

Assignment - 7.

Q-1. What is a String in Java?

In Java String is an object and collection of character quoted with Double Quotes.

Ex - String Sb = "Abhinav";

Q-2. Types of Strings in Java?

On the basis of change in content in the string a String is divided into two parts -

(a) Mutable String -

If a String value can be manipulate or the content of String can be change without creating another object in heap, then this type of String is called mutable String.

```
StringBuffer Sb = new StringBuffer("Abhi");  
Sb = Sb.append("Raj");
```


- ⑥. Immutable String - If the content of a String can not be changed then this type of String is called immutable String.

Example - String S₀ = "Hello";

Q-3 How many ways we can create String object in Java?

① String S₀ = new String("Abhi");

String S₁ = "Abhi";

② StringBuffer S₂ = new StringBuffer("Abhi");

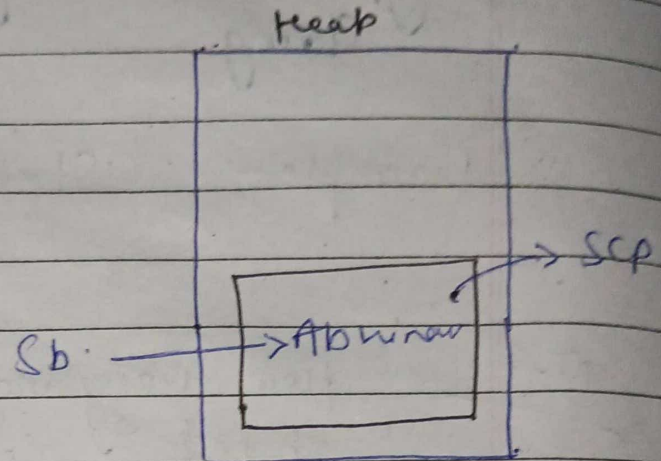
StringBuilder S₃ = new StringBuilder("Raj");

Q-4 String constant pool?

1) String constant pool - SCP is a region of memory inside the heap memory area, where a string created without using new keyword is stored and reference variable point to that address.

Example-

String Sb = "Abhinav";



Q-5. ^{mutable} ~~mutual~~ and ^{immutable} ~~immutual~~ objects?

① ^{immutable} ~~immutual~~ object -

Mutable means, things that can't be changed. In String, if the content of String can't be changed without creating another object, then this type of objects are called mutable String.

Ex- String Sb = "Abhinav";

String Sb1 = new String("Hello");

⑥. Immutable String-

an Immutable objects are those object in java in which the content can ~~not~~ be changed; then this type of object or String are called mutable String.

Example-

```
String Buffer sb = new String Buffer("key");
```

```
String Builder sb1 = new String Builder("who")
```

Q-5. where is the String constant pool in the memory?

* In Java Virtual Machine there are many memory regions and on behalf of value, object, or variable memory allocated on different-2 part of JVM.

* In heap area there is a section called String constant pool, here strings created without using new keywords are stored and Duplication is not allowed in this region.