**Exercise 1: Setting Up JUnit**

**Scenario:**

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

**Steps:**

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

**Output:**

**A screenshot of a computer program

AI-generated content may be incorrect.**

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

**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 http://maven.apache.org/maven-v4\_0\_0.xsd">

  <modelVersion>4.0.0</modelVersion>

  <groupId>com.example</groupId>

  <artifactId>Test</artifactId>

  <packaging>jar</packaging>

  <version>1.0-SNAPSHOT</version>

  <name>Test</name>

  <url>http://maven.apache.org</url>

  <dependencies>

  <dependency>

    <groupId>junit</groupId>

    <artifactId>junit</artifactId>

    <version>4.13.2</version>

    <scope>test</scope>

  </dependency>

  </dependencies>

</project>

Create a new test class in your project.

**Calculator.java**

package com.example;

public class Calculator {

    public int add(int a, int b) {

        return a + b;

    }

    public int subtract(int a, int b) {

        return a - b;

    }

}

**CalculatorTest.java**

package com.example;

import org.junit.Test;

import static org.junit.Assert.assertEquals;

public class CalculatorTest {

    @Test

    public void testAdd() {

        Calculator calc = new Calculator();

        assertEquals(5, calc.add(2, 3));

    }

    @Test

    public void testSubtract() {

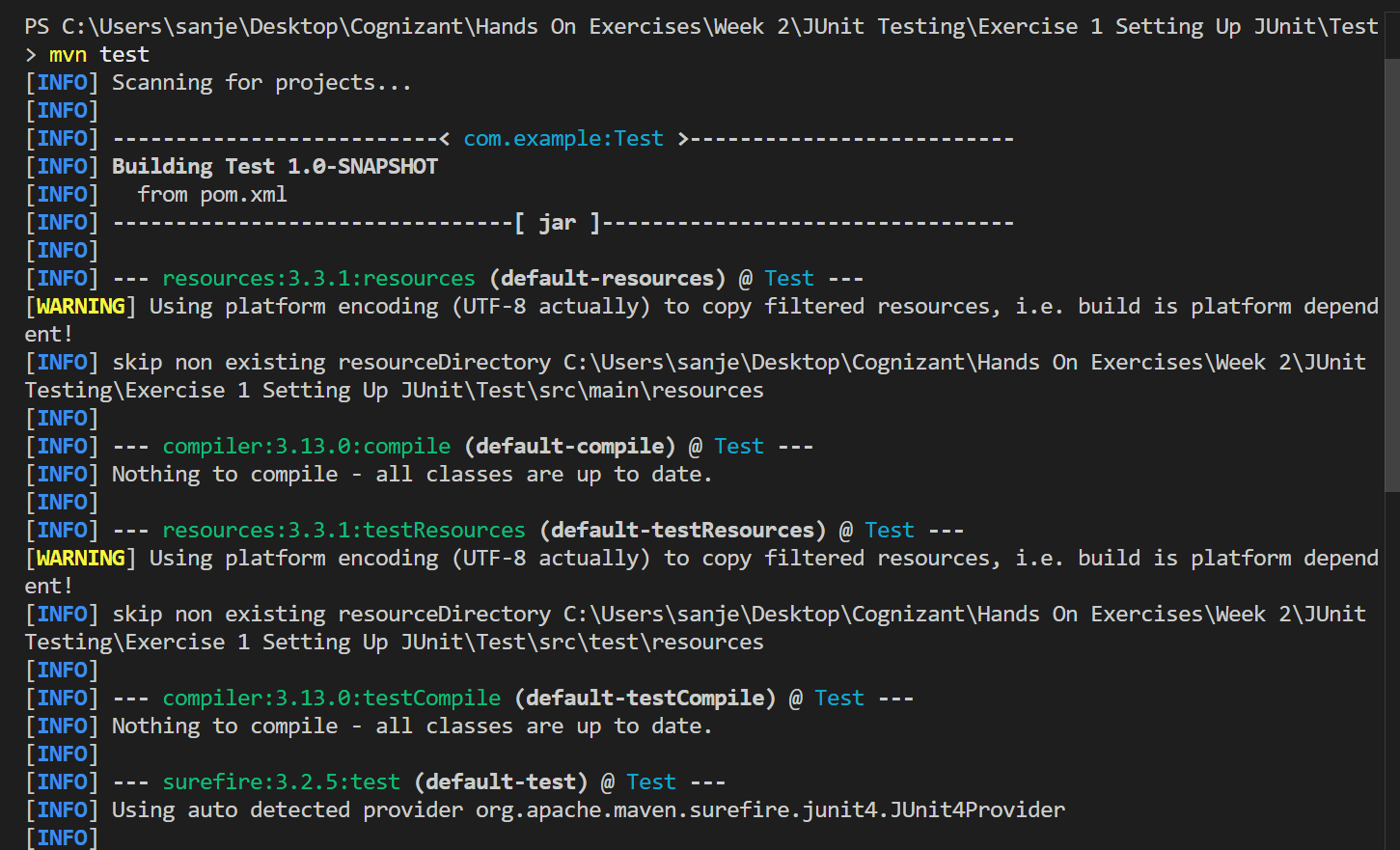
        Calculator calc = new Calculator();

        assertEquals(1, calc.subtract(3, 2));

    }

}

**Output:**

**A screenshot of a computer program

AI-generated content may be incorrect.**