| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/CollationKey.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/text/CollationElementIterator.html)   [**NEXT CLASS**](http://docs.google.com/java/text/Collator.html) | [**FRAMES**](http://docs.google.com/index.html?java/text/CollationKey.html)    [**NO FRAMES**](http://docs.google.com/CollationKey.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## **java.text**

Class CollationKey

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **java.text.CollationKey**

**All Implemented Interfaces:** [Comparable](http://docs.google.com/java/lang/Comparable.html)<[CollationKey](http://docs.google.com/java/text/CollationKey.html)>

public abstract class **CollationKey**extends [Object](http://docs.google.com/java/lang/Object.html)implements [Comparable](http://docs.google.com/java/lang/Comparable.html)<[CollationKey](http://docs.google.com/java/text/CollationKey.html)>

A CollationKey represents a String under the rules of a specific Collator object. Comparing two CollationKeys returns the relative order of the Strings they represent. Using CollationKeys to compare Strings is generally faster than using Collator.compare. Thus, when the Strings must be compared multiple times, for example when sorting a list of Strings. It's more efficient to use CollationKeys.

You can not create CollationKeys directly. Rather, generate them by calling Collator.getCollationKey. You can only compare CollationKeys generated from the same Collator object.

Generating a CollationKey for a String involves examining the entire String and converting it to series of bits that can be compared bitwise. This allows fast comparisons once the keys are generated. The cost of generating keys is recouped in faster comparisons when Strings need to be compared many times. On the other hand, the result of a comparison is often determined by the first couple of characters of each String. Collator.compare examines only as many characters as it needs which allows it to be faster when doing single comparisons.

The following example shows how CollationKeys might be used to sort a list of Strings.

// Create an array of CollationKeys for the Strings to be sorted.  
 Collator myCollator = Collator.getInstance();  
 CollationKey[] keys = new CollationKey[3];  
 keys[0] = myCollator.getCollationKey("Tom");  
 keys[1] = myCollator.getCollationKey("Dick");  
 keys[2] = myCollator.getCollationKey("Harry");  
 sort( keys );

//...

// Inside body of sort routine, compare keys this way  
 if( keys[i].compareTo( keys[j] ) > 0 )  
 // swap keys[i] and keys[j]

//...

// Finally, when we've returned from sort.  
 System.out.println( keys[0].getSourceString() );  
 System.out.println( keys[1].getSourceString() );  
 System.out.println( keys[2].getSourceString() );

**See Also:**[Collator](http://docs.google.com/java/text/Collator.html), [RuleBasedCollator](http://docs.google.com/java/text/RuleBasedCollator.html)

| **Constructor Summary** | |
| --- | --- |
| protected | [**CollationKey**](http://docs.google.com/java/text/CollationKey.html#CollationKey(java.lang.String))([String](http://docs.google.com/java/lang/String.html) source)            CollationKey constructor. |

| **Method Summary** | |
| --- | --- |
| abstract  int | [**compareTo**](http://docs.google.com/java/text/CollationKey.html#compareTo(java.text.CollationKey))([CollationKey](http://docs.google.com/java/text/CollationKey.html) target)            Compare this CollationKey to the target CollationKey. |
| [String](http://docs.google.com/java/lang/String.html) | [**getSourceString**](http://docs.google.com/java/text/CollationKey.html#getSourceString())()            Returns the String that this CollationKey represents. |
| abstract  byte[] | [**toByteArray**](http://docs.google.com/java/text/CollationKey.html#toByteArray())()            Converts the CollationKey to a sequence of bits. |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [toString](http://docs.google.com/java/lang/Object.html#toString()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Constructor Detail** |
| --- |

### CollationKey

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

CollationKey constructor.

**Parameters:**source - - the source string. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if source is null.**Since:** 1.6

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

### compareTo

public abstract int **compareTo**([CollationKey](http://docs.google.com/java/text/CollationKey.html) target)

Compare this CollationKey to the target CollationKey. The collation rules of the Collator object which created these keys are applied. **Note:** CollationKeys created by different Collators can not be compared.

**Specified by:**[compareTo](http://docs.google.com/java/lang/Comparable.html#compareTo(T)) in interface [Comparable](http://docs.google.com/java/lang/Comparable.html)<[CollationKey](http://docs.google.com/java/text/CollationKey.html)> **Parameters:**target - target CollationKey **Returns:**Returns an integer value. Value is less than zero if this is less than target, value is zero if this and target are equal and value is greater than zero if this is greater than target.**See Also:**[Collator.compare(java.lang.String, java.lang.String)](http://docs.google.com/java/text/Collator.html#compare(java.lang.String,%20java.lang.String))

### getSourceString

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

Returns the String that this CollationKey represents.

### toByteArray

public abstract byte[] **toByteArray**()

Converts the CollationKey to a sequence of bits. If two CollationKeys could be legitimately compared, then one could compare the byte arrays for each of those keys to obtain the same result. Byte arrays are organized most significant byte first.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/CollationKey.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*** |
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[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.

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