

```
1 package reverse_string_using_stacks;
2
3 public class Stack{
4
5     int top; int size;
6     char a[];
7
8     Stack(int n){ // constructor is basically used to initialize the values of top and array
9         top = -1;
10        size = n;
11        a = new char[size];
12    }
13
14    void push(char c) { // 2 conditions 1-> stack is full and 2-> Normal push
15
16        if(top >= size) {
17            System.out.println("Stack is full.. pls delete some elements before insertion.");
18        }
19        else {
20            a[++top] = c;
21        }
22    }
23
24
25    char pop() { // 2 conditions 1-> stack is empty. 2-> normal pop
26
27        if(top== -1) {
28            System.out.println("Stack is empty. Please enter some elements.");
29            return 0;
30        }
31        else {
32            char c = a[top--];
33            return c;
34        }
35    }
36
37
38    static void reverse(StringBuffer str) { // function to reverse string which has been
39        passed from the main function.
40
41        int n = str.length();
42
43        Stack st = new Stack(n); // crate object and pass size to the constructor of stack
44
45        class
46        {
47            int i;
48            for(i = 0; i<n; i++)
49                st.push(str.charAt(i)); // to insert the chars one after the other
50            inside the stack
51
52            for(i =0; i<n; i++)
53            {
54                char c = st.pop();
55                str.setCharAt(i,c); // to pop out the chars one after the other from the
56                stack
57            }
58        }
59    }
60 }
```

```
54     }
55
56     public static void main(String[] args) {
57
58         StringBuffer str = new StringBuffer("Drip Capital");    //String buffer class is used.
59
60
61         reverse(str);
62         System.out.println("Reversed string is:" + str);
63     }
64 }
65
66 /*
67 ***** OUTPUT *****
68 *
69 * Reversed string is:latipaC pirD
70 *
71 *
72 *
73 */
```