# Exercise 2: Writing Basic JUnit Tests

**Scenario**: You need to write basic JUnit tests for a simple Java class.

**Calculator.java:**

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;

}

public int multiply(int a, int b) {

return a \* b;

}

public double divide(int a, int b) {

if(b == 0) {

throw new IllegalArgumentException("Cannot divide by Zero");

}

return (double) a / b;

}

}

**CalculatorTest.java:**

package com.example;

import static org.junit.Assert.\*;

import org.junit.Test;

public class CalculatorTest {

*@*Test

public void testAdd() {

Calculator calculator = new Calculator();

assertEquals(5, calculator.add(2, 3));

}

*@*Test

public void testSubtract() {

Calculator calculator = new Calculator();

assertEquals(1, calculator.subtract(3, 2));

}

*@*Test

public void testMultiply() {

Calculator calculator = new Calculator();

assertEquals(6, calculator.multiply(2, 3));

}

*@*Test

public void testDivide() {

Calculator calculator = new Calculator();

assertEquals(2.0, calculator.divide(6, 3), 0.001);

}

*@*Test(expected = IllegalArgumentException.class)

public void testDivideByZero() {

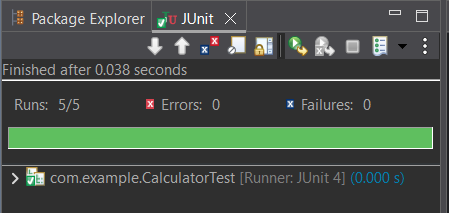
Calculator calculator = new Calculator();

calculator.divide(5, 0);

}

}

**Output:**

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