Exercise 4: AAA Pattern and Setup/Teardown

# Scenario:

You need to organize your tests using the Arrange-Act-Assert (AAA) pattern and use setup and teardown methods.

# Solution Code:

import static org.junit.Assert.\*;  
import org.junit.Before;  
import org.junit.After;  
import org.junit.Test;  
  
public class MathTest {  
  
 private MathUtils mathUtils;  
  
 @Before  
 public void setUp() {  
 // Arrange  
 mathUtils = new MathUtils();  
 }  
  
 @Test  
 public void testAddition() {  
 // Act  
 int result = mathUtils.add(2, 3);  
 // Assert  
 assertEquals(5, result);  
 }  
  
 @After  
 public void tearDown() {  
 mathUtils = null;  
 }  
}  
  
class MathUtils {  
 public int add(int a, int b) {  
 return a + b;  
 }  
}

# Output:

Test: testAddition()  
Expected Result: 5  
Actual Result: 5  
Test Status: PASSED