

29th july assignment

4)

```
1 import java.util.ArrayList;
2 import java.util.List;
3
4 public class PrinitProblem {
5
6     public static void main(String[] args) {
7         // TODO Auto-generated method stub
8         print(11);
9     }
10
11     public static void print(int n ){
12         List<String> list = null;
13         if(n <=0){
14             System.out.println("Please provide a valid number");
15             return;
16         }else{
17             list = new ArrayList<String>();
18             list.add("1"); //intialize
19         }
20         for(int i = 0; i < n; i++){
21             String newInt = counter(list.get(i));
22             list.add(newInt);
23         }
24         System.out.println(list);
25     }
26
27     private static String counter(String integer) {
28         if(integer == null){
29             return null;
30         }
31         String str = integer.toString();
32         String lastValue=null;
33         int counter = 1;
34         String newstr = "";
35         for(int i = 0; i < str.length(); i++){
36             lastValue = str.substring(i,i+1);
37             if(i+1 < str.length()){
38                 String nextValue = str.substring(i+1,i+2);
39                 if(lastValue.equalsIgnoreCase(nextValue)){
40                     counter++;
41                 }else{
42                     newstr = newstr + counter+" "+lastValue;
43                     counter = 1;
44                 }
45             }
```

```
45 }  
46 else{  
47 newstr = newstr+"" + counter+""+lastValue;  
48 }  
49 }  
50 return newstr;  
51 }  
52  
53 }  
54 // This code is created by AASHISH //
```

```
[1, 11, 21, 1211, 111221, 312211, 13112221, 1  
Process finished.
```

5)

```
1 import java.io.*;
2
3 import java.util.*;
4
5
6 class ReverseWords{
7
8 // reverses individual words of a string
9
10 static void reverseWords(String str)
11 {
12
13     Stack<Character> st=new Stack<Character>();
14
15     for (int i = 0; i < str.length(); ++i) {
16
17         if (str.charAt(i) != ' ')
18
19             st.push(str.charAt(i));
20
21         else {
22
23             while (st.empty() == false) {
24
25                 System.out.print(st.pop());
26             }
27
28             System.out.print(" ");
29         }
30
31     }
32     while (st.empty() == false) {
33         System.out.print(st.pop());
34     }
35 }
36 }
37
38 public static void main(String[] args)
39 {
40
41     String str = "hello how are you doing. Hope al
42
43     reverseWords(str);
44
```

```
40  
41 String str = "hello how are you doing. Hope al  
42  
43 reverseWords(str);  
44  
45 }  
46 }  
47 // This code is created by AASHISH //
```

× Terminal



```
olleh woh era uoy .gniod epoH lla !llew  
Process finished.
```