

# Practice assisted project phase 1

8. Write a program in Java to insert and remove elements in a stack

```
package main;
import java.util.*;

public class stack {
    public static void main(String args[])
    {
        // Creating an empty Stack
        Stack<String> stack = new Stack<String>();

        // Use add() method to add elements into the Stack
        stack.add("Welcome");
        stack.add("To");
        stack.add("MyApp");
        stack.add("4");
        stack.add("MyApp");

        // Displaying the Stack
        System.out.println("Stack: " + stack);

        // Inserting element at 3rd position
        stack.insertElementAt("Hello", 2);

        // Inserting element at last position
        stack.insertElementAt("World", 6);

        // Displaying the final Stack
        System.out.println("The final Stack is "
                           + stack);
    }
}
```

OUTPUT-

Console X

<terminated> stack [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (16-May-2023, 11:03:26 am - 11:03:26 am) [pid: 23368]

Stack: [Welcome, To, MyApp, 4, MyApp]

The final Stack is [Welcome, To, Hello, MyApp, 4, MyApp, World]

```
package main;
import java.util.*;

public class stack2 {
    public static void main(String args[])
    {
        Stack<String> stack = new Stack<String>();

        stack.add("Soumya");
        stack.add("for");
        stack.add("Soumya");
        stack.add("10");
        stack.add("20");

        System.out.println("Stack: " + stack);

        String rem_ele = stack.remove(4);

        System.out.println("Removed element: "
            + rem_ele);

        System.out.println("Final Stack: "
            + stack);
    }
}
```

OUTPUT-

```
Console ×
<terminated> stack2 [Java Application] C:\Program Files\Java\jdk-20\bin\javaw.exe (16-May-2023, 11:03:06 am – 11:03:07 am) [pid: 3648]
Stack: [Soumya, for, Soumya, 10, 20]
Removed element: 20
Final Stack: [Soumya, for, Soumya, 10]
```