

Course Name: A Level (2nd Sem)

Subject: JAVA

Topic: String handling in java

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String: A String is a sequence of characters (An array of characters). In Java, a String is treated as an object. After creating a String object we can not change it. So that is why it is said that a string is immutable. The `java.lang.String` class is used to create a String object.

How to create a String:

There are two ways to create a String in Java:

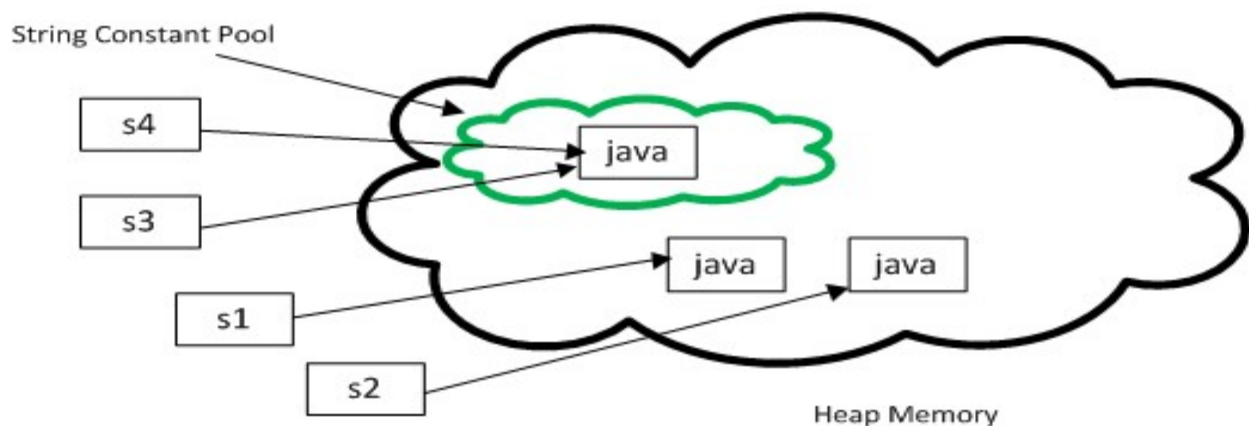
1. String literal
2. Using new keyword

String literal

Java String literal is created by using double quotes.

```
String s3 = "java";  
String s4 = "java"; //will not create new instance
```

Each time we 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 is returned. If the string doesn't exist in the pool, a new string instance is created and placed in the pool.



2) By new keyword

In this case, JVM will create a new String object in normal (non-pool) heap memory, and the literal "java" will be placed in the string constant pool. The variable `s` will refer to the object in a heap (non-pool).

```
String s1=new String("java");
```

Example:

```
class String{  
  
public static void main(String args[]){  
  
String s1="java";  
  
    String s2="java";  
  
String s3=new String("java");  
  
System.out.println(s1);  
  
System.out.println(s2);  
  
System.out.println(s3);  
  
}}
```

Immutable String:

In java, String objects are immutable. Immutable simply means which can not be modified or changed.

```
class String2  
{  
    public static void main(String args[])  
    {  
        String s1="NIELIT";  
        s1.concat(" GORAKHPUR");//concat() method appends the string at the end  
        System.out.println(s1);  
    }  
}
```

Output://it will print NIELIT only because it is immutable.

Exercise:-

- 1- What is the benfite of immutable String in java?
- 2- What is the use of String constant pool in java?