JUnit Testing Exercises

**Exercise :1**

**Calculator.java**

package com.example;

public class Calculator {

public int add(int a, int b) {

return a + b;

}

}

**CalculatorTest.java**

package com.example;

import org.junit.Test;

import static org.junit.Assert.assertEquals;

public class CalculatorTest {

@Test

public void add\_twoNumbers\_returnsSum() {

Calculator calc = new Calculator();

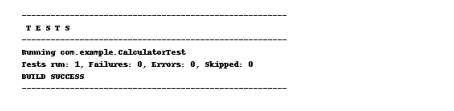
int result = calc.add(2, 3);

assertEquals(5, result);

}

}

**OUTPUT:**



**Exercise:3**

**AssertionsTest.java**

package com.example;

import org.junit.Test;

import static org.junit.Assert.\*;

public class AssertionsTest {

@Test

public void testAssertions() {

// assert equals

assertEquals(5, 2 + 3);

// assert true / assert false

assertTrue(5 > 3);

assertFalse(5 < 3);

// assert null / assert not null

assertNull(null);

assertNotNull(new Object());

}

}

**OUTPUT:**



**Exercise:4**

**CalculatorTest.java**

package com.example;

import org.junit.Before;

import org.junit.After;

import org.junit.Test;

import static org.junit.Assert.\*;

public class CalculatorTest {

private Calculator calc;

@Before

public void setUp() {

System.out.println("Before each test: Setup Calculator");

calc = new Calculator();

}

@After

public void tearDown() {

System.out.println("After each test: Teardown Calculator");

calc = null;

}

@Test

public void add\_returnsCorrectSum() {

// Arrange done in @Before

int a = 2, b = 3;

// Act

int result = calc.add(a, b);

// Assert

assertEquals(5, result);

}

}

**OUTPUT:**

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