

```
1 // Fixed_stk.java
2
3 public class Fixed_stk implements Interface_STK {
4     private static final int STACK_SIZE = 5;
5     private int stack[] = new int[STACK_SIZE];
6     private int top = -1;
7
8     @Override
9     public void push(int element) {
10         if (overflow()) {
11             System.out.println("Fixed Stack is full"
12 );
13         } else {
14             stack[++top] = element;
15         }
16
17     @Override
18     public int pop() {
19         if (underflow()) {
20             System.out.println("Fixed Stack is empty"
21 );
22             return -1;
23         } else {
24             return stack[top--];
25         }
26
27     @Override
28     public void displayStack() {
29         if (underflow()) {
30             System.out.println("Fixed Stack is empty"
31 );
32         }
33         for (int i = 0; i <= top; i++) {
34             System.out.println(stack[i]);
35         }
36
37     @Override
38     public boolean overflow() {
```

```
39         return top == (stack.length - 1);
40     }
41
42     @Override
43     public boolean underflow() {
44         return top == -1;
45     }
46 }
47
```