

Assignment-2

1. What is a String in java?

In java basically an object that represents a sequence of char values. An array of characters works the same as java String.

String provides lots of methods to perform operations on strings such as compare(), concat(), equals(), length(), replace(), compareTo(), substring() etc.

2. Types of String in java are?

String are of two types :

Mutable : Mutable objects are objects whose value can change after initialization.

Immutable : Immutable objects are objects whose value can not change after initialization.

3. In how many ways can you create string objects in java?

Using String literals

```
String str1= "Hello World";
```

Using the new keyword

```
String str2 = new String ("Hello World");
```

4. What is a string constant pool?

In java String is the most important topic. There are a number of concepts related to String but the string pooling concept is one of them. The String pooling concept in java is a bit tricky.

String pool is nothing but a storage area in Java heap where string literals store. By default it is empty and privately maintained by the Java String class. Whenever we create a string the string object occupies some space in the heap memory.

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

The mutable objects are objects whose values can be changed after initialization. We can change the object values such as fields and status after the object is created.

For example java.util.Date, StringBuilder, StringBuffer etc.

The immutable objects are objects whose value can not be changed after initialization.

We can not change anything once the object is created. For example primitive objects such as int, long, float, double, all legacy classes, wrapper class, String class etc.

6. Where exactly is the String constant pool located in the memory?

String constant pool located java heap memory.