

Unit Tests – Setup

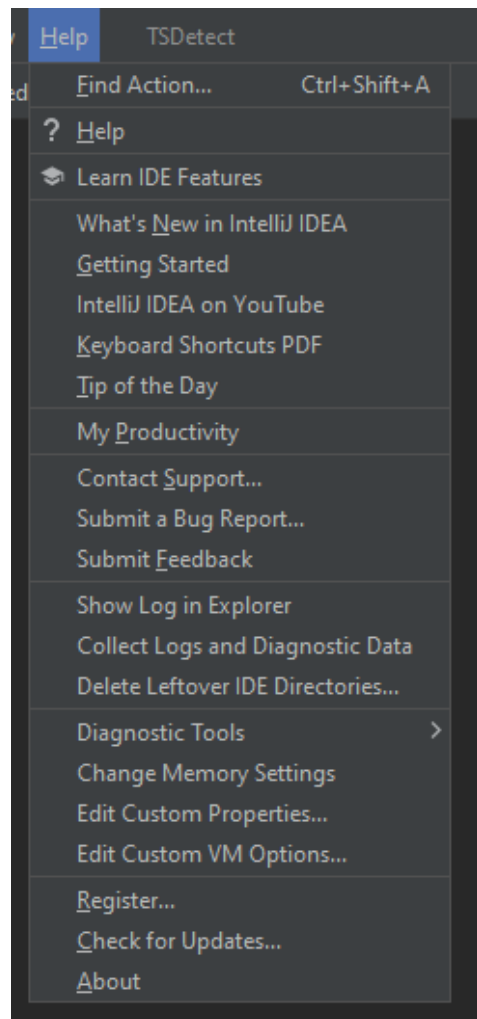
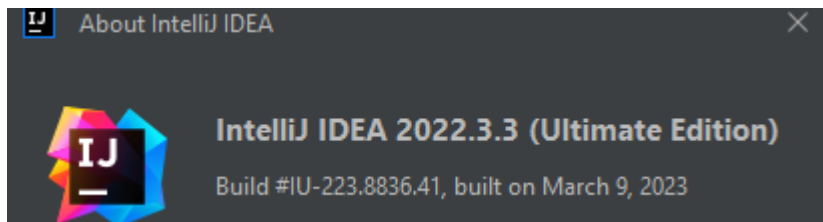
Setup

Prerequisites

IntelliJ Version

Please make sure that your version of IntelliJ is at least 2022.3.3

to find the version: from the top/main menu: Help → About



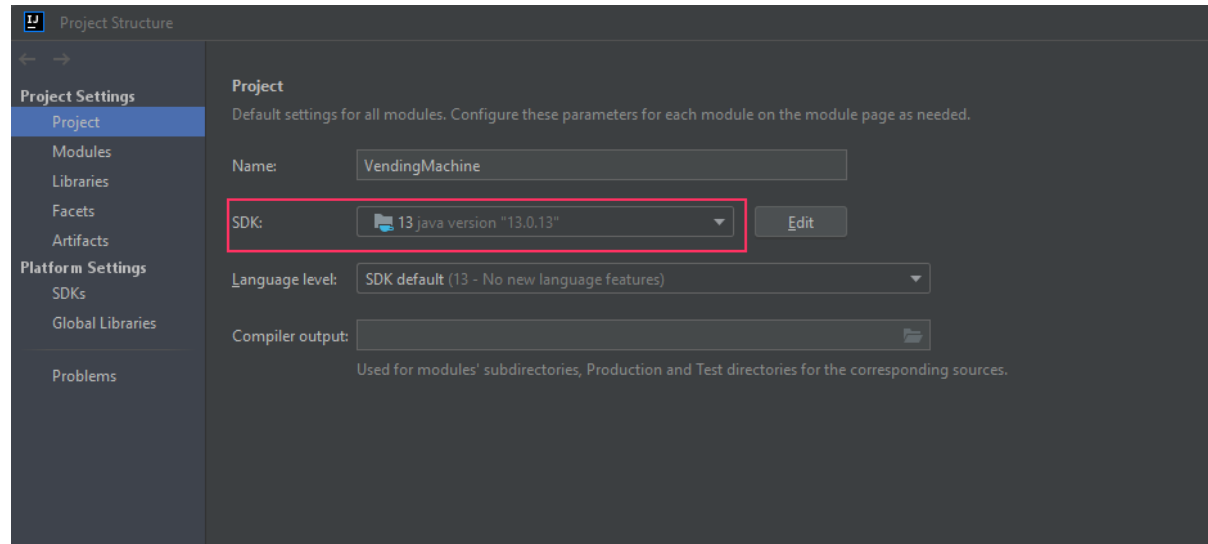
Prerequisites

Java SDK

Ensure Java SDK is installed on the computer and IntelliJ is made aware of it.

From the top/main menu: File →
Project Structure → Project

The assignments in these projects
have been verified against Java SDK
13



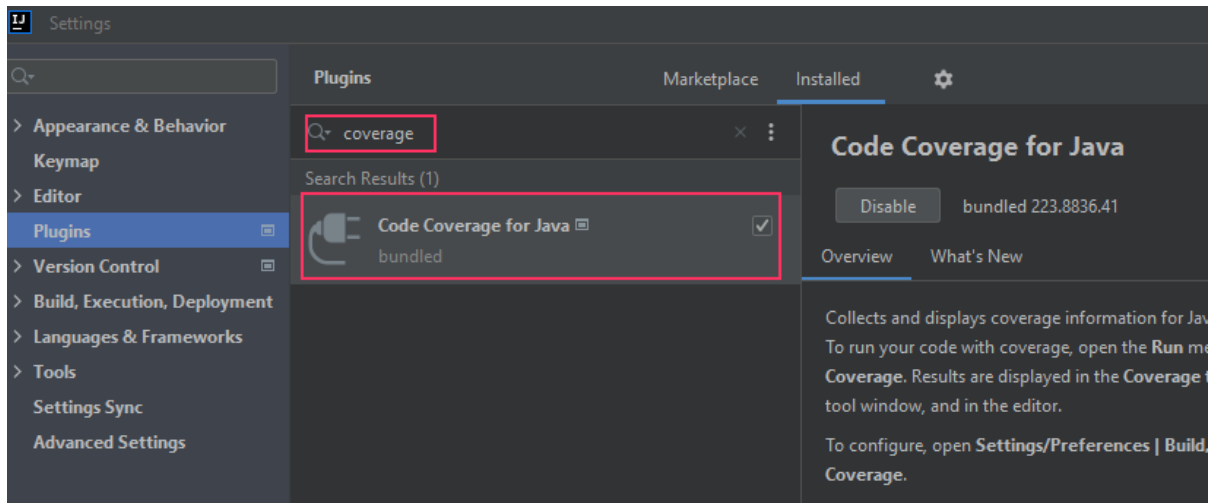
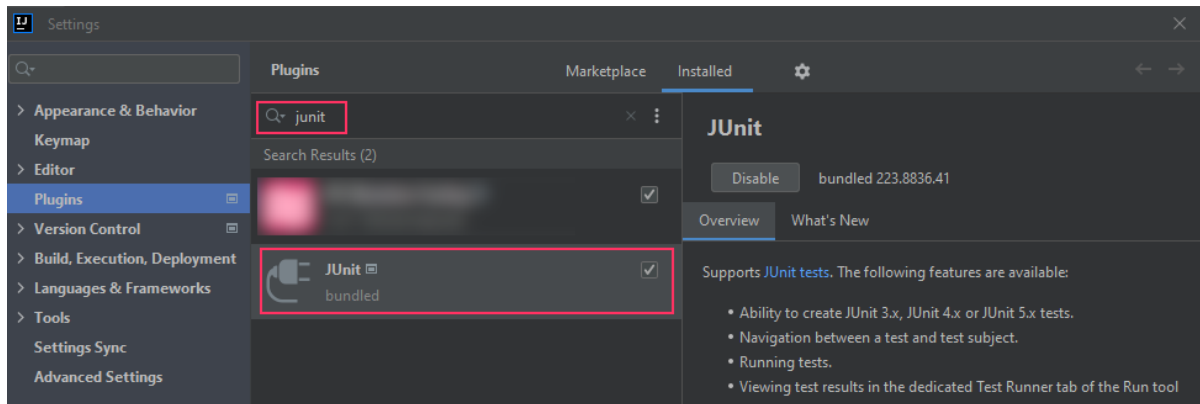
Prerequisites

Unit testing plugins

Ensure that you have the following two plugins installed (they are part of the default IntelliJ install)

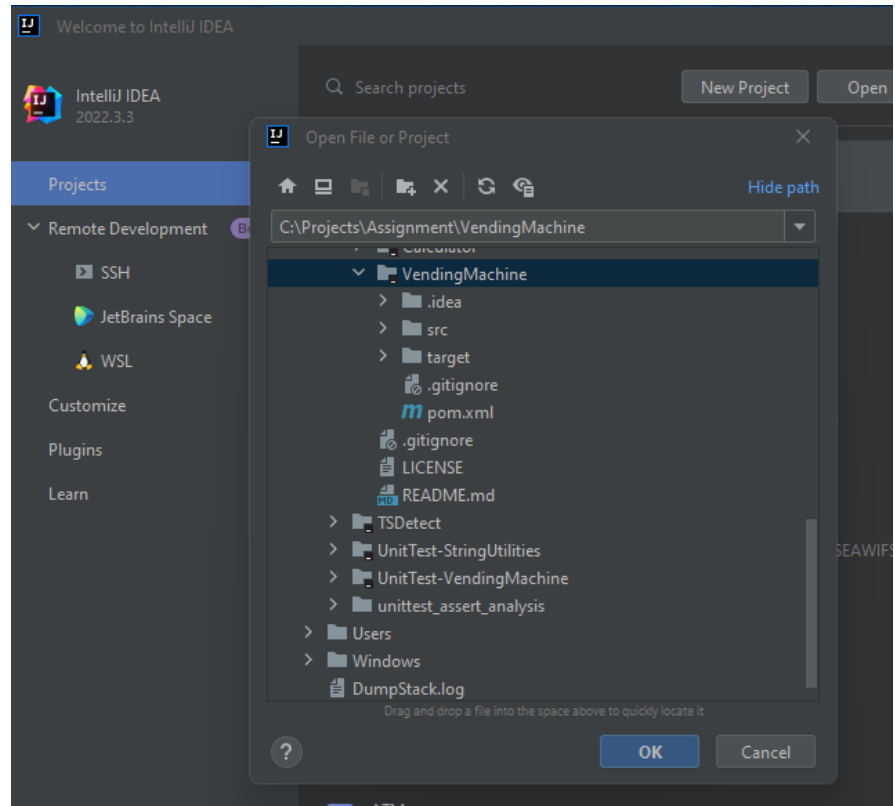
- 1) JUnit
- 2) Code Coverage for Java

To access plugins: from the top/main menu: File → Settings → Plugins



Open the project in IntelliJ

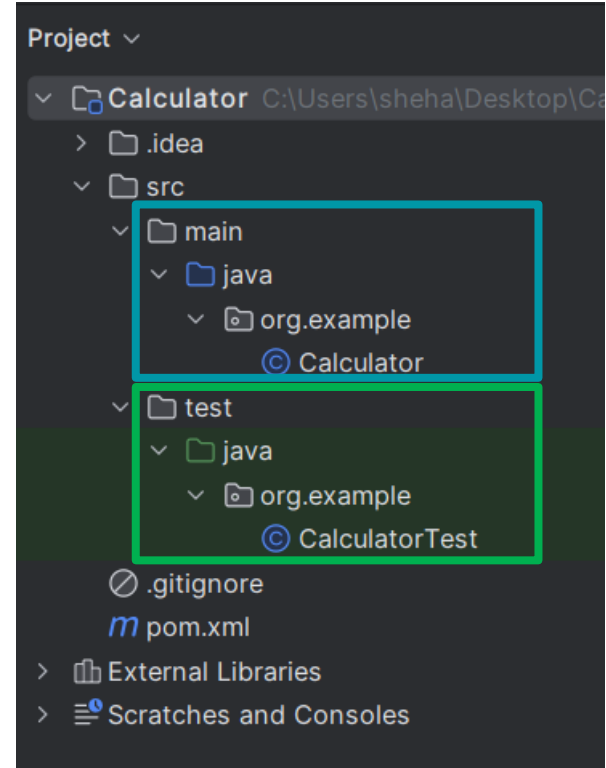
Select the root folder and click the “OK” button



Project structure

The source/production code is contained under: `src/main/java`

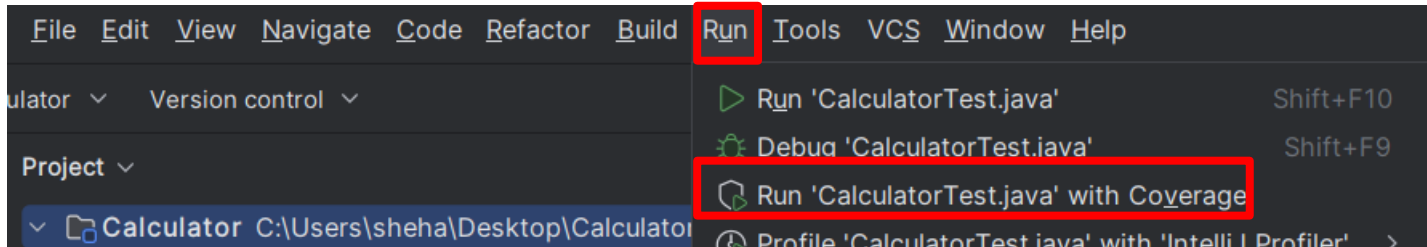
The test code is contained under: `src/test/java`



Sample Screenshot

Running tests with code coverage

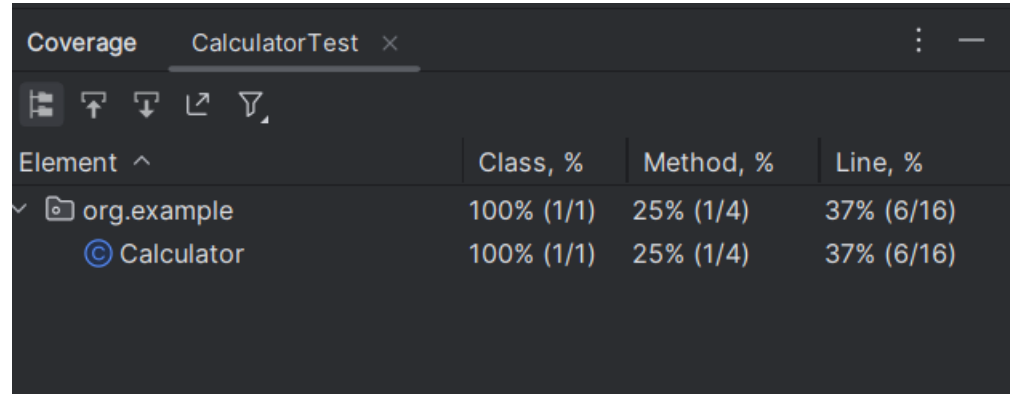
- 1) Select the root directory
- 2) From the top/main menu:
Run → Run All in <project>
with Coverage



Sample Screenshot

Show code coverage

The Coverage window should automatically show. If this does not happen, then from the top menu: Run → Show Coverage Data



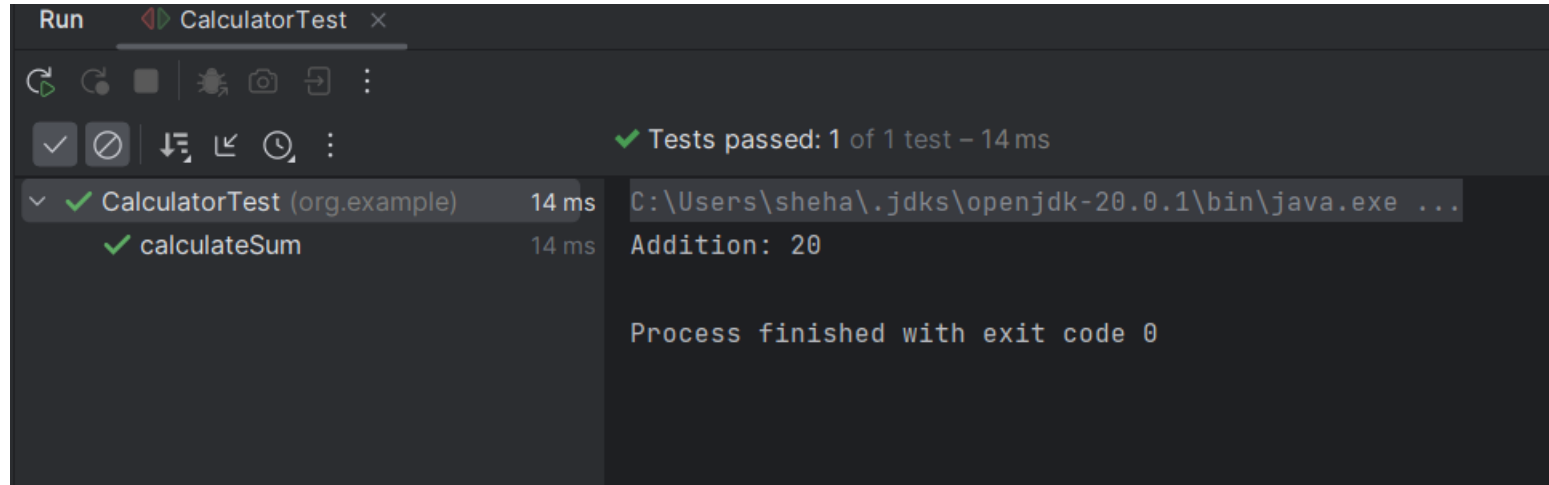
The screenshot shows the 'Coverage' window with a tab for 'CalculatorTest'. It contains a table with columns for 'Element', 'Class, %', 'Method, %', and 'Line, %'. The data shows 100% class coverage, 25% method coverage, and 37% line coverage for the 'org.example' package and its 'Calculator' class.

Element ^	Class, %	Method, %	Line, %
✓ org.example	100% (1/1)	25% (1/4)	37% (6/16)
Ⓢ Calculator	100% (1/1)	25% (1/4)	37% (6/16)

Sample Screenshot

View status of tests

To see an overview of the tests that are passing and failing, select the “Run” tool pane (that is usually visible at the bottom of the screen)



Sample Screenshot