| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/CharSequence.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/lang/Character.UnicodeBlock.html)   [**NEXT CLASS**](http://docs.google.com/java/lang/Class.html) | [**FRAMES**](http://docs.google.com/index.html?java/lang/CharSequence.html)    [**NO FRAMES**](http://docs.google.com/CharSequence.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#3znysh7) | DETAIL: FIELD | CONSTR | [METHOD](#2et92p0) |

## **java.lang**

Interface CharSequence

**All Known Subinterfaces:** [Name](http://docs.google.com/javax/lang/model/element/Name.html) **All Known Implementing Classes:** [CharBuffer](http://docs.google.com/java/nio/CharBuffer.html), [Segment](http://docs.google.com/javax/swing/text/Segment.html), [String](http://docs.google.com/java/lang/String.html), [StringBuffer](http://docs.google.com/java/lang/StringBuffer.html), [StringBuilder](http://docs.google.com/java/lang/StringBuilder.html)

public interface **CharSequence**

A CharSequence is a readable sequence of char values. This interface provides uniform, read-only access to many different kinds of char sequences. A char value represents a character in the *Basic Multilingual Plane (BMP)* or a surrogate. Refer to [Unicode Character Representation](http://docs.google.com/Character.html#unicode) for details.

This interface does not refine the general contracts of the [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)) and [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()) methods. The result of comparing two objects that implement CharSequence is therefore, in general, undefined. Each object may be implemented by a different class, and there is no guarantee that each class will be capable of testing its instances for equality with those of the other. It is therefore inappropriate to use arbitrary CharSequence instances as elements in a set or as keys in a map.

**Since:** 1.4

| **Method Summary** | |
| --- | --- |
| char | [**charAt**](http://docs.google.com/java/lang/CharSequence.html#charAt(int))(int index)            Returns the char value at the specified index. |
| int | [**length**](http://docs.google.com/java/lang/CharSequence.html#length())()            Returns the length of this character sequence. |
| [CharSequence](http://docs.google.com/java/lang/CharSequence.html) | [**subSequence**](http://docs.google.com/java/lang/CharSequence.html#subSequence(int,%20int))(int start, int end)            Returns a new CharSequence that is a subsequence of this sequence. |
| [String](http://docs.google.com/java/lang/String.html) | [**toString**](http://docs.google.com/java/lang/CharSequence.html#toString())()            Returns a string containing the characters in this sequence in the same order as this sequence. |

| **Method Detail** |
| --- |

### length

int **length**()

Returns the length of this character sequence. The length is the number of 16-bit chars in the sequence.

**Returns:**the number of chars in this sequence

### charAt

char **charAt**(int index)

Returns the char value at the specified index. An index ranges from zero to length() - 1. The first char value of the sequence is at index zero, the next at index one, and so on, as for array indexing.

If the char value specified by the index is a [surrogate](http://docs.google.com/Character.html#unicode), the surrogate value is returned.

**Parameters:**index - the index of the char value to be returned **Returns:**the specified char value **Throws:** [IndexOutOfBoundsException](http://docs.google.com/java/lang/IndexOutOfBoundsException.html) - if the index argument is negative or not less than length()

### subSequence

[CharSequence](http://docs.google.com/java/lang/CharSequence.html) **subSequence**(int start,  
 int end)

Returns a new CharSequence that is a subsequence of this sequence. The subsequence starts with the char value at the specified index and ends with the char value at index end - 1. The length (in chars) of the returned sequence is end - start, so if start == end then an empty sequence is returned.

**Parameters:**start - the start index, inclusiveend - the end index, exclusive **Returns:**the specified subsequence **Throws:** [IndexOutOfBoundsException](http://docs.google.com/java/lang/IndexOutOfBoundsException.html) - if start or end are negative, if end is greater than length(), or if start is greater than end

### toString

[String](http://docs.google.com/java/lang/String.html) **toString**()

Returns a string containing the characters in this sequence in the same order as this sequence. The length of the string will be the length of this sequence.

**Overrides:**[toString](http://docs.google.com/java/lang/Object.html#toString()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**a string consisting of exactly this sequence of characters

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/CharSequence.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/lang/Character.UnicodeBlock.html)   [**NEXT CLASS**](http://docs.google.com/java/lang/Class.html) | [**FRAMES**](http://docs.google.com/index.html?java/lang/CharSequence.html)    [**NO FRAMES**](http://docs.google.com/CharSequence.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#3znysh7) | DETAIL: FIELD | CONSTR | [METHOD](#2et92p0) |

[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

Copyright 2006 Sun Microsystems, Inc. All rights reserved. Use is subject to [license terms](http://docs.google.com/legal/license.html). Also see the [documentation redistribution policy](http://java.sun.com/docs/redist.html).