

Creating an Arithmetic Calculator.

Problem Statement:-

- write a program to create an arithmetic calculator.
- Using Core Java concepts: Variables, data types, operators, type casting, control statements, class, objects, access specifiers, and core keywords like final, this, and static

Step1: Java-Code

```
package mypackage;
import java.util.Scanner;

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

        System.out.println("Arithmetic Calculator");
        System.out.print("Enter the first number: ");
        double num1 = scanner.nextDouble();

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

        System.out.print("Enter the operator (+, -, *, /): ");
        char operator = scanner.next().charAt(0);

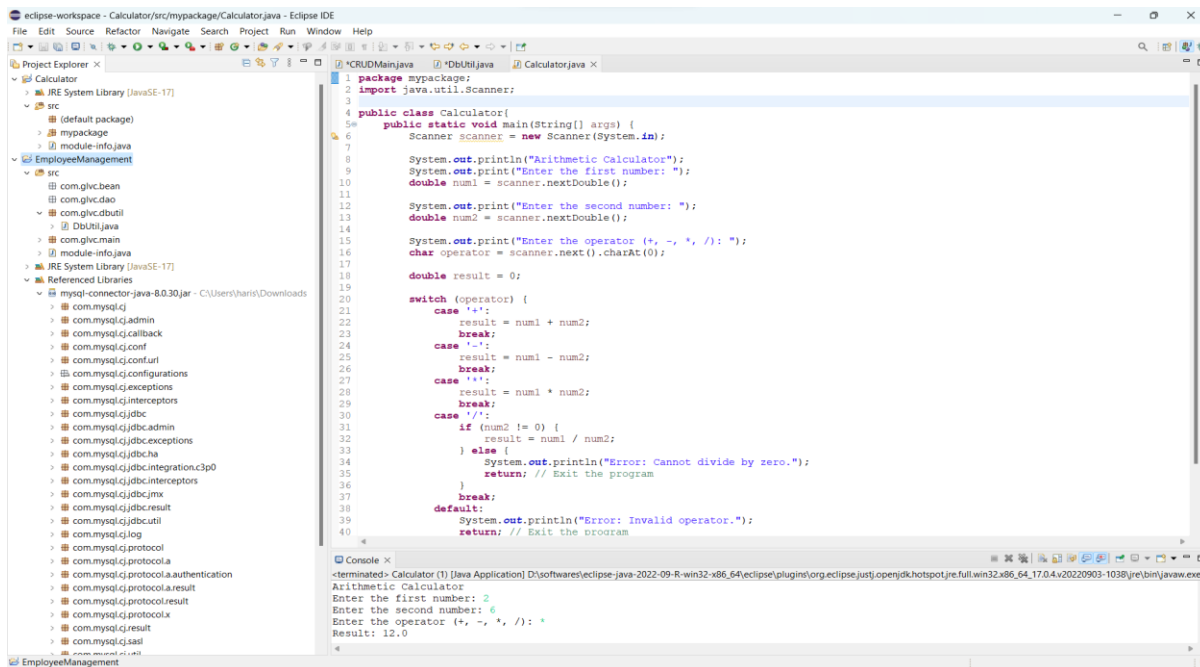
        double result = 0;

        switch (operator) {
            case '+':
                result = num1 + num2;
                break;
            case '-':
                result = num1 - num2;
                break;
            case '*':
                result = num1 * num2;
                break;
            case '/':
                if (num2 != 0) {
                    result = num1 / num2;
                } else {
                    System.out.println("Error: Cannot divide by zero.");
                    return; // Exit the program
                }
                break;
            default:
                System.out.println("Error: Invalid operator.");
                return; // Exit the program
        }

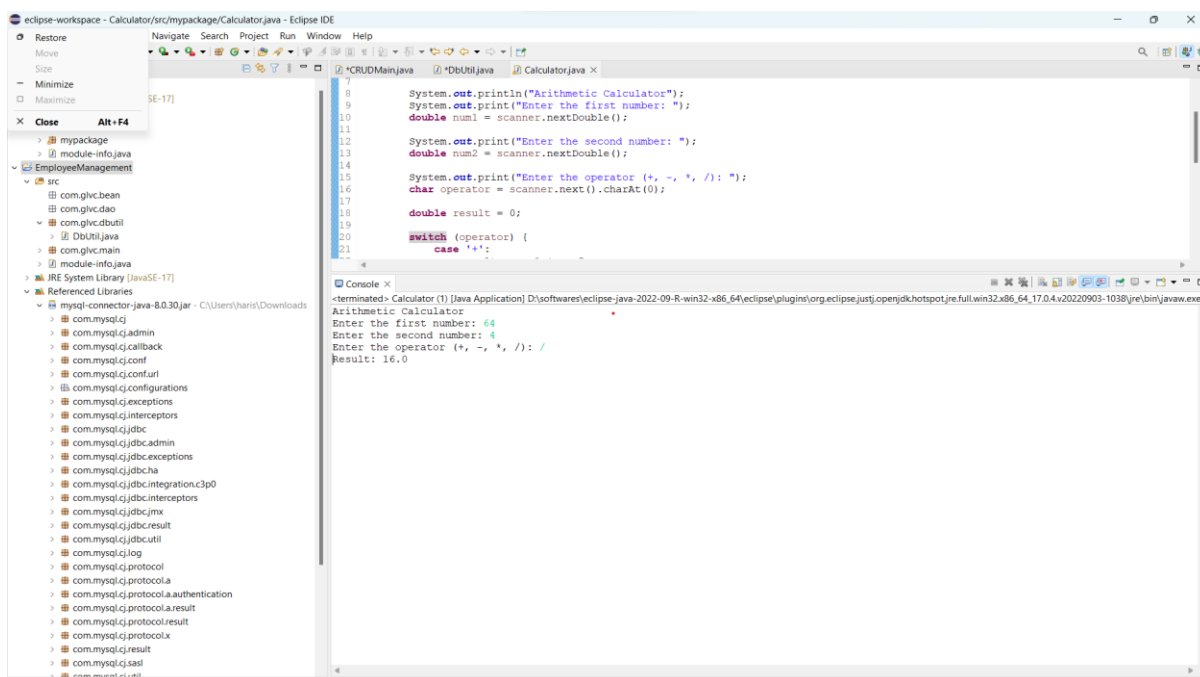
        System.out.println("Result: " + result);
    }
}
```

Step2: IDE-Eclipse.

- 2.1 Create a new Project, Name it as Calculator
- 2.2 Create a new class and name it as Calculator
- 2.3 Import packages



Step 3: Execution of code



Step4: Output of the Program

This program demonstrates the use of variables, data types, operators, control statements (switch), and user input using the **Scanner** class. The **switch** statement is used to determine which arithmetic operation to perform based on the entered operator. Compile and run this program to use the arithmetic calculator. Keep in mind that this is a basic example, and you can expand or modify it according to your requirements.

Step 5: Pushing the code to git hubs

3558Bhk / JAVA-FSD--Assignments

Q Type to search

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

Commit

write a program to create an arithmetic calculator.

write a program to create an arithmetic calculator.

- Using Core Java concepts: Variables, data types, operators, type casting, control statements, class, objects, access specifiers, and core keywords like final, this, and static

main

3558Bhk committed now Verified

0 parents commit b8f8c78

calculator.txt

```
... @@ -0,0 +1,45 @@
1 + package mypackage;
2 + import java.util.Scanner;
3 +
4 + public class Calculator{
5 +     public static void main(String[] args) {
6 +         Scanner scanner = new Scanner(System.in);
7 +
8 +         System.out.println("Arithmetic Calculator");
9 +         System.out.print("Enter the first number: ");
10 +         double num1 = scanner.nextDouble();
11 +
12 +         System.out.print("Enter the second number: ");
13 +         double num2 = scanner.nextDouble();
14 +
15 +         System.out.print("Enter the operator (+, -, *, /): ");
16 +         char operator = scanner.next().charAt(0);
17 +
18 +         double result = 0;
19 +
20 +         switch (operator) {
21 +             case "+":
22 +                 result = num1 + num2;
23 +                 break;
24 +             case "-":
25 +                 result = num1 - num2;
26 +                 break;
27 +             case "*":
28 +                 result = num1 * num2;
29 +                 break;
30 +             case "/":
31 +                 if (num2 != 0) {
32 +                     result = num1 / num2;
33 +                 } else {
34 +                     System.out.println("Error: Cannot divide by zero.");
35 +                     return; // Exit the program
36 +                 }
37 +                 break;
38 +             default:
39 +                 System.out.println("Error: Invalid operator.");
40 +                 return; // Exit the program
41 +         }
42 +
43 +         System.out.println("Result: " + result);
44 +     }
45 + }
```

Showing 1 changed file with 45 additions and 0 deletions.

Whitespace

Ignore whitespace

Split

Unified

0 comments on commit b8f8c78

Write Preview

Leave a comment

Markdown is supported Paste, drop, or click to add files

Comment on this commit