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Program 5 Develop programs for implementation of different methods of String and StringBuffer Class (10 methods of each) .

CODE:

```
import java.util.Scanner;
public class StringMethods {

    public static void main(String args[]) {
        Scanner sc = new Scanner(System.in);
        int num1;

        System.out.println("Enter any string: ");
        String str = sc.nextLine();
        System.out.println("Original string: "+str);

        StringBuffer strb = new StringBuffer("Minal Chhatre");
        System.out.println("String Buffer Original string:
"+strb);

        do{
            System.out.println("Enter 1 for string methods and 2
for string buffer methods ");
            int num = sc.nextInt();

            switch(num){
                case 1:
                    System.out.println("Using string methods: ");
                    System.out.println("1. Original string: "+str);
                    System.out.println("2. String length:
"+str.length());
                    System.out.println("3. String lowercase:
"+str.toLowerCase());
```

```

        System.out.println("4. String uppercase:
"+str.toUpperCase());
        System.out.println("5. String trim: "+str.trim());
        System.out.println("6. String substring 2-4:
"+str.substring(2,4));
        System.out.println("7. String replace c with m:
"+str.replace('c','m'));
        System.out.println("8. String starting 'char'?
"+str.startsWith("char"));
        System.out.println("9. String ending 'abs'?
"+str.endsWith("abs"));
        System.out.println("10. String character at 3:
"+str.charAt(3));
        System.out.println("11. String index of 'c':
"+str.indexOf("c"));
        System.out.println("12. String last index of 'c':
"+str.lastIndexOf("c"));
        System.out.println("13. String equals to
'Characteristics': "+str.equals("Characteristics"));
        System.out.println("14. String equals to
'Characteristics' - ignoring
case:"+str.equalsIgnoreCase("Characteristics"));
        break;
        case 2:
            System.out.println("1. Original string: "+strb);
            System.out.println("2. String capacity:
"+strb.capacity());
            System.out.println("3. String append:
"+strb.append(" : )"));
            System.out.println("4. String length:
"+strb.length());
            System.out.println("5. String character at 3:
"+strb.charAt(3));
            System.out.println("6. Substring 4-
6"+strb.substring(4,6));
            System.out.println("7. String delete:
"+strb.delete(4,6));

```

```

        System.out.println("8. String indexof:
"+strb.indexOf("a"));
        System.out.println("9. String last indexof:
"+strb.lastIndexOf("a"));
        System.out.println("10. String insert:
"+strb.insert(3,"zzz"));
        System.out.println("11. String set length:
"+strb.reverse());

        break;
        default:
            System.out.println("Enter Valid option ");

    }
    System.out.println("Do you want to continue process?
Press 0 ");
    num1 = sc.nextInt();
    }while(num1==0);

}

}

```

OUTPUT:

```

Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights
reserved.
'DOSKEY' is not recognized as an internal or external
command,
operable program or batch file.

```

```
C:\Users\KIRAN>d:
```

```
D:\>cd java
```

D:\java>javac StringMethods.java

D:\java>java StringMethods

Enter any string:

characteristics

Original string: characteristics

String Buffer Original string: Minal Chhatre

Enter 1 for string methods and 2 for string buffer methods

1

Using string methods:

1. Original string: characteristics
2. String length: 15
3. String lowercase: characteristics
4. String uppercase: CHARACTERISTICS
5. String trim: characteristics
6. String substring 2-4: ar
7. String replace c with m: mharamteristims
8. String starting 'char'?: true
9. String ending 'abs'?: false
10. String character at 3: r
11. String index of 'c': 0
12. String last index of 'c': 13
13. String equals to 'Characteristics': false
14. String equals to 'Characteristics' - ignoring case:true

Do you want to continue process? Press 0

0

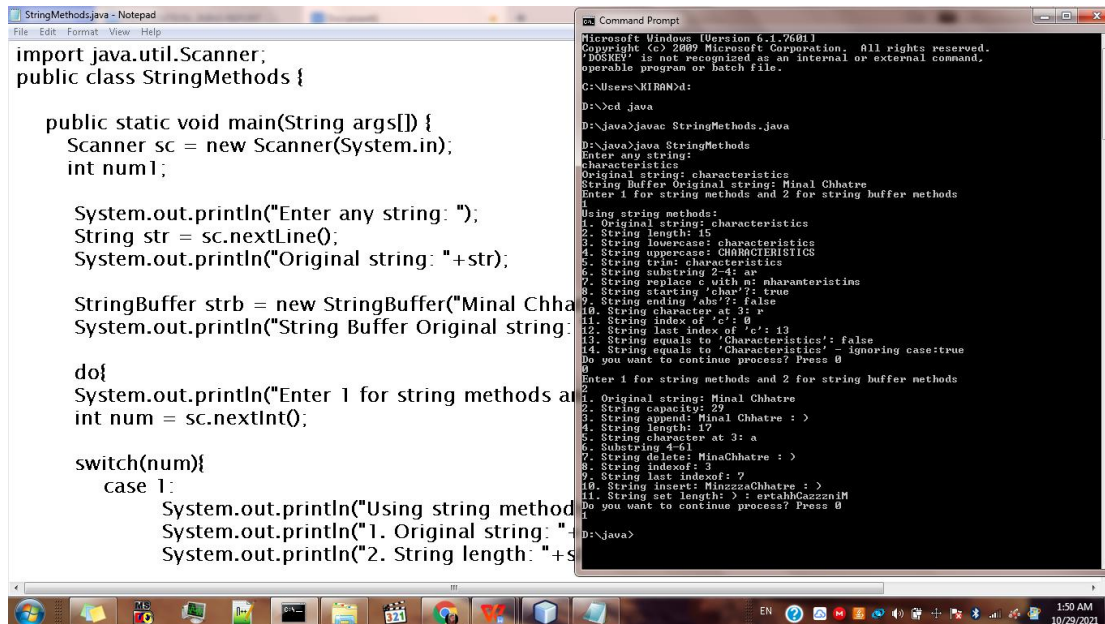
Enter 1 for string methods and 2 for string buffer methods

2

1. Original string: Minal Chhatre
2. String capacity: 29
3. String append: Minal Chhatre :)
4. String length: 17
5. String character at 3: a
6. Substring 4-6l
7. String delete: MinaChhatre :)
8. String indexof: 3
9. String last indexof: 7

10. String insert: MinzzzaChhatre :)
11. String set length:) : ertahhCazzzniM
Do you want to continue process? Press 0
1

D:\java>



The screenshot shows a Windows desktop with two windows. The left window is a Notepad editor titled 'StringMethods.java - Notepad' containing the following Java code:

```
import java.util.Scanner;
public class StringMethods {

    public static void main(String args[]) {
        Scanner sc = new Scanner(System.in);
        int num1;

        System.out.println("Enter any string: ");
        String str = sc.nextLine();
        System.out.println("Original string: "+str);

        StringBuffer strb = new StringBuffer("Minal Chhatre");
        System.out.println("String Buffer Original string: "+strb);

        do{
            System.out.println("Enter 1 for string methods and 2 for string buffer methods");
            int num = sc.nextInt();

            switch(num){
                case 1:
                    System.out.println("Using string methods");
                    System.out.println("1. Original string: "+str);
                    System.out.println("2. String length: "+str.length());
                    break;
                case 2:
                    System.out.println("Using string buffer methods");
                    System.out.println("1. Original string: "+strb);
                    System.out.println("2. String capacity: "+strb.capacity());
                    System.out.println("3. String append: "+strb.append(str));
                    System.out.println("4. String length: "+strb.length());
                    System.out.println("5. String character at 3: "+strb.charAt(3));
                    System.out.println("6. Substring: "+strb.substring(4,6));
                    System.out.println("7. String delete: "+strb.delete(4,6));
                    System.out.println("8. String indexOf: "+strb.indexOf('a'));
                    System.out.println("9. String last indexOf: "+strb.lastIndexOf('a'));
                    System.out.println("10. String insert: "+strb.insert(7, str));
                    System.out.println("11. String set length: "+strb.setLength(10));
                    System.out.println("Do you want to continue process? Press 0");
                    num1 = sc.nextInt();
                    break;
            }
        } while (num1 != 0);
    }
}
```

The right window is a Command Prompt titled 'Command Prompt' showing the execution of the program:

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
'DOSKEY' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\KIRAN>cd java
D:\java>javac StringMethods.java
D:\java>java StringMethods
Enter any string:
characteristics
Original string: characteristics
String Buffer Original string: Minal Chhatre
Enter 1 for string methods and 2 for string buffer methods
1
Using string methods:
1. Original string: characteristics
2. String length: 15
3. String lowercase: characteristics
4. String uppercase: CHARACTERISTICS
5. String trim: characteristics
6. String substring 2-4: ac
7. String replace c with n: mharacteristins
8. String starting 'char': true
9. String ending 'abc': false
10. String character at 3: r
11. String index of 'c': 8
12. String last index of 'c': 13
13. String equals to 'Characteristics': false
14. String equals to 'Characteristics' - ignoring case: true
Do you want to continue process? Press 0
0
Enter 1 for string methods and 2 for string buffer methods
2
1. Original string: Minal Chhatre
2. String capacity: 29
3. String append: Minal Chhatre : >
4. String length: 17
5. String character at 3: a
6. Substring 4-6: i
7. String delete: MinalChhatre : >
8. String indexOf: 3
9. String last indexOf: 7
10. String insert: MinzzzaChhatre : >
11. String set length: > : ertahhCazzzniM
Do you want to continue process? Press 0
1
D:\java>
```