Assignment1

Submitted

by

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Module2: Application Development Fundamental Assignment 2

B&B is a product-based company and is a market leader in electronic items, they would like to introduction a new product in the market, Solar Calculator, which works on solar power. You have been hired as a developer to develop an Console based Calculator application, which can be installed on Solar Calculator and tested.
You are required to do following items :
1. Create a Java Project.

2. Create a class Calculator.java

3. Write 4 public methods for (Sum, Subtract, Multiply, Divide).

4. Each method takes 2 integer values as input.

5. Read the input from the Console.

6. Write the main method to read 2 input values from terminal

7. Call all the methods and print the output of the methods

8. Import the Junit jar.

9. Write the Junit testcases for each of the 4 methods

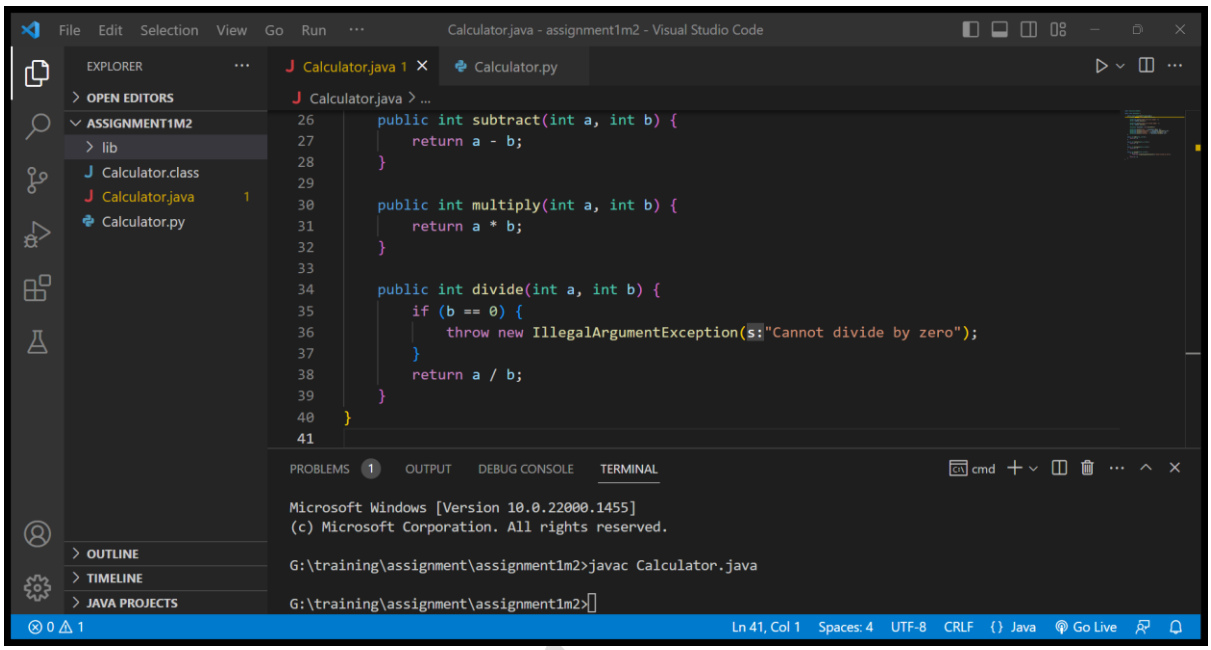
Step1:- Create a new Java project in VScode IDE, Create new file in VScode editor named as Calculator.

Step2: - write the following code to take 2 different integer input and perform 4 mathematical operation (sum subtract multiply and divide) and print it.

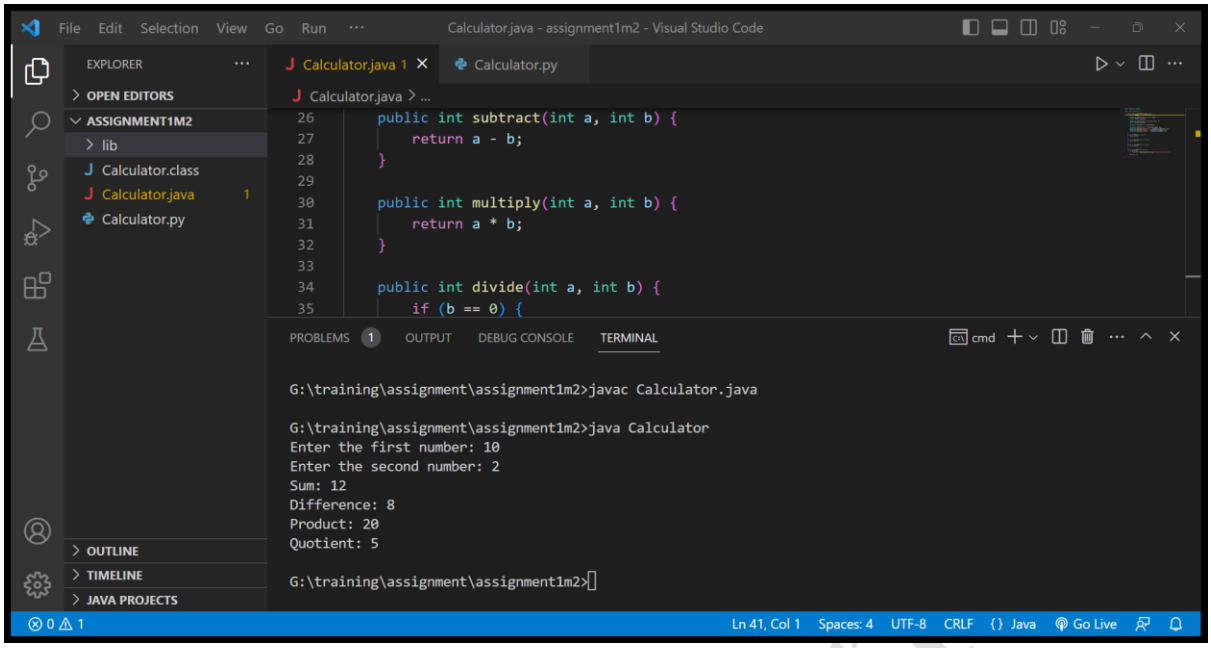
```java
import java.util.Scanner;

public class Calculator {

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

        System.out.print("Enter the first number: ");
        int a = scanner.nextInt();

        System.out.print("Enter the second number: ");
        int b = scanner.nextInt();

        Calculator calculator = new Calculator();

        System.out.println("Sum: " + calculator.add(a, b));
        System.out.println("Difference: " + calculator.subtract(a, b));
        System.out.println("Product: " + calculator.multiply(a, b));
        System.out.println("Quotient: " + calculator.divide(a, b));
    }

    public int add(int a, int b) {
        return a + b;
    }

    public int subtract(int a, int b) {
        return a - b;
    }

    public int multiply(int a, int b) {
        return a * b;
    }

    public int divide(int a, int b) {
        if (b == 0) {
            throw new IllegalArgumentException("Cannot divide by zero");
        }
        return a / b;
    }
```

```
}
```

Step3: - open the terminal pass the command “Javac Calculator.Java”. This command will compile the code and create a class file of the project.



Step4: - To run the project pause the command “Java Calculator”. after that give the two different integer input, then the project will perform all 4 mathematical operation.



Step5: - To Import the Junit jar. Download JUnit jar: Firstly, you need to download the JUnit jar file from the official JUnit website or any other reliable source. Make sure you download the latest version of JUnit compatible with your Java version. And set the path