

# Eclipse Setup for FPP September 2021

This document covers the follow points:


1. Software setup
2. Configuring Eclipse.
3. Adding some Java projects to your workspace

**Software Setup.** For convenience in assessing your work, we ask you to use the versions of Java and Eclipse that we specify here. You will download and install these as part of your software setup.

**Java.** You will need to download and install Oracle jdk-16 which can be obtained by following this link:

<https://www.oracle.com/java/technologies/javase-jdk16-downloads.html>

Use the Installer:

Windows x64 Installer	150.58 MB	 <a href="#">jdk-16.0.2_windows-x64_bin.exe</a>
-----------------------	-----------	--

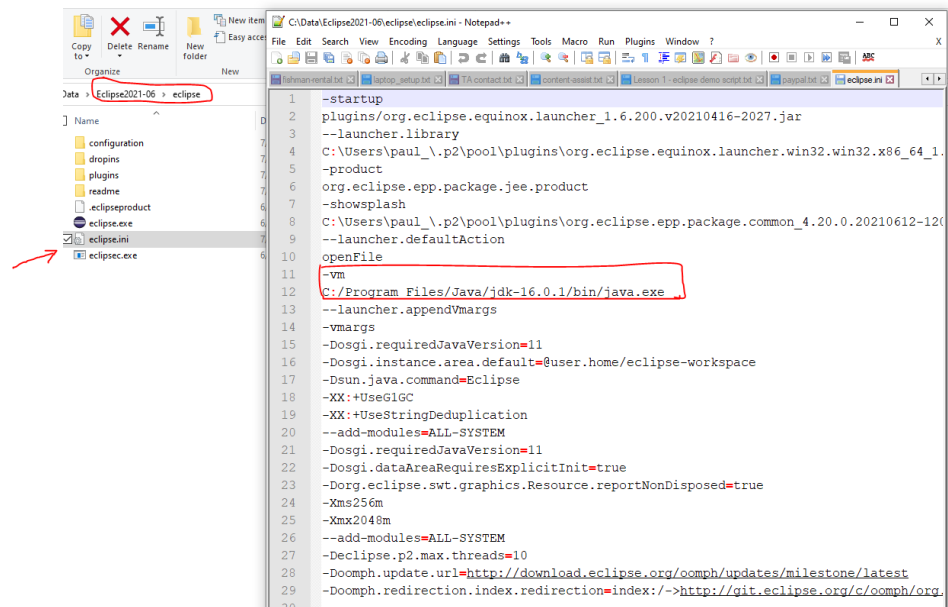
**Eclipse.** Download Eclipse 2021-06; make use of the Installer. Go here:

<https://www.eclipse.org/downloads/>

**Troubleshooting.** When you attempt to run Eclipse, you may get an error message "Incompatible JVM". This can be solved by opening the text file eclipse.ini (in the folder where eclipse.exe is installed) and adding two lines:

-vm

C:\Program Files\Java\jdk-16.0.1\bin\java.exe



For more details about this, look at [https://wiki.eclipse.org/Eclipse.ini#Specifying\\_the\\_JVM](https://wiki.eclipse.org/Eclipse.ini#Specifying_the_JVM)

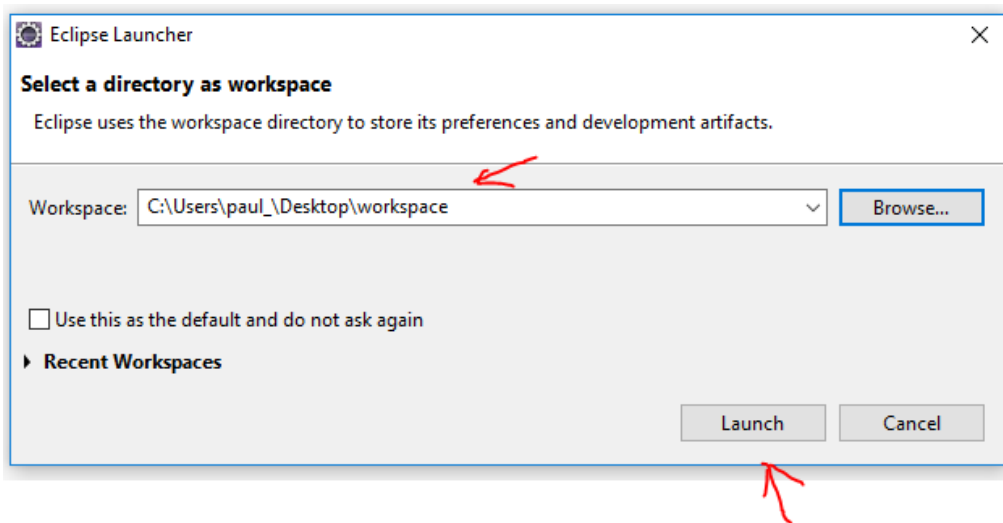
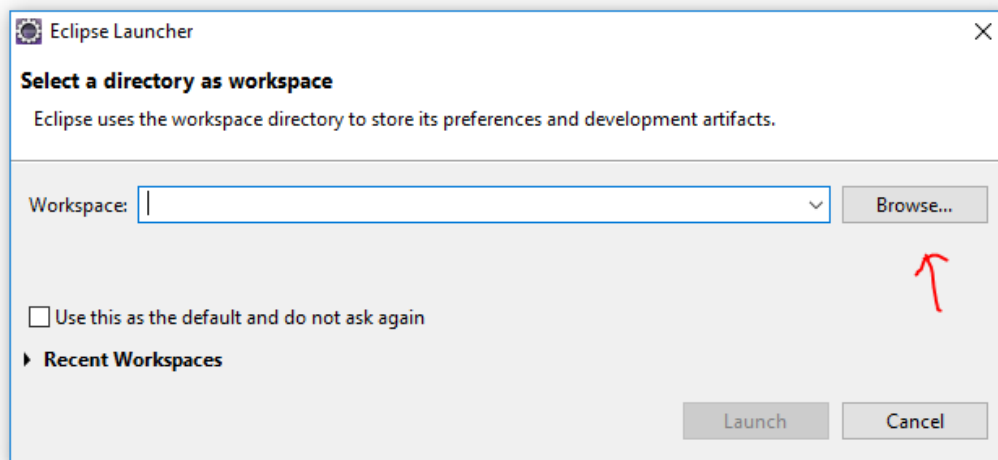
*Also:* The character encoding in Eclipse needs to be changed to UTF-8:

In Eclipse, go to Windows > Preferences > General > Workspace

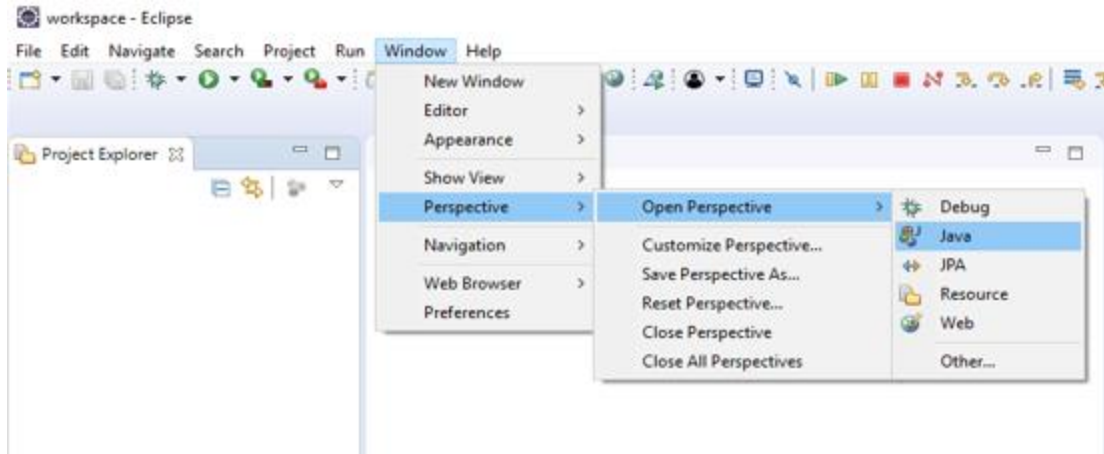
At the bottom left in this screen, you can change Text File Encoding to Other (and select UTF-8).

### Configuring Eclipse.

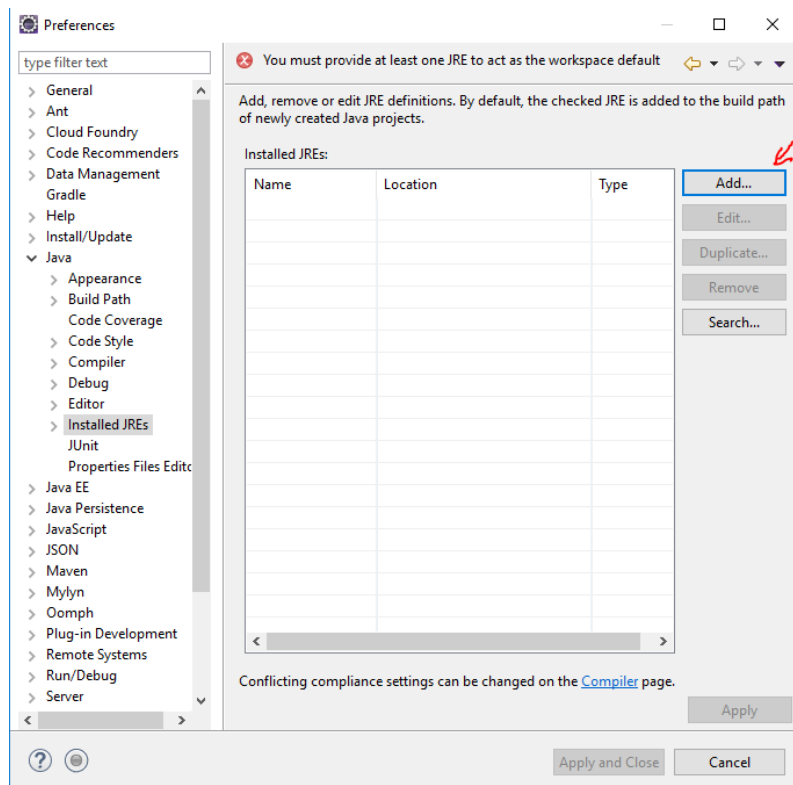
1. Create a workspace that you will use for FPP. You can do this by creating a new called workspace. All the code that you write and use in the course will be in this folder.
2. Launch Eclipse; at startup, it will ask for your workspace location. Browse to the workspace folder that you just created and click the "Launch" button.

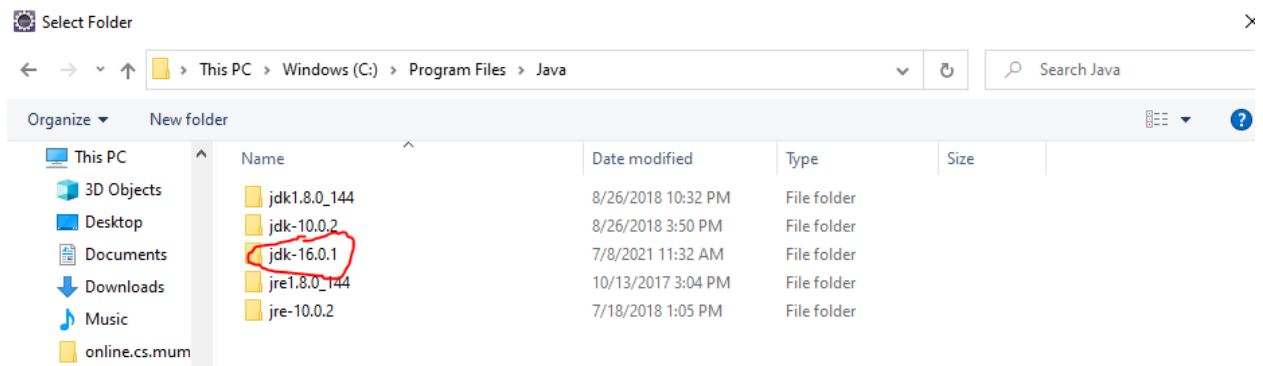
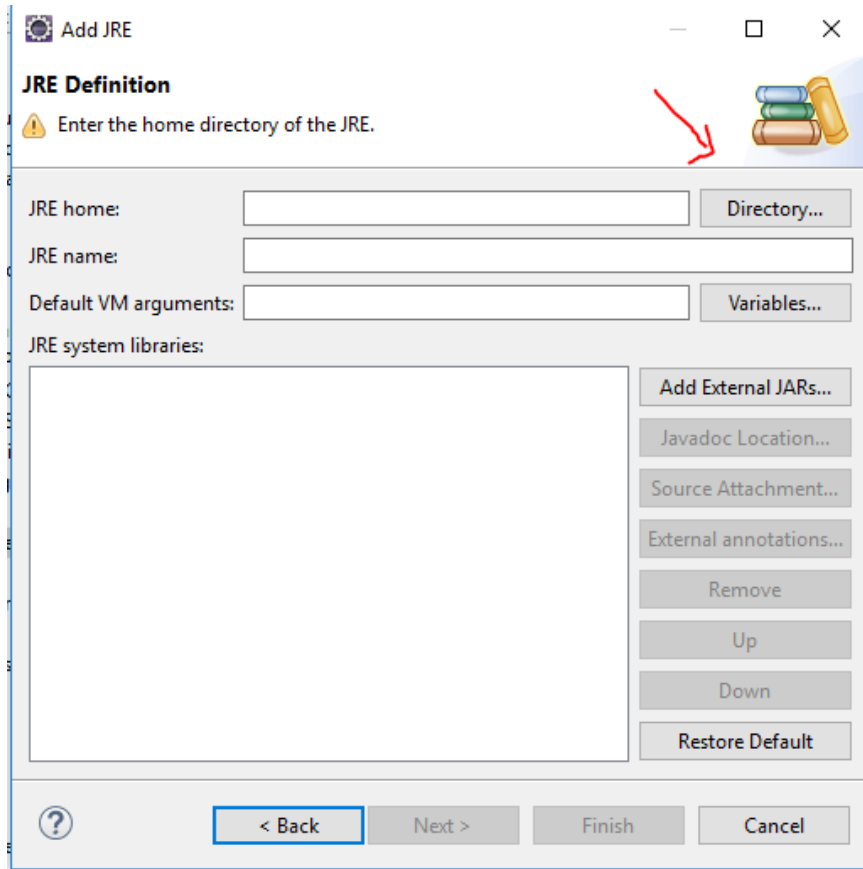


3. Close the Welcome tab and find Window along the top menu bar. Click Window > Perspective > Open Perspective > Java.

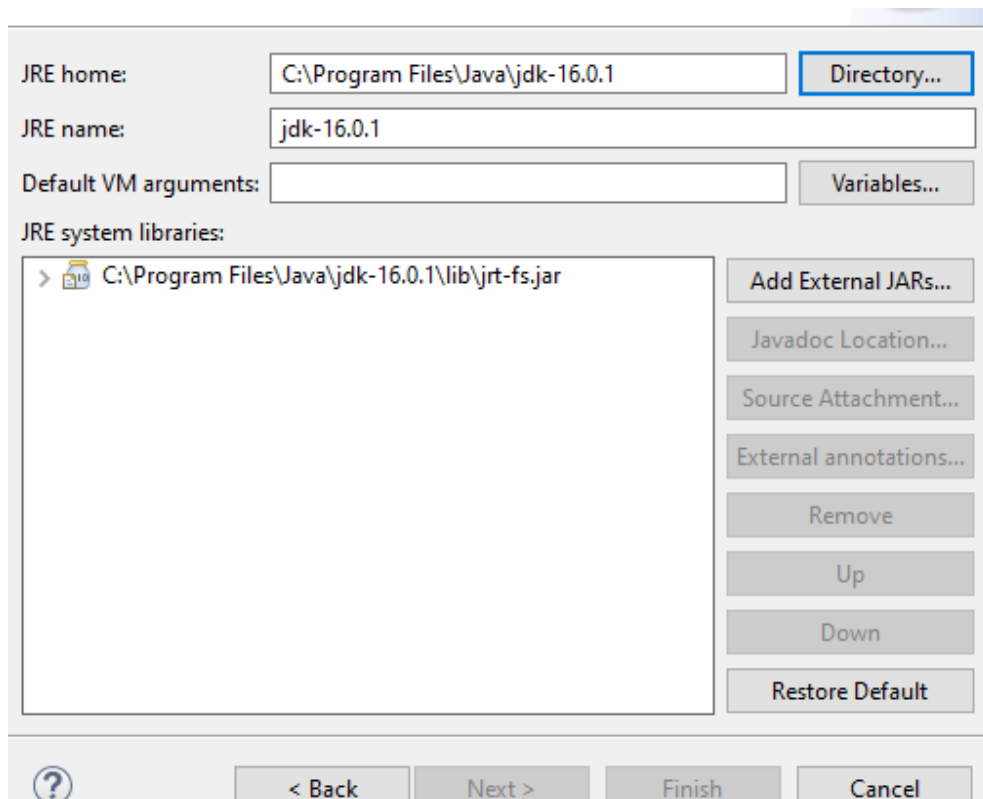


4. Point Eclipse to the jdk-16 distribution by doing the following.
  - a. Go to Window > Preferences > Java > Installed JREs
  - b. If jdk-16 already appears in this window, be sure the box next to this java version is checked. Otherwise, if the jdk-16 version has not been installed, then click Add and navigate to this jdk distribution in your file system. Select Standard VM and click Next. Click the Directory button beside the JRE home field, and then navigate to your jdk distribution.

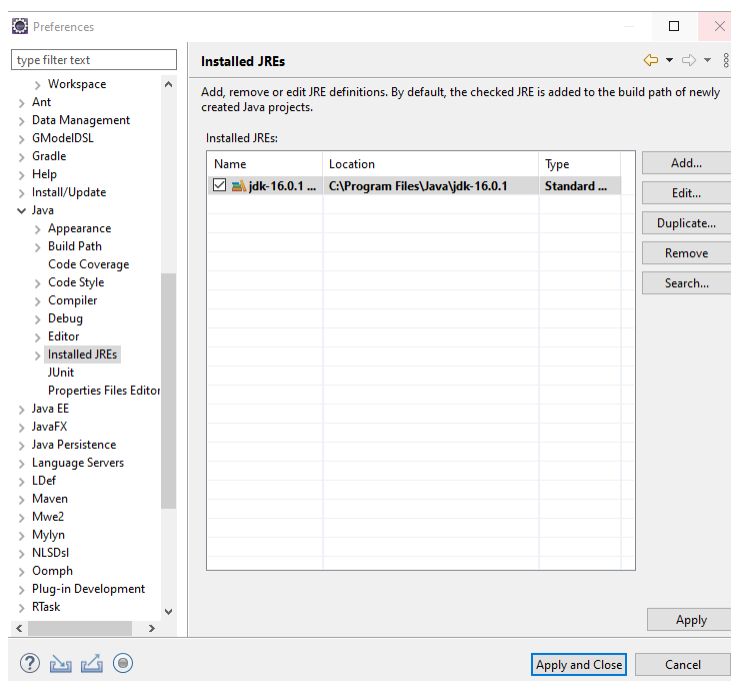




- c. When you have highlighted the folder jdk-16.0.1, click OK and you will see the following window:



You must then check the box on the next window that asks you to specify jdk 16.0.1 as your default JRE. Then click the Apply and Close button.



## Load Java Projects

1. You will need to import two Java projects into your workspace before class begins. To make sure all the code in these projects compiles in your workspace, you will first need to download and install the jar files that will be used in the course.
2. *Jar Files.* These are in a zip file jars.zip in Resources > Seup. Download this zip file, unzip, and place the jars folder directly in your workspace.

**RESOURCES**

Site Resources | Trash | Transfer Files | Check Quota

All site files / CS390-2021-09A-09D Resources / Setup

Move | Copy | Move to Trash | Show | Hide

<input type="checkbox"/>	Title	Access
<input type="checkbox"/>	Setup	Actions
<input type="checkbox"/>	database setup	Actions
<input type="checkbox"/>	<b>jars.zip</b>	Actions
<input type="checkbox"/>	laptop_setup.txt	Actions

Clipboard | Organize | New | Open

workspace2 > This PC > Windows (C:) > Data > workspace2 > jars

Name	Date modified
junit-4.10.jar	8/29/2021 10:26 AM
mysql-connector-java-5.1.20-bin.jar	8/29/2021 10:26 AM

3. *Projects to download.* You will need the InClassExercises and LectureCode folders:

**RESOURCES**

Site Resources | Trash | Transfer Files | Permissions | Options | Check Quota

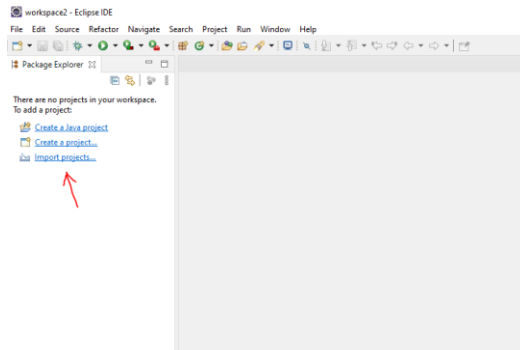
All site files / CS390-2021-09A-09D Resources

Move | Copy | Move to Trash | Show | Hide

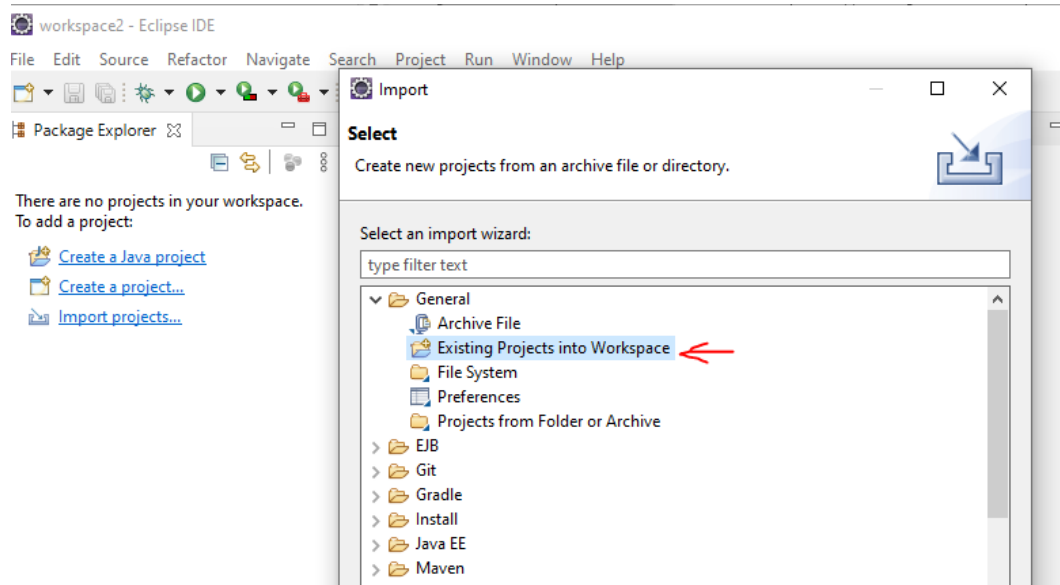
<input type="checkbox"/>	Title	Access
<input type="checkbox"/>	CS390-2021-09A-09D Resources	Actions
<input type="checkbox"/>	Books	Actions   Entire site
<input type="checkbox"/>	Exam Results	Actions   Entire site
<input checked="" type="checkbox"/>	<b>InClass Exercises</b>	Actions   Entire site
<input type="checkbox"/>	Lab Solutions (selected)	Actions   Entire site
<input checked="" type="checkbox"/>	<b>Lecture Code</b>	Actions   Entire site

After you download the zip files, unzip and copy the folders ("InClassExercises" and "LectureCode") directly into your workspace. In the LectureCode zip file you will also see another folder "JdbcPractice" – copy this one also into your workspace. Once you have done this, you need to import all three projects into the workspace, in the following way:

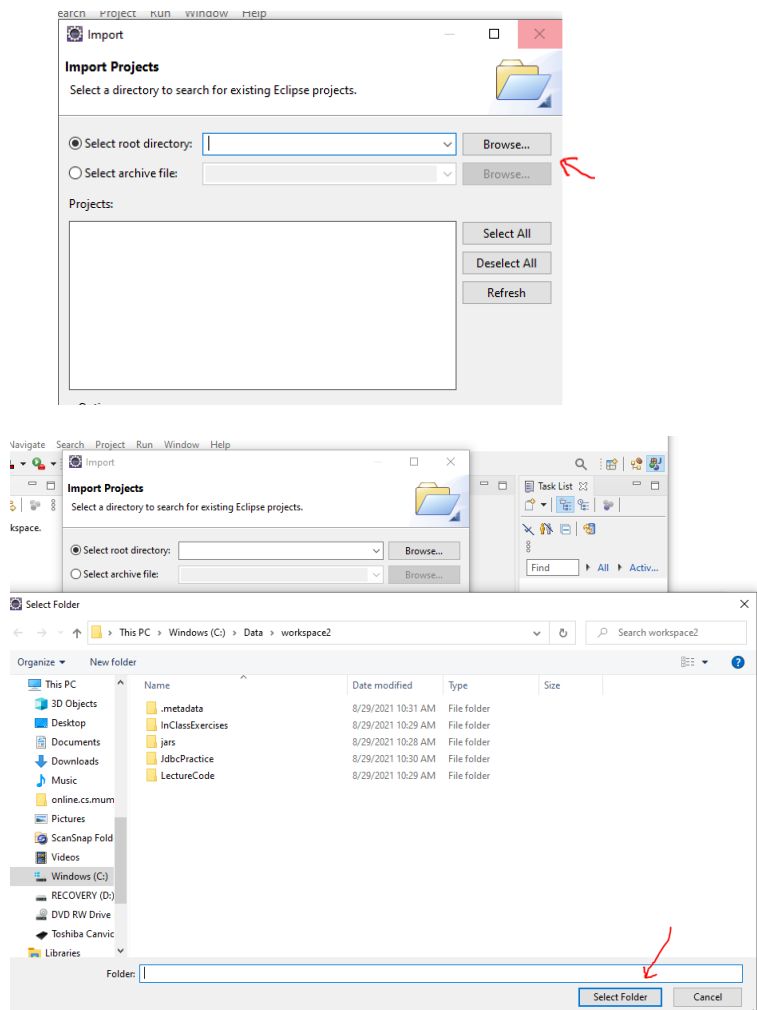
- A. Either click the "import" option displayed on the left panel or else right click the left panel and select "Import".



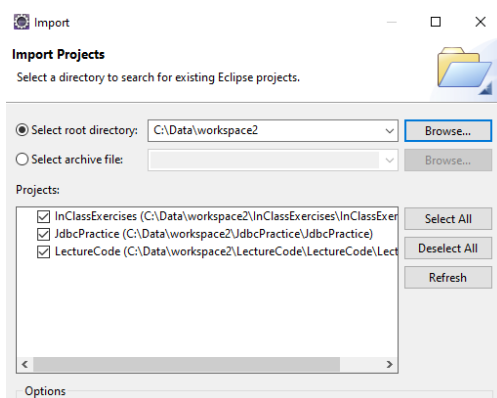
- B. Select General > Existing Projects into Workspace



C. Click Browse, do not navigate – just click "Select Folder"



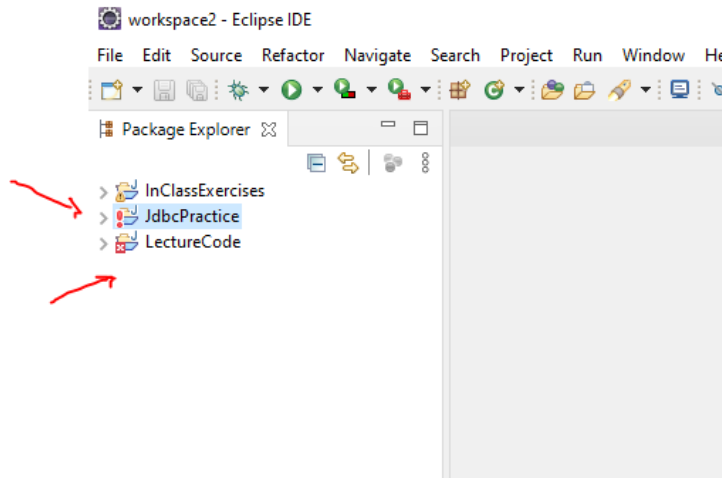
You will see:



Click Finish.

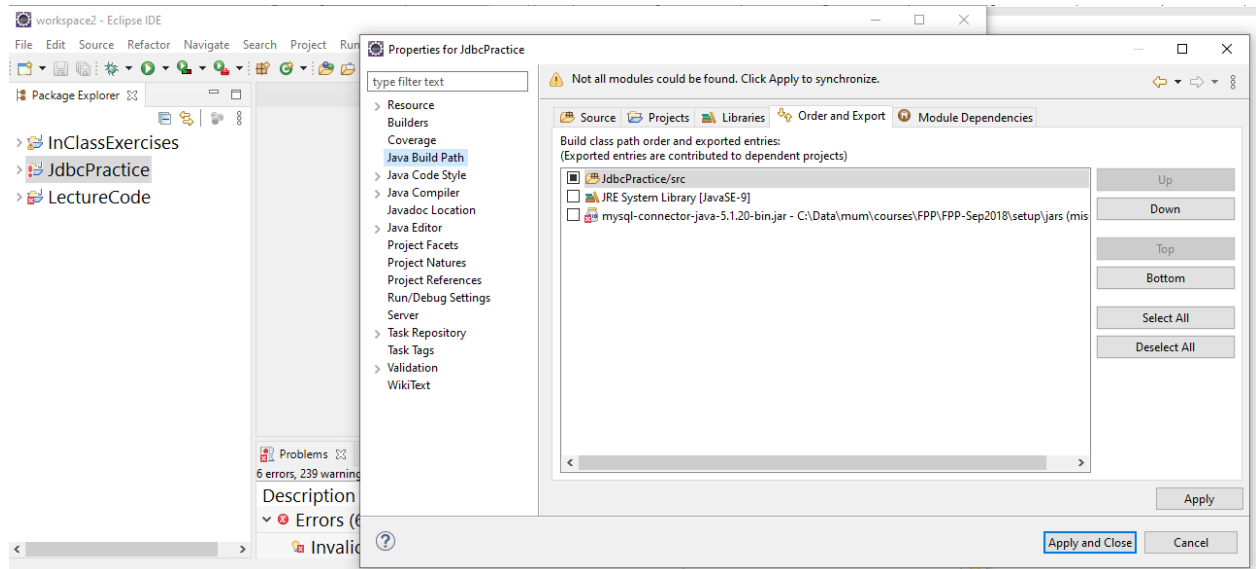


You will see something like this:

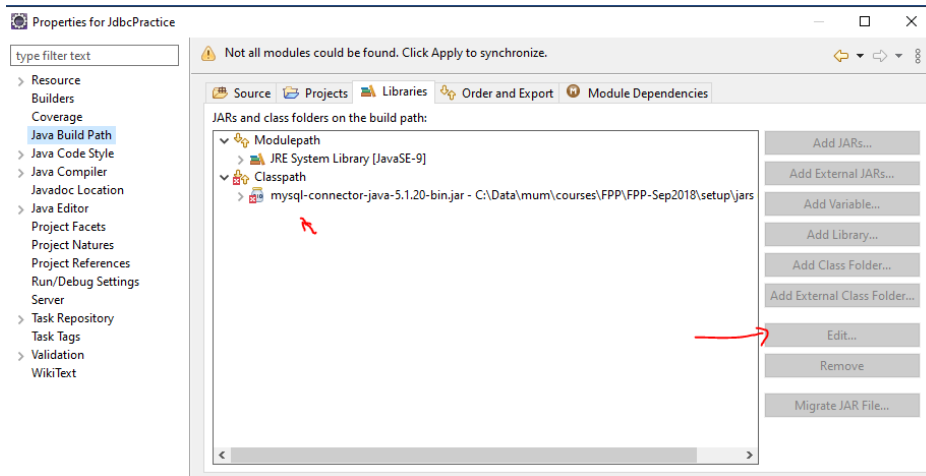


The red marking on LectureCode (if you have this) is present because the character encoding has not been corrected. See instructions for fixing this at the beginning of this document (where "troubleshooting" for Eclipse installation is discussed). The red marking on JdbcPractice indicates that you need to add a jar file to that project – we do that next.

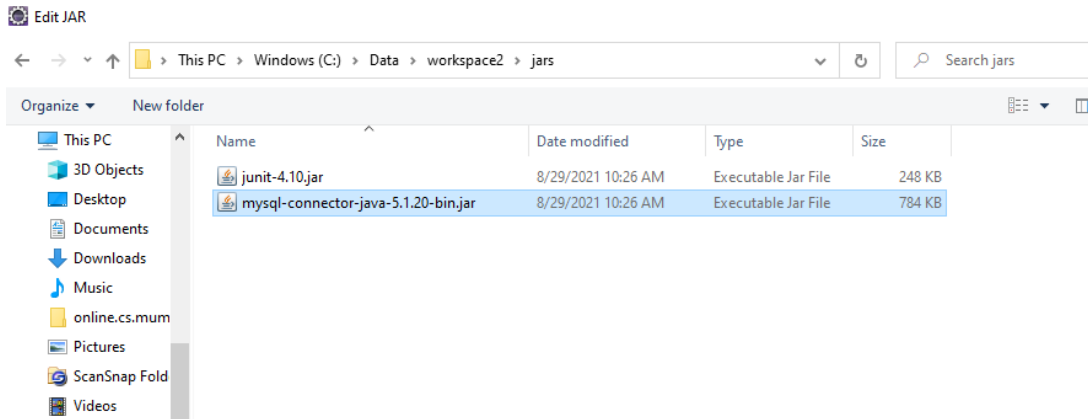
Right click on JdbcPractice project and select Properties. Pick Java Build Path. You will see:



Select Libraries. You will probably see my-sql-connector marked in red. Click the Edit button at the right



Then navigate to your jars folder in the workspace and select the mysql-connector-jar file that you see there.



The red marking should disappear. Click Apply and Close. JdbcPractice project should be free of red marks.

