**JUnit Testing Exercises**

**Exercise 1: Setting Up JUnit**

Scenario:

You need to set up JUnit in your Java project to start writing unit tests.

Steps:

1. Create a new Java project in your IDE (e.g., IntelliJ IDEA, Eclipse).

2. Add JUnit dependency to your project. If you are using Maven, add the following to your

pom.xml:

<dependency>

<groupId>junit</groupId>

<artifactId>junit</artifactId>

<version>4.13.2</version>

<scope>test</scope>

</dependency>

3. Create a new test class in your project.

**CODE:**

Calculator.java

package org.example;  
public class Calculator {  
 public int add(int a, int b) {  
 return a + b;  
 }  
}

CalculatorTest.java

package org.example;  
  
import org.junit.Test;  
import org.junit.Assert;  
import static org.junit.Assert.*assertEquals*;  
public class CalculatorTest {  
  
 @Test  
 public void testAdd() {  
 Calculator calc = new Calculator();  
 int result = calc.add(2, 3);  
 Assert.*assertEquals*(5, result);  
 }  
}

Pom.xml

<project xmlns="http://maven.apache.org/POM/4.0.0"  
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"  
 xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 <https://maven.apache.org/xsd/maven-4.0.0.xsd>">  
  
 <modelVersion>4.0.0</modelVersion>  
  
 <groupId>org.example</groupId>  
 <artifactId>Setting\_JUnit</artifactId>  
 <version>1.0-SNAPSHOT</version>  
  
 <dependencies>  
 <dependency>  
 <groupId>junit</groupId>  
 <artifactId>junit</artifactId>  
 <version>4.13.2</version>  
 <scope>test</scope>  
 </dependency>  
  
  
 </dependencies>  
</project>

**OUTPUT:**

