#### Name :- Prabhat Kumar

#### Session1

#### Project:- Constructing an arithmetic calculator

### **Project objective:**

As a developer, write a program to create an arithmetic calculator.

### **Background of the problem statement:**

As a developer, write a Java code to create a calculator to perform the four basic arithmetic operations (addition, subtraction, multiplication, and division).

# **Using Switch case:-**

```
package com.simplilearn.demo;
import java.util.Scanner;
public class calculator {
  public static void main(String[] args) {
    char operator;
    int num1, num2, result;
    Scanner input = new Scanner(System.in);
 System.out.println("Choose an operator: +, -, *, or /");
    operator = input.next().charAt(0);
    System.out.println("Enter first num");
    num1 = input.nextInt();
    System.out.println("Enter second num");
    num2 = input.nextInt();
    switch (operator) {
      case '+':
        result = num1 + num2;
        System.out.println(num1 + " + " + num2 + " = " + result);
        break:
      case '-':
        result = num1 - num2;
        System.out.println(num1 + " - " + num2 + " = " + result);
        break;
      case '*':
        result = num1 * num2;
        System.out.println(num1 + " * " + num2 + " = " + result);
       break;
      case '/':
        result = num1 / num2;
        System.out.println(num1 + " / " + num2 + " = " + result);
        break;
      default:
        System.out.println("Invalid operator!");
        break;
    }
    input.close();
  }
```

```
Enter first num
25
Enter second num
35
Choose an operator: +, -, *, or /
*
25 * 35 = 875
```

## Using if else loop:-

```
package com.simplilearn.demo;
import java.util.Scanner;
public class ifcal {
public static void main(String[] args) {
      char operator ;
      int num1, num2 , result;
      Scanner <u>sc</u>= new Scanner(System.in);
       System.out.println("Enter first num");
          num1 = sc.nextInt();
          System.out.println("Enter second num");
          num2 = sc.nextInt();
       System.out.println("Choose an operator: +, -, *, or /");
       operator = sc.next().charAt(0);
       if(operator=='+') {
              result = num1 + num2;
              System.out.println(num1 + " + " + num2 + " = " + result);
       }else if(operator=='-') {
              result = num1 - num2;
              System.out.println(num1 + " - " + num2 + " = " + result);
       else if(operator=='*') {
       result = num1 * num2;
       System.out.println(num1 + " * " + num2 + " = " + result);
}
       else if(operator=='/') {
       result = num1 / num2;
       System.out.println(num1 + " / " + num2 + " = " + result);
}
```