# **Exercise 3: Assertions in JUnit**

# You need to use different JUnit assertions in your Java project to validate that your test results match expected outcomes.

## **Create a New Java Project**

I created a folder named JUnitDemo and opened it in Visual Studio Code (VS Code). I ensured the Java Extension Pack was installed.

### **Add JUnit Dependency**

I used Maven to manage dependencies. In my pom.xml, I added:

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

### **Create the Test Class**

I created AssertionsTest.java in src/test/java/com/example/:

package com.example;  
  
import static org.junit.Assert.\*;  
import org.junit.Test;  
  
public class AssertionsTest {  
  
 @Test  
 public void testAssertions() {  
 // Check equality  
 assertEquals(5, 2 + 3);  
  
 // Check true condition  
 assertTrue(10 > 5);  
  
 // Check false condition  
 assertFalse(2 > 5);  
  
 // Check null  
 assertNull(null);  
  
 // Check not null  
 assertNotNull(new Object());  
 }  
}

### 

### **Run the Test**

I opened the terminal in VS Code and ran:

mvn test

## 

## **Sample Output**

-------------------------------------------------------  
 T E S T S  
-------------------------------------------------------  
Running com.example.AssertionsTest  
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0  
  
Results :  
  
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0  
  
[INFO] ------------------------------------------------------------------------  
[INFO] BUILD SUCCESS  
[INFO] ------------------------------------------------------------------------

