

Practical No. 03

Aim : Illustrate the use of various string methods

A. Write a Java program to demonstrate the use of String methods

Program :

```
//DemoString.java
```

```
class DemoString
```

```
{
```

```
    public static void main(String args[])
```

```
    {
```

```
        System.out.println("\n-----Demo of String class-----");
```

```
        char ch[]={'H','e','l','l','o',' ','T','h','e','r','e',' ','(','(','o','V','o',''),'')'};
```

```
        String s1="Hello There (( o V o )) ";//First object
```

```
        String s2="Hello There (( o V o )) ";//Reference to first object
```

```
        String s3=new String("Hello There (( o V o ))");//Second object
```

```
        String s4=new String(ch);//converting ch array to string
```

```
        System.out.println(s1);
```

```
        System.out.println(s2);
```

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

```
        System.out.println(s4);
```

```
        System.out.println("\n-- Formatted String ---");
```

```
        String name="Aarti";
```

```
        String sf1=String.format("name is %s",name);
```

```
        String sf2=String.format("value is %f",56.45675);
```

```
        String sf3=String.format("value is %20.12f",78.56768); //returns 12 char fractional part  
        filling with 0
```

```
System.out.println(sf1);
System.out.println(sf2);
System.out.println(sf3);
```

```
String str1 = String.format("%d", 101); // Integer value
String str2 = String.format("%s", "Amar Singh"); // String value
String str3 = String.format("%f", 101.00); // Float value
String str4 = String.format("%x", 105); // Hexadecimal value
String str5 = String.format("%c", 'K'); // Char value
```

```
System.out.println(str1);
System.out.println(str2);
System.out.println(str3);
System.out.println(str4);
System.out.println(str5);
```

//integer formatting

```
System.out.println("\n -----integer formatting-----");
```

```
String si1 = String.format("%d", 101);
```

// Specifying length of integer

```
String si2 = String.format("|%10d|", 101);
```

// Left-justifying within the specified width

```
String si3 = String.format("|%-10d|", 101);
```

```
String si4 = String.format("|% d|", 101);
```

// Filling with zeroes

```
String si5 = String.format("|%010d|", 101);
```

```
System.out.println(si1);
System.out.println(si2);
System.out.println(si3);
System.out.println(si4);
System.out.println(si5);
```

```
    System.out.println("-----Substring Demo-----");
    String s11="Online Lectures :( / :)";
    String substr1 = s11.substring(0); // Starts with 0 and goes to end
    System.out.println(substr1);
    String substr2 = s11.substring(16,18); // Starts from 16 and goes to 18
    System.out.println(substr2);
    // String substr3 = s11.substring(16,30); // Returns Exception
```

```
System.out.println("string length is: "+substr1.length());
System.out.println("string contains :) "+s11.contains(":)"));
System.out.println("Character at index 7 is : "+s11.charAt(7));
```

```
String se1="Java";
String se2="java";
String se3="Java";
System.out.println("----Case Sensetive----");
System.out.println(se1.equals(se2));
System.out.println(se1.equals(se3));
```

```
System.out.println("----Case InSensetive----");
System.out.println(se1.equalsIgnoreCase(se2));
System.out.println(se1.equalsIgnoreCase(se3));
```

```

System.out.println("----Concat----");
String fn="Aarti";
String ln="Pardeshi";
System.out.println(fn.concat(ln));

System.out.println("----Replace----");
System.out.println(fn.replace("A","Bh"));
System.out.println("Index of P in Last name is "+ln.indexOf("P"));
System.out.println("Surname in lower case : "+ln.toLowerCase());
System.out.println("Surname in upper case : "+ln.toUpperCase());
String striml="   Are you feeling tired??   ";
System.out.println("Before Trim "+striml);
System.out.println("After Trim "+striml.trim());
} //end main
} //end class

```

Output:

```
C:\Program Files\Java\jdk1.7.0_51\bin>javac DemoString.java
```

```
C:\Program Files\Java\jdk1.7.0_51\bin>java DemoString
```

```
-----Demo of String class-----
```

```
Hello There (( o V o ))
```

```
Hello There (( o V o ))
```

```
Hello There (( o V o ))
```

```
Hello There ((oVo))
```

```
-- Formatted String ---
```

```
name is Aarti
```

```
value is 56.456750
```

value is 78.567680000000

101

Amar Singh

101.000000

69

K

-----integer formatting-----

101

| 101|

|101 |

| 101|

|0000000101|

-----Substring Demo-----

Online Lectures :(/ :)

:(

string length is: 24

string contains :) true

Character at index 7 is : L

----Case Sensitive----

false

true

----Case InSensitive----

true

true

----Concat----

AartiPardeshi

----Replace----

Bharti

Index of P in Last name is 0

Surname in lower case : pardeshi

Surname in upper case : PARDESHI

Before Trim Are you feeling tired??

After Trim Are you feeling tired??

B. Write a Java program to accept n strings and sort names in ascending order.

Program :

```
package sortnames;

import java.io.DataInputStream;
import java.io.IOException;

public class SortNames {

    public static void main(String[] args) throws IOException {
        DataInputStream dis = new DataInputStream(System.in);
        int n;
        String temp;
        System.out.print("Enter number of names you want to enter : ");
        n = Integer.parseInt(dis.readLine());
        String names[] = new String[n];
        System.out.println("Enter" + n + "names");
        for(int i=0;i<n;i++)
        {
            names[i] = dis.readLine();
        }
        for(int i=0;i<n;i++)
        {
            for(int j=i+1;j<n;j++)
            {
                if(names[i].compareTo(names[j])>=0)
                {
```

```
        temp = names[i];
        names[i] = names[j];
        names[j] = temp;
    }
}
}
System.out.print("Names in sorted Order=\n");
for(int i=0;i<=n-1;i++)
{
    System.out.println(names[i]);
}
}
}
```

Output :

run:

Enter number of names you want to enter : 4

Enter4names

Rohan

Ankita

Sneha

Mayuri

Names in sorted Order=

Ankita

Mayuri

Rohan

Sneha

BUILD SUCCESSFUL (total time: 40 seconds)