String:

Generally, string is a sequence of characters. But in java, string is an object that represents a sequence of characters. String class is used to create string object.

The java.lang.String class implements *Serializable*, *Comparable* and *CharSequence* interfaces.

The java String is immutable i.e. it cannot be changed but a new instance is created. For mutable class, you can use StringBuffer and StringBuilder class.

Create String object?

1. By string literal(To make Java more memory efficient)
2. By new keyword

String literal:

Java String literal is created by using double quotes.

String s1=”3Edge”;

Each time you create a string literal, the JVM checks the string constant pool first. If the string already exists in the pool, a reference to the pooled instance is returned. If string doesn't exist in the pool, a new string instance is created and placed in the pool. For example:

String s1 = “3Edge”

String s2 =”3Edge” (Instance not created)

new Keyword:

String s=**new** String("3Edge");//creates two objects and one reference variable

JVM will create a new string object in normal(non pool) heap memory and the literal "3Edge" will be placed in the string constant pool. The variables will refer to the object in heap(non pool).

**String class Methods:**

|  |  |
| --- | --- |
| **Method** | **Description** |
| [char charAt(int index)](file:///C:\Users\Suresh\Downloads\javatpoint\www.javatpoint.com\java-string-charat.html) | returns char value for the particular index |
| [int length()](file:///C:\Users\Suresh\Downloads\javatpoint\www.javatpoint.com\java-string-length.html) | returns string length |
| [String substring(int beginIndex)](file:///C:\Users\Suresh\Downloads\javatpoint\www.javatpoint.com\java-string-substring.html) | returns substring for given begin index |
| [String substring(int beginIndex, int endIndex)](file:///C:\Users\Suresh\Downloads\javatpoint\www.javatpoint.com\java-string-substring.html) | returns substring for given begin index and end index |
| [boolean contains(CharSequence s)](file:///C:\Users\Suresh\Downloads\javatpoint\www.javatpoint.com\java-string-contains.html) | returns true or false after matching the sequence of char value |
| static String join(CharSecuance dele,CharSe ch) | returns a joined string |
| [boolean equals(Object another)](file:///C:\Users\Suresh\Downloads\javatpoint\www.javatpoint.com\java-string-equals.html) | checks the equality of string with object |
| [boolean isEmpty()](file:///C:\Users\Suresh\Downloads\javatpoint\www.javatpoint.com\java-string-isempty.html) | checks if string is empty |
| [String concat(String str)](file:///C:\Users\Suresh\Downloads\javatpoint\www.javatpoint.com\java-string-concat.html) | concatinates specified string |
| [String split(String regex)](file:///C:\Users\Suresh\Downloads\javatpoint\www.javatpoint.com\java-string-split.html) | returns splitted string matching regex |
| [String replace(CharSequence old, CharSequence new)](file:///C:\Users\Suresh\Downloads\javatpoint\www.javatpoint.com\java-string-replace.html) | replaces occurrences of specified char value |
| [String trim()](file:///C:\Users\Suresh\Downloads\javatpoint\www.javatpoint.com\java-string-trim.html) | returns trimmed string omitting leading and trailing spaces |
| [String intern()](file:///C:\Users\Suresh\Downloads\javatpoint\www.javatpoint.com\java-string-intern.html) | returns interned string |
| int indexOf(int ch) / String / String,index | returns specified char value index |
| String toLowerCase() | returns string in lowercase. |

Demo: