Practical-1

Name: Sojal Jyoti Kadam

Roll No.:CO2058

Title: Implement a robust Java calculator program that captures user input dynamically, processes mathematical operations using conditional logic and looping constructs, and ensures efficient error handling.

INPUT:-

```
import java.util.Scanner;
public class Calc
{
   public void calculate(int a, int b,int c)
   {
      switch(c)
      {
      case(1):
      System.out.println("The sum of these numbers is: "+ (a+b));
      break;

      case(2):
      System.out.println("the subtraction is: "+(a-b));
      break;

      case(3):
      System.out.println("The product is: "+a*b);
      break;

      case(4):
      System.out.println("The remainder is: "+a%b);
      break;

      case(5):
         try
         {
            System.out.println("The division is: "+a/b);
         }catch(ArithmeticException e)
         {
            System.out.println("Error can not divide by zero");
            System.out.println("Exception details: "+e.getMessage());
         }
      default:
      System.out.println("invalid choice");
      }
   }
```

```
   public static void main(String[] args)
   {
      Scanner sc=new Scanner(System.in);
      Calc obj=new Calc();

         String ch="y";
      while(ch.equalsIgnoreCase("y"))
      {
      System.out.println("Enter two numbers: ");
      int a=sc.nextInt();
      int b=sc.nextInt();
      System.out.println("enter the operation you want to perform
\n1:Addition\n2:Subtraction\n3:Multiplication\n4:Remainder\n5:Division");
      int c=sc.nextInt();

      obj.calculate(a,b,c);
      System.out.println("do u want to continue: (y/n)");
      ch=sc.next();
      }
      sc.close();
   }

}
```

OUTPUT: