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

**Code:**

package com.example;

import org.junit.After;

import org.junit.Before;

import org.junit.Test;

import static org.junit.Assert.\*;

class Calculator {

public int add(int a, int b) {

return a + b;

}

}

public class CalculatorTest {

private Calculator calculator;

@Before

public void setUp() {

calculator = new Calculator();

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

}

@After

public void tearDown() {

calculator = null;

System.*out*.println("Teardown: Calculator instance set to null");

@Test

public void testAddition() {

int a = 5;

int b = 10;

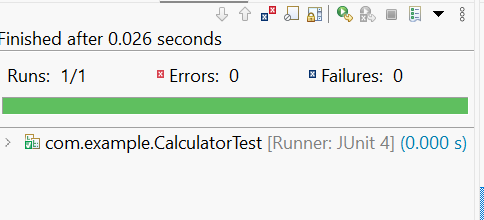
int result = calculator.add(a, b);

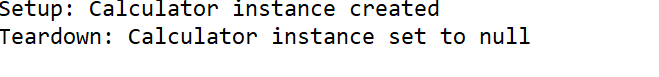
*assertEquals*("Sum should be 15", 15, result);

}

}

**Output:**

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