JUnit Testing Exercises

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

Scenario:

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

Steps:

1. Write tests using the AAA pattern.

2. Use @Before and @After annotations for setup and teardown methods.

Code Solution:

```java
package Junit.Junit;
import static org.junit.jupiter.api.Assertions.*;
import org.junit.jupiter.api.*;
public class AppTest {

    private App app;

    @BeforeEach
    void setUp() {
        app = new App();
        System.out.println("☑ Setup completed");
    }

    @AfterEach
    void tearDown() {
        app = null;
        System.out.println(" 🖌 Teardown completed");
    }

    @Test
    void testAddition() {
        int a = 10;
        int b = 15;
        int result = app.add(a, b);
        assertEquals(25, result);
```

```java
    }

    @Test
    void testSubtraction() {
        int a = 20;
        int b = 8;
        int result = app.subtract(a, b);

        assertEquals(12, result);
    }

    @Test
    void testIsPositive() {

        int number = -5;

        boolean result = app.isPositive(number);

        assertFalse(result);
    }
}
```