

## Exercise 4: Arrange-Act-Assert (AAA) Pattern, Test Fixtures, Setup and Teardown Methods in Junit

From File Juint\_Basic Testing Excercise

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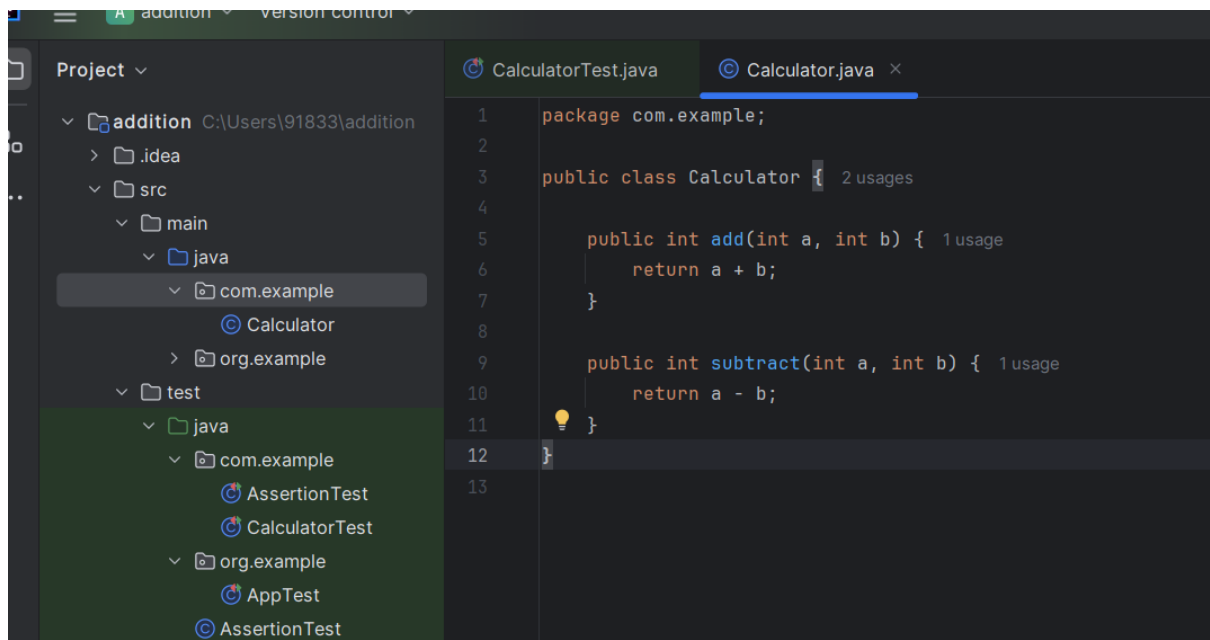
**Calculator.java class:**

**Code:**

```
package com.example;

public class Calculator {
    public int add(int a, int b) {
        return a + b;
    }
    public int subtract(int a, int b) {
        return a - b;
    }
}
```

**Practice Screen from IntelliJ:**



## CalcalatotTest.java class:

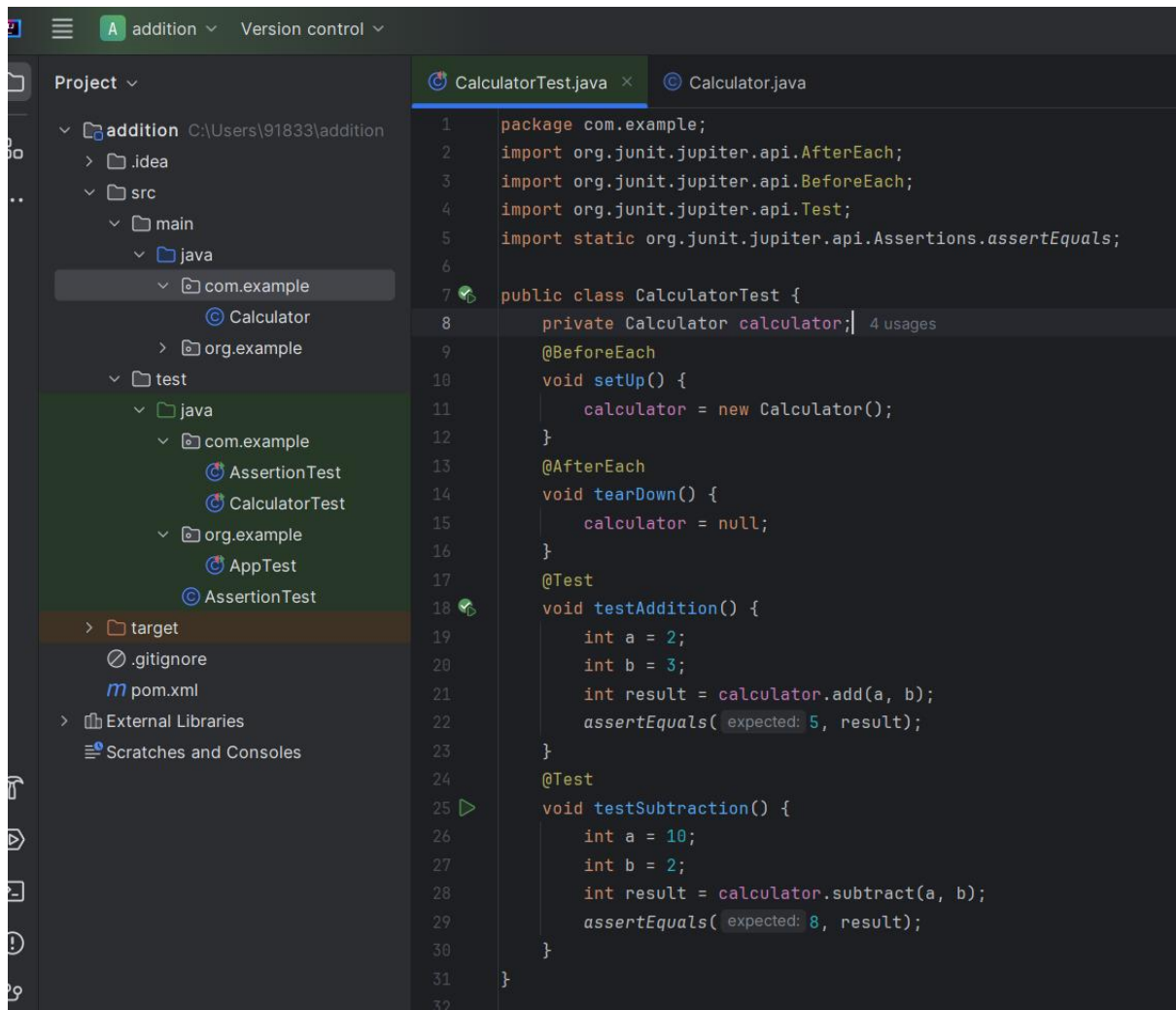
### Code:

```
package com.example;
import org.junit.jupiter.api.AfterEach;
import org.junit.jupiter.api.BeforeEach;
import org.junit.jupiter.api.Test;
import static org.junit.jupiter.api.Assertions.assertEquals;
```

```
public class CalculatorTest {
    private Calculator calculator;
    @BeforeEach
    void setUp() {
        calculator = new Calculator();
    }

    @AfterEach
    void tearDown() {
        calculator = null;
    }
    @Test
    void testAddition() {
        int a = 2;
        int b = 3;
        int result = calculator.add(a, b);
        assertEquals(5, result);
    }
    @Test
    void testSubtraction() {
        int a = 10;
        int b = 2;
        int result = calculator.subtract(a, b);
        assertEquals(8, result);
    }
}
```

## Practice Screen from IntelliJ:



## OUTPUT SCREEN:

