**Exercise\_4\_ Arrange-Act-Assert (AAA) Pattern, Test Fixtures, Setup andTeardown Methods in Junit**

**Calculator.class:**

public class Calculator {

public int add(int a, int b) {

return a + b;

}

public int subtract(int a, int b) {

return a - b;

}

}

**CalculatorTest.class:**

**import static org.junit.Assert.\*;**

**import org.junit.Before;**

**import org.junit.After;**

**import org.junit.Test;**

**public class CalculatorTest {**

**private Calculator calculator;**

**@Before**

**public void setUp() {**

**calculator = new Calculator(); // Arrange**

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

**}**

**@After**

**public void tearDown() {**

**calculator = null;**

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

**}**

**@Test**

**public void testAddition() {**

**int result = calculator.add(3, 4);**

**assertEquals(7, result);**

**}**

**@Test**

**public void testSubtraction() {**

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

**assertEquals(5, result);**

**}**

**}**

**OUTPUT:**

