Assignment-7

1) public class CountVowelConsonant {

```
    public static void main(String[] args) {
        String line = "Hello world 37 1!";
        int vowels = 0, consonants = 0, digits = 0, spaces = 0;

        line = line.toLowerCase();
        for(int i = 0; i < line.length(); ++i)
        {
            char ch = line.charAt(i);
            if(ch == 'a' || ch == 'e' || ch == 'i'
                || ch == 'o' || ch == 'u') {
                ++vowels;
            }
            else if((ch >= 'a'&& ch <= 'z')) {
                ++consonants;
            }
            else if( ch >= '0' && ch <= '9')
            {
                ++digits;
            }
            else if (ch ==' ')
            {
                ++spaces;
```

```
            }
        }

        System.out.println("Vowels: " + vowels);
        System.out.println("Consonants: " + consonants);
        System.out.println("Digits: " + digits);
        System.out.println("White spaces: " + spaces);
    }
}
```

2)

```
class removeConsecutiveChars{
public static String removeConsecutiveChars(String str) {

        if (str == null) {
            return null;
        }

        int strLen = str.length();
        if (strLen <= 1) {
            return str;
        }

        char[] strChar = str.toCharArray();
        char temp = strChar[0];

        StringBuilder stringBuilder = new StringBuilder(strLen);
```

```
        for (int i = 1; i < strLen; i++) {

            char val = strChar[i];
            if (val != temp) {
                stringBuilder.append(temp);
                temp = val;
            }
        }
        stringBuilder.append(temp);

        return stringBuilder.toString();
    }
```

3)

```
public class RemoveRepChar
{
        static char ch;
        public static void main(String[] args)
        {
                String str="aabbbbccc";
                char[] charArray = str.toCharArray();
                int count=0;
                for(int i=0;i<charArray.length;i++)
                {
                 if(i!=0 )
                        {
```

```
                    if(charArray[i]==ch)continue;       //ddddee
                    if(charArray[i]==charArray[i-1])
                    {
                count++;
                if(count==1)
                    {
                    System.out.println(charArray[i]);
                    count=0;
                    ch=charArray[i];
                }
            }
                else
                {
                count=0;//aabb

            }
        }

   }

}
```

4)

```
//String handling
//=======================================
/*public class StringEx
```

```
{
	public static void main(String args[])
	{
		String s1="java";
		char ch[]={'a','r','m','a','l'};
		String s2=new String(ch);
		String s3=new String("valivadekar");
		char[] helloArray = { 'h', 'e', 'l', 'l', 'o', '.' };
		String helloString = new String(helloArray);
		System.out.println( helloString );
		System.out.println(s1);
		System.out.println(s2);
		System.out.println(s3);
	}
}*/

//String Length

/*public class StringEx
{
	public static void main(String args[])
	{
		String palindrome="hello i m arati";
		int len=palindrome.length();

		System.out.println("String Length is:" +len);
```

```
        }
}*/

//String compareTo

/*class StringEx
{
        public static void main(String args[])
        {
                String s1="hello";
                String s2="hello";
                String s3="hemlo";
                String s4="flag";
                System.out.println(s1.compareTo(s2));
                System.out.println(s1.compareTo(s3));
                System.out.println(s1.compareTo(s4));
        }
}*/

//ReplaceString

/*public class StringEx
{
        public static void main(String args[])
        {
                String s1="hello how are you";
```

```
		String replaceString=s1.replace('h','t');
		System.out.println(replaceString);
	}
}*/
//StringToCharArray
class StringEx
{
	public static void main(String args[])
	{
		String s1="Welcome to Edureka";
		char[] ch=s1.toCharArray();
		for(int i=0;i<ch.length;i++)
		{
			System.out.print(ch[i]);
		}

	}
}

5)
class CountCharInEachWords {
	static void count(String str)
	{
		// Create an char array of given String
		char[] ch = str.toCharArray();
		for (int i = 0; i < ch.length; i++) {
```

```
                    // Declare an String with empty initialization
                    String s = "";

                    // When the character is not space
                    while (i < ch.length && ch[i] != ' ') {

                        // concat with the declared String
                        s = s + ch[i];
                        i++;
                    }

                    if (s.length() > 0)
                        System.out.println(s + "->" + s.length());

                }
        }
        public static void main(String[] args)
        {
                String str = "I am a Java programmer";
                count(str);
        }
}
7)
class ReverseofaString
{
        public static void main(String[] arg)
```

```
        {
        ReverseofaString rev=new ReverseofaString();
        Scanner sc=new Scanner(System.in);
        System.out.print("Enter a string : ");
        String  str=sc.nextLine();
        System.out.println("Reverse of a String  is : "+rev.reverse(str));
        }
        static String reverse(String s)
        {
        String rev="";
        for(int j=s.length();j>0;--j)
        {
        rev=rev+(s.charAt(j-1));
        }
        return rev;
        }
}
```

8)

```
import java.lang.*;
import java.io.*;
import java.util.*;

class ReverseString
{
        public static void main(String[] args)
        {
```

```
        String input = "Hello World";
                StringBuilder input1 = new StringBuilder();

                // append a string into StringBuilder input1
        input1.append(input);


                 // reverse StringBuilder input1
        input1 = input1.reverse();


        // print reversed String
        System.out.println(input1);

    }
}
```