

# Solution Review: Implement a Calculator Class

This review provides a detailed analysis to solve the 'Implement a Calculator Class' challenge.

## WE'LL COVER THE FOLLOWING ^

- Solution
- Explanation

## Solution #

```
class Calculator {  
  
    // Class fields  
    private double _num1;  
    private double _num2;  
  
    // Default Constructor  
    public Calculator(double num1, double num2) {  
        this._num1 = num1;  
        this._num2 = num2;  
    }  
  
    // Addition Method  
    public double Add() {  
        return this._num1 + this._num2;  
    }  
  
    // Subtraction Method  
    public double Subtract() {  
        return this._num2 - this._num1;  
    }  
  
    // Multiplication Method  
    public double Multiply() {  
        return this._num1 * this._num2;  
    }  
  
    // Divison Method  
    public double Divide() {  
        return this._num2 / this._num1;  
    }  
}  
  
class Demo {
```



```
public static void Main(string[] args) {  
    Calculator calc = new Calculator(10, 94);  
  
    Console.WriteLine("Addition:" + calc.Add());  
    Console.WriteLine("Subtraction:" + calc.Subtract());  
    Console.WriteLine("Multiplication:" + calc.Multiply());  
    Console.WriteLine("Division:" + calc.Divide());  
}  
  
}
```



## Explanation #

- **Line 4-5:** We have implemented the `Calculator` class which has the fields `_num1` and `_num2`.
  - **Line 8-11:** In the constructor, we have initialized both fields to `num1` and `num2`.
  - **Line 14-16:** Implemented `Add()`, a *method* which returns the sum of two numbers, i.e.,  $num1 + num2$
  - **Line 19-21:** Implemented `Subtract()`, a *method* which returns the difference of two numbers, i.e.,  $num2 - num1$
  - **Line 24-26:** Implemented `Multiply()`, a *method* which returns the product of two numbers, i.e.,  $num1 * num2$
  - **Line 29-31:** Implemented `Divide()`, a *method* which returns the division of the second number by the first number, i.e.,  $num2/num1$
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