1. **Setting up JUnit**

**JUnit dependency**

<dependencies>

<!-- JUnit 4.x for unit testing -->

<dependency>

<groupId>junit</groupId>

<artifactId>junit</artifactId>

<version>4.13.2</version>

<scope>test</scope>

</dependency>

</dependencies>

**Test class**

package com.example;

public class Calculator {

/\*\* Adds two numbers. \*/

public int add(int a, int b) {

return a + b;

}

}

**Test code**

package com.example;

import org.junit.Test;

import static org.junit.Assert.assertEquals;

public class CalculatorTest {

@Test

public void add\_shouldReturnSum() {

Calculator calc = new Calculator();

assertEquals("1 + 2 should equal 3", 3, calc.add(1, 2));

}

}