

```
source History
package com.mycompany.main;

/**
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 */
import java.util.*;
public class Main{
    public static void main(String[] args) {
        Stack<Integer>stack = new Stack<>();
        Scanner scanner = new Scanner(System.in);
        System.out.println("\nStack Operations:");
        System.out.println("1. Push");
        System.out.println("2. Pop");
        System.out.println("3. Peek");
        System.out.println("4. Display Stack");
        System.out.println("5. Exit");
        while (true) {
            System.out.print("\nEnter your choice:");
            int choice = scanner.nextInt();
            switch (choice) {
                case 1:
                    System.out.print("Enter a number to push:");
                    int num = scanner.nextInt();
                    stack.push(num);
                    System.out.println(num + "pushed onto the stack.");
                    break;
                case 2:
                    stack.pop();
                    System.out.println("Element popped.");
                    break;
                case 3:
                    if (stack.isEmpty()) {
                        System.out.println("Stack is empty.");
                    } else {
                        System.out.println("Top element is: " + stack.peek());
                    }
                    break;
                case 4:
                    if (stack.isEmpty()) {
                        System.out.println("Stack is empty.");
                    } else {
                        System.out.println("Stack elements:");
                        for (Integer element : stack) {
                            System.out.println(element);
                        }
                    }
                    break;
                case 5:
                    System.out.println("Exiting program...");
                    return;
            }
        }
    }
}
```

Input - Run (Main) x

```
1. Push
2. Pop
3. Peek
4. Display Stack
5. Exit

Enter your choice:5
Exiting program...

BUILD SUCCESS

Total time: 0.214 s
```

