**Exercise 1: Logging Error Messages and Warning Levels**

**Task: Write a Java application that demonstrates logging error messages and warning levels using SLF4J.**

**Step-by-Step Solution:**

1. **Add SLF4J and Logback dependencies to your `pom.xml` file:**
2. **Create a Java class that uses SLF4J for logging:**

**import org.slf4j.Logger;**

**import org.slf4j.LoggerFactory;**

**public class LoggingExample { private static final Logger logger = LoggerFactory.getLogger(LoggingExample.class);**

**public static void main(String[] args) {**

**logger.error("This is an error message");**

**logger.warn("This is a warning message");**

**}**

**}**

Code:

**Calculator.java**

public class Calculator {

public int add(int a, int b) {

return a + b;

}

}

**CalculatorTest.java**

import org.junit.jupiter.api.\*;

import static org.junit.jupiter.api.Assertions.\*;

class CalculatorTest {

Calculator calc;

@BeforeEach

void setUp() {

calc = new Calculator(); // Setup

}

@AfterEach

void tearDown() {

calc = null; // Teardown

}

@Test

void testAddition() {

// Arrange done in setup()

// Act

int result = calc.add(2, 3);

// Assert

assertEquals(5, result);

}

}

**Output:**



