstitution.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/ReferenceCountUpdater.java

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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/META-INF/native-image/io.netty/netty-common/native-image.properties

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Found in path(s):

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/ClassInitializerUtil.java

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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/NetUtilInitializations.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/NetUtilSubstitutions.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/DomainWildcardMappingBuilder.java

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```
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/internal/SuppressJava6Requirement.java
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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/logging/InternalLogger.java

\*

/opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/logging/JdkLogger.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/logging/CommonsLogger.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/logging/Log4JLogger.java

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jar/io/netty/util/internal/logging/InternalLoggerFactory.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-

jar/io/netty/util/concurrent/SingleThreadEventExecutor.java  
\*  
/opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/MultithreadEventExecutorGroup.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/NetUtil.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/package-info.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/logging/Slf4JLogger.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/logging/Slf4JLoggerFactory.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/TimerTask.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/EventExecutorGroup.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/Attribute.java  
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/opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/Signal.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/logging/JdkLoggerFactory.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/DefaultEventExecutorGroup.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/GlobalEventExecutor.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/package-info.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/StringUtil.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/SucceededFuture.java  
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/opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/logging/Log4JLoggerFactory.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/Timer.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/EventExecutor.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/Timeout.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/logging/AbstractInternalLogger.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/DefaultAttributeMap.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/BlockingOperationException.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/concurrent/DefaultEventExecutor.java

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/opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/SystemPropertyUtil.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/CharsetUtil.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/logging/CommonsLoggerFactory.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/logging/InternalLogLevel.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/concurrent/FailedFuture.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/Constant.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/IllegalReferenceCountException.java

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/opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/AttributeKey.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/AttributeMap.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/PlatformDependent.java

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/HashedWheelTimer.java

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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-

jar/io/netty/util/ResourceLeakException.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/DefaultFutureListeners.java  
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/opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/RecyclableArrayList.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/DefaultProgressivePromise.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/AppendableCharSequence.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/ReadOnlyIterator.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/NoOpTypeParameterMatcher.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/TypeParameterMatcher.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/ProgressiveFuture.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/DefaultThreadFactory.java  
\*  
/opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/AbstractReferenceCounted.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/logging/package-info.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/ReferenceCountUtil.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/ProgressivePromise.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/AbstractFuture.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/DefaultPromise.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/ScheduledFuture.java  
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/opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/package-info.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/internal/PendingWrite.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/Version.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/ThreadPerTaskExecutor.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/ResourceLeak.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-  
jar/io/netty/util/concurrent/AbstractEventExecutor.java



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* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/concurrent/GenericFutureListener.java
*
/opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/concurrent/Promise.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/ResourceLeakDetector.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/concurrent/CompleteFuture.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/concurrent/AbstractEventExecutorGroup.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/concurrent/FutureListener.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/internal/EmptyArrays.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/concurrent/ImmediateEventExecutor.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/internal/ConcurrentSet.java
*
/opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/concurrent/Future.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/ReferenceCounted.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/Recycler.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/concurrent/PromiseTask.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/concurrent/GenericProgressiveFutureListener.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/internal/PlatformDependent0.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/concurrent/ScheduledFutureTask.java
*
/opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/concurrent/ImmediateExecutor.java
* /opt/cola/permits/1845711756_1699909854.0518098/0/netty-common-4-1-101-final-sources-
jar/io/netty/util/ConstantPool.java
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\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/CharCollections.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/ShortObjectMap.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/LongObjectMap.java  
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/opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/CharObjectHashMap.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/ByteObjectMap.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/ByteObjectHashMap.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/ShortCollections.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/CharObjectMap.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/IntCollections.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/ByteCollections.java  
\*  
/opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/IntObjectHashMap.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/IntObjectMap.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/ShortObjectHashMap.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/LongObjectHashMap.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/ObjectUtil.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/collection/LongCollections.java

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Found in path(s):

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/LongAdderCounter.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/NettyRuntime.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/UncheckedBooleanSupplier.java  
\*  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/ReflectionUtil.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/logging/LocationAwareSlf4JLogger.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/SuppressForbidden.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/ObjectCleaner.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/EmptyPriorityQueue.java  
\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/PriorityQueue.java

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io.netty.util.internal.Hidden\$NettyBlockHoundIntegration

Found in path(s):

\* /opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/META-INF/services/reactor.blockhound.integration.BlockHoundIntegration

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\*

/opt/cola/permits/1845711756\_1699909854.0518098/0/netty-common-4-1-101-final-sources-jar/io/netty/util/internal/logging/FormattingTuple.java

## 1.208 netty-handler 4.1.101.Final

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\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/OpenSslCertificateCompressionAlgorithm.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/BouncyCastlePemReader.java

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jar/io/netty/handler/traffic/GlobalChannelTrafficShapingHandler.java

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jar/io/netty/handler/ssl/ocsp/OcspClientHandler.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/SslCompletionEvent.java

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/opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/ConscryptAlpnSslEngine.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/Conscrypt.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/ocsp/package-info.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/SslClientHelloHandler.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/SslCloseCompletionEvent.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/JdkAlpnSslEngine.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/AbstractSniHandler.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/JdkAlpnSslUtils.java

\*  
/opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/OptionalSslHandler.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/SniCompletionEvent.java  
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\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/traffic/ChannelTrafficShapingHandler.java  
\*  
/opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/traffic/GlobalTrafficShapingHandler.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/traffic/package-info.java  
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jar/io/netty/handler/ssl/util/BouncyCastleSelfSignedCertGenerator.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ipfilter/AbstractRemoteAddressFilter.java  
\*  
/opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/util/SimpleTrustManagerFactory.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/util/OpenJdkSelfSignedCertGenerator.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/ApplicationProtocolConfig.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/OpenSslClientContext.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/OpenSslSessionContext.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/OpenSslApplicationProtocolNegotiator.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ipfilter/IpSubnetFilterRule.java  
\*  
/opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/IdentityCipherSuiteFilter.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/OpenSsl.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/JettyNpnSslEngine.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
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jar/io/netty/handler/ssl/JdkSslServerContext.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/JdkSslClientContext.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/util/LazyX509Certificate.java  
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/opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ipfilter/RuleBasedIpFilter.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/PemReader.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/SslContext.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ipfilter/IpFilterRule.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/OpenSslEngineMap.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/SupportedCipherSuiteFilter.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/traffic/GlobalChannelTrafficCounter.java

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/opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ssl/JdkSslContext.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ssl/util/InsecureTrustManagerFactory.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ssl/CipherSuiteConverter.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
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* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
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* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ssl/util/ThreadLocalInsecureRandom.java
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/opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ssl/OpenSslContext.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ssl/OpenSslEngine.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ssl/SniHandler.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ssl/OpenSslServerContext.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ssl/OpenSslServerSessionContext.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
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* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ssl/util/FingerprintTrustManagerFactory.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ipfilter/IpFilterRuleType.java
*
/opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ssl/ApplicationProtocolUtil.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ssl/JdkDefaultApplicationProtocolNegotiator.java
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jar/io/netty/handler/ssl/CipherSuiteFilter.java
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jar/io/netty/handler/ssl/JettyAlpnSslEngine.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ipfilter/UniqueIpFilter.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/ssl/OpenSslSessionStats.java
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\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/JdkApplicationProtocolNegotiator.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/SslUtils.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/JdkSslEngine.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/Java7SslParametersUtils.java  
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\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/address/DynamicAddressConnectHandler.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/address/package-info.java

\*

/opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/util/TrustManagerFactoryWrapper.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/SslMasterKeyHandler.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/OpenSslPrivateKeyMethod.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/util/SimpleKeyManagerFactory.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/util/X509KeyManagerWrapper.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/util/KeyManagerFactoryWrapper.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/PseudoRandomFunction.java

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\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/PemPrivateKey.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/flush/FlushConsolidationHandler.java

\*  
/opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/flush/package-info.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/PemValue.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/ReferenceCountedOpenSslContext.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/PemX509Certificate.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/util/X509TrustManagerWrapper.java  
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\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/Java8SslUtils.java

\*  
/opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/ReferenceCountedOpenSslEngine.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/ReferenceCountedOpenSslServerContext.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/OpenSslKeyMaterialManager.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/PemEncoded.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/OpenSslCertificateException.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/ReferenceCountedOpenSslClientContext.java

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jar/io/netty/handler/ssl/util/LazyJavaxX509Certificate.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/OpenSslSessionTicketKey.java  
\*  
/opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/ApplicationProtocolNames.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/ApplicationProtocolAccessor.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/ApplicationProtocolNegotiationHandler.java  
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jar/io/netty/handler/ssl/ClientAuth.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
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jar/io/netty/handler/ssl/SslHandshakeCompletionEvent.java

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jar/io/netty/handler/ssl/StacklessSSLHandshakeException.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-  
jar/io/netty/handler/ssl/EnhancingX509ExtendedTrustManager.java

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\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/timeout/package-info.java

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jar/io/netty/handler/timeout/IdleStateEvent.java

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jar/io/netty/handler/ssl/DefaultOpenSslKeyMaterial.java

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jar/io/netty/handler/ssl/SignatureAlgorithmConverter.java

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jar/io/netty/handler/ssl/OpenSslSession.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-

jar/io/netty/handler/ssl/OpenSslKeyMaterial.java

\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-

jar/io/netty/handler/ssl/OpenSslKeyMaterialProvider.java

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jar/io/netty/handler/ssl/OpenSslCachingKeyMaterialProvider.java

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jar/io/netty/handler/ssl/OpenSslPrivateKey.java

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jar/io/netty/handler/ssl/ExtendedOpenSslSession.java

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jar/io/netty/handler/ssl/OpenSslX509KeyManagerFactory.java

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jar/io/netty/handler/pcap/TCPPacket.java
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jar/io/netty/handler/pcap/PcapWriter.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/pcap/IPPacket.java
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jar/io/netty/handler/pcap/PcapHeaders.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/pcap/EthernetPacket.java
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jar/io/netty/handler/pcap/package-info.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/pcap/UDPPacket.java
* /opt/cola/permits/1845712372_1699909923.353999/0/netty-handler-4-1-101-final-sources-
jar/io/netty/handler/pcap/PcapWriteHandler.java
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\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/OpenSslSessionId.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/OpenSslContextOption.java  
\*

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\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/BouncyCastle.java  
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\*

/opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/SslContextOption.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/BouncyCastleAlpnSslEngine.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/OpenSslAsyncPrivateKeyMethod.java

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\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/address/ResolveAddressHandler.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/logging/ByteBufFormat.java  
\*  
/opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ipfilter/IpSubnetFilter.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/SslClosedEngineException.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ipfilter/IpSubnetFilterRuleComparator.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/SslHandshakeTimeoutException.java  
\* /opt/cola/permits/1845712372\_1699909923.353999/0/netty-handler-4-1-101-final-sources-jar/io/netty/handler/ssl/util/FingerprintTrustManagerFactoryBuilder.java

## 1.209 netty-transport-native-unix-common

### 4.1.101.Final

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jar/io/netty/channel/unix/DomainDatagramChannel.java
* /opt/cola/permits/1845709862_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-
jar/io/netty/channel/unix/DomainDatagramSocketAddress.java
*
/opt/cola/permits/1845709862_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-
jar/io/netty/channel/unix/SegmentedDatagramPacket.java
* /opt/cola/permits/1845709862_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-
jar/io/netty/channel/unix/DomainDatagramChannelConfig.java
* /opt/cola/permits/1845709862_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-
jar/io/netty/channel/unix/DomainDatagramPacket.java
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jar/io/netty/channel/unix/PeerCredentials.java
* /opt/cola/permits/1845709862_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-
jar/io/netty/channel/unix/LimitsStaticallyReferencedJniMethods.java
*
/opt/cola/permits/1845709862_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-
jar/netty_unix_limits.h
* /opt/cola/permits/1845709862_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-
jar/io/netty/channel/unix/Limits.java
* /opt/cola/permits/1845709862_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-
jar/netty_unix_util.c
* /opt/cola/permits/1845709862_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-
jar/netty_unix_util.h
* /opt/cola/permits/1845709862_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-
jar/io/netty/channel/unix/ErrorsStaticallyReferencedJniMethods.java
* /opt/cola/permits/1845709862_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-
jar/io/netty/channel/unix/SocketWritableByteChannel.java
```

\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/netty\_unix\_limits.c

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\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/DomainSocketChannel.java

\*  
/opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/Errors.java  
\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/UnixChannel.java  
\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/netty\_unix\_socket.c  
\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/DomainSocketAddress.java  
\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/netty\_unix\_errors.h  
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\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/netty\_unix\_filedescriptor.c

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/opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/ServerDomainSocketChannel.java  
\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/DatagramSocketAddress.java  
\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/FileDescriptor.java  
\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/NativeInetAddress.java  
\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/DomainSocketReadMode.java  
\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/Socket.java  
\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/netty\_unix\_socket.h

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/opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/DomainSocketChannelConfig.java

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\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/netty\_unix\_buffer.h

\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/Buffer.java

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/opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/PreferredDirectByteBufAllocator.java

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\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/package-info.java

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/opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/IovArray.java

\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/Unix.java

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\* /opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/IntegerUnixChannelOption.java  
\*

/opt/cola/permits/1845709862\_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-jar/io/netty/channel/unix/GenericUnixChannelOption.java

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jar/netty_unix_jni.h
* /opt/cola/permits/1845709862_1699909634.91991/0/netty-transport-native-unix-common-4-1-101-final-sources-
jar/io/netty/channel/unix/UnixChannelUtil.java
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\* /opt/cola/permits/1847741632\_1700148917.0881903/0/netty-handler-proxy-4-1-101-final-sources-jar/io/netty/handler/proxy/HttpProxyHandler.java  
\*  
/opt/cola/permits/1847741632\_1700148917.0881903/0/netty-handler-proxy-4-1-101-final-sources-jar/io/netty/handler/proxy/ProxyHandler.java  
\* /opt/cola/permits/1847741632\_1700148917.0881903/0/netty-handler-proxy-4-1-101-final-sources-jar/io/netty/handler/proxy/ProxyConnectException.java  
\* /opt/cola/permits/1847741632\_1700148917.0881903/0/netty-handler-proxy-4-1-101-final-sources-jar/io/netty/handler/proxy/Socks5ProxyHandler.java  
\* /opt/cola/permits/1847741632\_1700148917.0881903/0/netty-handler-proxy-4-1-101-final-sources-jar/io/netty/handler/proxy/ProxyConnectionEvent.java  
\* /opt/cola/permits/1847741632\_1700148917.0881903/0/netty-handler-proxy-4-1-101-final-sources-jar/io/netty/handler/proxy/Socks4ProxyHandler.java

## 1.211 netty-codec-socks 4.1.101.Final

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\* /opt/cola/permits/1847741657\_1700148914.7722342/0/netty-codec-socks-4-1-101-final-sources-jar/io/netty/handler/codec/socksx/v4/Socks4Message.java

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\* /opt/cola/permits/1847741657\_1700148914.7722342/0/netty-codec-socks-4-1-101-final-sources-jar/io/netty/handler/codec/socksx/v5/Socks5InitialRequestDecoder.java

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/opt/cola/permits/1847741657\_1700148914.7722342/0/netty-codec-socks-4-1-101-final-sources-jar/io/netty/handler/codec/socksx/v4/Socks4ClientEncoder.java

\* /opt/cola/permits/1847741657\_1700148914.7722342/0/netty-codec-socks-4-1-101-final-sources-jar/io/netty/handler/codec/socksx/v5/Socks5ClientEncoder.java

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\* /opt/cola/permits/1847741657\_1700148914.7722342/0/netty-codec-socks-4-1-101-final-sources-jar/io/netty/handler/codec/socks/SocksCmdStatus.java  
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\* /opt/cola/permits/1847741657\_1700148914.7722342/0/netty-codec-socks-4-1-101-final-sources-jar/io/netty/handler/codec/socks/SocksAuthScheme.java  
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\* /opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketServerHandshakerFactory.java

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/opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocket00FrameDecoder.java

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\* /opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketServerProtocolConfig.java

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\* /opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-jar/io/netty/handler/codec/http/websocketx/extensions/WebSocketExtensionFilter.java  
\* /opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketCloseStatus.java

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/opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketClientProtocolConfig.java  
\* /opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-jar/io/netty/handler/codec/http/websocketx/CloseWebSocketFrame.java  
\* /opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketServerProtocolHandler.java

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jar/io/netty/handler/codec/http/websocketx/WebSocket13FrameDecoder.java
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\*  
/opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-jar/io/netty/handler/codec/spdy/DefaultSpdyPingFrame.java  
\* /opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-jar/io/netty/handler/codec/spdy/SpdySettingsFrame.java  
\* /opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-jar/io/netty/handler/codec/spdy/SpdyCodecUtil.java  
\* /opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-jar/io/netty/handler/codec/spdy/SpdyHeaderBlockZlibEncoder.java  
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  - \*
  - \* /opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-jar/io/netty/handler/codec/http/websocketx/WebSocketScheme.java
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\* /opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-  
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jar/io/netty/handler/codec/http/websocketx/WebSocketChunkedInput.java  
\*  
/opt/cola/permits/1849078729\_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-  
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* /opt/cola/permits/1849078729_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-
jar/io/netty/handler/codec/http/websocketx/WebSocket13FrameEncoder.java
* /opt/cola/permits/1849078729_1700256546.4903014/0/netty-codec-http-4-1-101-final-sources-
jar/io/netty/handler/codec/http/websocketx/WebSocket08FrameEncoder.java

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\*  
/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorMerge.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/subjects/TestSubject.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/observers/TestSubscriber.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/subscriptions/CompositeSubscription.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/Completable.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/functions/Action1.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/functions/Func4.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/functions/Func2.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/RxRingBuffer.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/CompletableOnSubscribeMerge.java  
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/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/BackpressureDrainManager.java  
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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/functions/Action7.java  
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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/schedulers/NewThreadScheduler.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/functions/Action5.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorAny.java  
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/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/functions/Func8.java  
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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-

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jar/rx/internal/operators/OperatorAll.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OperatorSkipLast.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/CompletableOnSubscribeMergeIterable.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OperatorSerialize.java
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jar/rx/internal/operators/SingleDoOnEvent.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/observers/Observers.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/schedulers/Schedulers.java
*
/opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OperatorTakeLastTimed.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OnSubscribeRedo.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/schedulers/TimeInterval.java
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* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OperatorReplay.java
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jar/rx/subscriptions/Subscriptions.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
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* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OperatorSingle.java
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* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OperatorTimeoutWithSelector.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OperatorSkipLastTimed.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/functions/Func3.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/Observer.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/functions/FuncN.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OperatorMapNotification.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/observers/Subscribers.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/Subscription.java
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* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
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* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OperatorTimeout.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/CompletableOnSubscribeMergeArray.java

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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/CompletableOnSubscribeConcatArray.java  
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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/CachedObservable.java  
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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/CompletableOnSubscribeMergeDelayErrorIterable.java  
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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorZipIterable.java  
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 \* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/plugins/RxJavaPlugins.java  
 \* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/functions/Func9.java  
 \* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorTake.java  
 \*  
 /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorCast.java  
 \* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeDoOnEach.java  
 \* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorToObservableSortedList.java  
 \* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/functions/Func0.java  
 \* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/schedulers/EventLoopsScheduler.java  
 \* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/BufferUntilSubscriber.java  
 \* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/exceptions/OnCompletedFailedException.java

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* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/functions/Func5.java
*
/opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/schedulers/NewThreadScheduler.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OnSubscribeMap.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/BlockingOperatorToIterator.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/observables/GroupedObservable.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OperatorUnsubscribeOn.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/subjects/SubjectSubscriptionManager.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OnSubscribeSingle.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OperatorObserveOn.java
*
/opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OnSubscribeFromArray.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/BlockingOperatorLatest.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OnSubscribeGroupJoin.java
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Found in path(s):
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```
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/SingleDoOnSubscribe.java
```

```
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/EmptyObservableHolder.java
```

\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeThrow.java  
\*  
/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleOnErrorReturn.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeDetach.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/ActionNotificationObserver.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/plugins/RxJavaHooks.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/subscriptions/package-info.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleTakeUntilObservable.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/ActionSubscriber.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/plugins/package-info.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleTakeUntilSingle.java  
\*  
/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/observers/package-info.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/schedulers/SchedulerWhen.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/observables/package-info.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/plugins/RxJavaSingleExecutionHookDefault.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/subjects/package-info.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/CompletableFlatMapSingleToCompletable.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/InternalObservableUtils.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleDoOnUnsubscribe.java  
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/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/subscriptions/Unsubscribed.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/singles/package-info.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeOnAssemblySingle.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleDelay.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeCreate.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/ObserverSubscriber.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/functions/Cancellable.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleFromCallable.java  
\*

/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/schedulers/GenericScheduledExecutorServiceFactory.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeOnAssemblyCompletable.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/Emitter.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/ActionObserver.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/subscriptions/CancellableSubscription.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeOnAssembly.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeLift.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleFromObservable.java  
\*  
/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleLiftObservableOperator.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/observers/AssertableSubscriber.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/exceptions/package-info.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleFromEmitter.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleTimeout.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/observers/AssertableSubscriberObservable.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/observers/AsyncCompletableSubscriber.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/exceptions/AssemblyStackTraceException.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/plugins/RxJavaCompletableExecutionHook.java  
\*  
/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/BackpressureOverflow.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/annotations/package-info.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/schedulers/SchedulePeriodicHelper.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/observers/SafeCompletableSubscriber.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/plugins/RxJavaSingleExecutionHook.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeFlattenIterable.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/NeverObservableHolder.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleFromFuture.java

\*  
/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleObserveOn.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleToObservable.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleTakeUntilCompletable.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/functions/package-info.java  
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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/BackpressureUtils.java

\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/producers/ProducerObserverArbiter.java

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/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/producers/QueuedValueProducer.java

\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/producers/SingleDelayedProducer.java

\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/producers/ProducerArbiter.java

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* Original location: https://github.com/JCTools/JCTools/blob/master/jctools-
core/src/main/java/org/jctools/queues/LinkedQueueNode.java
*/
```

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```
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/util/atomic/LinkedQueueNode.java
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*/
/**
* This plugin class provides 2 ways to customize {@link Scheduler} functionality
* 1. You may redefine entire schedulers, if you so choose. To do so, override
* the 3 methods that return Scheduler (io(), computation(), newThread()).
* 2. You may wrap/decorate an {@link Action0}, before it is handed off to a Scheduler. The
system-
* supplied Schedulers (Schedulers.ioScheduler, Schedulers.computationScheduler,
* Scheduler.newThreadScheduler) all use this hook, so it's a convenient way to
* modify Scheduler functionality without redefining Schedulers wholesale.
*
* Also, when redefining Schedulers, you are free to use/not use the onSchedule decoration hook.
* <p>
* See {@link RxJavaPlugins} or the RxJava GitHub Wiki for information on configuring plugins:
* https://github.com/ReactiveX/RxJava/wiki/Plugins.
*/

```

Found in path(s):

```

* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/plugins/RxJavaSchedulersHook.java

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* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/SingleEmitter.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/CompletableFromEmitter.java
*
/opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/CompletableEmitter.java
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* Original location: https://github.com/JCTools/JCTools/blob/master/jctools-
core/src/main/java/org/jctools/queues/atomic/SpScUnboundedAtomicArrayQueue.java
*/
```

Found in path(s):

```
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/util/atomic/SpScUnboundedAtomicArrayQueue.java
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core/src/main/java/org/jctools/queues/atomic/SpScAtomicArrayQueue.java
*/
```

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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/atomic/SpScAtomicArrayQueue.java

\*

/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/atomic/SpScExactAtomicArrayQueue.java

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\*/

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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/Single.java

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\*/

Found in path(s):

\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/atomic/MpscLinkedAtomicQueue.java

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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/unsafe/SpmcArrayQueue.java

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 */
```

Found in path(s):

```
*/opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/unsafe/Pow2.java
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```
*/opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OnSubscribeFlatMapCompletable.java
```

```
*/opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
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```

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\*/

Found in path(s):

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\*/

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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/unsafe/ConcurrentCircularArrayQueue.java

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\*/

Found in path(s):

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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeReduce.java

\*

/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeCollect.java

\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleOperatorZip.java



\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/ExceptionsUtils.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeConcatMap.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/DeferredScalarSubscriberSafe.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/schedulers/SchedulerLifecycle.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeTakeLastOne.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeFromCallable.java  
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/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribePublishMulticast.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleOperatorOnErrorResumeNext.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeReduceSeed.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/SuppressAnimalSniffer.java  
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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorWindowWithObservable.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/schedulers/NewThreadWorker.java  
\*  
/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/RxThreadFactory.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeTimerPeriodically.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorMulticast.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorBufferWithSize.java  
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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorMapPair.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorDoAfterTerminate.java  
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/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeDelaySubscriptionOther.java  
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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorBufferWithTime.java

\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorBufferWithStartEndObservable.java  
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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorTakeTimed.java  
\*  
/opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorWindowWithSize.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorSampleWithObservable.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeDelaySubscriptionWithSelector.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OperatorDistinctUntilChanged.java  
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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/atomic/SpSCLinkedListArrayQueue.java  
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\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/SingleOnSubscribeDelaySubscriptionOther.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/PlatformDependent.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeDelaySubscription.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/operators/OnSubscribeTimerOnce.java  
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jar/rx/internal/operators/OperatorDistinct.java
* /opt/cola/permits/1856379022_1701265124.64784/0/rxjava-1-2-9-sources-1-
jar/rx/internal/operators/OnSubscribeSkipTimed.java
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\* Modified from <http://www.javacodegeeks.com/2013/08/simple-and-lightweight-pool-implementation.html>

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[core/src/main/java/org/jctools/queues/QueueProgressIndicators.java](https://github.com/JCTools/JCTools/blob/master/jctools-core/src/main/java/org/jctools/queues/QueueProgressIndicators.java)

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Found in path(s):

\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/Observable.java  
\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-  
jar/rx/internal/util/UtilityFunctions.java

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This package contains code that relies on sun.misc.Unsafe. Before using it you MUST assert  
UnsafeAccess.isUnsafeAvailable() == true

Much of the code in this package comes from or is inspired by the JCTools project:  
<https://github.com/JCTools/JCTools>

JCTools has now published artifacts (<https://github.com/JCTools/JCTools/issues/17>) so RxJava could add JCTools  
as a "shadow" dependency (<https://github.com/ReactiveX/RxJava/issues/1735>).

RxJava has a "zero dependency" policy for the core library, so if we do add it as a dependency, it won't be an  
externally visible dependency that results in a separate jar.

The license for the JCTools code is <https://github.com/JCTools/JCTools/blob/master/LICENSE>

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Found in path(s):

\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/unsafe/README.md

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\* Original License: <https://github.com/JCTools/JCTools/blob/master/LICENSE>  
\* Original location: <https://github.com/JCTools/JCTools/blob/master/jctools-core/src/main/java/org/jctools/queues/ConcurrentSequencedCircularArrayQueue.java>  
\*/

Found in path(s):

\* /opt/cola/permits/1856379022\_1701265124.64784/0/rxjava-1-2-9-sources-1-jar/rx/internal/util/unsafe/ConcurrentSequencedCircularArrayQueue.java

## 1.224 jetty 12.0.3

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Found in path(s):

\* /opt/cola/permits/1856379036\_1701265095.6478956/0/jetty-io-12-0-3-sources-jar/org/eclipse/jetty/io/ByteBufferOutputStream.java

\* /opt/cola/permits/1856379036\_1701265095.6478956/0/jetty-io-12-0-3-sources-

```

jar/org/eclipse/jetty/io/Content.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/SocketChannelEndPoint.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/content/ByteBufferContentSource.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/internal/ByteBufferChunk.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/internal/ContentCopier.java
*
/opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ClientConnector.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/internal/ContentSourceString.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/content/ContentSinkSubscriber.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/DatagramChannelEndPoint.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/RetainableByteBuffer.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/CyclicTimeout.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/content/ChunksContentSource.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ssl/SslClientConnectionFactory.java
*
/opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ChunkAccumulator.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ByteBufferAggregator.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/AbstractEndPoint.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/NetworkTrafficListener.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/NetworkTrafficSocketChannelEndPoint.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ByteBufferAccumulator.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/content/AsyncContent.java
*
/opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/AbstractConnection.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/content/ContentSourceTransformer.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/IncludeExcludeConnectionStatistics.java

```

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* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ByteBufferInputStream.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/internal/ContentSourceConsumer.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ssl/ALPNProcessor.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/CyclicTimeouts.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ByteArrayEndPoint.java
*
/opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ManagedSelector.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/internal/CompoundPool.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/internal/NonRetainableByteBuffer.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/internal/QueuedPool.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ssl/SslHandshakeListener.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/NegotiatingClientConnection.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ByteBufferOutputStream2.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/content/ContentSourceCompletableFuture.java
*
/opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/content/ContentSourcePublisher.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ConnectionStatistics.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ByteBufferCallbackAccumulator.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ssl/SslConnection.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/EndPoint.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/IdleTimeout.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/NegotiatingClientConnectionFactory.java
*
/opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/content/ContentSourceInputStream.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/Connection.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-

```

```

jar/org/eclipse/jetty/io/content/BufferedContentSink.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/content/OutputStreamContentSource.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ArrayByteBufferPool.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ByteBufferPool.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/QuietException.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/SelectableChannelEndPoint.java
*
/opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/content/PathContentSource.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/content/InputStreamContentSource.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/SelectorManager.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/ClientConnectionFactory.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/WriteFlusher.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/EofException.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/jmx/ConnectionStatisticsMBean.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/AbstractRetainableByteBuffer.java
*
/opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/Retainable.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/RuntimeIOException.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/WriteThroughWriter.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/WriterOutputStream.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/internal/ContentSourceByteBuffer.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-jar/org/eclipse/jetty/io/package-
info.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-
jar/org/eclipse/jetty/io/content/ContentSinkOutputStream.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-jar/org/eclipse/jetty/io/ssl/package-
info.java
*
/opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-jar/module-info.java
* /opt/cola/permits/1856379036_1701265095.6478956/0/jetty-io-12-0-3-sources-

```

## 1.225 jackson-datatype-joda 2.16.0

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## 1.226 jetty-util 12.0.3

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Found in path(s):

```
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/HostMap.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ArrayTrie.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ServiceLoaderSpliterator.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/thread/strategy/ExecuteProduceConsume.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/Promise.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/UriPatternPredicate.java
*
/opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/VirtualThreads.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/annotation/ManagedObject.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/annotation/package-info.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/thread/Invocable.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
```



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jar/org/eclipse/jetty/util/security/CertificateUtils.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/FutureCallback.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ssl/X509.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ArrayUtil.java
*
/opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/resource/PathResourceFactory.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/security/Credential.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ByteArrayOutputStream2.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/MultiMap.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/statistic/CounterStatistic.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/component/StopLifeCycle.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/SearchPattern.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/thread/AutoLock.java
*
/opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/resource/ResourceUriPatternPredicate.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/TopologicalSort.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/resource/Resources.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/security/SecurityUtils.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/statistic/package-info.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/MultiReleaseJarFile.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/RolloverFileOutputStream.java
*
/opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/MultiPartWriter.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/thread/TryExecutor.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/thread/QueuedThreadPool.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/resource/Resource.java

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\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/StaticException.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/AttributesMap.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/ProcessorUtils.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/component/Container.java  
\*  
/opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/resource/PathCollators.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/thread/TimerScheduler.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/Loader.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/resource/GraalIssue5720PathResourceFactory.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/PidFile.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/resource/ResourceCollators.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/statistic/RateCounter.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/component/DumpableCollection.java  
\*  
/opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/Utf8StringBuilder.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/resource/FileSystemPool.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/LazyList.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/resource/MountedPathResourceFactory.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/thread/ExecutionStrategy.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/Decorator.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/AtomicBiInteger.java  
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\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/MemoryUtils.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/Callback.java  
\* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-

jar/org/eclipse/jetty/util/Attributes.java  
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 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
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 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
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 jar/org/eclipse/jetty/util/preventers/AbstractLeakPreventer.java  
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 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
 jar/org/eclipse/jetty/util/thread/ThreadClassLoaderScope.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
 jar/org/eclipse/jetty/util/resource/ResourceFactory.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
 jar/org/eclipse/jetty/util/security/CredentialProvider.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
 jar/org/eclipse/jetty/util/Uptime.java  
 \*  
 /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
 jar/org/eclipse/jetty/util/preventers/package-info.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
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 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
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 jar/org/eclipse/jetty/util/CompletableFuture.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
 jar/org/eclipse/jetty/util/FuturePromise.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
 jar/org/eclipse/jetty/util/AsciiLowerCaseSet.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
 jar/org/eclipse/jetty/util/TypeUtil.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
 jar/org/eclipse/jetty/util/thread/ExecutorThreadPool.java  
 \*  
 /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
 jar/org/eclipse/jetty/util/resource/URLResourceFactory.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
 jar/org/eclipse/jetty/util/thread/MonitoredQueuedThreadPool.java

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* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
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* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ssl/SniX509ExtendedKeyManager.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ConstantThrowable.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/UrlEncoded.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/Blocker.java
*
/opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/component/AttributeContainerMap.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/component/HaltLifeCycleListener.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/resource/ResourceFactoryInternals.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/thread/SerializedExecutor.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/FileID.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/statistic/RateStatistic.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/annotation/ManagedAttribute.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/annotation/ManagedOperation.java
*
/opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
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* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/thread/PrivilegedThreadFactory.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/LockedPool.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/component/Destroyable.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/LegacyQuotedStringTokenizer.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/SharedBlockingCallback.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/package-
info.java
*
/opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/component/DumpableAttributes.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ClassLoadingObjectInputStream.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-

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jar/org/eclipse/jetty/util/DecoratedObjectFactory.java  
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 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
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 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
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 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
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 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-  
 jar/org/eclipse/jetty/util/thread/ThreadPool.java

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 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/thread/strategy/EatWhatYouKill.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/URIUtil.java  
 \*  
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 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/StringUtil.java  
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 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/Attachable.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/preventers/AWTLeakPreventer.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/DeprecationWarning.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/TreeTrie.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/component/AbstractLifeCycle.java  
 \*  
 /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/resource/AttributeNormalizer.java  
 \* /opt/cola/permits/1856379043\_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/component/ClassLoaderDump.java

```

* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/security/package-info.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/resource/GraalIssue5720PathResource.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/DateCache.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/Jetty.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/RFC9110QuotedStringTokenizer.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ManifestUtils.java
*
/opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/RegexSet.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/security/CertificateValidator.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/thread/Scheduler.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/IncludeExcludeSet.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ssl/AliasedX509ExtendedKeyManager.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ExceptionUtil.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/resource/package-info.java
*
/opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/IteratingCallback.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ClassVisibilityChecker.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/thread/ReservedThreadExecutor.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ssl/package-info.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/thread/strategy/ProduceExecuteConsume.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-jar/module-info.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ByteArrayISO8859Writer.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/InetAddressPattern.java
*
/opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/component/LifeCycle.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/resource/MountedPathResource.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-

```

```
jar/org/eclipse/jetty/util/IncludeExclude.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/SocketAddressResolver.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/resource/PathResource.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ssl/SslSelectionDump.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/BufferUtil.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-jar/org/eclipse/jetty/util/Index.java
*
/opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/thread/package-info.java
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/ConcurrentPool.java
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```

```
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// terms of the Eclipse Public License v. 2.0 which is available at
// https://www.eclipse.org/legal/epl-2.0, or the Apache License, Version 2.0
/**
```

```
* Ensures serial invocation of submitted tasks.
* <p>
* The { @link InvocationType } of the { @link Runnable } returned from this class is
* always { @link InvocationType#BLOCKING } since a blocking task may be added to the queue
* at any time.
* <p>
* This class was inspired by the public domain class
* <a href="https://github.com/jroper/reactive-streams-servlet/blob/master/reactive-streams-
servlet/src/main/java/org/reactivestreams/servlet/NonBlockingMutexExecutor.java">NonBlockingMutexExecutor</
a>
* </p>
*/
```

Found in path(s):

```
* /opt/cola/permits/1856379043_1701265129.039068/0/jetty-util-12-0-3-sources-
jar/org/eclipse/jetty/util/thread/SerializedInvoker.java
No license file was found, but licenses were detected in source scan.
```

```
/*
* @(#)UnixCrypt.java 0.9 96/11/25
*
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## 1.227 jackson-module-guice 2.16.0

### 1.227.1 Available under license :

# Jackson JSON processor

Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007.

It is currently developed by a community of developers, as well as supported commercially by FasterXML.com.

## Licensing

Jackson core and extension components may be licensed under different licenses. To find the details that apply to this artifact see the accompanying LICENSE file. For more information, including possible other licensing options, contact FasterXML.com (<http://fasterxml.com>).

## Credits

A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses.

This copy of Jackson JSON processor `jackson-module-guice` module is licensed under the Apache (Software) License, version 2.0 ("the License").

See the License for details about distribution rights, and the specific rights regarding derivative works.

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<http://www.apache.org/licenses/LICENSE-2.0>

## 1.228 jetty-security 12.0.3

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Found in path(s):

- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/IdentityService.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/jaas/callback/package-info.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/RolePrincipal.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/authentication/SPNEGOAuthenticator.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/authentication/FormAuthenticator.java
- \*
- /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/internal/DeferredAuthenticationState.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/SecurityHandler.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/PropertyUserStore.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/DefaultAuthenticatorFactory.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/jaas/JAASLoginService.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/jaas/PropertyUserStoreManager.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/UserStore.java
- \*
- /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/SPNEGOLoginService.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/internal/DefaultUserIdentity.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/jaas/spi/AbstractLoginModule.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/jaas/JAASRole.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/jaas/callback/ObjectCallback.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/DefaultIdentityService.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/authentication/BasicAuthenticator.java
- \*
- /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/jaas/spi/AbstractDatabaseLoginModule.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/org/eclipse/jetty/security/jaas/spi/package-info.java
- \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-

jar/org/eclipse/jetty/security/SPNEGOUserPrincipal.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/authentication/SslClientCertAuthenticator.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/Authenticator.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/jaas/JAASUserPrincipal.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/jaas/callback/DefaultCallbackHandler.java  
 \*  
 /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/UserIdentity.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/jaas/callback/AbstractCallbackHandler.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/HashLoginService.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/RoleDelegateUserIdentity.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-jar/module-info.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/jaas/spi/PropertyFileLoginModule.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/LoginService.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/authentication/DigestAuthenticator.java  
 \*  
 /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/jaas/callback/RequestParameterCallback.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/internal/RoleRunAsToken.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/authentication/LoginAuthenticator.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/EmptyLoginService.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/jaas/callback/RequestCallback.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/package-info.java  
 \*  
 /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/UserPrincipal.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/ServerAuthException.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/JDBCLoginService.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-  
 jar/org/eclipse/jetty/security/Constraint.java  
 \* /opt/cola/permits/1856379050\_1701265041.4671917/0/jetty-security-12-0-3-sources-

```

jar/org/eclipse/jetty/security/AbstractLoginService.java
* /opt/cola/permits/1856379050_1701265041.4671917/0/jetty-security-12-0-3-sources-
jar/org/eclipse/jetty/security/jaas/package-info.java
* /opt/cola/permits/1856379050_1701265041.4671917/0/jetty-security-12-0-3-sources-
jar/org/eclipse/jetty/security/jaas/JAASPrincipal.java
* /opt/cola/permits/1856379050_1701265041.4671917/0/jetty-security-12-0-3-sources-
jar/org/eclipse/jetty/security/authentication/SessionAuthentication.java
*
/opt/cola/permits/1856379050_1701265041.4671917/0/jetty-security-12-0-3-sources-
jar/org/eclipse/jetty/security/authentication/package-info.java
* /opt/cola/permits/1856379050_1701265041.4671917/0/jetty-security-12-0-3-sources-
jar/org/eclipse/jetty/security/jaas/spi/DataSourceLoginModule.java
* /opt/cola/permits/1856379050_1701265041.4671917/0/jetty-security-12-0-3-sources-
jar/org/eclipse/jetty/security/jaas/spi/JDBCLoginModule.java
* /opt/cola/permits/1856379050_1701265041.4671917/0/jetty-security-12-0-3-sources-
jar/org/eclipse/jetty/security/AuthenticationState.java
* /opt/cola/permits/1856379050_1701265041.4671917/0/jetty-security-12-0-3-sources-
jar/org/eclipse/jetty/security/jaas/spi/LdapLoginModule.java

```

## 1.229 jetty-util-ajax 12.0.3

### 1.229.1 Available under license :

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```

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```

Found in path(s):

```

* /opt/cola/permits/1856378991_1701265101.9086883/0/jetty-util-ajax-12-0-3-sources-
jar/org/eclipse/jetty/util/ajax/package-info.java
* /opt/cola/permits/1856378991_1701265101.9086883/0/jetty-util-ajax-12-0-3-sources-
jar/org/eclipse/jetty/util/ajax/JSONPojoConvertor.java
* /opt/cola/permits/1856378991_1701265101.9086883/0/jetty-util-ajax-12-0-3-sources-jar/module-info.java
* /opt/cola/permits/1856378991_1701265101.9086883/0/jetty-util-ajax-12-0-3-sources-
jar/org/eclipse/jetty/util/ajax/JSONPojoConvertorFactory.java
* /opt/cola/permits/1856378991_1701265101.9086883/0/jetty-util-ajax-12-0-3-sources-
jar/org/eclipse/jetty/util/ajax/JSONCollectionConvertor.java
* /opt/cola/permits/1856378991_1701265101.9086883/0/jetty-util-ajax-12-0-3-sources-
jar/org/eclipse/jetty/util/ajax/JSONObjectConvertor.java
*
/opt/cola/permits/1856378991_1701265101.9086883/0/jetty-util-ajax-12-0-3-sources-
jar/org/eclipse/jetty/util/ajax/JSONDateConvertor.java
* /opt/cola/permits/1856378991_1701265101.9086883/0/jetty-util-ajax-12-0-3-sources-
jar/org/eclipse/jetty/util/ajax/JSON.java
* /opt/cola/permits/1856378991_1701265101.9086883/0/jetty-util-ajax-12-0-3-sources-
jar/org/eclipse/jetty/util/ajax/JSONEnumConvertor.java

```

\* /opt/cola/permits/1856378991\_1701265101.9086883/0/jetty-util-ajax-12-0-3-sources-jar/org/eclipse/jetty/util/ajax/AsyncJSON.java

## 1.230 logback-core 1.4.14

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Found in path(s):

\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/DefaultTimeBasedFileNamingAndTriggeringPolicy.java

\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/SizeAndTimeBasedFNATP.java

\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/helper/TimeBasedArchiveRemover.java

\*

/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/GenericXMLConfigurator.java

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Found in path(s):

\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/DefaultProcessor.java

\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/sanity/AppenderWithinAppenderSanityChecker.java

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Found in path(s):

\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/ModelClassToModelHandlerLinkerBase.java

\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/SerializeModelModelHandler.java

\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/action/SerializeModelAction.java

\*

/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/DummyEncoder.java

\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/XTeeOutputStream.java

\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/encoder/JsonEscapeUtil.java

\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/SerializeModelModel.java

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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/sift/SiftModelHandler.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/sift/NOPSiftModelHandler.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/sift/SiftingAppenderBase.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/ImplicitModelHandler.java

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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/util/EnvUtil.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/status/StatusUtil.java

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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/AppenderModelHandler.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/AppenderRefModel.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/NamedComponentModel.java

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Found in path(s):

\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/spi/ConfigurationEventListener.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/NPEAppender.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/FileTestUtil.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/DelayingListAppender.java

\*

/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/RandomUtil.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/MockInitialContextFactory.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/FileToBufferUtil.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/EnvUtilForTests.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/testUtil/TeeOutputStream.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-



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jar/ch/qos/logback/core/spi/ConfigurationEvent.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/testUtil/TrivialStatusListener.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/testUtil/MockInitialContext.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/testUtil/StringListAppender.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/testUtil/CoreTestConstants.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/SimpleInvocationGate.java
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```
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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/SaxEventInterpreter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/helper/MonoTypedConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/ImplicitModelDataForComplexProperty.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/ConversionRuleAction.java
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jar/ch/qos/logback/core/LifeCycleManager.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/DefaultInvocationGate.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/SyslogConstants.java
```

\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/ContextBase.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/LayoutBase.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/helper/TokenConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/event/SaxEventRecorder.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/helper/RenameUtil.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/spi/LogbackLock.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/color/BoldBlueCompositeConverter.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/FixedWindowRollingPolicy.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/spi/HostClassAndPropertyDouble.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/server/Client.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/color/BlackCompositeConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/status/StatusListenerAsList.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/read/CyclicBufferAppender.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/util/StatusPrinter.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/html/CssBuilder.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/property/ResourceExistsPropertyDefiner.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/LoginAuthenticator.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/boolex/JaninoEventEvaluatorBase.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/read/ListAppender.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/PatternLayoutEncoderBase.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-

jar/ch/qos/logback/core/pattern/color/BoldRedCompositeConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/pattern/ReplacingCompositeConverter.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/joran/action/ParamAction.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/joran/util/StringToObjectConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/util/StatusListenerConfigHelper.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/spi/AbstractComponentTracker.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/spi/PreSerializationTransformer.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/spi/FilterAttachable.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/joran/spi/JoranException.java  
\*  
/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/Layout.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/pattern/color/ForegroundCompositeConverterBase.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
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jar/ch/qos/logback/core/sift/DefaultDiscriminator.java  
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jar/ch/qos/logback/core/OutputStreamAppender.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/pattern/color/BoldWhiteCompositeConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/joran/action/ImplicitActionDataForBasicProperty.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/pattern/util/AlmostAsIsEscapeUtil.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/recovery/RecoveryCoordinator.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/pattern/PatternLayoutBase.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/recovery/ResilientOutputStreamBase.java  
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jar/ch/qos/logback/core/sift/SiftProcessor.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/joran/action/NewRuleAction.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/joran/action/SiftAction.java

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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/util/ConfigurationWatchListUtil.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/spi/DefaultNestedComponentRegistry.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/DynamicConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/conditional/PropertyEvalScriptBuilder.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/util/AsIsEscapeUtil.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/action/AppenderRefAction.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/net/ssl/KeyStoreFactoryBean.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/rolling/TriggeringPolicy.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/rolling/helper/DateTokenConverter.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/joran/event/stax/BodyEvent.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/joran/spi/ElementPath.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/util/PropertySetterException.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/net/server/RemoteReceiverStreamClient.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/util/IncompatibleClassException.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/net/ssl/SSLConfigurable.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/spi/ContextAware.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/pattern/Converter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/pattern/parser/Compiler.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/pattern/color/GreenCompositeConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/filter/AbstractMatcherFilter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/encoder/NonClosableInputStream.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/net/ssl/SSLContextFactoryBean.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/sift/AppenderFactory.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-  
jar/ch/qos/logback/core/sift/AppenderFactoryUsingSiftModel.java

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/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/filter/EvaluatorFilter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/action/PreconditionValidator.java
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jar/ch/qos/logback/core/status/Status.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/server/RemoteReceiverClient.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/AbstractSocketAppender.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/subst/NodeToStringTransformer.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
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/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/StatusBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/hook/DefaultShutdownHook.java
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jar/ch/qos/logback/core/joran/conditional/Condition.java
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jar/ch/qos/logback/core/hook/ShutdownHookBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/hook/ShutdownHook.java
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jar/ch/qos/logback/core/pattern/color/RedCompositeConverter.java
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/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/NoAutoStartUtil.java
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jar/ch/qos/logback/core/util/AggregationType.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/sift/AbstractDiscriminator.java
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jar/ch/qos/logback/core/rolling/helper/Compressor.java
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jar/ch/qos/logback/core/joran/spi/ConfigurationWatchList.java
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jar/ch/qos/logback/core/subst/Token.java
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jar/ch/qos/logback/core/rolling/SizeAndTimeBasedRollingPolicy.java
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jar/ch/qos/logback/core/pattern/IdentityCompositeConverter.java
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/PostCompileProcessor.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/RollingFileAppender.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/spi/ComponentTracker.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/ObjectWriterFactory.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/parser/SimpleKeywordNode.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/event/StartEvent.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/server/AbstractServerSocketAppender.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/SyslogAppenderBase.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/helpers/CyclicBuffer.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/helper/SizeAndTimeBasedArchiveRemover.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/color/GrayCompositeConverter.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/spi/CyclicBufferTracker.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/status/OnPrintStreamStatusListenerBase.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/action/ShutdownHookAction.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/node/ComponentNode.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/Appender.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/color/CyanCompositeConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/status/OnConsoleStatusListener.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/util/CharSequenceState.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/color/ANSIConstants.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/UnsynchronizedAppenderBase.java  
\*  
/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/util/ContentTypeUtil.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/recovery/ResilientFileOutputStream.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/server/ServerRunner.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/action/ImplicitModelData.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/color/BoldYellowCompositeConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/helper/ArchiveRemover.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/ssl/KeyManagerFactoryFactoryBean.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/status/OnErrorConsoleStatusListener.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/color/WhiteCompositeConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/color/BoldGreenCompositeConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/util/Loader.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/html/IThrowableRenderer.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/server/ServerSocketListener.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/html/HTMLLayoutBase.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/subst/Tokenizer.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/server/ClientVisitor.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/encoder/LayoutWrappingEncoder.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/action/DefinePropertyAction.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/spi/NoAutoStart.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/CompositeConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/parser/TokenStream.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/AsyncAppenderBase.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/spi/ActionException.java  
\*  
/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/parser/Token.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/util/OptionHelper.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/action/TimestampAction.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/server/SSLServerSocketAppenderBase.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/spi/FilterReply.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/color/BoldMagentaCompositeConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/parser/CompositeNode.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/event/stax/EndEvent.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/boolex/EventEvaluator.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/boolex/EvaluationException.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/event/EndEvent.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/spi/DefaultClass.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/util/IEscapeUtil.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/SMTPAppenderBase.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/subst/Node.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/Context.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/util/CachingDateFormatter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/pattern/LiteralConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/spi/SimpleRuleStore.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/PropertyDefinerBase.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/util/ExecutorServiceUtil.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/util/FileSize.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/helper/RollingCalendar.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/server/ConcurrentServerRunner.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/ssl/SSL.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/rolling/helper/IntegerTokenConverter.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/ssl/SSLConfiguration.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/spi/ScanException.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/util/DatePatternToRegexUtil.java

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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/StringCollectionUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/util/SystemInfo.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/server/RemoteReceiverServerRunner.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/AutoFlushingObjectWriter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/boolex/Matcher.java
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jar/ch/qos/logback/core/util/DynamicClassLoadingException.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/FormattingConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/helpers/ThrowableToStringArray.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/encoder/EchoEncoder.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/ElementSelector.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/spi/ContextAwareBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/TimeBasedFileNamingAndTriggeringPolicyBase.java
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/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/encoder/ByteArrayUtil.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/ConfigurableSSLServerSocketFactory.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/spi/EventPlayer.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/rolling/RolloverFailure.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/pattern/color/BoldCyanCompositeConverter.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/server/ServerListener.java
*

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/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/ssl/SecureRandomFactoryBean.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/ViewStatusMessagesServletBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/status/HttpStatus.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/LogbackException.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/event/SaxEvent.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/JoranConstants.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/helpers/Transform.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/html/NOPTrowableRenderer.java
*
/opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/net/DefaultSocketConnector.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/conditional/PropertyWrapperForScripts.java
No license file was found, but licenses were detected in source scan.
```

```
/**
* Logback: the reliable, generic, fast and flexible logging framework.
* Copyright (C) 1999-2022, QOS.ch. All rights reserved.
*
* This program and the accompanying materials are dual-licensed under
* either the terms of the Eclipse Public License v1.0 as published by
* the Eclipse Foundation
*
* or (per the licensee's choosing)
*
* under the terms of the GNU Lesser General Public License version 2.1
* as published by the Free Software Foundation.
*/
```

Found in path(s):

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* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/JoranConfiguratorBase.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/joran/util/ParentTag_Tag_Class_Tuple.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/model/processor/PhaseIndicator.java
* /opt/cola/permits/1862824011_1701915195.1574955/0/logback-core-1-4-14-sources-
jar/ch/qos/logback/core/model/InsertFromJNDIModel.java
*
```

/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/DefineModel.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/ImplicitModel.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/ShutdownHookModelHandler.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/TimestampModel.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/conditional/ThenAction.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/ShutdownHookModel.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/action/ImplicitModelAction.java  
\*  
/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/conditional/ElseAction.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/ImportModel.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/ComponentModel.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/sanity/SanityChecker.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/ModelConstants.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/joran/action/BaseModelAction.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/Model.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/RefContainerDependencyAnalyser.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/conditional/IfModel.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/DependencyDefinition.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/AppenderRefDependencyAnalyser.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/ModelInterpretationContext.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/TimestampModelHandler.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/util/TagUtil.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/EventEvaluatorModel.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/SequenceNumberGeneratorModel.java  
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/opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/conditional/ElseModel.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/ModelHandlerFactoryMethod.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/net/HardenedObjectInputStream.java  
\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/conditional/ElseModelHandler.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/processor/conditional/IfModelHandler.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/AppenderModel.java  
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\* /opt/cola/permits/1862824011\_1701915195.1574955/0/logback-core-1-4-14-sources-jar/ch/qos/logback/core/model/SiftModel.java



# 1.231 snappy-java 1.1.10.5

## 1.231.1 Available under license :

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Manifest-Version: 1.0

Bnd-LastModified: 1695799258578

Bundle-ActivationPolicy: lazy

Bundle-Activator: org.xerial.snappy.SnappyBundleActivator

Bundle-Description: snappy-java: A fast compression/decompression library

Bundle-DocURL: <http://www.xerial.org/>

Bundle-License: <http://www.apache.org/licenses/LICENSE-2.0.txt>

Bundle-ManifestVersion: 2

Bundle-Name: snappy-java: A fast compression/decompression library

Bundle-NativeCode: org/xerial/snappy/native/Windows/x86\_64/snappyjava.dll;osname=win32;processor=x86-64,org/xerial/snappy/native/Windows/x86\_64/snappyjava.dll;osname=win32;processor=x64,org/xerial/snappy/native/Windows/x86\_64/snappyjava.dll;osname=win32;processor=amd64,org/xerial/snappy/native/Windows/x86/snappyjava.dll;osname=win32;processor=x86,org/xerial/snappy/native/Mac/x86/libsnappyjava.jnilib;osname=macosx;processor=x86,org/xerial/snappy/native/Mac/x86\_64/libsnappyjava.dylib;osname=macosx;processor=x86-64,org/xerial/snappy/native/Mac/aarch64/libsnappyjava.dylib;osname=macosx;processor=aarch64,org/xerial/snappy/native/Linux/x86\_64/libsnappyjava.so;osname=linux;processor=x86-64,org/xerial/snappy/native/Linux/x86\_64/libsnappyjava.so;osname=linux;processor=x64,org/xerial/snappy/native/Linux/x86\_64/libsnappyjava.so;osname=linux;processor=amd64,org/xerial/snappy/native/Linux/x86/libsnappyjava.so;osname=linux;processor=x86,org/xerial/snappy/native/Linux/aarch64/libsnappyjava.so;osname=linux;processor=aarch64,org/xerial/snappy/native/Linux/riscv64/libsnappyjava.so;osname=linux;processor=riscv64,org/xerial/snappy/native/Linux/arm/libsnappyjava.so;osname=linux;processor=arm,org/xerial/snappy/native/Linux/armv7/libsnappyjava.so;osname=linux;processor=arm\_le,org/xerial/snappy/native/Linux/ppc64/libsnappyjava.so;osname=linux;processor=ppc64le,org/xerial/snappy/native/Linux/s390x/libsnappyjava.so;osname=linux;processor=s390x,org/xerial/snappy/native/AIX/ppc/libsnappyjava.a;osname=aix;processor=ppc,org/xerial/snappy/native/AIX/ppc64/libsnappyjava.a;osname=aix;processor=ppc64,org/xerial/snappy/native/SunOS/x86/libsnappyjava.so;osname=sunos;processor=x86,org/xerial/snappy/native/SunOS/x86\_64/libsnappyjava.so;osname=sunos;processor=x86-64,org/xerial/snappy/native/SunOS/sparc/libsnappyjava.so;osname=sunos;processor=sparc

Bundle-SymbolicName: org.xerial.snappy.snappy-java

Bundle-Vendor: xerial.org

Bundle-Version: 1.1.10.5

Created-By: 11.0.20 (Azul Systems, Inc.)

Export-Package: org.xerial.snappy;uses:="org.osgi.framework,org.xerial

```
.snappy.buffer.org.xerial.snappy.pool";version="1.1.10",org.xerial.sn
appy.buffer;version="1.1.10",org.xerial.snappy.pool;version="1.1.10"
Implementation-Title: snappy-java
Implementation-URL: https://github.com/xerial/snappy-java
Implementation-Vendor: xerial.org
Implementation-Vendor-Id: org.xerial.snappy
Implementation-Version: 1.1.10.5
Import-Package: org.osgi.framework;version="[1.5,2)"
Private-Package:
 org.xerial.snappy.native.AIX.ppc,org.xerial.snappy.na
tive.AIX.ppc64,org.xerial.snappy.native.FreeBSD.x86_64,org.xerial.sna
ppy.native.Linux.aarch64,org.xerial.snappy.native.Linux.android-aarch
64,org.xerial.snappy.native.Linux.android-arm,org.xerial.snappy.nativ
e.Linux.arm,org.xerial.snappy.native.Linux.armv6,org.xerial.snappy.na
tive.Linux.armv7,org.xerial.snappy.native.Linux.ppc,org.xerial.snappy
.native.Linux.ppc64,org.xerial.snappy.native.Linux.ppc64le,org.xerial
.snappy.native.Linux.riscv64,org.xerial.snappy.native.Linux.s390x,org
.xerial.snappy.native.Linux.x86,org.xerial.snappy.native.Linux.x86_64
,org.xerial.snappy.native.Mac.aarch64,org.xerial.snappy.native.Mac.x8
6,org.xerial.snappy.native.Mac.x86_64,org.xerial.snappy.native,org.xe
rial.snappy.native.SunOS.sparc,org.xerial.snappy.native.SunOS.x86,org
.xerial.snappy.native.SunOS.x86_64,org.xerial.snappy.native.Windows.a
arch64,org.xerial.snappy.native.Windows.x86,org.xerial.snappy.native.
Windows.x86_64
Require-Capability:
 osgi.ee;filter="(&(osgi.ee=JavaSE)(version=1.7))"
Specification-Title: snappy-java
Specification-Vendor: xerial.org
Specification-Version: 1.1.10.5
Tool: Bnd-5.1.2.202007211702
```

Found in path(s):

```
* /opt/cola/permits/1866412376_1702418090.4402528/0/snappy-java-1-1-10-5-1-jar/META-INF/MANIFEST.MF
```

## 1.232 protobuf-java 3.25.1

### 1.232.1 Available under license :

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```
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/duration.proto
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/field_mask.proto
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/type.proto
*
/opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/any.proto
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-
jar/google/protobuf/source_context.proto
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/descriptor.proto
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/empty.proto
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/wrappers.proto
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/api.proto
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/timestamp.proto
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/google/protobuf/struct.proto
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```

Manifest-Version: 1.0

Created-By: mergejars

Bnd-LastModified: 1700075063475

Bundle-Description: Core Protocol Buffers library. Protocol Buffers are  
a way of encoding structured data in an efficient yet extensible format

Bundle-DocURL: <https://developers.google.com/protocol-buffers/>

Bundle-License: <https://opensource.org/licenses/BSD-3-Clause>

Bundle-ManifestVersion: 2

Bundle-Name: Protocol Buffers [Core]

Bundle-SymbolicName: com.google.protobuf

Bundle-Version: 3.25.1

Export-Package: com.google.protobuf;version="3.25.1",com.google.protobuf  
.compiler;version="3.25.1";uses:="com.google.protobuf"

Import-Package: com.google.protobuf;version="[3.25,4)",sun.misc;resoluti  
on:=optional

Require-Capability: osgi.ee;filter="(&(osgi.ee=JavaSE)(version=1.8))"

Tool: Bnd-6.4.0.202211291949

Target-Label: //java/core:lite\_runtime\_only

Found in path(s):

```
* /opt/cola/permits/1870521345_1702990628.701057/0/protobuf-java-3-25-1-jar/META-INF/MANIFEST.MF
```

## 1.233 jline 3.20.0

## 1.233.1 Available under license :

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\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/builtins/Options.java

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/opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/Completer.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/style/StyleSource.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/utils/Colors.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/History.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/utils/NonBlockingInputStreamImpl.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/Size.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/style/StyleExpression.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/style/StyleFactory.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/keymap/BindingReader.java  
\*  
/opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/MaskingCallback.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/ParsedLine.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/style/Styler.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/utils/NonBlockingInputStream.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/PosixPtyTerminal.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/utils/StyleResolver.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/utils/NonBlockingReader.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/jna/win/Kernel32.java  
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\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/Candidate.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/Highlighter.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/AbstractPty.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/impl/completer/StringsCompleter.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/impl/completer/ArgumentCompleter.java  
\*

/opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/AbstractWindowsTerminal.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/Utils/Status.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/builtins/ConfigurationPath.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/builtins/Tmux.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/Editor.java  
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\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/console/impl/ConsoleEngineImpl.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/impl/history/DefaultHistory.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/builtins/Styles.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/LineReader.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/console/impl/SystemRegistryImpl.java  
\*  
/opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/console/ArgDesc.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/PrintAboveWriter.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/Utils/AttributedCharSequence.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/builtins/Completers.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/builtins/Commands.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/AbstractTerminal.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/Utils/AttributedStyle.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/console/Printer.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/impl/CompletionMatcherImpl.java  
\*  
/opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/console/SystemRegistry.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-

jar/org/jline/console/impl/DefaultPrinter.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-  
jar/org/jline/reader/impl/DefaultHighlighter.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-  
jar/org/jline/console/impl/SystemHighlighter.java  
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* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/Utils/package-info.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/terminal/impl/AbstractPosixTerminal.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/Utils/Levenshtein.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/terminal/impl/ExecPty.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/terminal/impl/jna/win/WindowsAnsiWriter.java
*
/opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/reader/UserInterruptException.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/Expander.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/Utils/DiffHelper.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/Keymap/KeyMap.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/reader/impl/UndoTree.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/reader/impl/completer/NullCompleter.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/package-info.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/reader/impl/completer/package-info.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/terminal/impl/CursorSupport.java
*
/opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/Widget.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/reader/impl/history/package-info.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/terminal/impl/NativeSignalHandler.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/Reference.java
```



\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/spi/Pty.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/package-info.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/impl/AttributedString.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/MouseEvent.java  
\*  
/opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/MouseSupport.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/impl/WCWidth.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/impl/completer/AggregateCompleter.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/builtins/Source.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/impl/OSUtils.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/impl/InputStreamReader.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/impl/DefaultExpander.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/Cursor.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/impl/ClosedException.java  
\*  
/opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/impl/completer/EnumCompleter.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/Binding.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/impl/ShutdownHooks.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/Attributes.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/Macro.java  
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*/
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```

Found in path(s):

```
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/builtins/ScreenTerminal.java
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```

```
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```

```
auto_left_margin, bw, bw
auto_right_margin, am, am
back_color_erase, bce, ut
can_change, ccc, cc
ceol_standout_glitch, xhp, xs
col_addr_glitch, xhpa, YA
cpi_changes_res, cpix, YF
cr_cancels_micro_mode, crxm, YB
dest_tabs_magic_smso, xt, xt
eat_newline_glitch, xenl, xn
erase_overstrike, eo, eo
generic_type, gn, gn
hard_copy, hc, hc
hard_cursor, chts, HC
has_meta_key, km, km
has_print_wheel, daisy, YC
has_status_line, hs, hs
hue_lightness_saturation, hls, hl
insert_null_glitch, in, in
lpi_changes_res, lpix, YG
```

memory\_above, da, da  
memory\_below, db, db  
move\_insert\_mode, mir, mi  
move\_standout\_mode, msgr, ms  
needs\_xon\_xoff, nxon, nx  
no\_esc\_ctlc, xsb, xb  
no\_pad\_char, npc,  
NP  
non\_dest\_scroll\_region, ndscr, ND  
non\_rev\_rmcup, nrrmc, NR  
over\_strike, os, os  
prtr\_silent, mc5i, 5i  
row\_addr\_glitch, xvpa, YD  
semi\_auto\_right\_margin, sam, YE  
status\_line\_esc\_ok, eslok, es  
tilde\_glitch, hz, hz  
transparent\_underline, ul, ul  
xon\_xoff, xon, xo  
columns, cols, co  
init\_tabs, it, it  
label\_height, lh, lh  
label\_width, lw, lw  
lines, lines, li  
lines\_of\_memory, lm, lm  
magic\_cookie\_glitch, xmc, sg  
max\_attributes, ma, ma  
max\_colors, colors, Co  
max\_pairs, pairs, pa  
maximum\_windows, wnum, MW  
no\_color\_video, ncv, NC  
num\_labels, nlab, NI  
padding\_baud\_rate, pb, pb  
virtual\_terminal, vt, vt  
width\_status\_line, wsl, ws  
bit\_image\_entwining, bitwin, Yo  
bit\_image\_type, bitype, Yp  
buffer\_capacity, bufisz, Ya  
buttons, btns, BT  
dot\_horz\_spacing, spinh, Yc  
dot\_vert\_spacing, spinv, Yb  
max\_micro\_address, maddr, Yd  
max\_micro\_jump, mjump, Ye  
micro\_col\_size, mcs, Yf  
micro\_line\_size, mls, Yg  
number\_of\_pins, npins, Yh  
output\_res\_char, orc, Yi  
output\_res\_horz\_inch, orhi, Yk  
output\_res\_line, orl, Yj

output\_res\_vert\_inch,  
orvi, Yl  
print\_rate, cps, Ym  
wide\_char\_size, widcs, Yn  
acs\_chars, acsc, ac  
back\_tab, cbt, bt  
bell, bel, bl  
carriage\_return, cr, cr  
change\_char\_pitch, cpi, ZA  
change\_line\_pitch, lpi, ZB  
change\_res\_horz, chr, ZC  
change\_res\_vert, cvr, ZD  
change\_scroll\_region, csr, cs  
char\_padding, rmp, rP  
clear\_all\_tabs, tbc, ct  
clear\_margins, mgc, MC  
clear\_screen, clear, cl  
clr\_bol, e1l, cb  
clr\_eol, el, ce  
clr\_eos, ed, cd  
column\_address, hpa, ch  
command\_character, cmdch, CC  
create\_window, cwin, CW  
cursor\_address, cup, cm  
cursor\_down, cud1, do  
cursor\_home, home, ho  
cursor\_invisible, civis, vi  
cursor\_left, cub1, le  
cursor\_mem\_address, mrcup, CM  
cursor\_normal, cnorm, ve  
cursor\_right, cuf1, nd  
cursor\_to\_ll, ll, ll  
cursor\_up, cuu1, up  
cursor\_visible, cvvis, vs  
define\_char, defc, ZE  
delete\_character, dch1, dc  
delete\_line, dl1, dl  
dial\_phone, dial, DI  
dis\_status\_line, dsl, ds  
display\_clock, dclk, DK  
down\_half\_line, hd, hd  
ena\_acs, enacs, eA  
enter\_alt\_charset\_mode, smacs, as  
enter\_am\_mode, smam,  
SA  
enter\_blink\_mode, blink, mb  
enter\_bold\_mode, bold, md  
enter\_ca\_mode, smcup, ti

enter\_delete\_mode, smdc, dm  
enter\_dim\_mode, dim, mh  
enter\_doublewide\_mode, swidm, ZF  
enter\_draft\_quality, sdrfq, ZG  
enter\_insert\_mode, smir, im  
enter\_italics\_mode, sitm, ZH  
enter\_leftward\_mode, slm, ZI  
enter\_micro\_mode, smicm, ZJ  
enter\_near\_letter\_quality, snlq, ZK  
enter\_normal\_quality, snrmq, ZL  
enter\_protected\_mode, prot, mp  
enter\_reverse\_mode, rev, mr  
enter\_secure\_mode, invis, mk  
enter\_shadow\_mode, sshm, ZM  
enter\_standout\_mode, smso, so  
enter\_subscript\_mode, ssubm, ZN  
enter\_superscript\_mode, ssupm, ZO  
enter\_underline\_mode, smul, us  
enter\_upward\_mode, sum, ZP  
enter\_xon\_mode, smxon, SX  
erase\_chars, ech, ec  
exit\_alt\_charset\_mode, rmacs, ae  
exit\_am\_mode, rmam, RA  
exit\_attribute\_mode, sgr0, me  
exit\_ca\_mode, rmcup, te  
exit\_delete\_mode, rmdc, ed  
exit\_doublewide\_mode, rwidm, ZQ  
exit\_insert\_mode, rmir, ei  
exit\_italics\_mode, ritm, ZR  
exit\_leftward\_mode, rlm, ZS  
exit\_micro\_mode, rmicm, ZT  
exit\_shadow\_mode, rshm,  
ZU  
exit\_standout\_mode, rmso, se  
exit\_subscript\_mode, rsubm, ZV  
exit\_superscript\_mode, rsupm, ZW  
exit\_underline\_mode, rmul, ue  
exit\_upward\_mode, rum, ZX  
exit\_xon\_mode, rmxon, RX  
fixed\_pause, pause, PA  
flash\_hook, hook, fh  
flash\_screen, flash, vb  
form\_feed, ff, ff  
from\_status\_line, fsl, fs  
goto\_window, wingo, WG  
hangup, hup, HU  
init\_1string, is1, i1  
init\_2string, is2, is

init\_3string, is3, i3  
init\_file, if, if  
init\_prog, iprog, iP  
initialize\_color, initc, Ic  
initialize\_pair, initp, Ip  
insert\_character, ich1, ic  
insert\_line, il1, al  
insert\_padding, ip, ip  
key\_a1, ka1, K1  
key\_a3, ka3, K3  
key\_b2, kb2, K2  
key\_backspace, kbs, kb  
key\_beg, kbeg, @1  
key\_btab, kcbt, kB  
key\_c1, kc1, K4  
key\_c3, kc3, K5  
key\_cancel, kcan, @2  
key\_catab, ktbc, ka  
key\_clear, kclr, kC  
key\_close, kclo, @3  
key\_command, kcmd, @4  
key\_copy, kcpy, @5  
key\_create, kcrt, @6  
key\_ctab, kctab, kt  
key\_dc, kdch1, kD  
key\_dl, kdl1, kL  
key\_down, kcud1, kd  
key\_eic, krmir, kM  
key\_end, kend, @7  
key\_enter, kent, @8  
key\_eol, kel, kE  
key\_eos,  
ked, kS  
key\_exit, kext, @9  
key\_f0, kf0, k0  
key\_f1, kf1, k1  
key\_f10, kf10, k;  
key\_f11, kf11, F1  
key\_f12, kf12, F2  
key\_f13, kf13, F3  
key\_f14, kf14, F4  
key\_f15, kf15, F5  
key\_f16, kf16, F6  
key\_f17, kf17, F7  
key\_f18, kf18, F8  
key\_f19, kf19, F9  
key\_f2, kf2, k2  
key\_f20, kf20, FA

key\_f21, kf21, FB  
key\_f22, kf22, FC  
key\_f23, kf23, FD  
key\_f24, kf24, FE  
key\_f25, kf25, FF  
key\_f26, kf26, FG  
key\_f27, kf27, FH  
key\_f28, kf28, FI  
key\_f29, kf29, FJ  
key\_f3, kf3, k3  
key\_f30, kf30, FK  
key\_f31, kf31, FL  
key\_f32, kf32, FM  
key\_f33, kf33, FN  
key\_f34, kf34, FO  
key\_f35, kf35, FP  
key\_f36, kf36, FQ  
key\_f37, kf37, FR  
key\_f38, kf38, FS  
key\_f39, kf39, FT  
key\_f4, kf4, k4  
key\_f40, kf40, FU  
key\_f41, kf41, FV  
key\_f42, kf42, FW  
key\_f43, kf43, FX  
key\_f44, kf44, FY  
key\_f45, kf45, FZ  
key\_f46, kf46, Fa  
key\_f47, kf47, Fb  
key\_f48, kf48, Fc  
key\_f49, kf49, Fd  
key\_f5, kf5, k5  
key\_f50, kf50, Fe  
key\_f51, kf51, Ff  
key\_f52, kf52, Fg  
key\_f53, kf53, Fh  
key\_f54, kf54, Fi  
key\_f55, kf55, Fj  
key\_f56, kf56, Fk  
key\_f57, kf57, Fl  
key\_f58, kf58,  
Fm  
key\_f59, kf59, Fn  
key\_f6, kf6, k6  
key\_f60, kf60, Fo  
key\_f61, kf61, Fp  
key\_f62, kf62, Fq  
key\_f63, kf63, Fr

key\_f7, kf7, k7  
key\_f8, kf8, k8  
key\_f9, kf9, k9  
key\_find, kfnd, @0  
key\_help, khlp, %1  
key\_home, khome, kh  
key\_ic, kich1, kI  
key\_il, kill, kA  
key\_left, kcub1, kI  
key\_ll, kll, kH  
key\_mark, kmrk, %2  
key\_message, kmsg, %3  
key\_move, kmov, %4  
key\_next, knxt, %5  
key\_npage, knp, kN  
key\_open, kopn, %6  
key\_options, kopt, %7  
key\_ppage, kpp, kP  
key\_previous, kprv, %8  
key\_print, kpri, %9  
key\_redo, krdo, %0  
key\_reference, kref, &1  
key\_refresh, krfr, &2  
key\_replace, krpl, &3  
key\_restart, krst, &4  
key\_resume, kres, &5  
key\_right, kcuf1, kr  
key\_save, ksav, &6  
key\_sbeg, kBEG, &9  
key\_scancel, kCAN, &0  
key\_scommand, kCMD, \*1  
key\_scopy, kCPY, \*2  
key\_screate, kCRT, \*3  
key\_sdc, kDC, \*4  
key\_sdl, kDL, \*5  
key\_select, kslt, \*6  
key\_send, kEND, \*7  
key\_seol, kEOL, \*8  
key\_sexit, kEXT, \*9  
key\_sf, kind, kF  
key\_sfind, kFND, \*0  
key\_shelp, kHLP, #1  
key\_shome, kHOM, #2  
key\_sic, kIC, #3  
key\_sleft, kLFT, #4  
key\_smessage,  
kMSG, %a  
key\_smove, kMOV, %b



key\_snext, kNXT, %c  
key\_soptions, kOPT, %d  
key\_sprevious, kPRV, %e  
key\_sprint, kPRT, %f  
key\_sr, kri, kR  
key\_sredo, kRDO, %g  
key\_sreplace, kRPL, %h  
key\_sright, kRIT, %i  
key\_srsume, kRES, %j  
key\_ssave, kSAV, !1  
key\_ssuspend, kSPD, !2  
key\_stab, khts, kT  
key\_sundo, kUND, !3  
key\_suspend, kspd, &7  
key\_undo, kund, &8  
key\_up, kcuu1, ku  
keypad\_local, rmkx, ke  
keypad\_xmit, smkx, ks  
lab\_f0, lf0, l0  
lab\_f1, lf1, l1  
lab\_f10, lf10, la  
lab\_f2, lf2, l2  
lab\_f3, lf3, l3  
lab\_f4, lf4, l4  
lab\_f5, lf5, l5  
lab\_f6, lf6, l6  
lab\_f7, lf7, l7  
lab\_f8, lf8, l8  
lab\_f9, lf9, l9  
label\_format, fln, Lf  
label\_off, rmln, LF  
label\_on, smln, LO  
meta\_off, rmm, mo  
meta\_on, smm, mm  
micro\_column\_address, mhpa, ZY  
micro\_down, mcud1, ZZ  
micro\_left, mcub1, Za  
micro\_right, mcuf1, Zb  
micro\_row\_address, mvpa, Zc  
micro\_up, mcuu1, Zd  
newline, nel, nw  
order\_of\_pins, porder, Ze  
orig\_colors, oc, oc  
orig\_pair, op, op  
pad\_char, pad, pc  
parm\_dch, dch, DC  
parm\_delete\_line, dl, DL  
parm\_down\_cursor, cud, DO

parm\_down\_micro,  
  mcud, Zf  
parm\_ich, ich, IC  
parm\_index, indn, SF  
parm\_insert\_line, il, AL  
parm\_left\_cursor, cub, LE  
parm\_left\_micro, mcub, Zg  
parm\_right\_cursor, cuf, RI  
parm\_right\_micro, mcuf, Zh  
parm\_rindex, rin, SR  
parm\_up\_cursor, cuu, UP  
parm\_up\_micro, mcuu, Zi  
pkey\_key, pfkey, pk  
pkey\_local, pfloc, pl  
pkey\_xmit, pfx, px  
plab\_norm, pln, pn  
print\_screen, mc0, ps  
ptrr\_non, mc5p, pO  
ptrr\_off, mc4, pf  
ptrr\_on, mc5, po  
pulse, pulse, PU  
quick\_dial, qdial, QD  
remove\_clock, rmclk, RC  
repeat\_char, rep, rp  
req\_for\_input, rfi, RF  
reset\_1string, rs1, r1  
reset\_2string, rs2, r2  
reset\_3string, rs3, r3  
reset\_file, rf, rf  
restore\_cursor, rc, rc  
row\_address, vpa, cv  
save\_cursor, sc, sc  
scroll\_forward, ind, sf  
scroll\_reverse, ri, sr  
select\_char\_set, scs, Zj  
set\_attributes, sgr, sa  
set\_background, setb, Sb  
set\_bottom\_margin, smgb, Zk  
set\_bottom\_margin\_parm, smgbp, Zl  
set\_clock, sclk, SC  
set\_color\_pair, scp, sp  
set\_foreground, setf, Sf  
set\_left\_margin, smgl, ML  
set\_left\_margin\_parm, smglp, Zm  
set\_right\_margin,  
  smgr, MR  
set\_right\_margin\_parm, smgrp, Zn  
set\_tab, hts, st

set\_top\_margin, smgt, Zo  
set\_top\_margin\_parm, smgtp, Zp  
set\_window, wind, wi  
start\_bit\_image, sbim, Zq  
start\_char\_set\_def, scsd, Zr  
stop\_bit\_image, rbim, Zs  
stop\_char\_set\_def, rcsd, Zt  
subscript\_characters, subcs, Zu  
superscript\_characters, supcs, Zv  
tab, ht, ta  
these\_cause\_cr, dochr, Zw  
to\_status\_line, tsl, ts  
tone, tone, TO  
underline\_char, uc, uc  
up\_half\_line, hu, hu  
user0, u0, u0  
user1, u1, u1  
user2, u2, u2  
user3, u3, u3  
user4, u4, u4  
user5, u5, u5  
user6, u6, u6  
user7, u7, u7  
user8, u8, u8  
user9, u9, u9  
wait\_tone, wait, WA  
xoff\_character, xoffc, XF  
xon\_character, xonc, XN  
zero\_motion, zerom, Zx  
alt\_scancode\_esc, scesa, S8  
bit\_image\_carriage\_return, bicr, Yv  
bit\_image\_newline, binel, Zz  
bit\_image\_repeat, birep, Xy  
char\_set\_names, csnm, Zy  
code\_set\_init, csin, ci  
color\_names, colorm, Yw  
define\_bit\_image\_region, defbi, Yx  
device\_type, devt, dv  
display\_pc\_char, dispch, S1  
end\_bit\_image\_region, endbi, Yy  
enter\_pc\_charset\_mode,  
smpch, S2  
enter\_scancode\_mode, smsc, S4  
exit\_pc\_charset\_mode, rmpch, S3  
exit\_scancode\_mode, rmsc, S5  
get\_mouse, getm, Gm  
key\_mouse, kmous, Km  
mouse\_info, minfo, Mi

pc\_term\_options, pctrm, S6  
pkey\_plab, pfxl, xl  
req\_mouse\_pos, reqmp, RQ  
scancode\_escape, scesc, S7  
set0\_des\_seq, s0ds, s0  
set1\_des\_seq, s1ds, s1  
set2\_des\_seq, s2ds, s2  
set3\_des\_seq, s3ds, s3  
set\_a\_background, setab, AB  
set\_a\_foreground, setaf, AF  
set\_color\_band, setcolor, Yz  
set\_lr\_margin, smglr, ML  
set\_page\_length, slines, YZ  
set\_tb\_margin, smgtb, MT  
enter\_horizontal\_hl\_mode, ehlm, Xh  
enter\_left\_hl\_mode, elhlm, Xl  
enter\_low\_hl\_mode, elohlm, Xo  
enter\_right\_hl\_mode, erhlm, Xr  
enter\_top\_hl\_mode, ethlm, Xt  
enter\_vertical\_hl\_mode, evhlm, Xv  
set\_a\_attributes, sgr1, sA  
set\_pglen\_inch, slength, sL

Found in path(s):

\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/utils/capabilities.txt

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\* Java TelnetD library (embeddable telnet daemon)

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\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-  
jar/org/jline/builtins/telnet/PortListener.java  
\*  
/opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-  
jar/org/jline/builtins/telnet/TelnetIO.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-  
jar/org/jline/builtins/telnet/Connection.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-  
jar/org/jline/builtins/telnet/ConnectionData.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-  
jar/org/jline/builtins/telnet/ConnectionManager.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-  
jar/org/jline/builtins/telnet/ConnectionEvent.java  
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Found in path(s):  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/builtins/ssh/Ssh.java  
\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-  
jar/org/jline/style/NopStyleSource.java



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\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/META-INF/maven/org.jline/jline-remote-ssh/pom.xml

\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/META-INF/maven/org.jline/jline/pom.xml

\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/META-INF/maven/org.jline/jline-style/pom.xml

\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/META-INF/maven/org.jline/jline-console/pom.xml

\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/META-INF/maven/org.jline/jline-terminal-jna/pom.xml

\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/META-INF/maven/org.jline/jline-builtins/pom.xml

\*

/opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/META-INF/maven/org.jline/jline-reader/pom.xml

\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/META-INF/maven/org.jline/jline-terminal/pom.xml

\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/META-INF/maven/org.jline/jline-remote-telnet/pom.xml

\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/META-INF/maven/org.jline/jline-terminal-jansi/pom.xml

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\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/impl/completer/SystemCompleter.java

\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/console/CommandInput.java

\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/jansi/JansiSupportImpl.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/widget/AutopairWidgets.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/TerminalBuilder.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/jna/JnaSupportImpl.java  
 \*  
 /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/console/impl/JlineCommandRegistry.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/impl/ReaderUtils.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/builtins/Nano.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/console/ScriptEngine.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/console/ConsoleEngine.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/utils/Log.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/console/CommandMethods.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/jna/freebsd/FreeBsdNativePty.java  
 \*  
 /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/utils/Display.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/jna/linux/LinuxNativePty.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/jna/freebsd/CLibrary.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/jansi/JansiNativePty.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/spi/JansiSupport.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/LineReaderBuilder.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/spi/JnaSupport.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/widget/AutosuggestionWidgets.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/builtins/ConsoleOptionGetter.java  
 \*  
 /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/console/CmdDesc.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/jna/win/JnaWinSysTerminal.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/terminal/impl/jna/solaris/CLibrary.java  
 \* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/widget/Widgets.java



```
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/console/CommandLine.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/terminal/impl/jansi/win/JansiWinSysTerminal.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/reader/impl/DefaultParser.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/terminal/impl/jna/JnaNativePty.java
*
/opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/terminal/impl/jna/linux/CLibrary.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/builtins/TTop.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/reader/EndOfFileException.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/console/impl/Builtins.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/reader/Parser.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/utils/ColorPalette.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/terminal/impl/jna/osx/CLibrary.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/builtins/Less.java
*
/opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/reader/impl/LineReaderImpl.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/terminal/impl/jna/osx/OsXNativePty.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/reader/CompletionMatcher.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/console/CommandRegistry.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/terminal/impl/jna/solaris/SolarisNativePty.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/utils/Signals.java
* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/console/impl/AbstractCommandRegistry.java
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```

```
black
maroon
green
```

olive  
navy  
purple  
teal  
silver  
grey  
red  
lime  
yellow  
blue  
fuchsia  
aqua  
white  
grey0  
navyblue  
darkblue  
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blue3a  
blue1  
darkgreen  
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deepskyblue4a  
deepskyblue4b  
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dodgerblue2  
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springgreen4  
turquoise4  
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springgreen3  
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lightseagreen  
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springgreen3a  
springgreen2  
cyan3  
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turquoise2  
green1  
springgreen2a  
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mediumspringgreen  
cyan2

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purple4a  
purple3  
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orange4  
grey37  
mediumpurple4  
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darkseagreen4  
paleturquoise4  
steelblue  
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chartreuse3  
darkseagreen4a  
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cadetbluea  
skyblue3  
steelblue1  
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plum4  
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mediumpurple3a

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magenta2  
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indianreda  
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hotpink2  
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violet  
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tan  
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thistle3  
plum2  
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magenta1  
orangered1  
indianred1  
indianred1a  
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hotpinka  
mediumorchid1a  
darkorange  
salmon1  
lightcoral  
palevioletred1  
orchid2  
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orange1  
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lightsalmon1  
lightpink1  
pink1  
plum1  
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lightgoldenrod2b  
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mistyrose1  
thistle1  
yellow1  
lightgoldenrod1  
khaki1  
wheat1  
cornsilk1  
grey100  
grey3  
grey7  
grey11  
grey15  
grey19  
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grey89  
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#### Found

in path(s):

\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/utills/colors.txt

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\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-

jar/org/jline/terminal/impl/jansi/win/WindowsAnsiWriter.java

\* /opt/cola/permits/1882208046\_1704836222.642235/0/jline-3-20-0-sources-2-jar/org/jline/utills/AnsiWriter.java

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```

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```

* /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/builtins/telnet/ConnectionListener.java
*
 /opt/cola/permits/1882208046_1704836222.642235/0/jline-3-20-0-sources-2-
jar/org/jline/builtins/telnet/ConnectionFilter.java

```

## 1.234 hazelcast-tpc-engine 5.3.6

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\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/META-INF/maven/com.hazelcast/hazelcast-tpc-engine/pom.xml

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List of third-party dependencies grouped by their license type:

Apache-2.0

Java Concurrency Tools Core Library:4.0.1

Third-party license texts:

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However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

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notices

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline



functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

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```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

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Found in path(s):

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/THIRD-PARTY.txt  
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Found in path(s):

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/Reactor.java  
\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/net/AsyncServerSocketBuilder.java  
\*  
/opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/ReactorType.java  
\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/net/AsyncServerSocketMetrics.java  
\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/logging/TpcLoggerFactory.java  
\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/nio/NioAsyncSocket.java  
\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/util/ReflectionUtil.java  
\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/logging/TpcLogger.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/net/AsyncSocketBuilder.java

\*

/opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/iobuffer/UnpooledIOBufferAllocator.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/nio/NioAcceptRequest.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/Option.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/util/ExceptionUtil.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/net/AsyncServerSocket.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/util/OS.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/net/AsyncSocket.java

\*

/opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/util/ThreadAffinityHelper.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/serialization/SerializableByConvention.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/util/BitUtil.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/net/package-info.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/TpcEngine.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/TpcEngineBuilder.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/iobuffer/NonConcurrentIOBufferAllocator.java

\*

/opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/nio/package-info.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/net/AsyncSocketMetrics.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/util/CloseUtil.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/iobuffer/IOBufferAllocator.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/util/Preconditions.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/nio/NioAsyncServerSocketBuilder.java

\*

/opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/util/ProgressIndicator.java



\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/net/AcceptRequest.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/nio/NioAsyncServerSocketOptions.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/ScheduledTask.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/logging/TpcLoggerLocator.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/package-info.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/nio/NioEventloop.java

\*

/opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/nio/IOVector.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/iobuffer/package-info.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/nio/NioReactor.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/util/JVM.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/nio/NioAsyncSocketBuilder.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/net/AbstractAsyncSocket.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/iobuffer/IOBuffer.java

\*

/opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/net/AsyncSocketReader.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/nio/NioReactorBuilder.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/nio/NioAsyncSocketOptions.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/util/UnsafeLocator.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/nio/NioAsyncServerSocket.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/nio/NioHandler.java

\*

/opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/ReactorBuilder.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/nio/SelectorOptimizer.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-jar/com/hazelcast/internal/tpcengine/util/CachedNanoClock.java

\* /opt/cola/permits/1883172649\_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-

```

jar/com/hazelcast/internal/tpcengine/Eventloop.java
* /opt/cola/permits/1883172649_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-
jar/com/hazelcast/internal/tpcengine/logging/JulLoggerFactory.java
* /opt/cola/permits/1883172649_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-
jar/com/hazelcast/internal/tpcengine/NopScheduler.java
* /opt/cola/permits/1883172649_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-
jar/com/hazelcast/internal/tpcengine/iobuffer/ConcurrentIOBufferAllocator.java
*
/opt/cola/permits/1883172649_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-
jar/com/hazelcast/internal/tpcengine/util/StandardNanoClock.java
* /opt/cola/permits/1883172649_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-
jar/com/hazelcast/internal/tpcengine/util/NanoClock.java
* /opt/cola/permits/1883172649_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-
jar/com/hazelcast/internal/tpcengine/Promise.java
* /opt/cola/permits/1883172649_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-
jar/com/hazelcast/internal/tpcengine/net/AsyncSocketOptions.java
* /opt/cola/permits/1883172649_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-
jar/com/hazelcast/internal/tpcengine/util/CircularQueue.java
* /opt/cola/permits/1883172649_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-
jar/com/hazelcast/internal/tpcengine/util/BufferUtil.java
* /opt/cola/permits/1883172649_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-
jar/com/hazelcast/internal/util/ThreadAffinity.java
*
/opt/cola/permits/1883172649_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-
jar/com/hazelcast/internal/tpcengine/Scheduler.java
* /opt/cola/permits/1883172649_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-
jar/com/hazelcast/internal/tpcengine/util/BoundPriorityQueue.java
* /opt/cola/permits/1883172649_1704944610.7694407/0/hazelcast-tpc-engine-5-3-6-sources-
jar/com/hazelcast/internal/tpcengine/PromiseAllocator.java

```

## 1.235 hazelcast 5.3.6

### 1.235.1 Available under license :

```

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// -----

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Objenesis

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The packages:

com.hazelcast.internal.util.collection

com.hazelcast.internal.util.concurrent

and the classes:

com.hazelcast.internal.util.QuickMath  
com.hazelcast.client.impl.protocol.util.UnsafeBuffer  
com.hazelcast.client.impl.protocol.util.BufferBuilder

contain code originating from the Agrona project  
(<https://github.com/real-logic/Agrona>).

The class com.hazelcast.internal.util.HashUtil contains code originating  
from the Koloboke project (<https://github.com/OpenHFT/Koloboke>).

The class classloading.ThreadLocalLeakTestUtils contains code originating  
from the Tomcat  
project (<https://github.com/apache/tomcat>).

com.hazelcast.internal.cluster.fd.PhiAccrualFailureDetector contains code originating  
from the Akka project (<https://github.com/akka/akka/>).

The package com.hazelcast.internal.json contains code originating  
from minimal-json project (<https://github.com/ralfstx/minimal-json>).

The class com.hazelcast.instance.impl.MobyNames contains code originating  
from The Moby Project (<https://github.com/moby/moby>).

The class com.hazelcast.internal.util.graph.BronKerboschCliqueFinder contains code  
originating from The JGraphT Project (<https://github.com/jgrapht/jgrapht>).

The packages:

com.hazelcast.sql  
com.hazelcast.jet.sql

contain code originating from the Apache Calcite (<https://github.com/apache/calcite>)

The class com.hazelcast.jet.kafka.impl.ResumeTransactionUtil contains  
code derived from the Apache Flink project.

The class com.hazelcast.internal.util.ConcurrentReferenceHashMap contains code written by Doug Lea  
and updated within the WildFly project  
(<https://github.com/wildfly/wildfly>).

The classes:

com.hazelcast.cp.internal.raft.impl.state.FollowerState  
com.hazelcast.cp.internal.raft.impl.state.FollowerStateTest  
com.hazelcast.cp.internal.raft.impl.SlowFollowerBackoffTest

contain code originating from the MicroRaft project (<https://github.com/MicroRaft/MicroRaft>)

# Jackson JSON processor

Jackson is a high-performance, Free/Open Source JSON processing library.

It was originally written by Tatu Saloranta ([tatu.saloranta@iki.fi](mailto:tatu.saloranta@iki.fi)), and has been in development since 2007.

It is currently developed by a community of developers.

## Copyright

Copyright 2007-, Tatu Saloranta ([tatu.saloranta@iki.fi](mailto:tatu.saloranta@iki.fi))

## Licensing

Jackson 2.x core and extension components are licensed under Apache License 2.0

To find the details that apply to this artifact see the accompanying LICENSE file.

## Credits

A list of contributors may be found from CREDITS(-2.x) file, which is included in some artifacts (usually source distributions); but is always available from

the source code management (SCM) system project uses.

## FastDoubleParser

jackson-core bundles a shaded copy of FastDoubleParser <<https://github.com/wrandelshofer/FastDoubleParser>>.

That code is available under an MIT license

<<https://github.com/wrandelshofer/FastDoubleParser/blob/main/LICENSE>>

under the following copyright.

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See FastDoubleParser-NOTICE for details of other source code included in FastDoubleParser and the licenses and copyrights that apply to that code.

Jackson components are licensed under Apache (Software) License, version 2.0, as per accompanying LICENSE file.

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jar/org/zeroturnaround/zip/timestamps/TimestampStrategy.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-jar/org/zeroturnaround/zip/Zips.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/timestamps/Java8TimestampStrategy.java
*
/opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/timestamps/PreJava8TimestampStrategy.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/ZipEntryUtil.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/IdentityNameMapper.java
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jar/org/zeroturnaround/zip/FileSource.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/NameMapper.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/ZipEntrySource.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/ByteSource.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
jar/org/zeroturnaround/zip/ZipInfoCallback.java
*
/opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-jar/org/zeroturnaround/zip/ZipUtil.java
* /opt/cola/permits/1886919998_1705485810.177811/0/zt-zip-1-16-sources-
```

jar/org/zeroturnaround/zip/ZTFileUtil.java

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jar/org/zeroturnaround/zip/timestamps/TimestampStrategyFactory.java

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jar/org/zeroturnaround/zip/commons/FilenameUtils.java

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jar/org/zeroturnaround/zip/commons/FileExistsException.java

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- \*
- /opt/cola/permits/1886919998\_1705485810.177811/0/zt-zip-1-16-sources-jar/org/zeroturnaround/zip/extra/AsiExtraField.java
- \* /opt/cola/permits/1886919998\_1705485810.177811/0/zt-zip-1-16-sources-jar/org/zeroturnaround/zip/extra/ZipShort.java
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## 1.239 openjdk 11.0.22

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## xwd v1.0.7

### xwd utility

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CUP Parser Generator for Java v 0.11b

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include/GL/gl.h :

Mesa 3-D
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Mesa 3-D Graphics Library v21.0.3

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include/GL/wglxext.h :

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ASM Bytecode Manipulation Framework v6.0

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1.241 zstd-jni 1.5.2-1

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Manifest-Version: 1.0

Automatic-Module-Name: com.github.luben.zstd_jni

Bnd-LastModified: 1642851452470

Bundle-Description: JNI bindings for Zstd native library that provides fast and high compression lossless algorithm for Java and all JVM languages.

Bundle-License: <https://opensource.org/licenses/BSD-2-Clause>;description=BSD 2-Clause License

Bundle-ManifestVersion: 2

Bundle-Name: zstd-jni

Bundle-NativeCode: darwin/x86_64/libzstd-jni-1.5.2-1.dylib;osname=MacO

S;osname=MacOSX;processor=x86_64, darwin/aarch64/libzstd-jni-1.5.2-1.

dylib;osname=MacOS;osname=MacOSX;processor=aarch64, freebsd/amd64/lib

zstd-jni-1.5.2-1.so;osname=FreeBSD;processor=amd64, freebsd/i386/libzstd-jni-1.5.2-1.so;osname=FreeBSD;processor=i386, linux/aarch64/libzstd-jni-1.5.2-1.so;osname=Linux;processor=aarch64, linux/amd64/libzstd-jni-1.5.2-1.so;osname=Linux;processor=amd64, linux/arm/libzstd-jni-1.5.2-1.so;osname=Linux;processor=arm, linux/i386/libzstd-jni-1.5.2-1.so;osname=Linux;processor=i386, linux/mips64/libzstd-jni-1.5.2-1.so;osname=Linux;processor=mips64, linux/ppc64/libzstd-jni-1.5.2-1.so;osname=Linux;processor=ppc64, linux/ppc64le/libzstd-jni-1.5.2-1.so;osname=Linux;processor=ppc64le, linux/s390x/libzstd-jni-1.5.2-1.so;osname=Linux;processor=s390x, win/amd64/libzstd-jni-1.5.2-1.dll;osname=Win32;processor=amd64, win/x86/libzstd-jni-1.5.2-1.dll;osname=Win32;processor=x86

Bundle-SymbolicName: com.github.luben.zstd-jni
Bundle-Vendor: com.github.luben
Bundle-Version: 1.5.2.1
Created-By: 11.0.14 (Debian)
Export-Package: com.github.luben.zstd;version="1.5.2.1",com.github.luben.zstd.util;version="1.5.2.1"
Implementation-Title: zstd-jni
Implementation-Vendor: com.github.luben
Implementation-Vendor-Id: com.github.luben
Implementation-Version: 1.5.2-1
Import-Package: org.osgi.framework;resolution:=optional
Private-Package: linux.amd64,linux.i386,linux.aarch64,linux.arm,linux.ppc64,linux.ppc64le,linux.mips64,linux.s390x,darwin.x86_64,darwin.aarch64,win.amd64,win.x86,freebsd.amd64,freebsd.i386
Require-Capability: osgi.ee;filter="(&(osgi.ee=JavaSE)(version=11.0))"
"
Specification-Title: zstd-jni
Specification-Vendor: com.github.luben
Specification-Version: 1.5.2-1
Tool: Bnd-4.0.0.201805111645

Found in path(s):

* /opt/cola/permits/1891228067_1705939701.7854912/0/zstd-jni-1-5-2-1-5-jar/META-INF/MANIFEST.MF

1.242 zlib 1.3.1

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1.245 busybox 1.36.1

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jseward@bzip.org

bzip2/libbzip2 version 1.0.4 of 20 December 2006

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1.246 bash 5.2.26-r0

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```
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```

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```

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```
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This is free software, and you are welcome to redistribute it
under certain conditions; type `show c'
for details.
```

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```
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```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

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//http-parser

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<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en"><head><!--

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</div>

</div>

<div class="bottomlang">

<p>Available Languages: en </p>

</div><div class="top"></div><div

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<script type="text/javascript"><!--><![CDATA[//><!--

var comments_shortname = 'httpd';

var comments_identifier = 'http://httpd.apache.org/docs/2.4/license.html';

(function(w, d) {

if (w.location.hostname.toLowerCase() == "httpd.apache.org") {

d.write('<div id="comments_thread"></div>');

var s = d.createElement('script');

s.type = 'text/javascript';

s.async = true;

s.src = 'https://comments.apache.org/show_comments.lua?site=' + comments_shortname + '&page=' +

comments_identifier;

(d.getElementsByTagName('head')[0] || d.getElementsByTagName('body')[0]).appendChild(s);

}

else {

d.write('<div id="comments_thread">Comments are disabled for this page at the moment.</div>');

}

})(window, document);

//><![></script></div><div id="footer">

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if (typeof(prettyPrint) !== 'undefined') {

prettyPrint();

}

//><![></script>

</body></html>

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Jackson JSON processor

Jackson is a high-performance, Free/Open Source JSON processing library.

It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007.

It is currently developed by a community of developers.

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1.252 jackson-dataformat-yaml 2.15.4

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Credits


```

# *****
# This Perl script creates a fresh ca-bundle.crt file for use with libcurl.
# It downloads certdata.txt from Mozilla's source tree (see URL below),
# then parses certdata.txt and extracts CA Root Certificates into PEM format.
# These are then processed with the OpenSSL commandline tool to produce the
# final ca-bundle.crt file.
# The script is based on the parse-certs script written by Roland Krikava.
# This Perl script works on almost any platform since its only external
# dependency is the OpenSSL commandline tool for optional text listing.
# Hacked by Guenter Knauf.
#
use Encode;
use Getopt::Std;
use MIME::Base64;
use strict;
use warnings;
use vars qw($opt_b $opt_d $opt_f $opt_h $opt_i $opt_k $opt_l $opt_m $opt_n $opt_p $opt_q $opt_s $opt_t $opt_u
$opt_v $opt_w);
use List::Util;
use Text::Wrap;
use Time::Local;
my $MOD_SHA = "Digest::SHA";
eval "require
$MOD_SHA";
if ($@) {
$MOD_SHA = "Digest::SHA::PurePerl";
eval "require $MOD_SHA";
}
eval "require LWP::UserAgent";

my %urls = (
'nss' =>
'https://hg.mozilla.org/projects/nss/raw-file/default/lib/ckfw/builtins/certdata.txt',
'central' =>
'https://hg.mozilla.org/mozilla-central/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
'beta' =>
'https://hg.mozilla.org/releases/mozilla-beta/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
'release' =>
'https://hg.mozilla.org/releases/mozilla-release/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
);

$opt_d = 'release';

# If the OpenSSL commandline is not in search path you can configure it here!
my $openssl = 'openssl';

my $version = '1.27';

```

```

$opt_w = 76; # default base64 encoded lines length

# default cert types to include in the output (default is to include CAs which may issue SSL server certs)
my $default_mozilla_trust_purposes = "SERVER_AUTH";
my $default_mozilla_trust_levels
= "TRUSTED_DELEGATOR";
$opt_p = $default_mozilla_trust_purposes . ":" . $default_mozilla_trust_levels;

my @valid_mozilla_trust_purposes = (
    "DIGITAL_SIGNATURE",
    "NON_REPUDIATION",
    "KEY_ENCIPHERMENT",
    "DATA_ENCIPHERMENT",
    "KEY_AGREEMENT",
    "KEY_CERT_SIGN",
    "CRL_SIGN",
    "SERVER_AUTH",
    "CLIENT_AUTH",
    "CODE_SIGNING",
    "EMAIL_PROTECTION",
    "IPSEC_END_SYSTEM",
    "IPSEC_TUNNEL",
    "IPSEC_USER",
    "TIME_STAMPING",
    "STEP_UP_APPROVED"
);

my @valid_mozilla_trust_levels = (
    "TRUSTED_DELEGATOR", # CAs
    "NOT_TRUSTED",      # Don't trust these certs.
    "MUST_VERIFY_TRUST", # This explicitly tells us that it ISN'T a CA but is otherwise ok. In other words, this
                        # should tell the app to ignore any other sources that claim this is a CA.
    "TRUSTED"          # This cert is trusted, but only for itself and not for delegates (i.e. it is not a CA).
);

my $default_signature_algorithms = $opt_s = "MD5";

my @valid_signature_algorithms = (
    "MD5",
    "SHA1",
    "SHA256",
    "SHA384",
    "SHA512"
);

$0 =~ s@.*(//\)\)\@ @;
$Getopt::Std::STANDARD_HELP_VERSION = 1;
getopts('bd:fhiklmnp:qs:tuvw:');

```

```

if(!defined($opt_d)) {
    # to make plain "-d" use not cause warnings, and actually still work
    $opt_d = 'release';
}

# Use predefined URL or else custom URL specified on command line.
my $url;
if(defined($urls{$opt_d})) {
    $url = $urls{$opt_d};
    if(!$opt_k && $url !~ /^https:\//i) {
        die "The URL for '$opt_d' is not HTTPS. Use -k to override (insecure).\n";
    }
}
else {
    $url = $opt_d;
}

my $curl = `curl -V`;

if ($opt_i) {
    print ("=" x 78 . "\n");
    print "Script Version      : $version\n";
    print "Perl Version           : $]\n";
    print "Operating System Name    : $^O\n";
    print "Getopt::Std.pm Version    : ${Getopt::Std::VERSION}\n";
    print "Encode::Encoding.pm Version : ${Encode::Encoding::VERSION}\n";
    print "MIME::Base64.pm Version   : ${MIME::Base64::VERSION}\n";
    print "LWP::UserAgent.pm
Version      : ${LWP::UserAgent::VERSION}\n" if($LWP::UserAgent::VERSION);
    print "LWP.pm Version      : ${LWP::VERSION}\n" if($LWP::VERSION);
    print "Digest::SHA.pm Version      : ${Digest::SHA::VERSION}\n" if ($Digest::SHA::VERSION);
    print "Digest::SHA::PurePerl.pm Version : ${Digest::SHA::PurePerl::VERSION}\n" if
($Digest::SHA::PurePerl::VERSION);
    print ("=" x 78 . "\n");
}

sub warning_message() {
    if ( $opt_d =~ m/^risk$/i ) { # Long Form Warning and Exit
        print "Warning: Use of this script may pose some risk:\n";
        print "\n";
        print " 1) If you use HTTP URLs they are subject to a man in the middle attack\n";
        print " 2) Default to 'release', but more recent updates may be found in other trees\n";
        print " 3) certdata.txt file format may change, lag time to update this script\n";
        print " 4) Generally unwise to blindly trust CAs without manual review & verification\n";
        print " 5) Mozilla apps use additional security
checks aren't represented in certdata\n";
        print " 6) Use of this script will make a security engineer grind his teeth and\n";
    }
}

```

```

    print "    swear at you. ;)\n";
    exit;
} else { # Short Form Warning
    print "Warning: Use of this script may pose some risk, -d risk for more details.\n";
}
}

sub HELP_MESSAGE() {
    print "Usage:\t${0} [-b] [-d<certdata>] [-f] [-i] [-k] [-l] [-n] [-p<purposes:levels>] [-q] [-s<algorithms>] [-t] [-u] [-v] [-w<l>] [<outputfile>]\n";
    print "\t-b\tbackup an existing version of ca-bundle.crt\n";
    print "\t-d\tspecify Mozilla tree to pull certdata.txt or custom URL\n";
    print "\t\t Valid names are:\n";
    print "\t\t ", join( " ", map { ( $_ =~ m/$opt_d/ ) ? "$_ (default)" : "$_" } sort keys %urls ), "\n";
    print "\t-f\tforce rebuild even if certdata.txt is current\n";
    print "\t-i\tprint version info about used modules\n";
    print "\t-k\tallow URLs other than HTTPS, enable HTTP fallback (insecure)\n";
    print "\t-l\tprint license info about certdata.txt\n";
    print "\t-m\tinclude meta data in output\n";
    print "\t-n\tno download of certdata.txt (to use existing)\n";
    print wrap("\t\t", "\t\t", "-p\tlist of Mozilla trust purposes and levels for certificates to include in output. Takes the form of a comma separated list of purposes, a colon, and a comma separated list of levels. (default: $default_mozilla_trust_purposes:$default_mozilla_trust_levels)", "\n");
    print "\t\t Valid purposes are:\n";
    print wrap("\t\t\t", "\t\t\t", join( " ", "ALL", @valid_mozilla_trust_purposes ) ), "\n";
    print "\t\t Valid levels are:\n";
    print wrap("\t\t\t", "\t\t\t", join( " ", "ALL", @valid_mozilla_trust_levels ) ), "\n";
    print "\t-q\tbe really quiet (no progress output at all)\n";
    print wrap("\t\t", "\t\t", "-s\tcomma separated list of certificate signatures/ hashes to output in plain text mode. (default: $default_signature_algorithms)\n");
    print "\t\t Valid signature algorithms are:\n";
    print wrap("\t\t\t", "\t\t\t", join( " ", "ALL", @valid_signature_algorithms ) ), "\n";
    print "\t-t\tinclude plain text listing of certificates\n";
    print "\t-u\tunlink (remove) certdata.txt after processing\n";
    print "\t-v\tbe verbose and print out processed CAs\n";
    print "\t-w <l>\twrap base64 output lines after <l> chars (default: ${opt_w})\n";
    exit;
}

sub VERSION_MESSAGE() {
    print "${0} version ${version} running Perl ${} on ${^O}\n";
}

warning_message() unless ($opt_q || $url =~ m/^(ht|f)tps:/i);
HELP_MESSAGE() if ($opt_h);

```

```

sub report($@) {
    my $output = shift;

    print STDERR $output . "\n" unless $opt_q;
}

sub is_in_list($@) {
    my $target = shift;

    return defined(List::Util::first { $target eq $_ } @_);
}

# Parses $param_string as a case insensitive comma separated list with optional whitespace
# validates that only allowed parameters are supplied
sub parse_csv_param($$@) {
    my $description = shift;
    my $param_string = shift;
    my @valid_values = @_;

    my @values = map {
        s/^\s+//; # strip leading spaces
        s/\s+$//; # strip trailing spaces
        uc $_ # return the modified string as upper case
    } split( ',', $param_string );

    # Find all values which are not in the list of valid values or "ALL"
    my @invalid = grep { !is_in_list($_,"ALL",@valid_values) } @values;

    if ( scalar(@invalid) > 0 ) {
        # Tell the user which parameters were invalid and print the standard help message which will exit
        print "Error: Invalid ", $description, scalar(@invalid) == 1 ? " : " : "s: ", join( ", ", map { "\"$_\"" } @invalid ),
        "\n";
        HELP_MESSAGE();
    }

    @values = @valid_values if ( is_in_list("ALL",@values) );

    return @values;
}

sub sha256 {
    my $result;
    if ($Digest::SHA::VERSION || $Digest::SHA::PurePerl::VERSION) {
        open(FILE, $_[0]) or die "Can't open '$_[0]': $!";
        binmode(FILE);
        $result = $MOD_SHA->new(256)->addfile(*FILE)->hexdigest;
        close(FILE);
    } else {

```



```

# Use OpenSSL command if Perl Digest::SHA modules not available
$result = `"$openssl" dgst -r -sha256 "$_[0]"`;
$result =~ s/^(0-9a-f){64}) .+/$1/is;
}
return $result;
}

sub oldhash {
my $hash = "";
open(C, "<$_[0]") || return 0;
while(<C>) {
chomp;
if($_ =~ /^#\# SHA256: (.*)/) {
$hash = $1;
last;
}
}
close(C);
return $hash;
}

if ( $opt_p !~ m:/:/ ) {
print "Error: Mozilla trust identifier list must include both purposes and levels\n";
HELP_MESSAGE();
}

(my $included_mozilla_trust_purposes_string, my $included_mozilla_trust_levels_string) = split( ':', $opt_p );
my @included_mozilla_trust_purposes = parse_csv_param( "trust purpose",
$included_mozilla_trust_purposes_string, @valid_mozilla_trust_purposes );
my @included_mozilla_trust_levels = parse_csv_param( "trust level", $included_mozilla_trust_levels_string,
@valid_mozilla_trust_levels );

my @included_signature_algorithms = parse_csv_param( "signature algorithm", $opt_s,
@valid_signature_algorithms );

sub should_output_cert(%) {
my
%trust_purposes_by_level = @_;

foreach my $level (@included_mozilla_trust_levels) {
# for each level we want to output, see if any of our desired purposes are included
return 1 if ( defined( List::Util::first { is_in_list( $_, @included_mozilla_trust_purposes ) }
@{ $trust_purposes_by_level{ $level } } ) );
}

return 0;
}

```

```

my $crt = $ARGV[0] || 'ca-bundle.crt';
(my $txt = $url) =~ s@(.*/\?.*)@@g;

my $stdout = $crt eq '-';
my $resp;
my $fetched;

my $oldhash = oldhash($crt);

report "SHA256 of old file: $oldhash";

if(!$opt_n) {
    report "Downloading $txt ...";

    # If we have an HTTPS URL then use curl
    if($url =~ /^https:\//i) {
        if($curl) {
            if($curl =~ /^Protocols:.* https(|$)/m) {
                report "Get certdata with curl!";
                my $proto = !$opt_k ? "--proto =https" : "";
                my $quiet = $opt_q ? "-s" : "";
                my @out = `curl -w %{response_code} $proto $quiet -o "$txt" "$url"`;
                if(!$? && @out && $out[0] == 200) {
                    $fetched = 1;
                    report "Downloaded $txt";
                }
            }
            else {
                report "Failed downloading via HTTPS with curl";
                if(-e $txt && !unlink($txt)) {
                    report "Failed to remove '$txt': $!";
                }
            }
        }
        else {
            report "curl lacks https support";
        }
    }
    else {
        report "curl not found";
    }
}

# If nothing was fetched then use LWP
if(!$fetched) {
    if($url =~ /^https:\//i) {
        report "Falling back to HTTP";
        $url =~ s/^https:\//http:\//i;
    }
}

```

```

}
if(!$opt_k) {
    report "URLs other than HTTPS are disabled by default, to enable use -k";
    exit 1;
}
report "Get certdata with LWP!";
if(!defined(${LWP::UserAgent::VERSION})) {
    report "LWP is not available (LWP::UserAgent not found)";
    exit 1;
}
my $sua = new LWP::UserAgent(agent => "$0/$version");
$sua->env_proxy();
$response = $sua->mirror($url, $txt);
if($response && $response->code eq '304') {
    report "Not modified";
    exit 0 if -e $crt && !$opt_f;
}
else {
    $fetched = 1;
    report "Downloaded $txt";
}
if(!$response || $response->code !~ /^(?:200|304)$/) {
    report "Unable to download latest data: "
        . ($response? $response->code . ' - ' . $response->message : "LWP failed");
    exit 1 if -e $crt || ! -r $txt;
}
}
}

my $filedate = $response ? $response->last_modified : (stat($txt))[9];
my $datesrc = "as of";
if(!$filedate) {
    # mxr.mozilla.org gave us a time, hg.mozilla.org does not!
    $filedate = time();
    $datesrc="downloaded on";
}

# get the hash from the download file
my $newhash= sha256($txt);

if(!$opt_f && $oldhash eq $newhash) {
    report "Downloaded file identical to previous run's source file. Exiting";
    if($opt_u && -e $txt && !unlink($txt)) {
        report "Failed to remove $txt: $!\n";
    }
    exit;
}
}

```

```

report "SHA256 of new file: $newhash";

my $currentdate = scalar gmtime($filedate);

my $format = $opt_t ? "plain text and " : "";
if( $stdout
) {
    open(CRT, '> -') or die "Couldn't open STDOUT: $!\n";
} else {
    open(CRT, ">$crt.~") or die "Couldn't open $crt.~: $!\n";
}
print CRT <<EOT;
##
## Bundle of CA Root Certificates
##
## Certificate data from Mozilla ${datesrc}: ${currentdate} GMT
##
## This is a bundle of X.509 certificates of public Certificate Authorities
## (CA). These were automatically extracted from Mozilla's root certificates
## file (certdata.txt). This file can be found in the mozilla source tree:
## ${url}
##
## It contains the certificates in ${format}PEM format and therefore
## can be directly used with curl / libcurl / php_curl, or with
## an Apache+mod_ssl webserver for SSL client authentication.
## Just configure this file as the SSLCACertificateFile.
##
## Conversion done with mk-ca-bundle.pl version $version.
## SHA256: $newhash
##

EOT

report "Processing '$txt' ...";
my $cname;
my $certnum = 0;
my $skipnum = 0;
my $start_of_cert = 0;
my @precert;
my $cka_value;
my $valid = 1;

open(TXT, "$txt")
or die "Couldn't open $txt: $!\n";
while (<TXT>) {
    if (/^\*\*\*\* BEGIN LICENSE BLOCK \*\*\*\*/) {
        print CRT;
        print if ($opt_l);
    }
}

```

```

while (<TXT>) {
    print CRT;
    print if ($opt_1);
    last if (/^*\*\*\*\* END LICENSE BLOCK \*\*\*\*\*/);
}
}
elseif(/^# (Issuer|Serial Number|Subject|Not Valid Before|Not Valid After |Fingerprint \((MD5\)|Fingerprint
\((SHA1\))):/) {
    push @precert, $_;
    $valid = 1;
    next;
}
}
elseif(/^#\^s*$/) {
    undef @precert;
    next;
}
}
chomp;

```

Example:

```

# CKA_NSS_SERVER_DISTRICT_AFTER MULTILINE_OCTAL
# \062\060\060\066\061\067\060\060\060\060\060\060\132
# END

```

```

if (/^CKA_NSS_SERVER_DISTRICT_AFTER (CK_BBOOL CK_FALSE|MULTILINE_OCTAL)/) {
    if($1 eq "MULTILINE_OCTAL") {
        my @timestamp;
        while (<TXT>) {
            last if (/^END/);
            chomp;
            my @octets = split(/\//);
            shift @octets;
            for (@octets) {
                push
@timestamp, chr(oct);
            }
        }
        # A trailing Z in the timestamp signifies UTC
        if($timestamp[12] ne "Z") {
            report "distrust date stamp is not using UTC";
        }
        # Example date: 200617000000Z
        # Means 2020-06-17 00:00:00 UTC
        my $distrustat =
            timegm($timestamp[10] . $timestamp[11], # second
                $timestamp[8] . $timestamp[9], # minute
                $timestamp[6] . $timestamp[7], # hour
                $timestamp[4] . $timestamp[5], # day
                ($timestamp[2] . $timestamp[3]) - 1, # month

```

```

        "20" . $timestamp[0] . $timestamp[1]); # year
    if(time >= $distrustat) {
        # not trusted anymore
        $skipnum++;
        report "Skipping: $scaname is not trusted anymore" if ($opt_v);
        $valid = 0;
    }
    else {
        # still trusted
    }
}
next;
}

# this
is a match for the start of a certificate
if (/^CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE/) {
    $start_of_cert = 1
}
if ($start_of_cert && /^CKA_LABEL UTF8 \"(.*)\"/) {
    $scaname = $1;
}
my %trust_purposes_by_level;
if ($start_of_cert && /^CKA_VALUE MULTILINE_OCTAL/) {
    $cka_value="";
    while (<TXT>) {
        last if (/^END/);
        chomp;
        my @octets = split(\\);
        shift @octets;
        for (@octets) {
            $cka_value .= chr(oct);
        }
    }
}
if (/^CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST/ && $valid) {
    # now scan the trust part to determine how we should trust this cert
    while (<TXT>) {
        last if (/^#/);
        if (/^CKA_TRUST_([A-Z_]+)\s+CK_TRUST\s+CKT_NSS_([A-Z_]+)\s*$/) {
            if ( !is_in_list($1,@valid_mozilla_trust_purposes) ) {
                report "Warning: Unrecognized trust purpose for cert: $scaname. Trust purpose: $1. Trust Level: $2";
            } elsif ( is_in_list($2,@valid_mozilla_trust_levels) ) {
                report "Warning:
Unrecognized trust level for cert: $scaname. Trust purpose: $1. Trust Level: $2";
            } else {
                push @{$trust_purposes_by_level{$2}}, $1;
            }
        }
    }
}

```

```

}
}

if ( !should_output_cert(%trust_purposes_by_level) ) {
    $skipnum ++;
    report "Skipping: $scaname" if ($opt_v);
} else {
    my $data = $sca_value;
    $sca_value = "";
    my $encoded = MIME::Base64::encode_base64($data, "");
    $encoded =~ s/(\.|\{1,$opt_w\})/$1\n/g;
    my $pem = "-----BEGIN CERTIFICATE-----\n"
        . $encoded
        . "-----END CERTIFICATE-----\n";
    print CRT "\n$scaname\n";
    print CRT @precert if($opt_m);
    my $maxLength = length(decode('UTF-8', $scaname, Encode::FB_CROAK | Encode::LEAVE_SRC));
    if ($opt_t) {
        foreach my $key (keys %trust_purposes_by_level) {
            my $string = $key . ": " . join(" ", @{$trust_purposes_by_level{$key}});
            $maxLength = List::Util::max( length($string), $maxLength );
        }
    };
    print CRT $string . "\n";
}
}

print CRT ("=" x $maxLength . "\n");
if (!$opt_t) {
    print CRT $pem;
} else {
    my $pipe = "";
    foreach my $hash (@included_signature_algorithms) {
        $pipe = "|$openssl x509 -" . $hash . " -fingerprint -noout -inform PEM";
        if (!$stdout) {
            $pipe .= " >> $crt.~";
            close(CRT) or die "Couldn't close $crt.~: $!";
        }
        open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
        print TMP $pem;
        close(TMP) or die "Couldn't close openssl pipe: $!";
        if (!$stdout) {
            open(CRT, ">>$crt.~") or die "Couldn't open $crt.~: $!";
        }
    }
    $pipe = "|$openssl x509 -text -inform PEM";
    if (!$stdout) {
        $pipe .= " >> $crt.~";
        close(CRT) or die "Couldn't close $crt.~: $!";
    }
}

```

```

    open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
    print TMP
$pem;
    close(TMP) or die "Couldn't close openssl pipe: $!";
    if (!$stdout) {
        open(CRT, ">>$crt.~") or die "Couldn't open $crt.~: $!";
    }
}
report "Parsing: $scaname" if ($opt_v);
$certnum ++;
$start_of_cert = 0;
}
undef @precert;
}

}
close(TXT) or die "Couldn't close $txt: $!\n";
close(CRT) or die "Couldn't close $crt.~: $!\n";
unless( $stdout ) {
    if ($opt_b && -e $crt) {
        my $bk = 1;
        while (-e "$crt.~${bk}~") {
            $bk++;
        }
        rename $crt, "$crt.~${bk}~" or die "Failed to create backup $crt.~$bk}~: $!\n";
    } elsif( -e $crt ) {
        unlink( $crt ) or die "Failed to remove $crt: $!\n";
    }
    rename "$crt.~", $crt or die "Failed to rename $crt.~ to $crt: $!\n";
}
if($opt_u && -e $txt && !unlink($txt)) {
    report "Failed to remove $txt: $!\n";
}
report "Done ($certnum CA certs processed, $skipnum skipped).";

```

Found in path(s):

```

* /opt/cola/permits/1919538345_1710807720.5754924/0/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/mk-ca-bundle.pl

```

1.254 activation 1.2.0

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1.256 leveldb 1.5

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Julian Seward, jseward@bzip.org
bzip2/libbzip2 version 1.0.6 of 6 September 2010

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Version 2.1, February 1999

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Any

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Version 3.1, 31 March 2009

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com.hazelcast.jet.kafka.impl.KafkaDataConnectionRegistration

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```
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```
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jar/com/hazelcast/jet/kafka/impl/WriteKafkaP.java
* /opt/cola/permits/1942992369_1710969541.1455948/0/hazelcast-jet-kafka-5-3-6-sources-
jar/com/hazelcast/jet/kafka/impl/HazelcastJsonValueSerializer.java
* /opt/cola/permits/1942992369_1710969541.1455948/0/hazelcast-jet-kafka-5-3-6-sources-
jar/com/hazelcast/jet/kafka/impl/KafkaDataConnectionRegistration.java
*
/opt/cola/permits/1942992369_1710969541.1455948/0/hazelcast-jet-kafka-5-3-6-sources-
jar/com/hazelcast/jet/kafka/impl/NonClosingKafkaProducer.java
* /opt/cola/permits/1942992369_1710969541.1455948/0/hazelcast-jet-kafka-5-3-6-sources-
jar/com/hazelcast/jet/kafka/impl/ResumeTransactionUtil.java
* /opt/cola/permits/1942992369_1710969541.1455948/0/hazelcast-jet-kafka-5-3-6-sources-
jar/com/hazelcast/jet/kafka/TopicsConfig.java
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jar/com/hazelcast/jet/kafka/KafkaDataConnection.java
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* /opt/cola/permits/1942992369_1710969541.1455948/0/hazelcast-jet-kafka-5-3-6-sources-
jar/com/hazelcast/jet/kafka/package-info.java
*
/opt/cola/permits/1942992369_1710969541.1455948/0/hazelcast-jet-kafka-5-3-6-sources-
jar/com/hazelcast/jet/kafka/KafkaSinks.java
* /opt/cola/permits/1942992369_1710969541.1455948/0/hazelcast-jet-kafka-5-3-6-sources-
jar/com/hazelcast/jet/kafka/KafkaProcessors.java
* /opt/cola/permits/1942992369_1710969541.1455948/0/hazelcast-jet-kafka-5-3-6-sources-
jar/com/hazelcast/jet/kafka/KafkaSources.java
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Apache-2.0

Apache Kafka:3.4.0

LZ4 and xxHash:1.8.0

snappy-java:1.1.10.5

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bzip2/libbzip2 version 1.0.6 of 6 September 2010

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Version 3, 29 June 2007

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1.260 musl-utils 1.2.5-r0

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1.261 libgcc 13.2.1_git20240309-r0

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Version 3.1, 31 March 2009

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```
<program> Copyright (C) <year> <name of author>  
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```

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1.262 zlib 1.3.1-r1

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```
# Automatically generated by apkbuild-cpan, template 3
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
pkgname=perl-bsd-resource
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgver=1.2911
pkgrel=9
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/${_pkgreal}-$pkgver"
```

```

build() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL INSTALLDIRS=vendor
    make
}

check() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    make test
}

package() {
    make DESTDIR="$pkgdir" install
    find "$pkgdir" \( -name perllocal.pod -o -name .packlist \) -delete
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
# Contributor: Patrycja Rosa <alpine@ptrcnll.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnll.me>
pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
cdefs.h
queue.h
tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
    mkdir -p "$pkgdir"
    install -Dm644 -t "$pkgdir"/usr/include/sys \
        cdefs.h queue.h tree.h
}

sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcb12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h

```

d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3 tree.h

"

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The Kohonen neural network code for color optimization was written by Anthony Dekker.

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The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:

"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95
<http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html>

Contributor: Fabian Affolter <fabian@affolter-engineering.ch>

Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>

pkgname=py3-flake8-copyright

_pkgname=flake8-copyright

pkgver=0.2.4

pkgrel=2

pkgdesc="Extension for flake8 which checks for copyrights"

options="!check" # No testsuite

url="https://github.com/savoirfairelinux/flake8-copyright"

arch="noarch"

license="MIT"

depends="py3-flake8 py3-setuptools"

makedepends="py3-gpep517 py3-wheel"

subpackages="\$pkgname-pyc"

source="https://files.pythonhosted.org/packages/source/\${_pkgname:0:1}/\${_pkgname}/\${_pkgname}-\${pkgver}.tar.gz"

builddir="\$srcdir"/\${_pkgname}-\${pkgver}

```

replaces="py-flake8-copyright"          # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
    gpep517 build-wheel \
        --wheel-dir .dist \
        --output-fd 3 3>&1 >&2
}

package() {
    gpep517 install-wheel --destdir "$pkgdir" \
        .dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
flake8-copyright-0.2.4.tar.gz
"
# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.22
pkgrel=1
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
    subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
    mkdir -p "$pkgdir"
}

_subpkg() {
    local type=${subpkgname/$pkgname-/}
    pkgdesc="$pkgdesc ($type)"
    install_if="$pkgname=$pkgver-r$pkgrel"
}

```

```

mkdir -p "$subpkgdir"/usr/share/spdx
cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
pkgdesc="$pkgdesc (licence list)"
mkdir -p "$subpkgdir"/usr/share/spdx
local i; for i in "$builddir"/text/*.txt; do
local
license=${i##*/}
echo ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
done
}

sha512sums="
b213fe66699770d75a4c994a01a5c08325751423516c2fb871088a47e7e7ce605736064f5ce3a63dc1d3c462271832db
7bc464ac968df1888f9823787964c786 license-list-data-3.22.tar.gz
"

# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=1
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz"
options="!check" # no tests

build() {
# some GNU autoconf options are ignored, but it works
./configure \
--build=$CBUILD \
--host=$CHOST \
--prefix=/usr \
--sysconfdir=/etc \
--mandir=/usr/share/man \
--localstatedir=/var/lib # it really shouldn't be in /var
make
}

package() {
make DESTDIR="$pkgdir" install
install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

```


}

sha512sums="

aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294

bsd-games-3.3.tar.gz

"

Vintage Dreams Waves v 2.0. for Creative Labs' AWE Soundcards
(EMU Soundfont 2 Format)

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vintagedreamworks@hotmail.com

<http://www.geocities.com/SiliconValley/Campus/8645/index.html>

<http://members.nbc.com/silicon39/>

<http://www.mp3.com/silicon39>

<https://analoguesque.x10host.com/>

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WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Maintainer:

pkgname=cargo-license

pkgver=0.6.1

pkgrel=0

pkgdesc="Cargo subcommand to see license of dependencies"

url="https://github.com/onur/cargo-license"

arch="all"

license="MIT"

makedepends="cargo cargo-auditable"

source="\$pkgname-\$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/\$pkgver/download"

prepare() {

default_prepare

cargo fetch --target="\$CTARGET" --locked

}

build() {

cargo auditable build --release --frozen

}

check() {

cargo test --frozen

}

package() {

install -Dm755 target/release/cargo-license -t "\$pkgdir"/usr/bin

}

sha512sums="

36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00

272d796ac634f0a5e1d49232b6b29d5 cargo-license-0.6.1.tar.gz

"

mini_sendmail - accept email on behalf of real sendmail

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Maintainer: Natanael Copa <ncopa@alpinelinux.org>

pkgname=libart-lgpl

pkgver=2.3.21

pkgrel=8

pkgdesc="A library for high-performance 2D graphics"

url="https://www.levien.com/libart/"

arch="all"

options="!check" # No test suite.

license="LGPL-2.0-or-later"

subpackages="\$pkgname-dev"

source="https://download.gnome.org/sources/libart-lgpl/2.3/libart-lgpl-\$pkgver.tar.bz2"

"

builddir="\$srcdir"/libart-lgpl-\$pkgver

```
prepare() {  
  update_config_sub  
  default_prepare  
}
```

```
build() {  
  ./configure \  
  --build=$CBUILD \  
  --host=$CHOST \  
  --prefix=/usr  
  make  
}
```

```
package() {  
  make DESTDIR="$pkgdir" install  
}
```

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e76654309e001aee9bace727b5b4c8589405256a3c020 libart-lgpl-2.3.21.tar.bz2"

```

# Contributor: Dhruvin Gandhi <contact@dhruvin.dev>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license-expression
pkgver=30.3.0
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir/${_pkgname}-${pkgver}"

build() {
    gpep517 build-wheel \
        --wheel-dir .dist \
        --output-fd 3 3>&1 >&2
}

check() {
    python3 -m venv --clear --without-pip --system-site-packages .testenv
    .testenv/bin/python3 -m installer .dist/*.whl
    .testenv/bin/python3 -m pytest
}

package() {
    python3 -m installer -d "$pkgdir" \
        .dist/*.whl
}

sha512sums="
3fe4ac8830085fe38d8ee713a332047941b2a7a8ff5f31810b124c5903335a8343a222926aefe000da66a49b4d6f8b934
af3cc350448b075a4ec6aa1fdb51aef
    license-expression-30.3.0.tar.gz
"

```

1.263 activation-api 1.2.2

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JUnit (4.12)

* License: Eclipse Public License

1.264 apk-tools 2.14.4-r0

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1.265 ca-certificates-bundle 20240226-r0

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No license file was found, but licenses were detected in source scan.

```
#!/usr/bin/env perl
# *****
# *
# *      _ _ _ _ _
# * Project  _||| _\|
# *      / _||| |)
# *      |( _||| _<| _
# *      \_|||/| \_|||
# *
# * Copyright (C) 1998 - 2020, Daniel Stenberg, <daniel@haxx.se>, et al.
# *
# * This software is licensed as described in the file COPYING, which
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# *
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# * copies of the Software, and permit persons to whom the Software is
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# *
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# *
# *****
# This Perl script creates a fresh ca-bundle.crt file for use with libcurl.
# It downloads certdata.txt from Mozilla's source tree (see URL below),
# then parses certdata.txt and extracts CA Root Certificates into PEM format.
# These are then processed with the OpenSSL commandline tool to produce the
# final ca-bundle.crt file.
# The script is based on the parse-certs script written by Roland Krikava.
# This Perl script works on almost any platform since its only external
# dependency is the OpenSSL commandline tool for optional text listing.
# Hacked by Guenter Knauf.
#
use Encode;
use Getopt::Std;
use MIME::Base64;
use strict;
use warnings;
use vars qw($opt_b $opt_d $opt_f $opt_h $opt_i $opt_k $opt_l $opt_m $opt_n $opt_p $opt_q $opt_s $opt_t $opt_u
$opt_v $opt_w);
use List::Util;
use Text::Wrap;
use Time::Local;
my $MOD_SHA = "Digest::SHA";
eval "require
```

```

$MOD_SHA";
if ($@) {
    $MOD_SHA = "Digest::SHA::PurePerl";
    eval "require $MOD_SHA";
}
eval "require LWP::UserAgent";

my %urls = (
    'nss' =>
        'https://hg.mozilla.org/projects/nss/raw-file/default/lib/ckfw/builtins/certdata.txt',
    'central' =>
        'https://hg.mozilla.org/mozilla-central/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
    'beta' =>
        'https://hg.mozilla.org/releases/mozilla-beta/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
    'release' =>
        'https://hg.mozilla.org/releases/mozilla-release/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
);

$opt_d = 'release';

# If the OpenSSL commandline is not in search path you can configure it here!
my $openssl = 'openssl';

my $version = '1.27';

$opt_w = 76; # default base64 encoded lines length

# default cert types to include in the output (default is to include CAs which may issue SSL server certs)
my $default_mozilla_trust_purposes = "SERVER_AUTH";
my $default_mozilla_trust_levels
    = "TRUSTED_DELEGATOR";
$opt_p = $default_mozilla_trust_purposes . ":" . $default_mozilla_trust_levels;

my @valid_mozilla_trust_purposes = (
    "DIGITAL_SIGNATURE",
    "NON_REPUDIATION",
    "KEY_ENCIPHERMENT",
    "DATA_ENCIPHERMENT",
    "KEY_AGREEMENT",
    "KEY_CERT_SIGN",
    "CRL_SIGN",
    "SERVER_AUTH",
    "CLIENT_AUTH",
    "CODE_SIGNING",
    "EMAIL_PROTECTION",
    "IPSEC_END_SYSTEM",
    "IPSEC_TUNNEL",
    "IPSEC_USER",

```

```

"TIME_STAMPING",
"STEP_UP_APPROVED"
);

my @valid_mozilla_trust_levels = (
"TRUSTED_DELEGATOR", # CAs
"NOT_TRUSTED",      # Don't trust these certs.
"MUST_VERIFY_TRUST", # This explicitly tells us that it ISN'T a CA but is otherwise ok. In other words, this
should tell the app to ignore any other sources that claim this is a CA.
"TRUSTED"          # This cert is trusted, but only for itself and not for delegates (i.e. it is not a CA).
);

my $default_signature_algorithms = $opt_s = "MD5";

my @valid_signature_algorithms = (
"MD5",
"SHA1",
"SHA256",
"SHA384",
"SHA512"
);

$0 =~ s@.*(//\.)@@;
$Getopt::Std::STANDARD_HELP_VERSION = 1;
getopts('bd:fhiklmnp:qs:tuvw:');

if(!defined($opt_d)) {
    # to make plain "-d" use not cause warnings, and actually still work
    $opt_d = 'release';
}

# Use predefined URL or else custom URL specified on command line.
my $url;
if(defined($urls{$opt_d})) {
    $url = $urls{$opt_d};
    if(!$opt_k && $url !~ /^https:\/\//i) {
        die "The URL for '$opt_d' is not HTTPS. Use -k to override (insecure).\n";
    }
}
else {
    $url = $opt_d;
}

my $curl = `curl -V`;

if($opt_i) {
    print ("=" x 78 . "\n");
    print "Script Version          : $version\n";
}

```



```

print "Perl Version          : $]\n";
print "Operating System Name  : $^O\n";
print "Getopt::Std.pm Version   : ${Getopt::Std::VERSION}\n";
print "Encode::Encoding.pm Version : ${Encode::Encoding::VERSION}\n";
print "MIME::Base64.pm Version   : ${MIME::Base64::VERSION}\n";
print "LWP::UserAgent.pm
Version      : ${LWP::UserAgent::VERSION}\n" if($LWP::UserAgent::VERSION);
print "LWP.pm Version           : ${LWP::VERSION}\n" if($LWP::VERSION);
print "Digest::SHA.pm Version    : ${Digest::SHA::VERSION}\n" if ($Digest::SHA::VERSION);
print "Digest::SHA::PurePerl.pm Version : ${Digest::SHA::PurePerl::VERSION}\n" if
($Digest::SHA::PurePerl::VERSION);
print ("=" x 78 . "\n");
}

```

```

sub warning_message() {
if ( $opt_d =~ m/^risk$/i ) { # Long Form Warning and Exit
    print "Warning: Use of this script may pose some risk:\n";
    print "\n";
    print " 1) If you use HTTP URLs they are subject to a man in the middle attack\n";
    print " 2) Default to 'release', but more recent updates may be found in other trees\n";
    print " 3) certdata.txt file format may change, lag time to update this script\n";
    print " 4) Generally unwise to blindly trust CAs without manual review & verification\n";
    print " 5) Mozilla apps use additional security
checks aren't represented in certdata\n";
    print " 6) Use of this script will make a security engineer grind his teeth and\n";
    print "    swear at you. ;)\n";
    exit;
} else { # Short Form Warning
    print "Warning: Use of this script may pose some risk, -d risk for more details.\n";
}
}

```

```

sub HELP_MESSAGE() {
    print "Usage: t${0} [-b] [-d<certdata>] [-f] [-i] [-k] [-l] [-n] [-p<purposes:levels>] [-q] [-s<algorithms>] [-t] [-u] [-v] [-w<l>] [<outputfile>]\n";
    print "\t-b\tbackup an existing version of ca-bundle.crt\n";
    print "\t-d\tspecify Mozilla tree to pull certdata.txt or custom URL\n";
    print "\t\t Valid names are:\n";
    print "\t\t  , join( " , " , map { ( $_ =~ m/$opt_d/ ) ? "$_ (default)" : "$_" } sort keys %urls ) , "\n";
    print "\t-f\tforce rebuild even if certdata.txt is current\n";
    print "\t-i\tprint version info about used modules\n";
    print "\t-k\tallow URLs other than HTTPS, enable HTTP fallback (insecure)\n";
    print "\t-l\tprint license info
about certdata.txt\n";
    print "\t-m\tinclude meta data in output\n";
    print "\t-n\tno download of certdata.txt (to use existing)\n";
    print wrap("\t", "\t", "-p\tlist of Mozilla trust purposes and levels for certificates to include in output. Takes the
form of a comma separated list of purposes, a colon, and a comma separated list of levels. (default:

```

```

$default_mozilla_trust_purposes:$default_mozilla_trust_levels)", "\n";
print "\t Valid purposes are:\n";
print wrap("\t  ", "\t  ", join( " ", "ALL", @valid_mozilla_trust_purposes ), "\n");
print "\t Valid levels are:\n";
print wrap("\t  ", "\t  ", join( " ", "ALL", @valid_mozilla_trust_levels ), "\n");
print "\t-q\tbe really quiet (no progress output at all)\n";
print wrap("\t", "\t", "-s\tcomma separated list of certificate signatures/ hashes to output in plain text mode. (default:
$default_signature_algorithms)\n");
print "\t Valid signature algorithms are:\n";
print wrap("\t  ", "\t  ",
  join( " ", "ALL", @valid_signature_algorithms ), "\n");
print "\t-t\tinclude plain text listing of certificates\n";
print "\t-u\tunlink (remove) certdata.txt after processing\n";
print "\t-v\tbe verbose and print out processed CAs\n";
print "\t-w <l>\twrap base64 output lines after <l> chars (default: ${opt_w})\n";
exit;
}

sub VERSION_MESSAGE() {
print "${0} version ${version} running Perl ${} on ${^O}\n";
}

warning_message() unless ($opt_q || $url =~ m/^(ht|f)tps:/i );
HELP_MESSAGE() if ($opt_h);

sub report($@) {
my $output = shift;

print STDERR $output . "\n" unless $opt_q;
}

sub is_in_list($@) {
my $target = shift;

return defined(List::Util::first { $target eq $_ } @_);
}

# Parses $param_string as a case insensitive comma separated list with optional whitespace
# validates that only allowed parameters are supplied
sub parse_csv_param($$@) {
my $description = shift;
my $param_string = shift;
my @valid_values = @_;

my @values = map {
s/^\s+//; # strip leading spaces
s/\s+$//; # strip trailing spaces
uc $_ # return the modified string as upper case

```

```

} split( ',', $param_string );

# Find all values which are not in the list of valid values or "ALL"
my @invalid = grep { !is_in_list($_,"ALL",@valid_values) } @values;

if ( scalar(@invalid) > 0 ) {
    # Tell the user which parameters were invalid and print the standard help message which will exit
    print "Error: Invalid ", $description, scalar(@invalid) == 1 ? " : " : "s: ", join( ", ", map { "\"$_\""} @invalid ),
    "\n";
    HELP_MESSAGE();
}

@values = @valid_values if ( is_in_list("ALL",@values) );

return @values;
}

sub sha256 {
my $result;
if ($Digest::SHA::VERSION || $Digest::SHA::PurePerl::VERSION) {
    open(FILE, $_[0]) or die "Can't open '$_[0]': $!";
    binmode(FILE);
    $result = $MOD_SHA->new(256)->addfile(*FILE)->hexdigest;
    close(FILE);
} else {
    # Use OpenSSL command if Perl Digest::SHA modules not available
    $result = `"$openssl" dgst -r -sha256 "$_[0]"`;
    $result =~ s/^\s*([0-9a-f]{64})\s*/$1/is;
}
return $result;
}

sub oldhash {
my $hash = "";
open(C, "<$_[0]") || return 0;
while(<C>) {
    chomp;
    if($_ =~ /^#\s*SHA256: (.*)/) {
        $hash = $1;
        last;
    }
}
close(C);
return $hash;
}

if ( $opt_p != m:/ ) {

```

```

print "Error: Mozilla trust identifier list must include both purposes and levels\n";
HELP_MESSAGE();
}

(my $included_mozilla_trust_purposes_string, my $included_mozilla_trust_levels_string) = split(':', $opt_p);
my @included_mozilla_trust_purposes = parse_csv_param("trust purpose",
$included_mozilla_trust_purposes_string, @valid_mozilla_trust_purposes);
my @included_mozilla_trust_levels = parse_csv_param("trust level", $included_mozilla_trust_levels_string,
@valid_mozilla_trust_levels);

my @included_signature_algorithms = parse_csv_param("signature algorithm", $opt_s,
@valid_signature_algorithms);

sub should_output_cert(%) {
my
%trust_purposes_by_level = @_;

foreach my $level (@included_mozilla_trust_levels) {
# for each level we want to output, see if any of our desired purposes are included
return 1 if ( defined( List::Util::first { is_in_list( $_, @included_mozilla_trust_purposes ) }
@{ $trust_purposes_by_level{ $level } } ) );
}

return 0;
}

my $crt = $ARGV[0] || 'ca-bundle.crt';
(my $txt = $url) =~ s@(.*/\|?.*)@@g;

my $stdout = $crt eq '-';
my $resp;
my $fetched;

my $oldhash = oldhash($crt);

report "SHA256 of old file: $oldhash";

if(!$opt_n) {
report "Downloading $txt ...";

# If we have an HTTPS URL then use curl
if($url =~ /^https:\|/i) {
if($curl) {
if($curl =~ /^Protocols:. * https( \|$/m) {
report "Get certdata with curl!";
my $proto = !$opt_k ? "--proto=https" : "";
my $quiet = $opt_q ? "-s" : "";
my @out = `curl -w % {response_code} $proto $quiet -o "$txt" "$url"`;

```

```

if(!$? && @out && $out[0] == 200) {
    $fetched = 1;
    report "Downloaded $txt";
}
else {
    report "Failed downloading via HTTPS with curl!";
    if(-e $txt && !unlink($txt)) {
        report "Failed to remove '$txt': $!";
    }
}
else {
    report "curl lacks https support";
}
else {
    report "curl not found";
}
}

# If nothing was fetched then use LWP
if(!$fetched) {
    if($url =~ /^https:\//i) {
        report "Falling back to HTTP";
        $url =~ s/^https:\//http:\//i;
    }
    if(!$opt_k) {
        report "URLs other than HTTPS are disabled by default, to enable use -k";
        exit 1;
    }
    report "Get certdata with LWP!";
    if(!defined($LWP::UserAgent::VERSION)) {
        report "LWP is not available (LWP::UserAgent not found)";
        exit 1;
    }
    my $ua = new LWP::UserAgent(agent => "$0/$version");
    $ua->env_proxy();
    $resp = $ua->mirror($url, $txt);
    if($resp && $resp->code eq '304') {
        report "Not modified";
        exit 0 if -e $crt && !$opt_f;
    }
    else {
        $fetched = 1;
        report "Downloaded $txt";
    }
    if(!$resp || $resp->code !~ /^(?:200|304)$/) {
        report "Unable to download latest data: "

```

```

    . ($resp? $resp->code . ' - ' . $resp->message : "LWP failed");
    exit 1 if -e $crt || ! -r $txt;
}
}
}

my $filedate = $resp ? $resp->last_modified : (stat($txt))[9];
my $datesrc = "as of";
if(!$filedate) {
    # mxr.mozilla.org gave us a time, hg.mozilla.org does not!
    $filedate = time();
    $datesrc="downloaded on";
}

# get the hash from the download file
my $newhash= sha256($txt);

if(!$opt_f && $oldhash eq $newhash) {
    report "Downloaded file identical to previous run's source file. Exiting";
    if($opt_u && -e $txt && !unlink($txt)) {
        report "Failed to remove $txt: $!\n";
    }
    exit;
}

report "SHA256 of new file: $newhash";

my $currentdate = scalar gmtime($filedate);

my $format = $opt_t ? "plain text and " : "";
if( $stdout
) {
    open(CRT, '> -') or die "Couldn't open STDOUT: $!\n";
} else {
    open(CRT,">$crt.~") or die "Couldn't open $crt.~: $!\n";
}
print CRT <<EOT;
##
## Bundle of CA Root Certificates
##
## Certificate data from Mozilla ${datesrc}: ${currentdate} GMT
##
## This is a bundle of X.509 certificates of public Certificate Authorities
## (CA). These were automatically extracted from Mozilla's root certificates
## file (certdata.txt). This file can be found in the mozilla source tree:
## ${url}
##
## It contains the certificates in ${format}PEM format and therefore

```

```

## can be directly used with curl / libcurl / php_curl, or with
## an Apache+mod_ssl webserver for SSL client authentication.
## Just configure this file as the SSLCertificateFile.
##
## Conversion done with mk-ca-bundle.pl version $version.
## SHA256: $newhash
##

EOT

report "Processing '$txt' ...";
my $scaname;
my $certnum = 0;
my $skipnum = 0;
my $start_of_cert = 0;
my @precert;
my $cka_value;
my $valid = 1;

open(TXT,"$txt")
or die "Couldn't open $txt: $!\n";
while (<TXT>) {
if (/^*\*\*\* BEGIN LICENSE BLOCK \*\*\*\*/) {
print CRT;
print if ($opt_l);
while (<TXT>) {
print CRT;
print if ($opt_l);
last if (/^*\*\*\* END LICENSE BLOCK \*\*\*\*/);
}
}
elsif(/^# (Issuer|Serial Number|Subject|Not Valid Before|Not Valid After |Fingerprint \|(MD5)|Fingerprint
\|(SHA1)):/) {
push @precert, $_;
$valid = 1;
next;
}
elsif(/^#\^s*$/) {
undef @precert;
next;
}
}
chomp;

# Example:
# CKA_NSS_SERVER_DISTRICT_AFTER MULTILINE_OCTAL
# \062\060\060\066\061\067\060\060\060\060\060\060\132
# END

```

```

if (/^CKA_NSS_SERVER_DISTRICT_AFTER (CK_BBOOL CK_FALSE|MULTILINE_OCTAL)/) {
  if($1 eq "MULTILINE_OCTAL") {
    my @timestamp;
    while (<TXT>) {
      last if (/^END/);
      chomp;
      my @octets = split(/\//);
      shift @octets;
      for (@octets) {
        push
@timestamp, chr(oct);
      }
    }
    # A trailing Z in the timestamp signifies UTC
    if($timestamp[12] ne "Z") {
      report "distrust date stamp is not using UTC";
    }
    # Example date: 200617000000Z
    # Means 2020-06-17 00:00:00 UTC
    my $distrustat =
      timegm($timestamp[10] . $timestamp[11], # second
            $timestamp[8] . $timestamp[9], # minute
            $timestamp[6] . $timestamp[7], # hour
            $timestamp[4] . $timestamp[5], # day
            ($timestamp[2] . $timestamp[3]) - 1, # month
            "20" . $timestamp[0] . $timestamp[1]); # year
    if(time >= $distrustat) {
      # not trusted anymore
      $skipnum++;
      report "Skipping: $scaname is not trusted anymore" if ($opt_v);
      $valid = 0;
    }
    else {
      # still trusted
    }
  }
  next;
}

# this
is a match for the start of a certificate
if (/^CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE/) {
  $start_of_cert = 1
}
if ($start_of_cert && /^CKA_LABEL UTF8 \"(.*)\"/) {
  $scaname = $1;
}
my %trust_purposes_by_level;

```



```

if ($start_of_cert && /^CKA_VALUE MULTILINE_OCTAL/) {
    $sca_value="";
    while (<TXT>) {
        last if (/^END/);
        chomp;
        my @octets = split(/\//);
        shift @octets;
        for (@octets) {
            $sca_value .= chr(oct);
        }
    }
}
if(/^CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST/ && $valid) {
    # now scan the trust part to determine how we should trust this cert
    while (<TXT>) {
        last if (/^#/);
        if (/^CKA_TRUST_([A-Z_]+)\s+CK_TRUST\s+CKT_NSS_([A-Z_]+)\s*$/) {
            if ( !is_in_list($1,@valid_mozilla_trust_purposes) ) {
                report "Warning: Unrecognized trust purpose for cert: $aname. Trust purpose: $1. Trust Level: $2";
            } elsif ( is_in_list($2,@valid_mozilla_trust_levels) ) {
                report "Warning:
Unrecognized trust level for cert: $aname. Trust purpose: $1. Trust Level: $2";
            } else {
                push @{$trust_purposes_by_level{$2}}, $1;
            }
        }
    }

    if ( !should_output_cert(%trust_purposes_by_level) ) {
        $skipnum ++;
        report "Skipping: $aname" if ($opt_v);
    } else {
        my $data = $sca_value;
        $sca_value = "";
        my $encoded = MIME::Base64::encode_base64($data, "");
        $encoded =~ s/(.{1,$opt_w})/$1\n/g;
        my $pem = "-----BEGIN CERTIFICATE-----\n"
            . $encoded
            . "-----END CERTIFICATE-----\n";
        print CRT "\n$aname\n";
        print CRT @precert if($opt_m);
        my $maxLength = length(decode('UTF-8', $aname, Encode::FB_CROAK | Encode::LEAVE_SRC));
        if ($opt_t) {
            foreach my $key (keys %trust_purposes_by_level) {
                my $string = $key . ": " . join(" ", @{$trust_purposes_by_level{$key}});
                $maxLength = List::Util::max( length($string), $maxLength );
            }
        };
        print CRT $string . "\n";
    }
}

```

```

    }
  }
  print CRT ("=" x $maxStringLength . "\n");
  if (!$opt_t) {
    print CRT $pem;
  } else {
    my $pipe = "";
    foreach my $hash (@included_signature_algorithms) {
      $pipe = "|$openssl x509 -" . $hash . " -fingerprint -noout -inform PEM";
      if (!$stdout) {
        $pipe .= " >> $crt.~";
        close(CRT) or die "Couldn't close $crt.~: $!";
      }
      open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
      print TMP $pem;
      close(TMP) or die "Couldn't close openssl pipe: $!";
      if (!$stdout) {
        open(CRT, ">>$crt.~") or die "Couldn't open $crt.~: $!";
      }
    }
    $pipe = "|$openssl x509 -text -inform PEM";
    if (!$stdout) {
      $pipe .= " >> $crt.~";
      close(CRT) or die "Couldn't close $crt.~: $!";
    }
    open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
    print TMP
    $pem;
    close(TMP) or die "Couldn't close openssl pipe: $!";
    if (!$stdout) {
      open(CRT, ">>$crt.~") or die "Couldn't open $crt.~: $!";
    }
  }
  report "Parsing: $cname" if ($opt_v);
  $certnum ++;
  $start_of_cert = 0;
}
undef @precert;
}

}
close(TXT) or die "Couldn't close $txt: $!\n";
close(CRT) or die "Couldn't close $crt.~: $!\n";
unless( $stdout ) {
  if ($opt_b && -e $crt) {
    my $bk = 1;
    while (-e "$crt.~${bk}~") {
      $bk++;
    }
  }
}

```

```

    }
    rename $crt, "$crt.${bk}~" or die "Failed to create backup $crt.${bk}~: $!\n";
} elsif( -e $crt ) {
    unlink( $crt ) or die "Failed to remove $crt: $!\n";
}
rename "$crt.", $crt or die "Failed to rename $crt.~ to $crt: $!\n";
}
if($opt_u && -e $txt && !unlink($txt)) {
    report "Failed to remove $txt: $!\n";
}
}
report "Done ($certnum CA certs processed, $skipnum skipped).";

```

Found in path(s):

```

* /opt/cola/permits/1978342439_1713364772.434879/0/ca-certificates-bundle-20230506-r0-os-alpine-3-18-0-tar-
xz/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/mk-ca-bundle.pl

```

No license file was found, but licenses were detected in source scan.

```

/* c_rehash.c - Create hash symlinks for certificates
* C implementation based on the original Perl and shell versions
*
* Copyright (c) 2013-2014 Timo Teräs <timo.teras@iki.fi>
* All rights reserved.
*
* This software is licensed under the MIT License.
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*/

```

Found in path(s):

```

* /opt/cola/permits/1978342439_1713364772.434879/0/ca-certificates-bundle-20230506-r0-os-alpine-3-18-0-tar-
xz/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/c_rehash.c

```

1.266 scanelf 1.3.7-r2

1.266.1 Available under license :

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Version 2, June 1991

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Ty Coon, President of Vice

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1.268 alpine-baselayout 3.6.5-r0

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```
# Automatically generated by apkbuild-cpan, template 3
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
pkgname=perl-bsd-resource
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgver=1.2911
pkgrel=9
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
```

```

makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL INSTALLDIRS=vendor
    make
}

check() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    make test
}

package() {
    make DESTDIR="$pkgdir" install
    find "$pkgdir" \( -name perllocal.pod -o -name .packlist \) -delete
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
# Contributor: Patrycja Rosa <alpine@ptrcnll.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnll.me>
pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
cdefs.h
queue.h
tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
    mkdir -p "$pkgdir"
    install -Dm644 -t "$pkgdir"/usr/include/sys \
        cdefs.h queue.h tree.h
}

```

```
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178 cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750 queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3 tree.h
"
```

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The Kohonen neural network code for color optimization was written by Anthony Dekker.

Parts Copyright (c) 1995 by C. Blanc and C. Schlick

The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:

"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95

<http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html>

Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>

Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>

pkgname=spdx-licenses

pkgver=3.22

pkgrel=1

pkgdesc="Various data formats for the SPDX License List"

url="https://spdx.org/"

arch="noarch"

options="!check" # no test suite

license="CC-BY-3.0"

source="license-list-data-\$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v\$pkgver.tar.gz"


```

builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
    subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
    mkdir -p "$pkgdir"
}

_subpkg() {
    local type=${subpkgname/$pkgname-/}
    pkgdesc="$pkgdesc ($type)"
    install_if="$pkgname=$pkgver-r$pkgrel"
    mkdir -p "$subpkgdir"/usr/share/spdx
    cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
    pkgdesc="$pkgdesc (licence list)"
    mkdir -p "$subpkgdir"/usr/share/spdx
    local i; for i in "$builddir"/text/*.txt; do
        local
        license=${i##*/}
        echo ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
    done
}

sha512sums="
b213fe66699770d75a4c994a01a5c08325751423516c2fb871088a47e7e7ce605736064f5ce3a63dc1d3c462271832db
7bc464ac968df1888f9823787964c786 license-list-data-3.22.tar.gz
"

# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=1
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz"

```

```

options="!check" # no tests

build() {
# some GNU autoconf options are ignored, but it works
./configure \
--build=$CBUILD \
--host=$CHOST \
--prefix=/usr \
--sysconfdir=/etc \
--mandir=/usr/share/man \
--localstatedir=/var/lib # it really shouldn't be in /var
make
}

package() {
make DESTDIR="$pkgdir" install
install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
"

# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright" # Backwards compatibility
provides="py-flake8-copyright=${pkgver}-r${pkgrel}" # Backwards compatibility

build() {
gpep517 build-wheel \
--wheel-dir .dist \
--output-fd 3 3>&1 >&2

```

```

}

package() {
    gpep517 install-wheel --destdir "$pkgdir" \
        .dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
flake8-copyright-0.2.4.tar.gz
"
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
    default_prepare

    cargo fetch --target="$CTARGET" --locked
}

build() {
    cargo auditable build --release --frozen
}

check() {
    cargo test --frozen
}

package() {
    install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5 cargo-license-0.6.1.tar.gz
"
# Contributor: Dhruvin Gandhi <contact@dhruvin.dev>
# Maintainer: Patrycja Rosa <alpine@ptrcnll.me>
pkgname=py3-license-expression

```

```
_pkgname=license-expression
pkgver=30.3.0
pkgrel=1
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir/${_pkgname}-${pkgver}"
```

```
build() {
    gpep517 build-wheel \
        --wheel-dir .dist \
        --output-fd 3 3>&1 >&2
}
```

```
check() {
    python3 -m venv --clear --without-pip --system-site-packages .testenv
    .testenv/bin/python3 -m installer .dist/*.whl
    .testenv/bin/python3 -m pytest
}
```

```
package() {
    python3 -m installer -d "$pkgdir" \
        .dist/*.whl
}
```

```
sha512sums="
3fe4ac8830085fe38d8ee713a332047941b2a7a8ff5f31810b124c5903335a8343a222926ae00da66a49b4d6f8b934
af3cc350448b075a4ec6aa1fdb51aef
    license-expression-30.3.0.tar.gz
"
```

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vintagedreamworks@hotmail.com

<http://www.geocities.com/SiliconValley/Campus/8645/index.html>

<http://members.nbc.com/silicon39/>

<http://www.mp3.com/silicon39>

<https://analoguesque.x10host.com/>

Maintainer: Natanael Copa <ncopa@alpinelinux.org>

pkgname=libart-1gpl

pkgver=2.3.21

pkgrel=8

pkgdesc="A library for high-performance 2D graphics"

url="https://www.levien.com/libart/"

arch="all"

options="!check" # No test suite.

license="LGPL-2.0-or-later"

subpackages="\$pkgname-dev"

source="https://download.gnome.org/sources/libart_1gpl/2.3/libart_1gpl-\$pkgver.tar.bz2"

"

builddir="\$srcdir"/libart_1gpl-\$pkgver

prepare() {

update_config_sub

```
default_prepare
}
```

```
build() {
./configure \
--build=$CBUILD \
--host=$CHOST \
--prefix=/usr
make
}
```

```
package() {
make DESTDIR="$pkgdir" install
}
```

```
sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020 libart_lgpl-2.3.21.tar.bz2"
mini_sendmail - accept email on behalf of real sendmail
```

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1.269 ncurses 6.4_p20240420-r0

1.269.1 Available under license :

```
# Automatically generated by apkbuild-cpan, template 3
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
pkgname=perl-bsd-resource
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgver=1.2911
pkgrel=9
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
buildidir="$srcdir/${_pkgreal}-$pkgver"

build() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL INSTALLDIRS=vendor
    make
}

check() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    make test
}

package() {
    make DESTDIR="$pkgdir" install
    find "$pkgdir" \( -name perllocal.pod -o -name .packlist \) -delete
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"

# Contributor: Patrycja Rosa <alpine@ptrcnll.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnll.me>
pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
```

```

license="BSD-2-Clause AND BSD-3-Clause"
source="
cdefs.h
queue.h
tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
  mkdir -p "$pkgdir"
  install -Dm644 -t "$pkgdir"/usr/include/sys \
    cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178 cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750 queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3 tree.h
"

```

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 The Kohonen neural network code for color optimization was written by Anthony Dekker.

Parts Copyright (c) 1995 by C. Blanc and C. Schlick
 The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a


```

student practice (Universite Bordeaux, France). For additional information about X-splines, see:
"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95
http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html
# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.22
pkgrel=1
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
    subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
    mkdir -p "$pkgdir"
}

_subpkg() {
    local type=${subpkgname/$pkgname-/}
    pkgdesc="$pkgdesc ($type)"
    install_if="$pkgname=$pkgver-r$pkgrel"
    mkdir -p "$subpkgdir"/usr/share/spdx
    cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
    pkgdesc="$pkgdesc (licence list)"
    mkdir -p "$subpkgdir"/usr/share/spdx
    local i; for i in "$builddir"/text/*.txt; do
        local
        license=${i##*/}
        echo "${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
    done
}

sha512sums="
b213fe66699770d75a4c994a01a5c08325751423516c2fb871088a47e7e7ce605736064f5ce3a63dc1d3c462271832db
7bc464ac968df1888f9823787964c786 license-list-data-3.22.tar.gz

```

```

"
# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=1
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz"
options="!check" # no tests

build() {
# some GNU autoconf options are ignored, but it works
./configure \
--build=$CBUILD \
--host=$CHOST \
--prefix=/usr \
--sysconfdir=/etc \
--mandir=/usr/share/man \
--localstatedir=/var/lib # it really shouldn't be in /var
make
}

package() {
make DESTDIR="$pkgdir" install
install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
bsd-games-3.3.tar.gz
"
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"

```

```

license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir"/${_pkgname}-${pkgver}

replaces="py-flake8-copyright"          # Backwards compatibility
provides="py-flake8-copyright=${pkgver-r$pkgrel}" # Backwards compatibility

build() {
    gpep517 build-wheel \
        --wheel-dir .dist \
        --output-fd 3 3>&1 >&2
}

package() {
    gpep517 install-wheel --destdir "$pkgdir" \
        .dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
flake8-copyright-0.2.4.tar.gz
"
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-${pkgver}.tar.gz::https://crates.io/api/v1/crates/cargo-license/${pkgver}/download"

prepare() {
    default_prepare

    cargo fetch --target="$CTARGET" --locked
}

build() {
    cargo auditable build --release --frozen
}

check() {

```

```

cargo test --frozen
}

package() {
install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5 cargo-license-0.6.1.tar.gz
"

# Contributor: Dhruvin Gandhi <contact@dhruvin.dev>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license-expression
pkgver=30.3.0
pkgrel=1
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir/${_pkgname}-${pkgver}"

build() {
gpep517 build-wheel \
--wheel-dir .dist \
--output-fd 3 3>&1 >&2
}

check() {
python3 -m venv --clear --without-pip --system-site-packages .testenv
.testenv/bin/python3 -m installer .dist/*.whl
.testenv/bin/python3 -m pytest
}

package() {
python3 -m installer -d "$pkgdir" \
.dist/*.whl
}

sha512sums="
3fe4ac8830085fe38d8ee713a332047941b2a7a8ff5f31810b124c5903335a8343a222926ae00da66a49b4d6f8b934
af3cc350448b075a4ec6aa1fdb51aef
"

```

license-expression-30.3.0.tar.gz

"

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vintagedreamworks@hotmail.com

<http://www.geocities.com/SiliconValley/Campus/8645/index.html>

<http://members.nbc.com/silicon39/>

<http://www.mp3.com/silicon39>

<https://analoguesque.x10host.com/>

mini_sendmail - accept email on behalf of real sendmail

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```
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
```

```
pkgname=libart-lgpl
```

```
pkgver=2.3.21
```

```
pkgrel=8
```

```
pkgdesc="A library for high-performance 2D graphics"
```

```
url="https://www.levien.com/libart/"
```

```
arch="all"
```

```
options="!check" # No test suite.
```

```
license="LGPL-2.0-or-later"
```

```
subpackages="$pkgname-dev"
```

```
source="https://download.gnome.org/sources/libart-lgpl/2.3/libart-lgpl-$pkgver.tar.bz2"
```

```
"
```

```
builddir="$srcdir"/libart-lgpl-$pkgver
```

```
prepare() {  
    update_config_sub  
    default_prepare  
}
```

```
build() {  
    ./configure \  
    --build=$CBUILD \  
    --host=$CHOST \  
    --prefix=/usr
```

```

make
}

package() {
make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020 libart_lgpl-2.3.21.tar.bz2"

```

1.270 libucontext 1.2-r3

1.270.1 Available under license :

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1.271 alpine-baselayout-data 3.6.5-r0

1.271.1 Available under license :

```

# Contributor: Patrycja Rosa <alpine@ptrcnll.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnll.me>
pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
cdefs.h
queue.h
tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
mkdir -p "$pkgdir"
install -Dm644 -t "$pkgdir"/usr/include/sys \

```

```
cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178 cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750 queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3 tree.h
"
```

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The Kohonen neural network code for color optimization was written by Anthony Dekker.

Parts Copyright (c) 1995 by C. Blanc and C. Schlick

The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:

"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95
<http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html>

Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>

Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>

pkgname=spdx-licenses

pkgver=3.22

pkgrel=1

pkgdesc="Various data formats for the SPDX License List"

url="https://spdx.org/"

arch="noarch"

options="!check" # no test suite


```

license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
    subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
    mkdir -p "$pkgdir"
}

_subpkg() {
    local type=${subpkgname/$pkgname-/}
    pkgdesc="$pkgdesc ($type)"
    install_if="$pkgname=$pkgver-r$pkgrel"
    mkdir -p "$subpkgdir"/usr/share/spdx
    cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
    pkgdesc="$pkgdesc (licence list)"
    mkdir -p "$subpkgdir"/usr/share/spdx
    local i; for i in "$builddir"/text/*.txt; do
        local
        license=${i##*/}
        echo "${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
    done
}

sha512sums="
b213fe66699770d75a4c994a01a5c08325751423516c2fb871088a47e7e7ce605736064f5ce3a63dc1d3c462271832db
7bc464ac968df1888f9823787964c786 license-list-data-3.22.tar.gz
"

# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=1
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error

```

```

subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz"
options="!check" # no tests

build() {
# some GNU autoconf options are ignored, but it works
./configure \
--build=$CBUILD \
--host=$CHOST \
--prefix=/usr \
--sysconfdir=/etc \
--mandir=/usr/share/man \
--localstatedir=/var/lib # it really shouldn't be in /var
make
}

package() {
make DESTDIR="$pkgdir" install
install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
"
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright" # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
gpep517 build-wheel \

```

```

--wheel-dir .dist \
--output-fd 3 3>&1 >&2
}

package() {
gpep517 install-wheel --destdir "$pkgdir" \
.dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
flake8-copyright-0.2.4.tar.gz
"
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
default_prepare

cargo fetch --target="$CTARGET" --locked
}

build() {
cargo auditable build --release --frozen
}

check() {
cargo test --frozen
}

package() {
install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5 cargo-license-0.6.1.tar.gz
"

```

```

# Contributor: Dhruvin Gandhi <contact@dhruvin.dev>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license-expression
pkgver=30.3.0
pkgrel=1
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir/${_pkgname}-${pkgver}"

build() {
    gpep517 build-wheel \
        --wheel-dir .dist \
        --output-fd 3 3>&1 >&2
}

check() {
    python3 -m venv --clear --without-pip --system-site-packages .testenv
    .testenv/bin/python3 -m installer .dist/*.whl
    .testenv/bin/python3 -m pytest
}

package() {
    python3 -m installer -d "$pkgdir" \
        .dist/*.whl
}

sha512sums="
3fe4ac8830085fe38d8ee713a332047941b2a7a8ff5f31810b124c5903335a8343a222926aefe000da66a49b4d6f8b934
af3cc350448b075a4ec6aa1fdb51aef
    license-expression-30.3.0.tar.gz
"
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```

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vintagedreamworks@hotmail.com

<http://www.geocities.com/SiliconValley/Campus/8645/index.html>

<http://members.nbc.com/silicon39/>

<http://www.mp3.com/silicon39>

<https://analoguesque.x10host.com/>

Automatically generated by apkgbuild-cpan, template 4

Contributor: Valery Kartel <valery.kartel@gmail.com>

Maintainer: Celeste <cielesti@protonmail.com>

pkgname=perl-bsd-resource

pkgver=1.2911

pkgrel=9

#_pkgreal is used by apkgbuild-cpan to find modules at MetaCpan

_pkgreal=BSD-Resource

pkgdesc="Perl extension implements the BSD process resource limit functions"

url="https://metacpan.org/release/BSD-Resource/"

arch="all"

license="Artistic-2.0 OR LGPL-2.0"

depends="perl"

makedepends="perl-dev"

```

subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
        INSTALLDIRS=vendor \
        NO_PACKLIST=1 \
        NO_PERLLOCAL=1
    make
}

check() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    make test
}

package() {
    make DESTDIR="$pkgdir" install
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
    BSD-Resource-1.2911.tar.gz
"
mini_sendmail - accept email on behalf of real sendmail

```

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Maintainer: Natanael Copa <ncopa@alpinelinux.org>

pkgname=libart-lgpl

pkgver=2.3.21

pkgrel=8

pkgdesc="A library for high-performance 2D graphics"

url="https://www.levien.com/libart/"

arch="all"

options="!check" # No test suite.

license="LGPL-2.0-or-later"

subpackages="\$pkgname-dev"

source="https://download.gnome.org/sources/libart-lgpl/2.3/libart-lgpl-\$pkgver.tar.bz2"

"

builddir="\$srcdir"/libart-lgpl-\$pkgver

```
prepare() {
  update_config_sub
  default_prepare
}
```

```
build() {
  ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr
  make
}
```

```
package() {
  make DESTDIR="$pkgdir" install
}
```

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e76654309e001aee9bace727b5b4c8589405256a3c020 libart-lgpl-2.3.21.tar.bz2"

1.272 libncursesw 6.4_p20240420-r0

1.272.1 Available under license :

Contributor: Patrycja Rosa <alpine@ptrcnull.me>

Maintainer: Patrycja Rosa <alpine@ptrcnull.me>

pkgname=bsd-compat-headers

```

pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
cdefs.h
queue.h
tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
mkdir -p "$pkgdir"
install -Dm644 -t "$pkgdir"/usr/include/sys \
cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178 cdefs.h
2f0d5e6e4dc3350285cf17009265dddcb12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750 queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3 tree.h
"
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The Kohonen neural network code for color optimization was written by Anthony Dekker.

Parts Copyright (c) 1995 by C. Blanc and C. Schlick

The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:

"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95

<http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html>

Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>

Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>

pkgname=spdx-licenses

pkgver=3.22

pkgrel=1

pkgdesc="Various data formats for the SPDX License List"

url="https://spdx.org/"

arch="noarch"

options="!check" # no test suite

license="CC-BY-3.0"

source="license-list-data-\$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v\$pkgver.tar.gz"

builddir="\$srcdir/license-list-data-\$pkgver"

subpackages="\$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in \$_types; do

subpackages="\$subpackages \$pkgname-\$type:_subpkg"

done

package() {

mkdir -p "\$pkgdir"

}

_subpkg() {

local type=\${subpkgname/\$pkgname-/}

pkgdesc="\$pkgdesc (\$type)"

install_if="\$pkgname=\$pkgver-r\$pkgrel"

mkdir -p "\$subpkgdir"/usr/share/spdx

cp -r "\$builddir"/\$type "\$subpkgdir"/usr/share/spdx/

}

list() {

pkgdesc="\$pkgdesc (licence list)"

mkdir -p "\$subpkgdir"/usr/share/spdx

local i; for i in "\$builddir"/text/*.txt; do

local

license=\${i##*/}

echo \${license%.*} >> "\$subpkgdir"/usr/share/spdx/license.lst

done

```

}

sha512sums="
b213fe66699770d75a4c994a01a5c08325751423516c2fb871088a47e7e7ce605736064f5ce3a63dc1d3c462271832db
7bc464ac968df1888f9823787964c786 license-list-data-3.22.tar.gz
"
# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=1
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz"
options="!check" # no tests

build() {
# some GNU autoconf options are ignored, but it works
./configure \
--build=$CBUILD \
--host=$CHOST \
--prefix=/usr \
--sysconfdir=/etc \
--mandir=/usr/share/man \
--localstatedir=/var/lib # it really shouldn't be in /var
make
}

package() {
make DESTDIR="$pkgdir" install
install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
bsd-games-3.3.tar.gz
"
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4

```

```

pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright"          # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
    gpep517 build-wheel \
        --wheel-dir .dist \
        --output-fd 3 3>&1 >&2
}

package() {
    gpep517 install-wheel --destdir "$pkgdir" \
        .dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
flake8-copyright-0.2.4.tar.gz
"
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
    default_prepare

    cargo fetch --target="$CTARGET" --locked
}

```

```

build() {
    cargo auditable build --release --frozen
}

check() {
    cargo test --frozen
}

package() {
    install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5 cargo-license-0.6.1.tar.gz
"

# Contributor: Dhruvin Gandhi <contact@dhruvin.dev>
# Maintainer: Patrycja Rosa <alpine@ptrcnll.me>
pkgname=py3-license-expression
_pkgname=license-expression
pkgver=30.3.0
pkgrel=1
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir/${_pkgname}-${pkgver}"

build() {
    gpep517 build-wheel \
        --wheel-dir .dist \
        --output-fd 3 3>&1 >&2
}

check() {
    python3 -m venv --clear --without-pip --system-site-packages .testenv
    .testenv/bin/python3 -m installer .dist/*.whl
    .testenv/bin/python3 -m pytest
}

package() {
    python3 -m installer -d "$pkgdir" \
        .dist/*.whl
}

```

```
}
```

```
sha512sums="
```

```
3fe4ac8830085fe38d8ee713a332047941b2a7a8ff5f31810b124c5903335a8343a222926aefe000da66a49b4d6f8b934  
af3cc350448b075a4ec6aa1fdb51aef
```

```
license-expression-30.3.0.tar.gz
```

```
"
```

```
MIT License
```

```
Copyright (c) 2023 Leaf Corcoran
```

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```
# Automatically generated by apkbuild-cpan, template 4
```

```
# Contributor: Valery Kartel <valery.kartel@gmail.com>
```

```
# Maintainer: Celeste <cielesti@protonmail.com>
```

```
pkgname=perl-bsd-resource
```

```
pkgver=1.2911
```

```
pkgrel=9
```

```
#__pkgreal is used by apkbuild-cpan to find modules at MetaCpan
```

```
_pkgreal=BSD-Resource
```

```
pkgdesc="Perl extension implements the BSD process resource limit functions"
```

```
url="https://metacpan.org/release/BSD-Resource/"
```

```
arch="all"
```

```
license="Artistic-2.0 OR LGPL-2.0"
```

```
depends="perl"
```

```
makedepends="perl-dev"
```

```
subpackages="$pkgname-doc"
```

```
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
```

```
builddir="$srcdir/$_pkgreal-$pkgver"
```

```
build() {
```

```
export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
INSTALLDIRS=vendor \
NO_PACKLIST=1 \
NO_PERLLOCAL=1
make
}
```

```
check() {
export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
make test
}
```

```
package() {
make DESTDIR="$pkgdir" install
}
```

```
sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
```

```
BSD-Resource-1.2911.tar.gz
```

```
"
```

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(EMU Soundfont 2 Format)

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Maintainer: Natanael Copa <ncopa@alpinelinux.org>

pkgname=libart-lgpl

pkgver=2.3.21

pkgrel=8

pkgdesc="A library for high-performance 2D graphics"

url="https://www.levien.com/libart/"

arch="all"

options="!check" # No test suite.

license="LGPL-2.0-or-later"

subpackages="\$pkgname-dev"

source="https://download.gnome.org/sources/libart-lgpl/2.3/libart-lgpl-\$pkgver.tar.bz2"

"

builddir="\$srcdir"/libart-lgpl-\$pkgver

```
prepare() {  
  update_config_sub  
  default_prepare  
}
```

```
build() {  
  ./configure \  
  --build=$CBUILD \  
  --host=$CHOST \  
  --prefix=/usr  
  make  
}
```

```
package() {
  make DESTDIR="$pkgdir" install
}
```

```
sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020 libart_lgpl-2.3.21.tar.bz2"
```

1.273 jsr305 3.0.2

1.273.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (c) 2005 Brian Goetz
 * Released under the Creative Commons Attribution License
 * (http://creativecommons.org/licenses/by/2.5)
 * Official home: http://www.jcip.net
 */
```

Found in path(s):

```
* /opt/cola/permits/2035784567_1717163175.5646207/0/jsr305-3-0-2-sources-12-
jar/javax/annotation/concurrent/Immutable.java
* /opt/cola/permits/2035784567_1717163175.5646207/0/jsr305-3-0-2-sources-12-
jar/javax/annotation/concurrent/GuardedBy.java
* /opt/cola/permits/2035784567_1717163175.5646207/0/jsr305-3-0-2-sources-12-
jar/javax/annotation/concurrent/NotThreadSafe.java
* /opt/cola/permits/2035784567_1717163175.5646207/0/jsr305-3-0-2-sources-12-
jar/javax/annotation/concurrent/ThreadSafe.java
```

1.274 xml-apis 1.4.01

1.274.1 Available under license :

```
=====
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== Version 2.0, in this case for the Apache xml-commons xml-apis ==
== distribution. ==
=====
```

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2000-05-05

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1.275 servlet-api 3.0.1

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```
* /opt/cola/permits/2036532780_1717204606.4493613/0/perfmark-api-0-17-0-sources-3-
jar/io/perfmark/PerfMark.java
* /opt/cola/permits/2036532780_1717204606.4493613/0/perfmark-api-0-17-0-sources-3-jar/io/perfmark/Tag.java
* /opt/cola/permits/2036532780_1717204606.4493613/0/perfmark-api-0-17-0-sources-3-jar/io/perfmark/Link.java
*
/opt/cola/permits/2036532780_1717204606.4493613/0/perfmark-api-0-17-0-sources-3-jar/io/perfmark/package-
info.java
* /opt/cola/permits/2036532780_1717204606.4493613/0/perfmark-api-0-17-0-sources-3-jar/io/perfmark/Impl.java
```

1.278 busybox 1.36.1-r29

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```
<one line to give the program's name and a brief idea of what it does.>  
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```

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```
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Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

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```
Yoyodyne, Inc., hereby disclaims all copyright interest in the
program `Gnomovision' (a program to direct compilers to make passes
at assemblers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

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under certain conditions; type `show c' for details.
```

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```
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```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
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1.282 ssl-client 1.36.1-r29

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1.283 openjdk 11.0.22u7

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```

```
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```

```
...
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## CUP Parser Generator for Java v 0.11b

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Main Mesa code	src/mesa/	MIT
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Ext headers	GL/gltext.h	Khronos
	GL/gltext.h	Khronos
	GL/wglext.h	Khronos
	KHR/khrplatform.h	Khronos

\*\*\*\*\*

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Mesa 3-D  
graphics library

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```
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include/GL/glxext.h
include/GL/wglxext.h :
```

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```
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```

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## xwd v1.0.7

### xwd utility

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## Double-conversion v1.1.5

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Ext headers GL/ glxext.h Khronos  
GL/ glxext.h Khronos  
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Mesa 3-D  
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include/GL/ wglxext.h :

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include/KHR/khrplatform.h :

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## ASM Bytecode Manipulation Framework v6.0

### ASM License

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