WEEK:2

Exercise 4: Arrange-Act-Assert (AAA) Pattern, Test Fixtures, Setup and Teardown Methods in JUnit Scenario: You need to organize your tests using the Arrange-Act-Assert (AAA) pattern and use setup and teardown methods. Steps: 1. Write tests using the AAA pattern. 2. Use @Before and @After annotations for setup and teardown methods.

package com.klef.cts.springboot;

import org.junit.Before;

import org.junit.After;

import org.junit.Test;

import static org.junit.Assert.\*;

public class CalculatorTest {

private Calculator calculator;

@Before

public void setUp() {

// Arrange: common setup before each test

calculator = new Calculator();

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

}

@After

public void tearDown() {

// Cleanup after each test

calculator = null;

System.out.println("Teardown: Calculator instance cleaned up");

}

@Test

public void testAddition() {

// Arrange: done in setUp()

// Act

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

// Assert

assertEquals(5, result);

}

@Test

public void testSubtraction() {

// Arrange: done in setUp()

// Act

int result = calculator.subtract(5, 3);

// Assert

assertEquals(2, result);

}

}