

String

A string is a sequence of characters.

```
String variableName = "value";
```

String Pool

A separate space in Java heap where string literals are stored.

When a string literal is created, JVM first checks for that literal in the String Pool. If the literal is already present, a reference to the literal is returned. If not present, a new string object is created.

A string object created using the 'new' keyword is created outside of the String Pool in the heap.

Comparing Strings

"==" operator

returns true when the two variables point to the same string object.

.equals() method

returns true when the two string objects have the same value.

String formatting

The printf() method is used to format a string.

%d	int
%.nf	float
%c	char
%s	String
%n	newline

String Methods

Method	Functionality
.charAt()	returns the character at the specified index
.concat()	appends a string to the end of the string
.contains()	checks whether the string contains the specified sequence
.indexOf()	returns the first occurring index of the specified sequence
.length()	length of the string
.replace()	replace the specified sequence
.split()	split a string into an array of substrings
.toLowerCase()	converts string to lowercase letters
.toUpperCase()	converts string to uppercase letters

Immutability

String objects are *immutable*. i.e. Once a string object is created it's data can't be changed.

➤ Java does not support *Operator overloading*. However, the '+' operator is overloaded to concatenate strings.