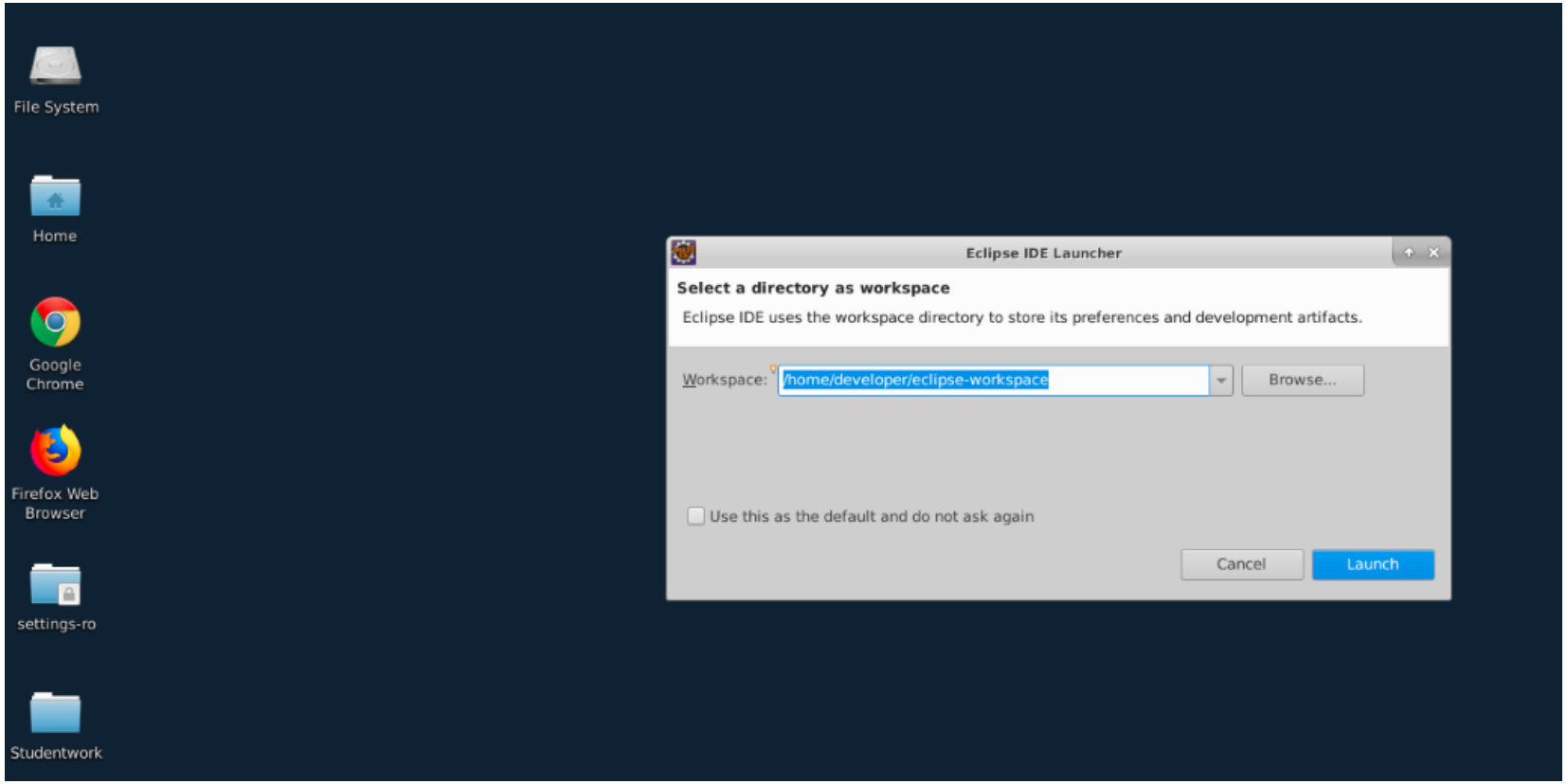
Java Lab set Up

Lab Image

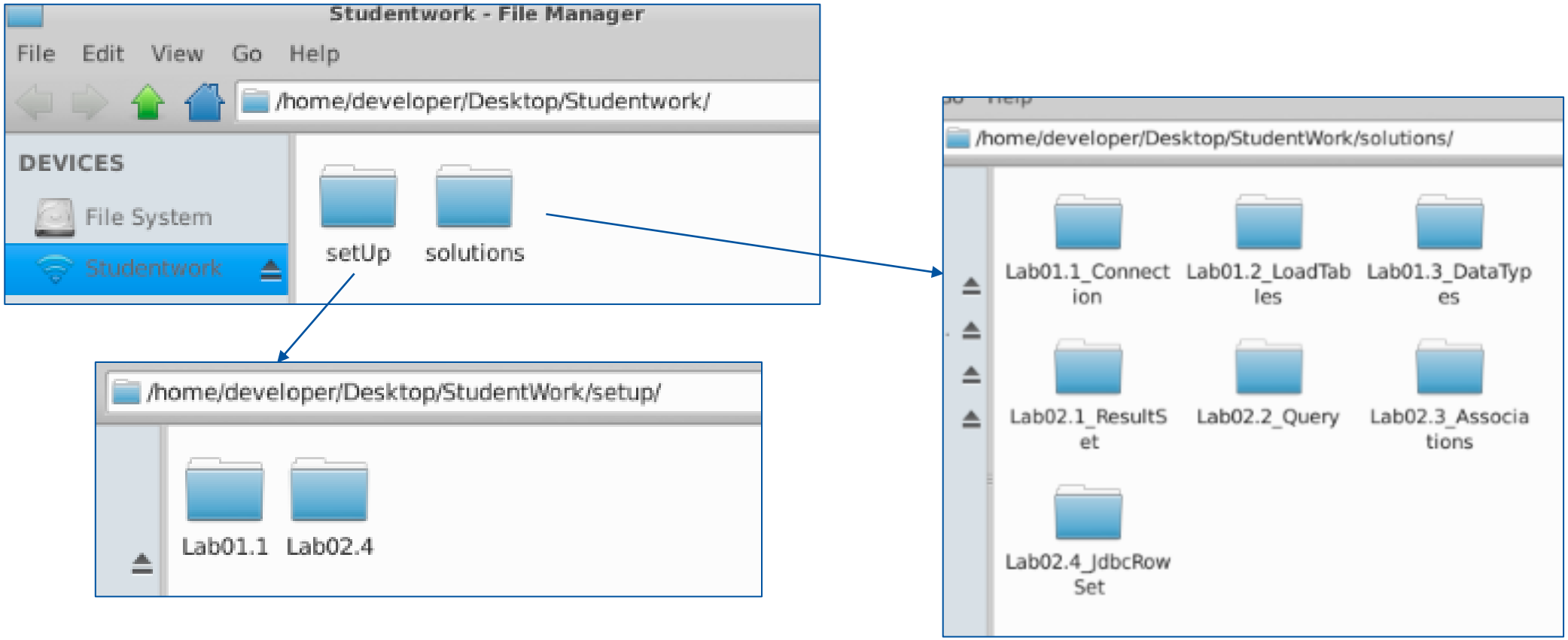
- All your labs will require an INITIAL setup per course. Once you have completed this setup as you evolve your lab it should not need to be done again.

- When you open your lab you will see this;



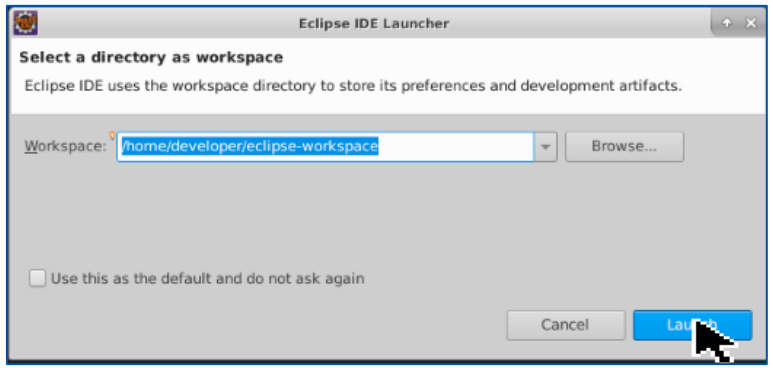
Where are my lab files?

If you open the Studentwork folder you will see both setup and solution directories

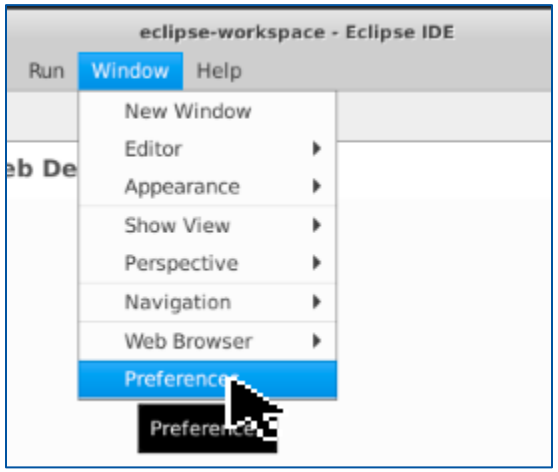


Open eclipse

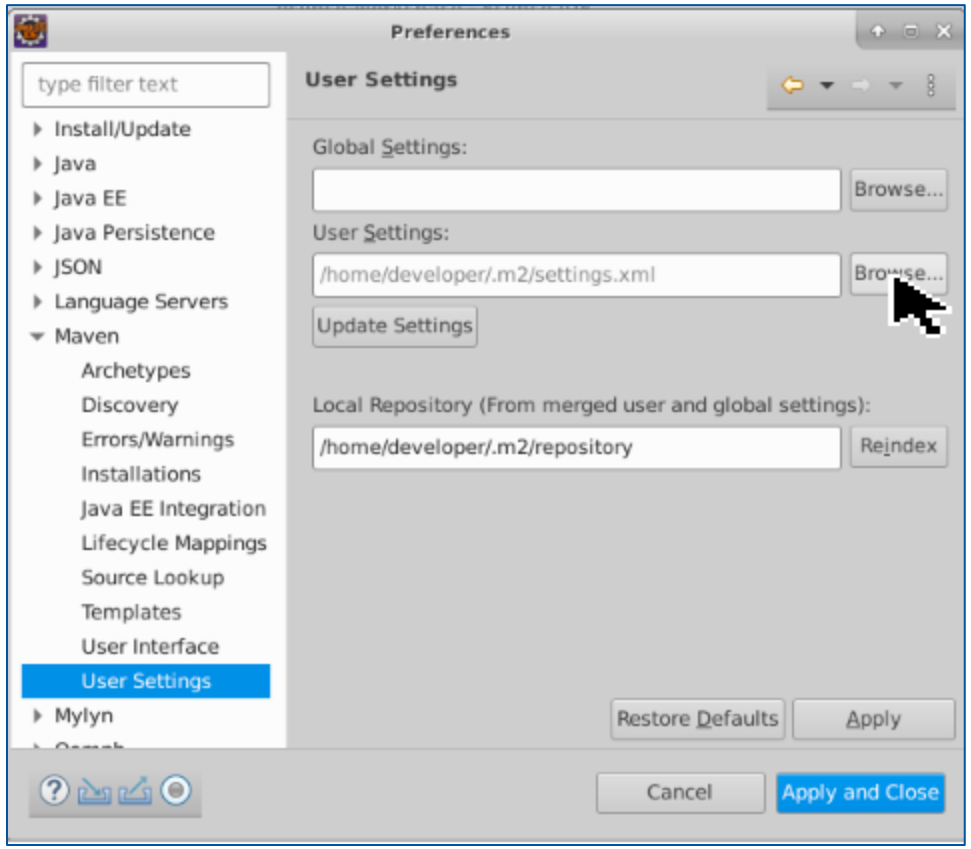
- Launch your eclipse workspace



- Then select Window->Preferences

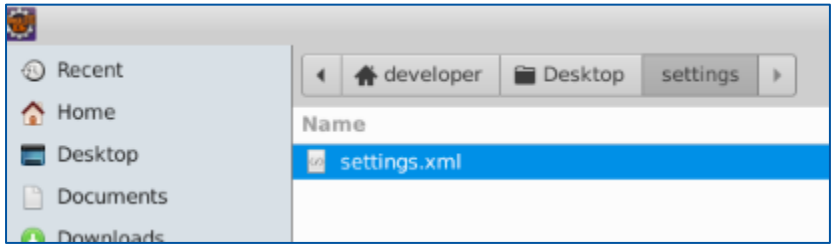


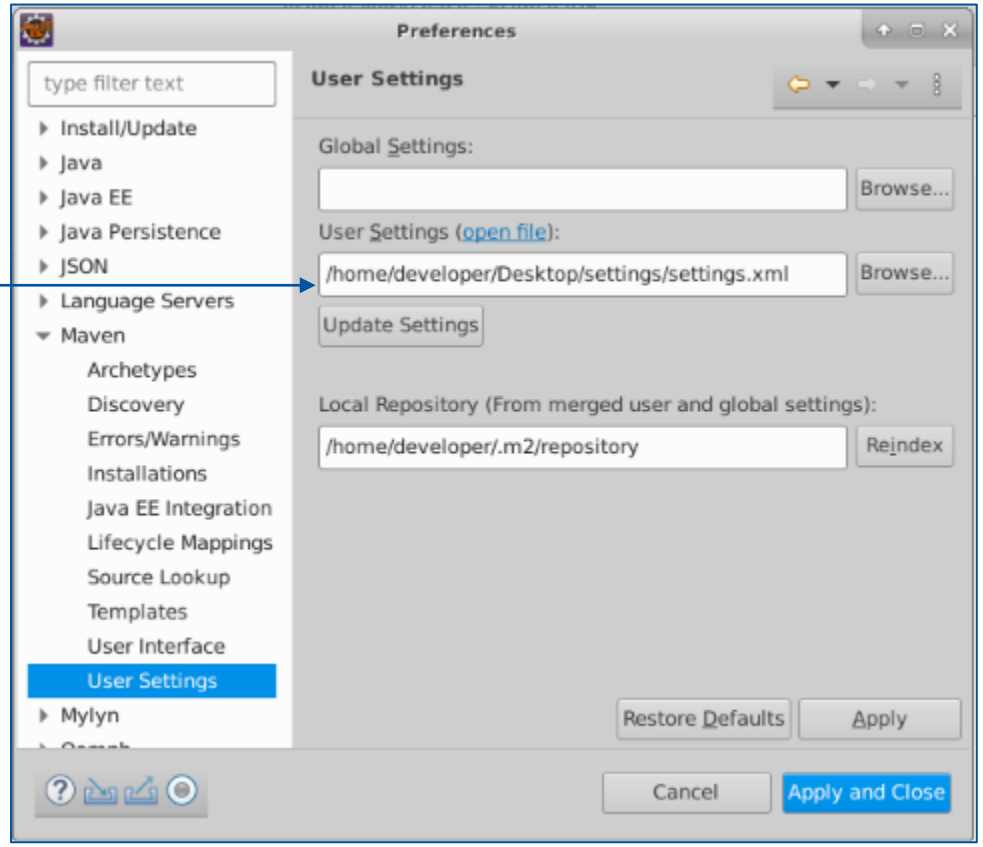
- Select->Maven->User Settings->Browse button for “User Settings”



Maven Setup

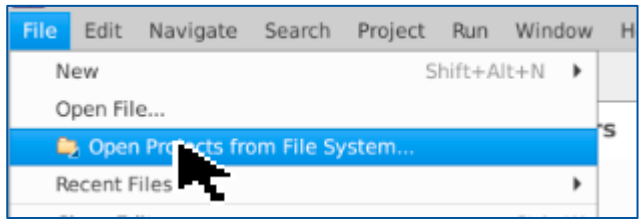
- Then navigate to /home/developer/Desktop/settings
- Select the settings.xml file
- Click the Open button
- Your User Settings file has changed
- Click Apply and Close button
- This maven setting will pull in maven dependencies from behind a proxy



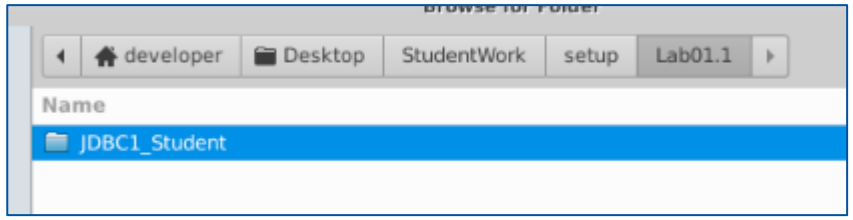


Open Project

- Launch the eclipse workspace
- Now to get our starter project, in eclipse select File->Open Projects from File System



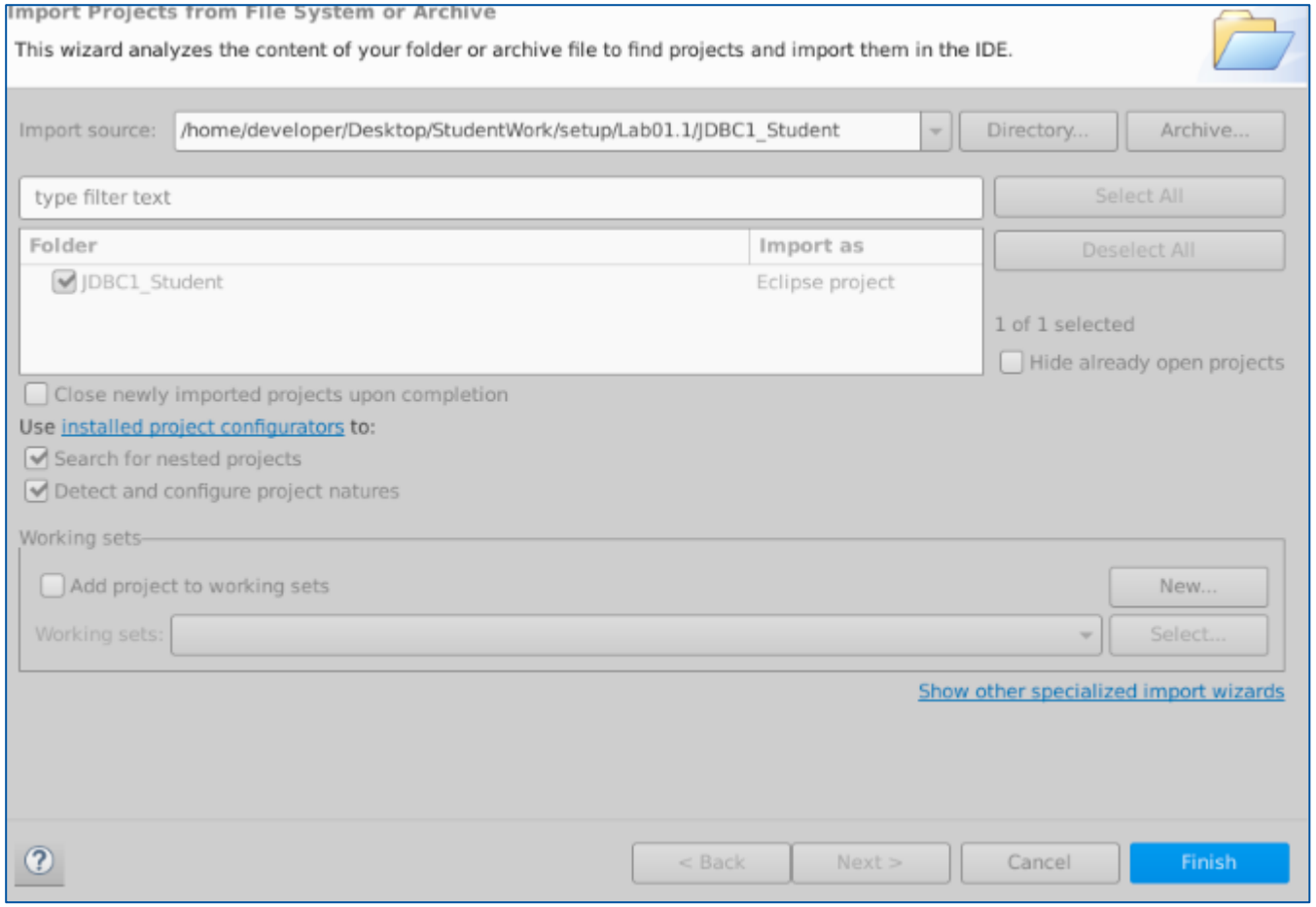
- Navigate to developer/Desktop/StudentWork/<starter lab directory>/<Starter lab>
  - i.e. developer/Desktop/StudentWork/setup/Lab01.1/JDBC1_Student
- Below it is your starter Lab



- Select the lab, click the “Open” button

Bring your project into eclipse

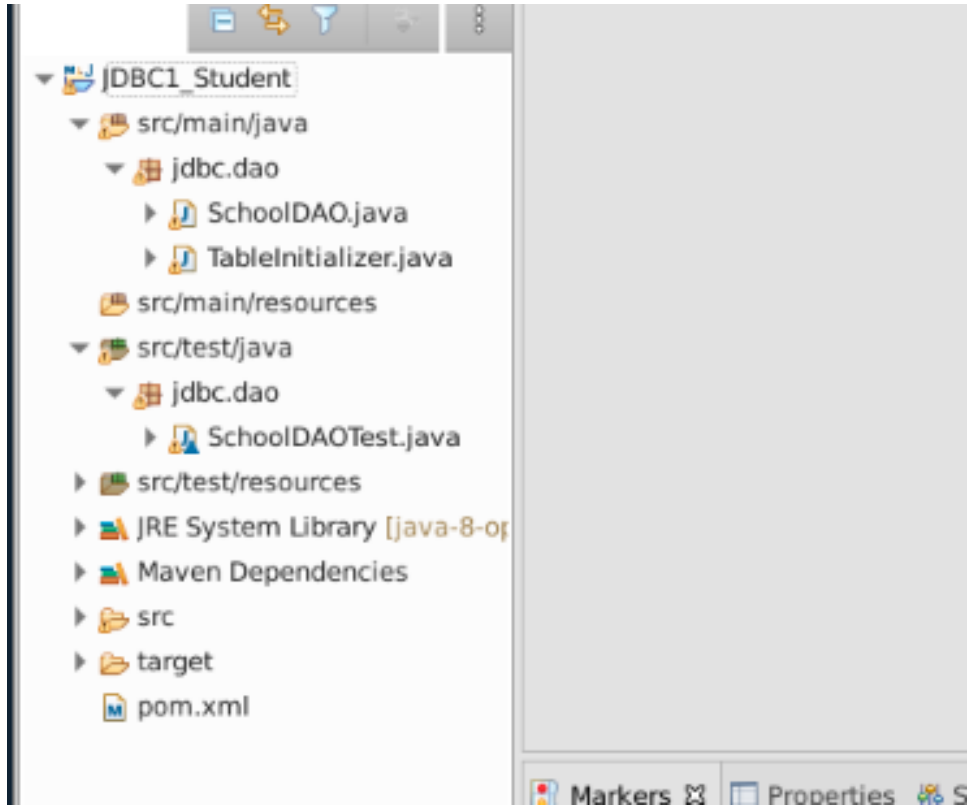
- Your project should be selected, click the "Finish" button



- Close the Welcome tag

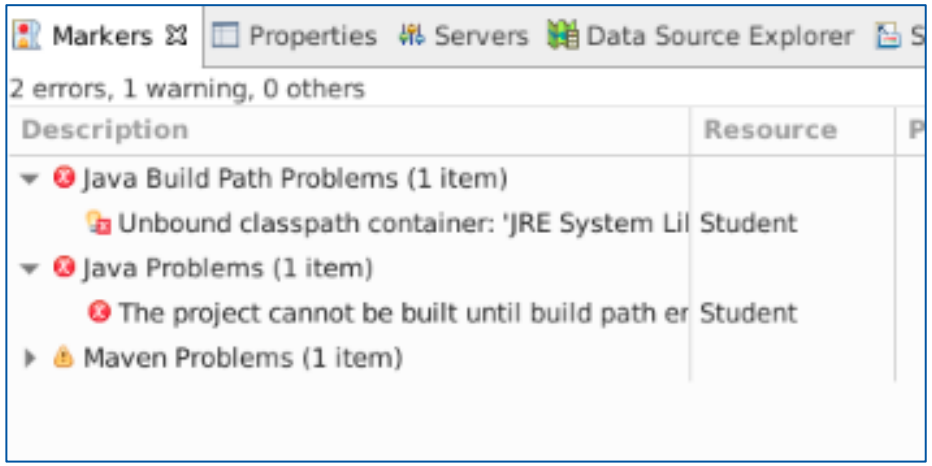
Project Imported

- Your project will appear and maven will build the project to get rid of red errors

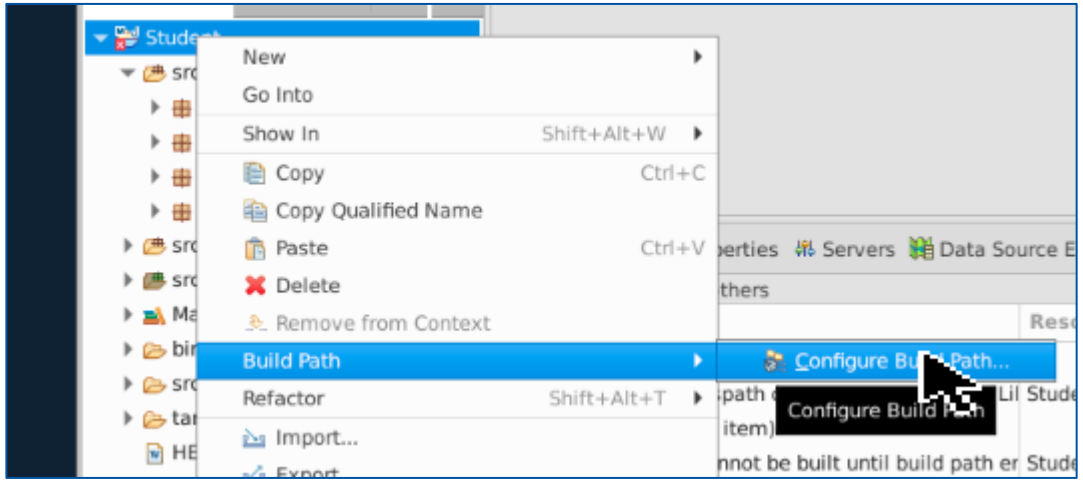


Problems

- If you see an error like this complaining about the JRE

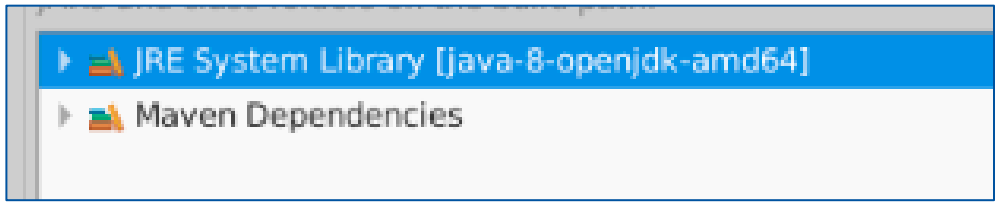


- Select the project node->BuildPath->Configure Build Path

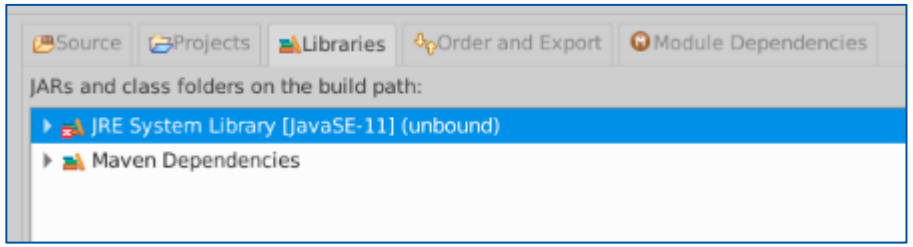


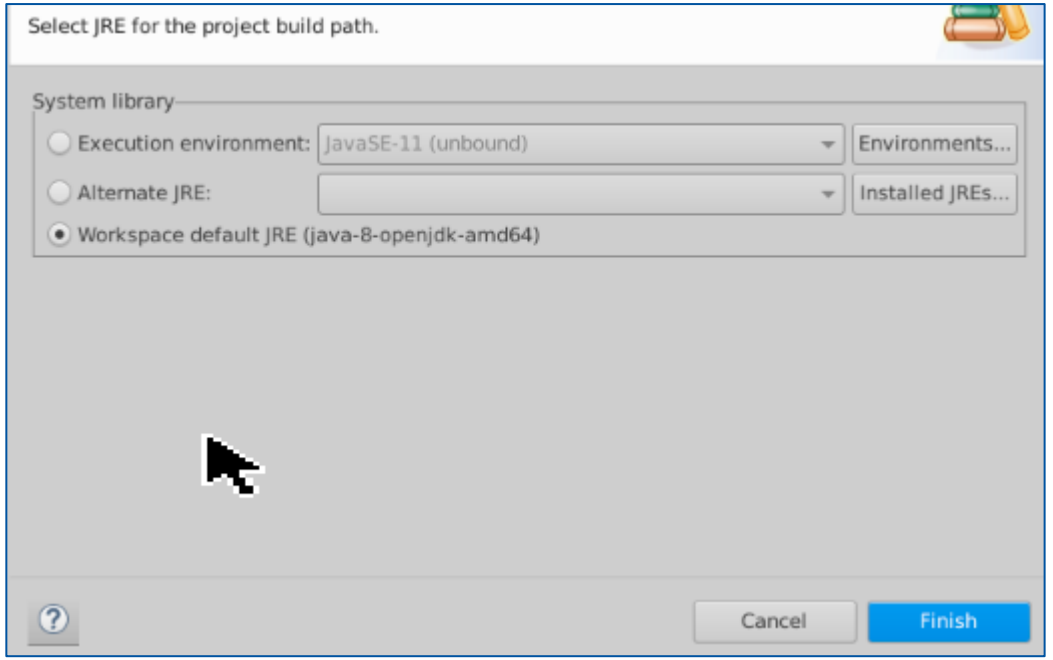
Verify the JRE/JDK

- This means we have an unbound classpath variable i.e. our JRE.
- Select the Libraries tab
- Select the JRE
- Click the “Edit button”
- Select the Workspace default JRE
- Click the “Finish” button



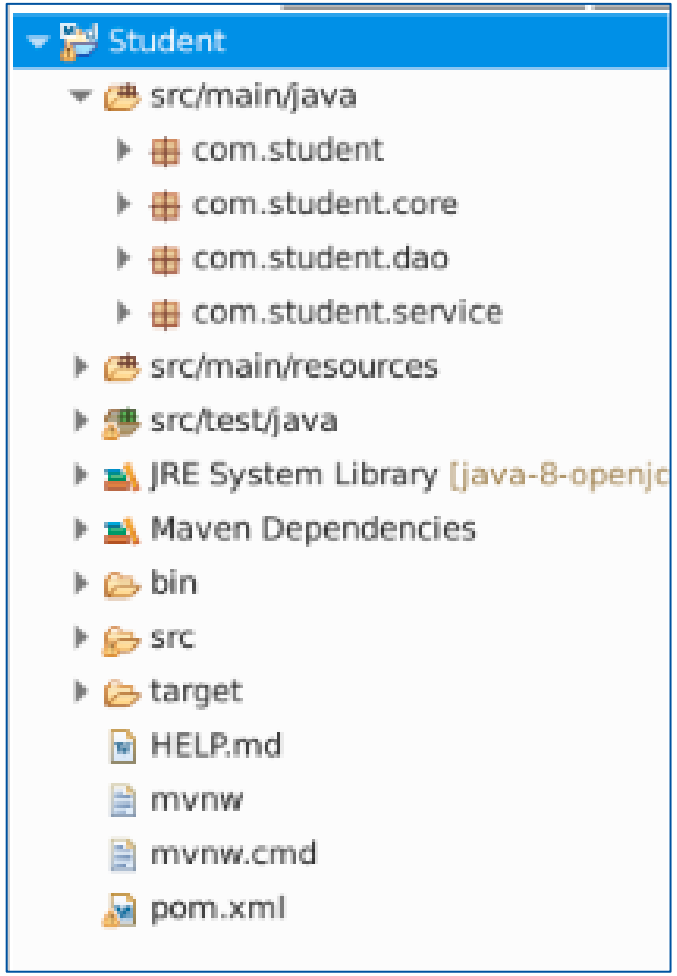
- Click “Apply and Close” button





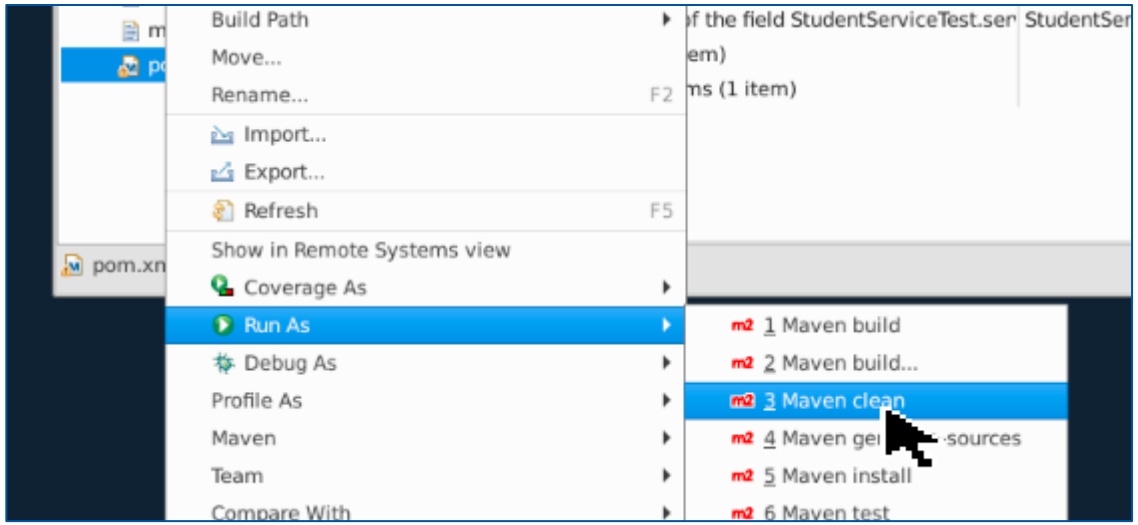
Project Rebuild

- Maven will rebuild automatically and you should have no red errors



Still have Problem?

- If you still have errors; try a maven clean;
- Select the pom.xml of your project->right click->Run As->Maven clean
- It may take a while, but your console will show some warnings, maybe some downloading statements but finally a BUILD SUCCESS



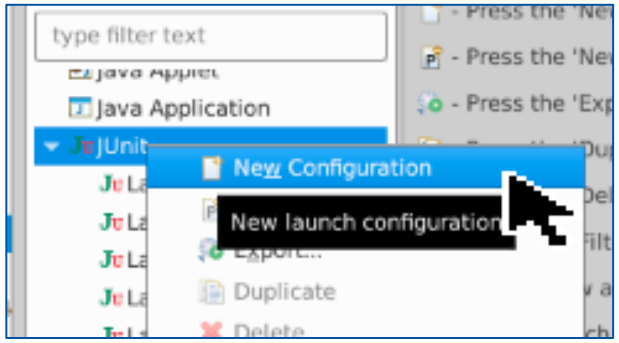

```
[INFO] Downloaded from : https://repo.maven.apache.org/maven2/org/apache/maven/plugi
[INFO] Downloading from : https://repo.maven.apache.org/maven2/org/apache/maven/plug
[INFO] Downloaded from : https://repo.maven.apache.org/maven2/org/apache/maven/plugi
[INFO] Downloading from : https://repo.maven.apache.org/maven2/org/apache/maven/mave
[INFO] Downloaded from : https://repo.maven.apache.org/maven2/org/apache/maven/maven
[INFO]
[INFO] --- maven-clean-plugin:3.1.0:clean (default-clean) @ Student ---
[INFO] Deleting /home/developer/Desktop/Studentwork/setUp/Lab02.1/Student/target
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  3.772 s
[INFO] Finished at: 2021-05-04T15:08:07Z
[INFO] ------------------------------------------------------------------------
```

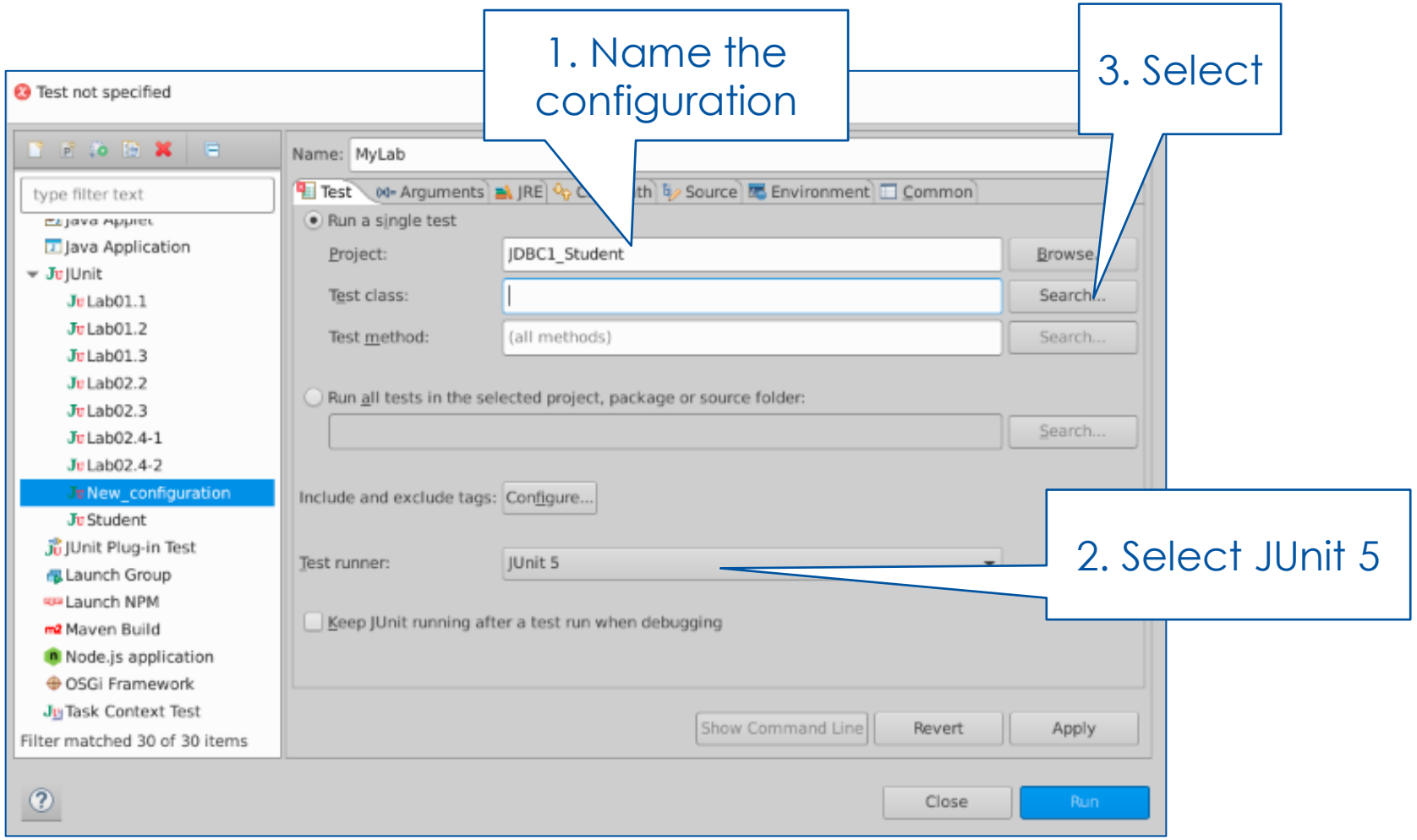
Project Ready

- Once you start a lab, the state of your lab is maintained
- You should only need to set settings.xml or jdk, or do a maven clean the first time you start a course
- But if you run into issues you now know what to do
- You are ready to go

Run JUnit

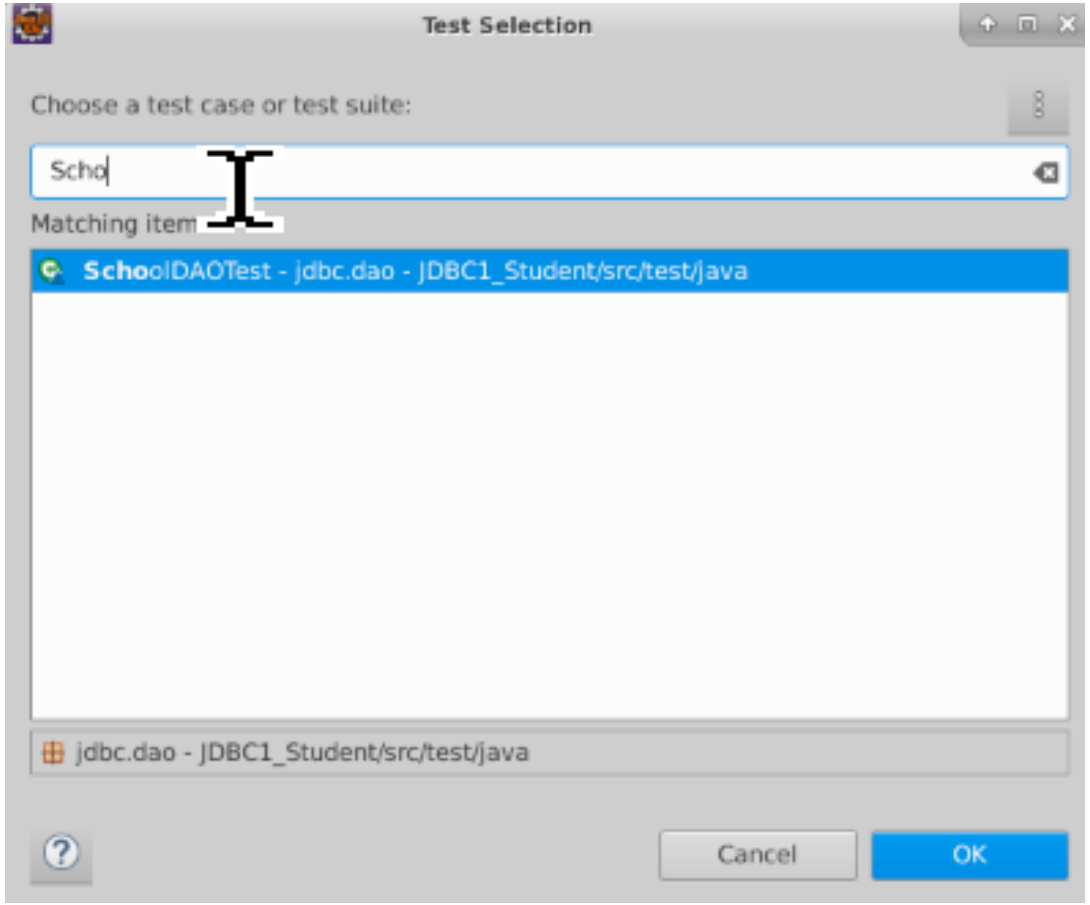
Select your Test Class->Right Click->Run configurations->Select JUnit->New Configuration





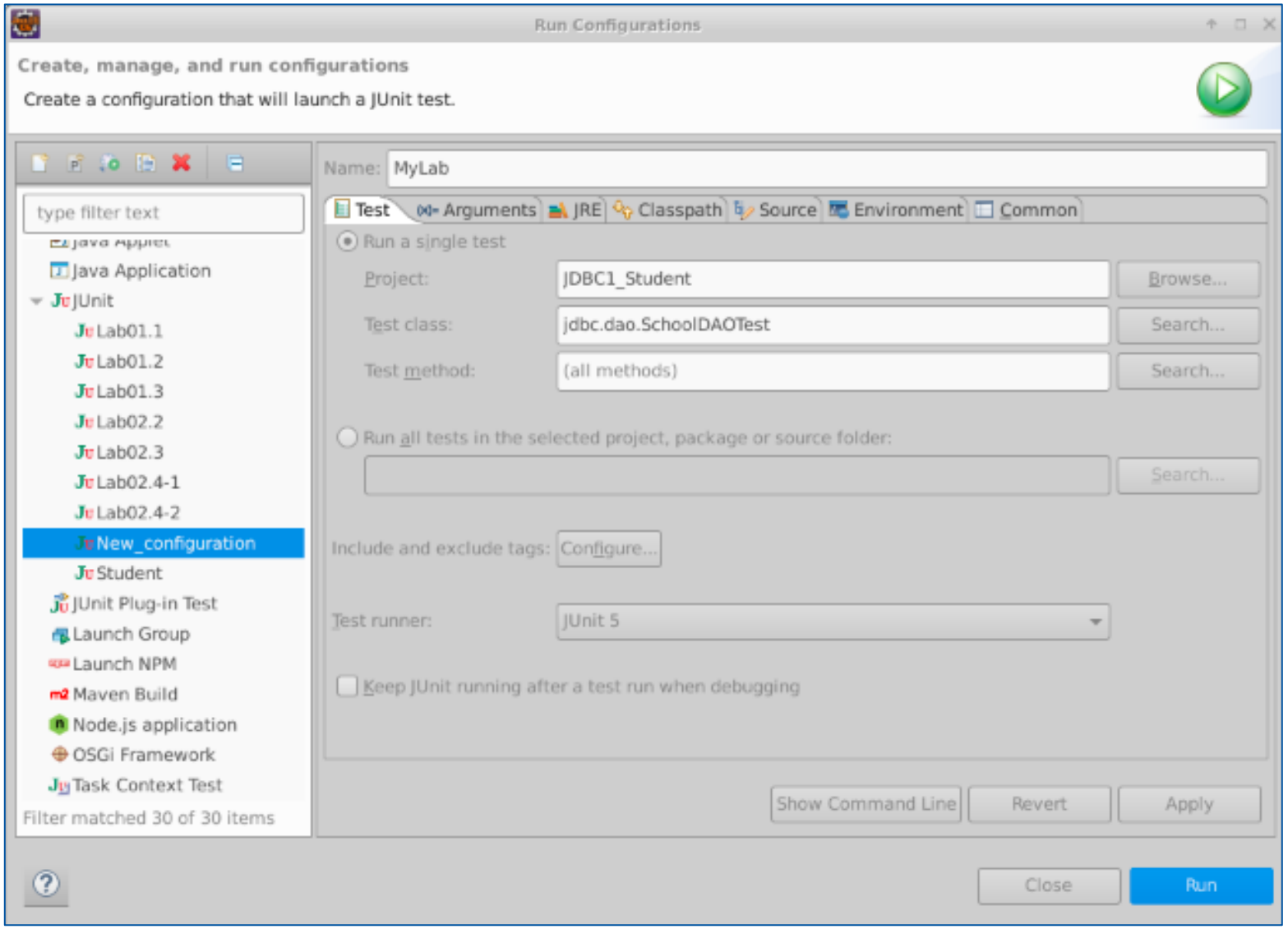
Select Test Class

Start typing until SchoolDaoTest appears (if you did not select JUnit5 previously you will not find it). Select the class -> OK



Apply and Run

Click Apply-> Run



After the first run

You can select the saved configuration

Select you test class-> right click->Run Configurations->Select your saved configuration->Run