**S.NO:1 Exercise 1: Setting Up JUnit**

**SOLUTION CODE:**

package com.example;

import org.junit.Test;

import static org.junit.Assert.assertEquals;

public class CalculatorTest {

@Test

public void testAdd() {

Calculator calc = new Calculator();

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

assertEquals(5, result);

}

}

**S.NO:2 Exercise 3: Assertions in JUnit**

**SOLUTION CODE:**

import org.junit.Test;

import static org.junit.Assert.\*;

public class AssertionsTest {

@Test

public void testAssertions() {

assertEquals(5, 2 + 3);

assertTrue(5 > 3);

assertFalse(5 < 3);

assertNull(null);

assertNotNull(new Object());

}

}

**S.NO:3 Exercise 4: Arrange-Act-Assert (AAA) Pattern, Test Fixtures, Setup and Teardown Methods in JUnit**

**SOLUTION CODE:**

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() {

calculator = new Calculator();

}

@After

public void tearDown() {

calculator = null;

}

@Test

public void testAddition() {

int result = calculator.add(10, 5);

assertEquals(15, result);

}

@Test

public void testSubtraction() {

int result = calculator.subtract(10, 5);

assertEquals(5, result);

}

}