DATE: 20-01-2023   **EXPERIMENT NO** 1.a   **REGISTER NO**: 2162014

SIMPLE CALCULATOR

AIM: Write a java program to make a simple calculator.

PROGRAM:

```java
/**
 *
 * @author 2162014
 */
import java.util.Scanner;

public class Calculator {

    public double Operations(char o, double r, double n1, double n2) {
        // conditions to perform arithmetic operations
        switch (o) {
            case '+' -> {
                System.out.println("\nAddition: " + n1 + " + " + n2);
                r = n1 + n2;
                break;
            }
            case '-' -> {
                System.out.println("\nSubtraction: " + n1 + " - " + n2);
                r = n1 - n2;
                break;
            }
            case '*' -> {
                System.out.println("\nMultiplication: " + n1 + " * " + n2);
                r = n1 * n2;
                break;
            }
            case '/' -> {
                System.out.println("\nDivision: " + n1 + " / " + n2);
                r = n1 / n2;
                break;
            }
            default -> {
                System.out.println("\nInvalid input!\n");
                break;
            }
        }
        return r;
    }

            public static void main(String[] args) {
```
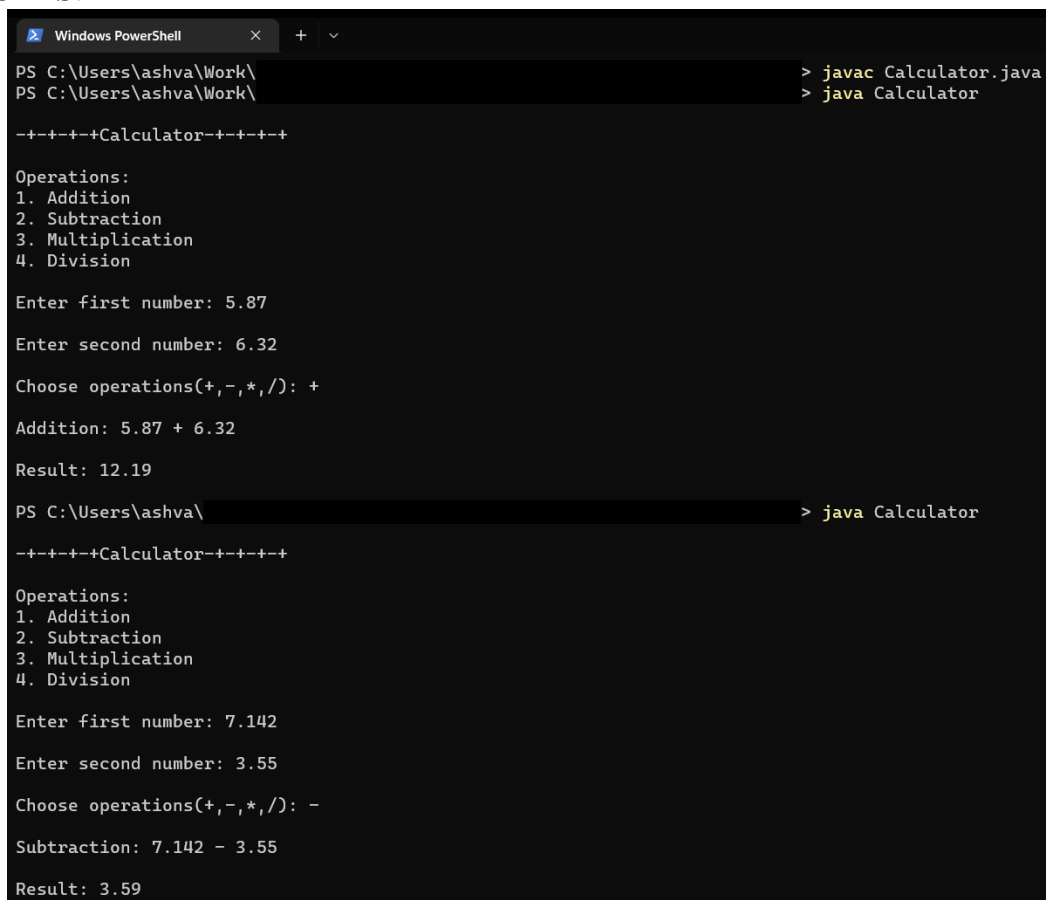
```java
    Scanner scn = new Scanner(System.in);
    Calculator obj = new Calculator();
    System.out.print("\n-+-+-+-+Calculator-+-+-+-+\n");
    // Menu
    System.out.print("\nOperations:\n1. Addition\n2. Subtraction\n3. Multiplication\n4.
Division\n");
    // get numbers from user
    System.out.print("\nEnter first number: ");
    double num1 = scn.nextDouble();
    System.out.print("\nEnter second number: ");
    double num2 = scn.nextDouble();
    // get operation from user
    System.out.print("\nChoose operations(+,-,*,/): ");
    char op = scn.next().charAt(0);
    double result = 0, ans = obj.Operations(op, result, num1, num2);
    // display output to user
    System.out.printf("\nResult: %.2f \n", ans);
    System.out.print("\n");
  }
}
```

RESULTS:
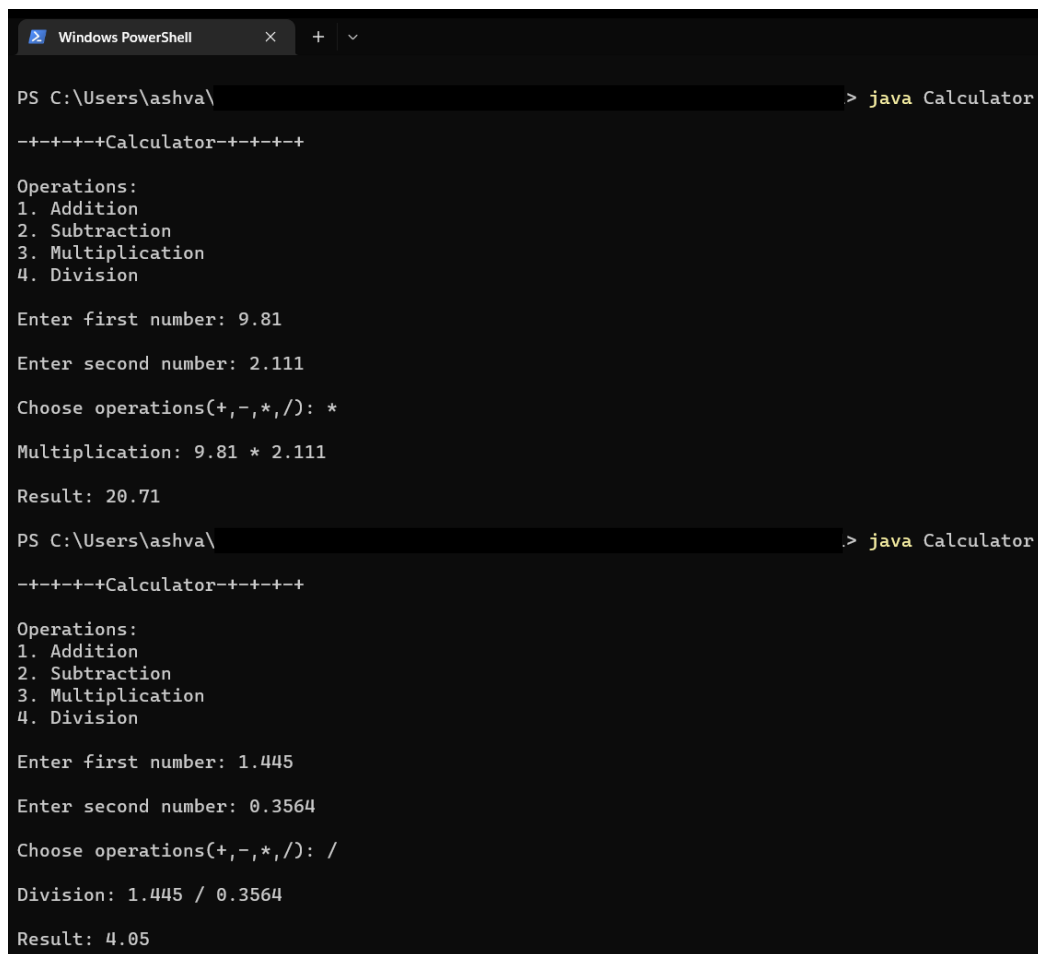
Fig. 1 – Output for addition and subtraction

Fig. 2 – Output for multiplication and division