**String Interview Questions**

**Q. How to compare strings? Use "==" or use equals()?**

**Ans.** In brief, "==" tests if references are equal and equals() tests if values are equal. Unless you want to check if two strings are the same object, you should always use equals().

**Q. Why is char[] preferred over String for security sensitive information?**

**Ans.** Strings are immutable, which means once they are created, they will stay unchanged until Garbage Collector kicks in. With an array, you can explicitly change its elements. In this way, security sensitive information(e.g. password) will not be present anywhere in the system.

**Q. How to split a string with whitespace characters?**

**Ans.** We can simple do split using regular expression. "\s" stands for white space characters such as " ", "\t", "\r", "\n".

String[] strArray = aString.split("\\s+");

**Q. String vs StringBuilder vs StringBuffer**

**Ans.** **String vs StringBuilder:**

StringBuilder is mutable, which means you can modify it after its creation.

**StringBuilder vs StringBuffer:**

StringBuffer is synchronized, which means it is thread-safe but slower than StringBuilder.

**Q. How to repeat a string?**

**Ans.** In Java, we can use the repeat() method of StringUtils from Apache Commons Lang package.

String str = "abcd";

String repeated = StringUtils.repeat(str,3);

//abcdabcdabcd

**Q. How to count # of occurrences of a character in a string?**

**Ans.** Use StringUtils from apache commons lang.

int n = StringUtils.countMatches("11112222", "1");

System.out.println(n);

**Q. To what value is a variable of the String type automatically initialized?**

**Ans.** The default value of an String type is null.

**Q. How is it possible for two String objects with identical values not to be equal under the == operator?**

**Ans.** The == operator compares two objects to determine if they are the same object in memory. It is possible for two String objects to have the same value, but located in different areas of memory.

**Q. What is the meaning of immutable in terms of String?**

**Ans.** The simple meaning of immutable is unmodifiable or unchangeable. Once string object has been created, its value can't be changed.

**Q. Why string objects are immutable in java?**

**Ans.** Because java uses the concept of string literal. Suppose there are 5 reference variables,all refers to one object "sachin".If one reference variable changes the value of the object, it will be affected to all the reference variables. That is why string objects are immutable in java.

**Q. How many ways we can create the string object?**

**Ans.** How to create String object?

There are two ways to create String object:

1. By string literal

2. By new keyword

1) String literal:

String literal is created by double quote.For

Example:

1. String s="Hello";

Each time you create a string literal, the JVM checks the string constant pool first. If the string already exists in the pool, a reference to the pooled instance returns. If the string does not exist in the pool, a new String object instantiates, then is placed in the pool.For example:

1. String s1="Welcome";

2. String s2="Welcome";//no new object will be created

In the above example only one object will be created.First time JVM will find no string object with the name "Welcome" in string constant pool,so it will create a new object.Second time it will find the string with the name "Welcome" in string constant pool,so it will not create new object whether will return the reference to the same instance.

Note: String objects are stored in a special memory area known as string constant pool inside the Heap memory.

2)By new keyword:

1. String s=new String("Welcome");//creates two objects and one reference variable

2. String s2="Welcome";

3. String s3="Welcome";

Only one object

**Q. Why java uses the concept of string literal?**

**Ans.** To make Java more memory efficient (because no new objects are created if it exists already in string constant pool)