

Code : 1

```
package Topic_14_Stacks;
```

```
import java.util.*;
```

```
public class StackDemo {
```

```
    public static void main(String[] args) {  
        // Write your code here
```

```
        Stack<Integer> stack = new Stack<>(); // push, pop, peek are all O(1)  
        stack.push(10); // 10  
        stack.push(20); // 10, 20  
        stack.push(30); // 10, 20, 30  
        stack.push(40); // 10, 20, 30, 40
```

```
        System.out.println(stack); // 10, 20, 30, 40  
        System.out.println(stack.peek()); // 40  
        stack.pop(); // 10, 20, 30
```

```
        System.out.println(stack.peek()); // 30  
        stack.pop(); // 10, 20
```

```
        System.out.println(stack.peek()); // 20  
        stack.pop(); // 10
```

```
        System.out.println(stack.peek()); // 10  
        stack.pop(); //
```

```
        System.out.println(stack.peek()); // error  
        stack.pop(); // error
```

```
    }
```

```
}
```

Code : 2

```
package Topic_14_Stacks;
```

```
import java.util.*;
```

```
public class StackDemo2 {
```

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

```
        // Write your code here
```

```
        Stack<String> stack = new Stack<>(); // push, pop, peek are all O(1)
```

```
        stack.push("Hello"); // "Hello"
```

```
        stack.push("Bye"); // "Hello", "Bye"
```

```
        stack.push("World"); // "Hello", "Bye", "World"
```

```
        while (stack.size() > 0) {
```

```
            String tos = stack.peek();
```

```
            System.out.println(tos);
```

```
            stack.pop();
```

```
        }
```

```
    }
```

```
}
```

