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

**Calculator.java**

package org.example;

public class Calculator {

public int add(int a, int b) {

return a + b;

}

public int subtract(int a, int b) {

return a - b;

}

}

**CalculatorTest.java**

import org.junit.jupiter.api.\*;

import static org.junit.jupiter.api.Assertions.\*;

import org.example.Calculator;

public class CalculatorTest {

private Calculator calculator;

@BeforeEach

public void setUp() {

calculator = new Calculator();

System.out.println("Setup complete");

}

@AfterEach

public void tearDown() {

calculator = null;

System.out.println("Teardown complete");

}

@Test

public void testAddition() {

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

assertEquals(5, result);

}

@Test

public void testSubtraction() {

int result = calculator.subtract(5, 2);

assertEquals(3, result);

}

}

OUTPUT:

