

# String in java

## Assignment

### Assignment Solution

Q1.What is a String in Java?

Ans. A Java string is a sequence of characters that exists as an object of the class java. lang.

Q2.Types of String in java are?

Ans. A string is a collection of characters. String objects in Java are immutable, which means they can never be modified after they have been created.

### CharSequence Interface

In Java, the CharSequence Interface is used to represent the order of characters.

1. **String**:- A string is an immutable class i.e. it cannot be changed. We need to create a new object and functions like toupper, tolower, etc return a new object.
2. **StringBuffer**:- StringBuffer represents expandable and writable character sequences, whereas the string represents fixed-length, immutable character sequences.
3. **StringBuilder** -: A mutable string of characters is represented by the Java class StringBuilder. The StringBuilder class offers a substitute for the String Class in Java since it constructs a mutable sequence of characters instead of an immutable one as the String Class does.

Q3.In how many ways can you create string objects in Java?

Ans. There are two ways to create a String object:

1. By string literal : Java String literal is created by using double quotes.  
For Example: String s="Welcome";
2. By new keyword : Java String is created by using a keyword "new".  
For example: String s=new String("Welcome");  
It creates two objects (in String pool and in heap) and one reference variable where the variable 's' will refer to the object in the heap.

Q4. What is a string constant pool?

Ans. The Java string constant pool is an area in heap memory where Java stores literal string values. The heap is an area of memory used for run-time operations. When a new variable is created and given a value, Java checks to see if that exact value exists in the pool.

Q5. What do you mean by mutable and immutable objects?

Ans. The mutable objects can be changed to any value or state without adding a new object. Whereas, the immutable objects can not be changed to its value or state once it is created.

Q6. Where exactly is the string constant pool located in the memory?

Ans. Heap memory