312011 **JAVA –EXP NO. 7** SEM III

AIM : PROGRAM ON STRING AND STRING BUFFER

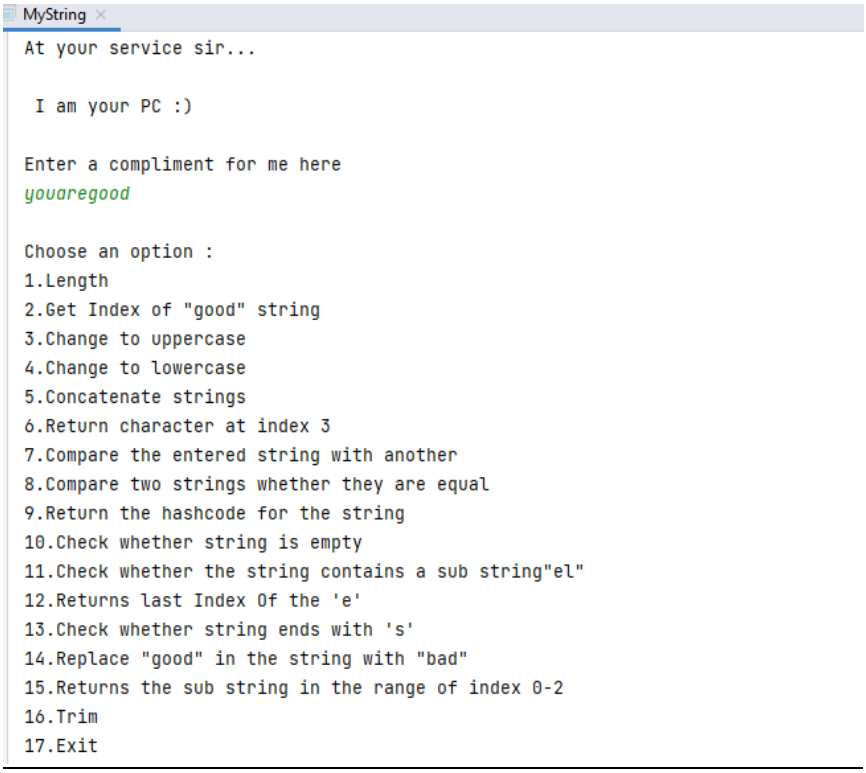
PROGRAM 1: (ON STRING)

```
package practicals.exp7;
import java.io.*;
import java.util.*;

public class MyString
{
    public static void main(String[] args)
    {
        int opt;
        double num=190;
        String temp,temp1,temp2,t,temp5;

        Scanner sc =new Scanner(System.in);

        System.out.println(" ");

        System.out.println("At your service sir... ");

        System.out.println(" ");

        System.out.println(" I am your PC :)");

        System.out.println(" ");

        System.out.println("Enter a compliment for me here");

        temp=sc.nextLine();


        do
        {
            System.out.println(" ");
            System.out.println("Choose an option :");
            System.out.println("1.Length");
            System.out.println("2.Get Index of \"good\" string");
            System.out.println("3.Change to uppercase");
            System.out.println("4.Change to lowercase");
            System.out.println("5.Concatenate strings");
            System.out.println("6.Return character at index 3");
            System.out.println("7.Compare the entered string with another");
            System.out.println("8.Compare two strings whether they are
equal");
            System.out.println("9.Return the hashcode for the string");
            System.out.println("10.Check whether string is empty");
            System.out.println("11.Check whether the string contains a sub
string\"el\" ");
            System.out.println("12.Returns last Index Of the \'e\'");
```

```
            System.out.println("13.Check whether string ends with \'s\'");
            System.out.println("14.Replace \"good\" in the string with
\"bad\" ");
            System.out.println("15.Returns the sub string in the range of
index 0-2");
            System.out.println("16.Trim");
            System.out.println("17.Exit");

            opt=sc.nextInt();

            switch(opt)

            {
                case 1: System.out.println("Lenght-"+temp.length());break;

                case 2: System.out.println("Index of the specified character
is:"+temp.indexOf("good"));break;

                case 3: System.out.println(temp.toUpperCase());break;

                case 4: System.out.println(temp.toLowerCase());break;

                case 5: System.out.println("Enter a String to be
concatenated");
                    temp2=sc.next();
                    System.out.println(temp.concat(temp2));break;

                case 6: System.out.println(temp.charAt(3));break;

                case 7: System.out.println("Enter another string");
                    t=sc.next();
                    System.out.println(temp.compareTo(t));break;

                case 8: System.out.println("Enter another String");
                    temp5=sc.next();
                    System.out.println(temp.equals(temp5));break;

                case 9: System.out.println(temp.hashCode());break;

                case 10:System.out.println(temp.isEmpty());break;

                case 11:System.out.println(temp.contains("el"));break;

                case 12:System.out.println(temp.lastIndexOf('e'));break;

                case 13:System.out.println(temp.endsWith("s"));break;

                case 14:System.out.println(temp.replace("good","Bad"));break;

                case 15:System.out.println(temp.substring(0,2));break;

                case 16:System.out.println(temp.trim());break;

                case 17:System.out.println("Do compile and run me again :)");
                    break;

                default:System.out.println("Enter a valid option");
```

```
            }
        }while(opt!=17);

    }
}
```

OUTPUT :



MyString

```
1
Lenght-10

Choose an option :
1.Length
2.Get Index of "good" string
3.Change to uppercase
4.Change to lowercase
5.Concatenate strings
6.Return character at index 3
7.Compare the entered string with another
8.Compare two strings whether they are equal
9.Return the hashcode for the string
10.Check whether string is empty
11.Check whether the string contains a sub string"el"
12.Returns last Index Of the 'e'
13.Check whether string ends with 's'
14.Replace "good" in the string with "bad"
15.Returns the sub string in the range of index 0-2
16.Trim
17.Exit
2
Index of the specified character is:6
```

MyString

```
Choose an option :
1.Length
2.Get Index of "good" string
3.Change to uppercase
4.Change to lowercase
5.Concatenate strings
6.Return character at index 3
7.Compare the entered string with another
8.Compare two strings whether they are equal
9.Return the hashcode for the string
10.Check whether string is empty
11.Check whether the string contains a sub string"el"
12.Returns last Index Of the 'e'
13.Check whether string ends with 's'
14.Replace "good" in the string with "bad"
15.Returns the sub string in the range of index 0-2
16.Trim
17.Exit
3
YOUAREGOOD
```

MyString

```
Choose an option :
1.Length
2.Get Index of "good" string
3.Change to uppercase
4.Change to lowercase
5.Concatenate strings
6.Return character at index 3
7.Compare the entered string with another
8.Compare two strings whether they are equal
9.Return the hashcode for the string
10.Check whether string is empty
11.Check whether the string contains a sub string"el"
12.Returns last Index Of the 'e'
13.Check whether string ends with 's'
14.Replace "good" in the string with "bad"
15.Returns the sub string in the range of index 0-2
16.Trim
17.Exit
4
youaregood
```

MyString

```
Choose an option :
1.Length
2.Get Index of "good" string
3.Change to uppercase
4.Change to lowercase
5.Concatenate strings
6.Return character at index 3
7.Compare the entered string with another
8.Compare two strings whether they are equal
9.Return the hashcode for the string
10.Check whether string is empty
11.Check whether the string contains a sub string"el"
12.Returns last Index Of the 'e'
13.Check whether string ends with 's'
14.Replace "good" in the string with "bad"
15.Returns the sub string in the range of index 0-2
16.Trim
17.Exit
5
Enter a String to be concatenated
mypc
youaregoodmypc
```

```
Choose an option :
1.Length
2.Get Index of "good" string
3.Change to uppercase
4.Change to lowercase
5.Concatenate strings
6.Return character at index 3
7.Compare the entered string with another
8.Compare two strings whether they are equal
9.Return the hashcode for the string
10.Check whether string is empty
11.Check whether the string contains a sub string"el"
12.Returns last Index Of the 'e'
13.Check whether string ends with 's'
14.Replace "good" in the string with "bad"
15.Returns the sub string in the range of index 0-2
16.Trim
17.Exit
6
a
```

MyString

```
Choose an option :
1.Length
2.Get Index of "good" string
3.Change to uppercase
4.Change to lowercase
5.Concatenate strings
6.Return character at index 3
7.Compare the entered string with another
8.Compare two strings whether they are equal
9.Return the hashcode for the string
10.Check whether string is empty
11.Check whether the string contains a sub string"el"
12.Returns last Index Of the 'e'
13.Check whether string ends with 's'
14.Replace "good" in the string with "bad"
15.Returns the sub string in the range of index 0-2
16.Trim
17.Exit
7
Enter another string
youaregood
0
```

MyString

```
Choose an option :
1.Length
2.Get Index of "good" string
3.Change to uppercase
4.Change to lowercase
5.Concatenate strings
6.Return character at index 3
7.Compare the entered string with another
8.Compare two strings whether they are equal
9.Return the hashcode for the string
10.Check whether string is empty
11.Check whether the string contains a sub string"el"
12.Returns last Index Of the 'e'
13.Check whether string ends with 's'
14.Replace "good" in the string with "bad"
15.Returns the sub string in the range of index 0-2
16.Trim
17.Exit
8
Enter another String
youarebad
false
```

MyString

```
Choose an option :
1.Length
2.Get Index of "good" string
3.Change to uppercase
4.Change to lowercase
5.Concatenate strings
6.Return character at index 3
7.Compare the entered string with another
8.Compare two strings whether they are equal
9.Return the hashcode for the string
10.Check whether string is empty
11.Check whether the string contains a sub string"el"
12.Returns last Index Of the 'e'
13.Check whether string ends with 's'
14.Replace "good" in the string with "bad"
15.Returns the sub string in the range of index 0-2
16.Trim
17.Exit
9
231787538
```

MyString

```
Choose an option :
1.Length
2.Get Index of "good" string
3.Change to uppercase
4.Change to lowercase
5.Concatenate strings
6.Return character at index 3
7.Compare the entered string with another
8.Compare two strings whether they are equal
9.Return the hashcode for the string
10.Check whether string is empty
11.Check whether the string contains a sub string"el"
12.Returns last Index Of the 'e'
13.Check whether string ends with 's'
14.Replace "good" in the string with "bad"
15.Returns the sub string in the range of index 0-2
16.Trim
17.Exit
10
false
```

MyString

```
Choose an option :
1.Length
2.Get Index of "good" string
3.Change to uppercase
4.Change to lowercase
5.Concatenate strings
6.Return character at index 3
7.Compare the entered string with another
8.Compare two strings whether they are equal
9.Return the hashcode for the string
10.Check whether string is empty
11.Check whether the string contains a sub string"el"
12.Returns last Index Of the 'e'
13.Check whether string ends with 's'
14.Replace "good" in the string with "bad"
15.Returns the sub string in the range of index 0-2
16.Trim
17.Exit
11
false
```

MyString

```
Choose an option :
1.Length
2.Get Index of "good" string
3.Change to uppercase
4.Change to lowercase
5.Concatenate strings
6.Return character at index 3
7.Compare the entered string with another
8.Compare two strings whether they are equal
9.Return the hashcode for the string
10.Check whether string is empty
11.Check whether the string contains a sub string"el"
12.Returns last Index Of the 'e'
13.Check whether string ends with 's'
14.Replace "good" in the string with "bad"
15.Returns the sub string in the range of index 0-2
16.Trim
17.Exit
12
5
```

MyString

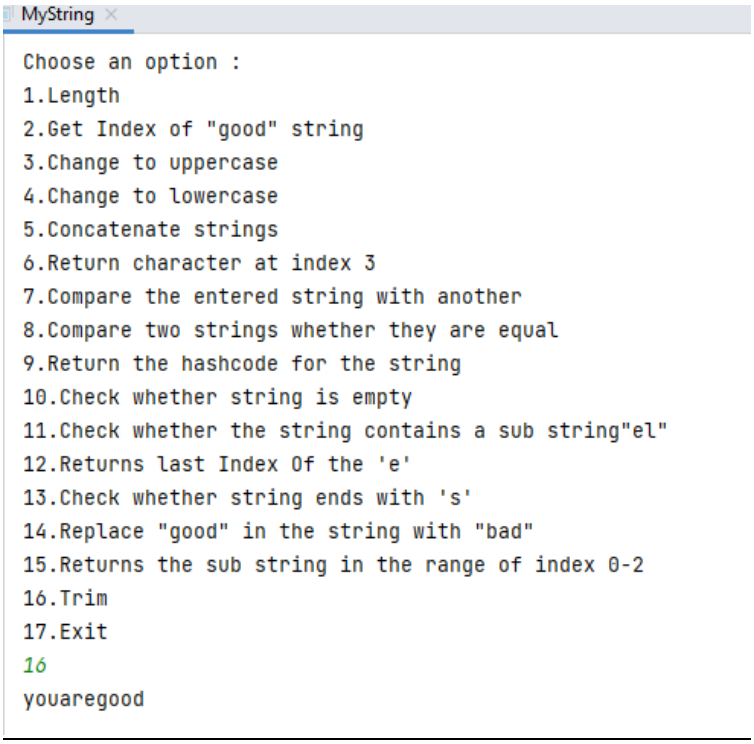
```
Choose an option :
1.Length
2.Get Index of "good" string
3.Change to uppercase
4.Change to lowercase
5.Concatenate strings
6.Return character at index 3
7.Compare the entered string with another
8.Compare two strings whether they are equal
9.Return the hashcode for the string
10.Check whether string is empty
11.Check whether the string contains a sub string"el"
12.Returns last Index Of the 'e'
13.Check whether string ends with 's'
14.Replace "good" in the string with "bad"
15.Returns the sub string in the range of index 0-2
16.Trim
17.Exit
13
false
```

MyString MyVector

```
Enter a compliment for me here
youaregood

Choose an option :
1.Length
2.Get Index of "good" string
3.Change to uppercase
4.Change to lowercase
5.Concatenate strings
6.Return character at index 3
7.Compare the entered string with another
8.Compare two strings whether they are equal
9.Return the hashcode for the string
10.Check whether string is empty
11.Check whether the string contains a sub string"el"
12.Returns last Index Of the 'e'
13.Check whether string ends with 's'
14.Replace "good" in the string with "bad"
15.Returns the sub string in the range of index 0-2
16.Trim
17.Exit
14
youareBad
```

MyString

```
Choose an option :
1.Length
2.Get Index of "good" string
3.Change to uppercase
4.Change to lowercase
5.Concatenate strings
6.Return character at index 3
7.Compare the entered string with another
8.Compare two strings whether they are equal
9.Return the hashcode for the string
10.Check whether string is empty
11.Check whether the string contains a sub string"el"
12.Returns last Index Of the 'e'
13.Check whether string ends with 's'
14.Replace "good" in the string with "bad"
15.Returns the sub string in the range of index 0-2
16.Trim
17.Exit
15
yo
```



PROGRAM 2: (ON STRING BUFFER)

```
package practicals.exp7;
import java.util.*;

public class Interact {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.println("Hello agent Az I am your PC");

        System.out.println("Enter our secret code here");

        int greet = sc.nextInt();

        if (greet == 786)
            System.out.println("Our today's mission is to see working of some
string buffer methods");

        System.out.println("Our string is :\"Tom and Jerry\"");

        StringBuffer line1 = new StringBuffer("Tom and Jerry");

        int opt;
        do {
```

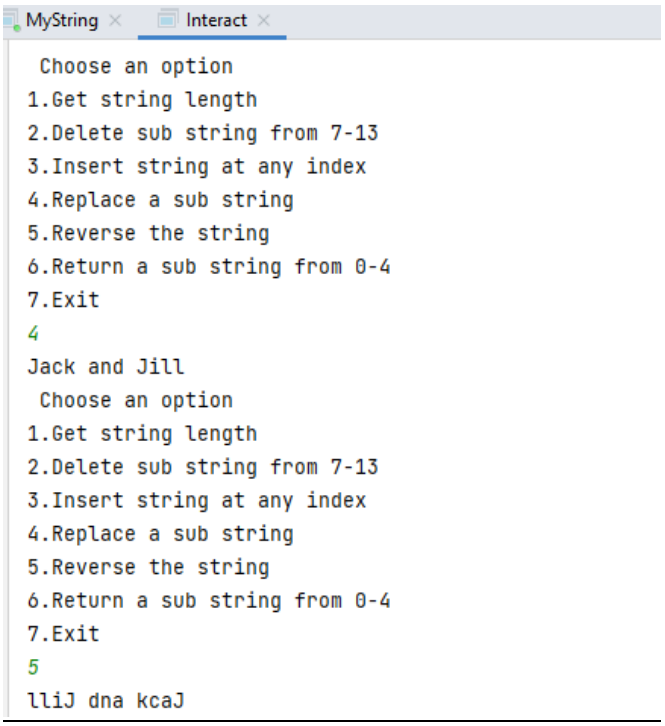
```
            System.out.println(" Choose an option");


            System.out.println("1.Get string length");
            System.out.println("2.Delete sub string from 7-13");
            System.out.println("3.Insert string at any index");
            System.out.println("4.Replace a sub string");
            System.out.println("5.Reverse the string");
            System.out.println("6.Return a sub string from 0-4");
            System.out.println("7.Exit");

            opt = sc.nextInt();

            switch (opt) {
                case 1:
                    System.out.println(line1.length());
                    break;
                case 2:
                    System.out.println(line1.delete(7, 13));
                    break;

                case 3:
                    System.out.println(line1.insert(7, " Jill"));
                    break;

                case 4:
                    System.out.println(line1.replace(0, 3, "Jack"));
                    break;

                case 5:
                    System.out.println(line1.reverse());
                    break;

                case 6:
                    System.out.println(line1.substring(0, 4));
                    break;

                case 7:
                    break;

            }
        } while (opt != 7);
    }
}
```

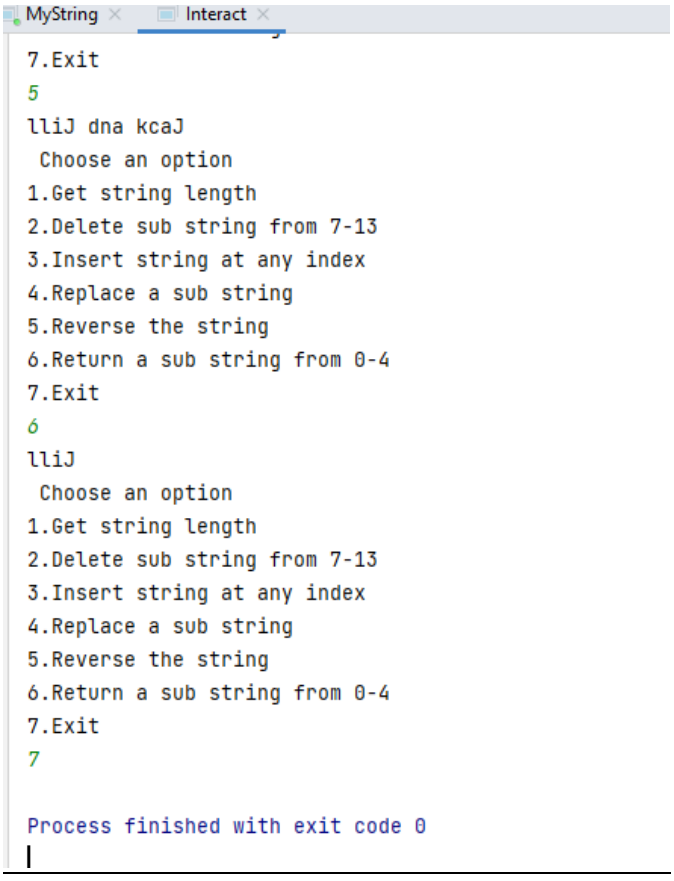
OUTPUT :

```
"C:\Program Files\Java\jdk-11.0.12\bin\java.exe" "-javaagent:C:\Progra
Hello agent Az I am your PC
Enter our secret code here
786
Our today's mission is to see working of some string buffer methods
Our string is :"Tom and Jerry"
 Choose an option
1.Get string length
2.Delete sub string from 7-13
3.Insert string at any index
4.Replace a sub string
5.Reverse the string
6.Return a sub string from 0-4
7.Exit
1
13
 Choose an option
1.Get string length
2.Delete sub string from 7-13
3.Insert string at any index
4.Replace a sub string
5.Reverse the string
6.Return a sub string from 0-4
7.Exit
2
Tom and
```

MyString × Interact ×

```
 Choose an option
1.Get string length
2.Delete sub string from 7-13
3.Insert string at any index
4.Replace a sub string
5.Reverse the string
6.Return a sub string from 0-4
7.Exit
2
Tom and
 Choose an option
1.Get string length
2.Delete sub string from 7-13
3.Insert string at any index
4.Replace a sub string
5.Reverse the string
6.Return a sub string from 0-4
7.Exit
3
Tom and Jill
```


MyString
Interact
Choose an option
1.Get string length
2.Delete sub string from 7-13
3.Insert string at any index
4.Replace a sub string
5.Reverse the string
6.Return a sub string from 0-4
7.Exit
4
Jack and Jill
Choose an option
1.Get string length
2.Delete sub string from 7-13
3.Insert string at any index
4.Replace a sub string
5.Reverse the string
6.Return a sub string from 0-4
7.Exit
5
lliJ dna kcaJ


MyString
Interact
7.Exit
5
lliJ dna kcaJ
Choose an option
1.Get string length
2.Delete sub string from 7-13
3.Insert string at any index
4.Replace a sub string
5.Reverse the string
6.Return a sub string from 0-4
7.Exit
6
lliJ
Choose an option
1.Get string length
2.Delete sub string from 7-13
3.Insert string at any index
4.Replace a sub string
5.Reverse the string
6.Return a sub string from 0-4
7.Exit
7
Process finished with exit code 0