# Exercise 1: Setting Up JUnit

## Step-by-Step Guide

### 1. Create a New Java Project

In IntelliJ IDEA:  
- Open IntelliJ IDEA.  
- Go to File > New > Project.  
- Choose Maven (or Java if not using Maven).  
- Name your project (e.g., JUnitDemo).  
- Click Finish.  
  
In Eclipse:  
- Go to File > New > Maven Project or Java Project.  
- Follow the wizard and name your project.

### 2. Add JUnit Dependency (for Maven users)

In your project’s root directory, open pom.xml and add the following inside <dependencies>:

<dependency>  
 <groupId>junit</groupId>  
 <artifactId>junit</artifactId>  
 <version>4.13.2</version>  
 <scope>test</scope>  
</dependency>

Then, reload the Maven project to download dependencies (In IntelliJ: click the refresh icon in the Maven panel).

### 3. Create a Test Class

Let’s say you have a class named Calculator.java in src/main/java/com/example/:

// File: src/main/java/com/example/Calculator.java  
package com.example;  
  
public class Calculator {  
 public int add(int a, int b) {  
 return a + b;  
 }  
}

Now create a test class:

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

## Running the Test

In IntelliJ:  
- Right-click the test class or method and select Run 'CalculatorTest'.  
  
In Eclipse:  
- Right-click on the test file > Run As > JUnit Test.