```
package com.section6.calci;

import java.util.*;

class Calculator
{
        public double result;

        public Calculator(int choice, double num1, double num2)
        {

    double result;

       switch (choice)
       {
          case 1:
             this.result = num1 + num2;
             break;

          case 2:
             this.result = num1 - num2;
             break;

          case 3:
             this.result = num1 * num2;
             break;

          case 4:
             if (num2 != 0)
             {
                this.result = num1 / num2;
```

```
            }
            else
            {
               System.out.println("Error: Division by zero");
               break;
            }
            break;

         default:
            System.out.println("Invalid choice. Please select a valid operation.");
      }

      }
}
```

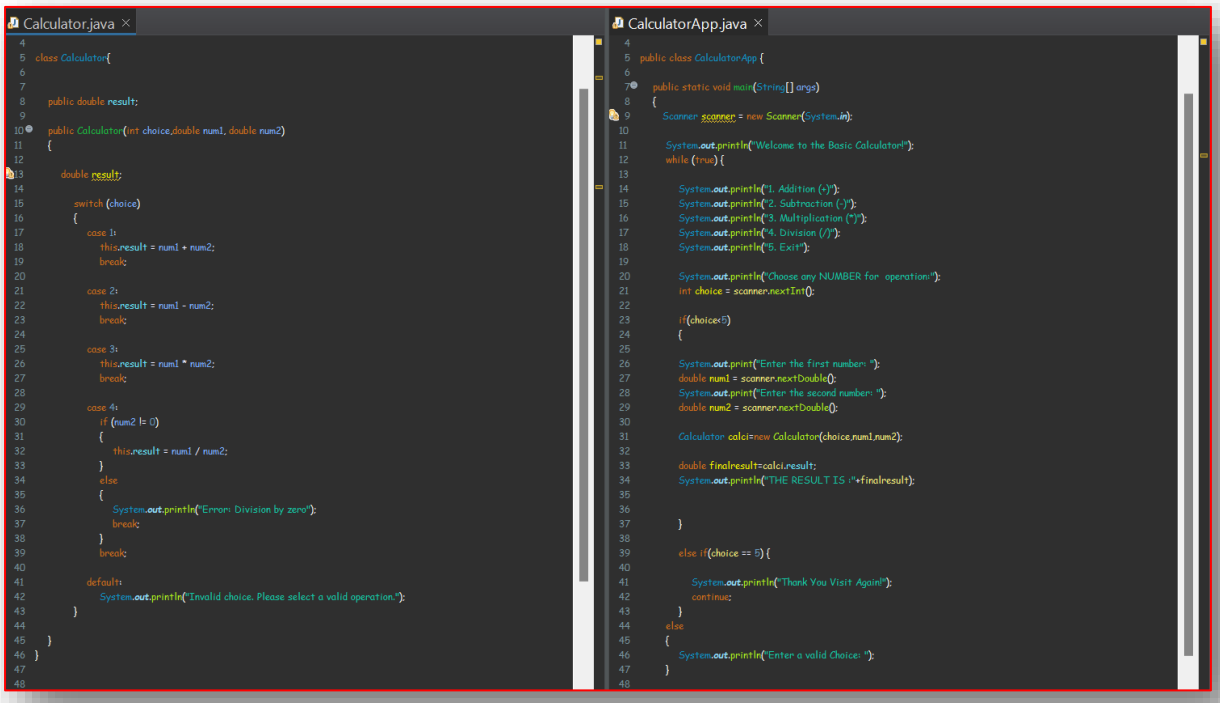
```
package com.section6.calci;

import java.util.*;

public class CalculatorApp {

        public static void main(String[] args)
        {
          Scanner scanner = new Scanner(System.in);

                System.out.println("Welcome to the Basic Calculator!");
    while (true) {

       System.out.println("1. Addition (+)");
       System.out.println("2. Subtraction (-)");
       System.out.println("3. Multiplication (*)");
       System.out.println("4. Division (/)");
       System.out.println("5. Exit");

       System.out.println("Choose any NUMBER for  operation:");
       int choice = scanner.nextInt();

       if(choice<5)
       {

       System.out.print("Enter the first number: ");
       double num1 = scanner.nextDouble();
       System.out.print("Enter the second number: ");
       double num2 = scanner.nextDouble();

       Calculator calci=new Calculator(choice,num1,num2);
```

```
    double finalresult=calci.result;
    System.out.println("THE RESULT IS :"+finalresult);
}
    else if(choice == 5) {

        System.out.println("Thank You Visit Again!");
        continue;
    }
 else
 {
     System.out.println("Enter a valid Choice: ");
 }

     }}}
```

SOURCE CODE

class Calculator (by using Constructor)

class CalculatorApp (Main Method)



Calculator.java

```
class Calculator{

    public double result;
    public Calculator(int choice,double num1, double num2)
    {
        double result;
        switch (choice)
        {
            case 1:
                this.result = num1 + num2;
                break;

            case 2:
                this.result = num1 - num2;
                break;

            case 3:
                this.result = num1 * num2;
                break;

            case 4:
                if (num2 != 0)
                {
                    this.result = num1 / num2;
                }
                else
                {
                    System.out.println("Error: Division by zero");
                    break;
                }
                break;

            default:
                System.out.println("Invalid choice. Please select a valid operation.");
        }
    }
}
```

CalculatorApp.java

```
public class CalculatorApp {

    public static void main(String[] args)
    {
        Scanner scanner = new Scanner(System.in);

        System.out.println("Welcome to the Basic Calculator!");
        while (true) {

            System.out.println("1. Addition (+)");
            System.out.println("2. Subtraction (-)");
            System.out.println("3. Multiplication (*)");
            System.out.println("4. Division (/)");
            System.out.println("5. Exit");

            System.out.println("Choose any NUMBER for  operation!");
            int choice = scanner.nextInt();

            if(choice<5)
            {

            System.out.print("Enter the first number: ");
            double num1 = scanner.nextDouble();
            System.out.print("Enter the second number: ");
            double num2 = scanner.nextDouble();

            Calculator calci=new Calculator(choice,num1,num2);

            double finalresult=calci.result;
            System.out.println("THE RESULT IS :"+finalresult);


            }

            else if(choice == 5) {

                System.out.println("Thank You Visit Again!");
                continue;
            }
        else
        {
            System.out.println("Enter a valid Choice: ");
        }
```