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

**CalculatorTestAAA.java :**

package com.example;

import org.junit.Before;

import org.junit.After;

import org.junit.Test;

import static org.junit.Assert.\*;

public class CalculatorTestAAA {

private Calculator calculator;

@Before

public void setUp() {

calculator = new Calculator();

System.out.println("setUp: Calculator instance created");

}

@After

public void tearDown() {

System.out.println("tearDown: Test completed\n");

}@Test

public void testAddition() {

int a = 10;

int b = 5;

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

assertEquals(15, result);

System.out.println("testAddition: " + a + " + " + b + " = " + result);

}

@Test

public void testSubtraction() {

int a = 8;

int b = 3;

int result = calculator.subtract(a, b);

assertEquals(5, result);

System.out.println("testSubtraction: " + a + " - " + b + " = " + result);

}

**OUTPUT :**

