

## Challenge 4: Implement a Calculator Class

In this exercise, you have to implement a calculator which can perform addition, subtraction, multiplication, and division.

### WE'LL COVER THE FOLLOWING ^

- Problem Statement
  - Input
  - Output
  - Sample Input
  - Sample Output
- Coding Exercise

## Problem Statement #

Write a Java **class** called `Calculator` with

- **private** *fields*:
  - `num1` and `num2` (**double** type)

And *methods*:

- `add()`, a *method* which returns the addition of two numbers
- `subtract()`, a *method* which returns the subtraction of num1 from num2
- `multiply()`, a *method* which returns the multiplication of numbers
- `divide()`, a *method* which returns the division of num2 by num1
- Define a parameterized constructor which takes two parameters `num1` and `num2` and assigns these variables to the respective fields in the class.

## Input #

Pass double point numbers in the parameterized constructor

## Output #

addition, subtraction, division, and multiplication

## Sample Input #

```
Calculator obj = new Calculator(10, 94);  
obj.add()  
obj.subtract()  
obj.multiply()  
obj.divide()
```

## Sample Output #

```
104  
84  
940  
9.4
```

## Coding Exercise #

First, take a close look and design a step-by-step algorithm before jumping to the implementation. This problem is designed for your practice, so initially try to solve it on your own. If you get stuck, you can always refer to the solution provided in the solution review.

**Good Luck!**

```
class Calculator {  
    // write class fields here  
  
    public Calculator() {  
        //write definition here  
    }  
  
    double add(double n1, double n2) {  
        //write definition here  
  
        return 0;  
    }  
  
    double subtract(double n1, double n2) {  
        //write definition here  
  
        return 0;  
    }  
}
```



```
}  
  
double multiply(double n1, double n2) {  
    //write definition here  
  
    return 0;  
}  
  
double divide(double n1, double n2) {  
    //write definition here  
  
    return 0;  
}  
  
}  
  
class Demo {  
  
    public static void main(String args[]) {  
        Calculator obj = new Calculator();  
  
        System.out.println(obj.add(10, 94));  
        System.out.println(obj.subtract(10, 94));  
        System.out.println(obj.multiply(10, 94));  
        System.out.println(obj.divide(10, 94));  
    }  
  
}
```



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The solution will be explained in the next lesson.