

```
// Java code for stack implementation
```

```
import java.io.*;
```

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

```
class Test
```

```
{
```

```
    // Pushing element on the top of the stack
```

```
    static void stack_push(Stack<Integer> stack)
```

```
    {
```

```
        for(int i = 0; i < 5; i++)
```

```
        {
```

```
            stack.push(i);
```

```
        }
```

```
    }
```

```
    // Popping element from the top of the stack
```

```
    static void stack_pop(Stack<Integer> stack)
```

```
    {
```

```
        System.out.println("Pop Operation:");
```

```
        for(int i = 0; i < 5; i++)
```

```
        {
```

```
            Integer y = (Integer) stack.pop();
```

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

```
        }
```

```
    }
```

```
    // Displaying element on the top of the stack
```

```
    static void stack_peek(Stack<Integer> stack)
```

```
    {
```

```

        Integer element = (Integer) stack.peek();

        System.out.println("Element on stack top: " + element);
    }

    // Searching element in the stack
    static void stack_search(Stack<Integer> stack, int element)
    {
        Integer pos = (Integer) stack.search(element);

        if(pos == -1)
            System.out.println("Element not found");
        else
            System.out.println("Element is found at position: " + pos);
    }

    public static void main (String[] args)
    {
        Stack<Integer> stack = new Stack<Integer>();

        stack_push(stack);
        stack_pop(stack);
        stack_push(stack);
        stack_peek(stack);
        stack_search(stack, 2);
        stack_search(stack, 6);
    }
}

```

Output : Pop Operation:

4

3

2

1

0

Element on stack top: 4

Element is found at position: 3

Element not found