

String class

1. String is non-primitive data type, memory size is not fixed.
2. String is use to store collection of characters.
3. String is a inbuilt/ready made class present inside "java.lang" package.
4. String class is final class can't be inherited to other classes.
5. Object creation of String can be done in 2 ways:
 - Without using new keyword
 - Using new keyword
6. At the time of String declaration or String declaration & initialization object creation takes place.
7. String objects are immutable in nature/can't be change.
8. String objects are going to get stored inside "String pool area" which is present inside "heap area".

String pool area:

It is use to store String objects.

It is classified into 2 areas:

1. Constant pool area
2. Non-constant pool area.

1. Constant pool area:

1. During object creation time if you don't make use of new keyword then object creation takes place inside constant pool area.

1: Duplicate objects info are not allowed inside constant pool area.

2. non-constant pool area:

2. During object creation time if you make use of new keyword then object creation takes place inside non-constant pool area.

Duplicate objects info are allowed inside non-constant pool area.

```
package StringClass;
public class StringClassMethods1
{
    public static void main(String[] args)
    {
        String s1="velocity";
        String s2="ABCD";
        String s3="abcd";
        String s4="my name is abc";
        String s5="";
        String s6="abcaba";

        System.out.println(s5.isEmpty()); //true
        System.out.println(s1.charAt(2)); //l
        System.out.println(s6.indexOf('b'));
        System.out.println(s6.lastIndexOf('b'));
        System.out.println("-----");

        System.out.println(s1.substring(4)); //city
        System.out.println(s1.substring(4,6)); // 4 to 5 (SI, (EI+1))

        System.out.println("-----");
        System.out.println(s1.length());
    }
}
```

```

        System.out.println(s1.toUpperCase()); //VELOCITY
//      s1=s1.toUpperCase();
//      System.out.println(s1);
        System.out.println(s2.toLowerCase()); //abcd
//      s2=s2.toLowerCase();
//      System.out.println(s2);
        System.out.println("-----");
        System.out.println(s2.equals(s3)); //false compare data & case
        System.out.println(s2.equalsIgnoreCase(s3)); //true compare only data
        System.out.println("----");
        System.out.println(s4.contains("my")); //true
        System.out.println(s4.startsWith("my")); //true
        System.out.println(s4.endsWith("abc")); //true
    }
}

```

```

package StringClass;
public class StringClassMethods2
{
    public static void main(String[] args)
    {
        String s1="velocity";
        String s2="abcd";
        String s3=" xyz abc ";
        String s4="my name is abc";

        System.out.println(s1+s2); //velocityabcd
        System.out.println(s1.concat(s2)); //velocityabcd

        System.out.println(s3);
        System.out.println(s3.trim());

        System.out.println(s4.replace("abc", "xyz")); //my name is xyz

        String [] ar=s4.split(" "); //{my(0) name(1) is(2) abc(3)}

        System.out.println(ar.length); //4
        System.out.println(ar[2]); //is

        System.out.println("-----");

        for(int i=0; i<=ar.length-1; i++)
        {
            System.out.println(ar[i]);
        }
    }
}

```

```

package StringClass;
public class StringClassMethods3
{
    public static void main(String[] args)
    {
        String s1="my name is abc"; //oup -> abc is name my

        String[] ar = s1.split(" "); //{my(0) name(1) is(2) abc(3)}

        for(int i=ar.length-1; i>=0; i--)
        {
            System.out.print(ar[i]+" ");
        }
    }
}

```

```

package StringClass;
public class exampleOfForEachLoop
{

```

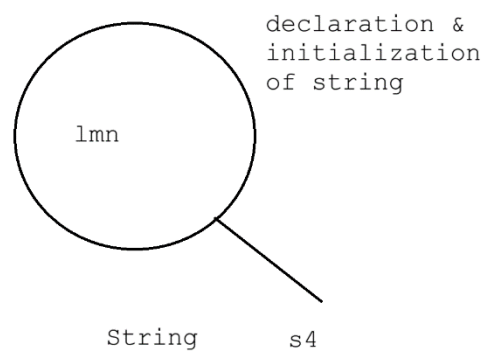
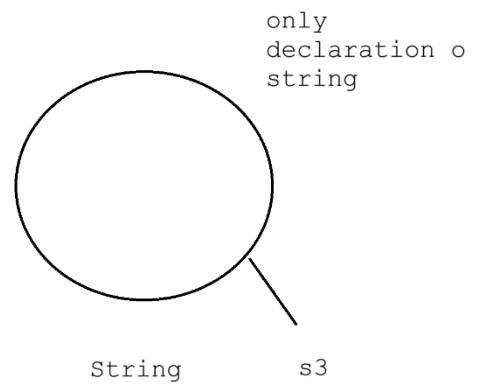
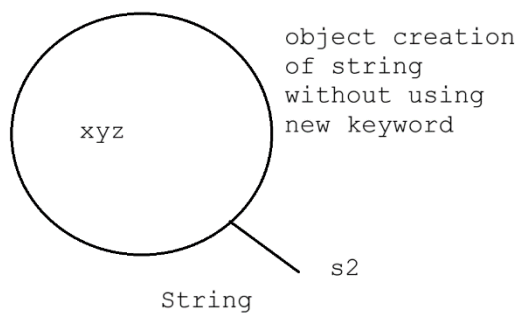
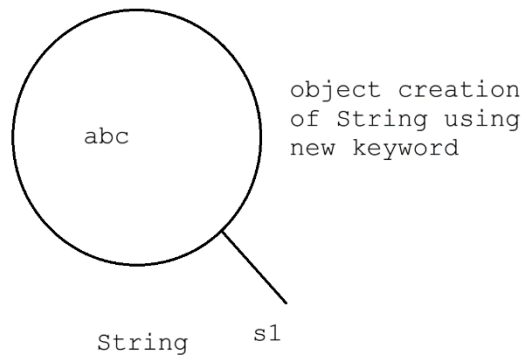
```
public static void main(String[] args)
{
    String [] ar= {"ganesh", "mahesh", "ramesh", "rahul"};

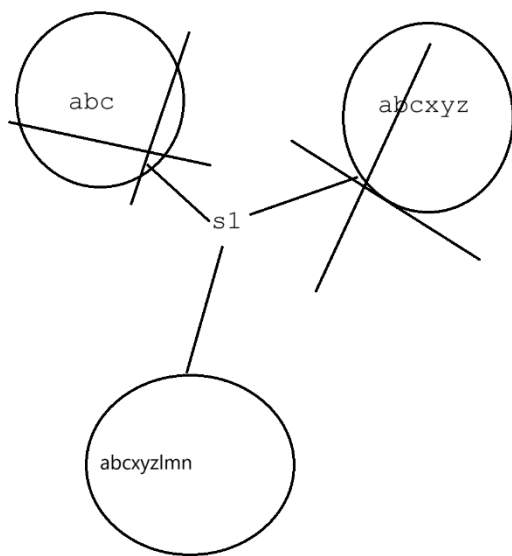
    for(String s1:ar)
    {
        System.out.println(s1);
    }

    System.out.println("-----");

    int [] ar1= {10,50,60,20,40};

    for( int num:ar1)
    {
        System.out.println(num);
    }
}
```





JVM

