## Java Strings

In this lesson, the basic string data type in Java and the various inbuilt functions that the language offers will be explained.



## Introduction #

**String** is a class that is built into the **java.lang** package. This represents **character** strings, i.e., text type of data is stored in the *String* type in Java.

## String literals #

String literals are a means of expressing text type of data in Java. They start with **double-quotation marks** and then contain zero or more characters, including Unicode characters. The String literal must end with another double-quotation marks ". This would be a String in Java, "Hello World!".

In String literals, the backslash character \ helps incorporate special characters into the line of text. The table below shows the syntax for these special characters.

Name	Character
Backspace	\b
Tab	\t
NULL character	\0
Newline	\n

Carriage Control	\r
Double Quote	\ "
Single Quote	\',
Backslash	\\

The code below shows an example of how to use these special characters!

```
class special_characters {
    public static void main(String[] args) {
        String special_char = "Line one\n" + "Line two\n";
        System.out.println(special_char);
    }
}
```

## Immutability #

Keep in mind that **String** objects are *immutable*, i.e, they cannot be modified once created. Hence, when a String object is modified, it is actually a **new** string that is being created. Hence, to save changes to the String, we must assign it to the new String. Look at the example below!

```
class immutability {
  public static void main(String[] args) {
    String text = "    Cut string";
    // The trim function is meant to eliminate leading & trailing spaces
    text.trim();
    // Without assigning the text variable to the trimmed string
    System.out.println(text);

    // Assigning trimmed string to the variable
    text = text.trim();
    System.out.println(text);
}
```







Now that you have the basic idea of **Strings** in Java. Let's look at the different functions that this class has to offer in the next lesson!