**WEEK-2**

**TDD Using Junit5 and Mockito: JUnit\_Basic Testing Exercises:**

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

**1.Calculator.java:**

package testpkg;

public class Calculator {

    public int add(int a, int b) {

        return a + b;

    }

    public int subtract(int a, int b) {

        return a - b;

    }

}

**2.CalculatorTest.java:**

package testpkg;

import org.junit.After;

import org.junit.Before;

import org.junit.Test;

import static org.junit.Assert.\*;

public class CalculatorTest {

    private Calculator calculator;

    @Before

    public void setUp() {

        calculator = new Calculator();

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

    }

    @After

    public void tearDown() {

        calculator = null;

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

    }

    @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);

    }

}

