

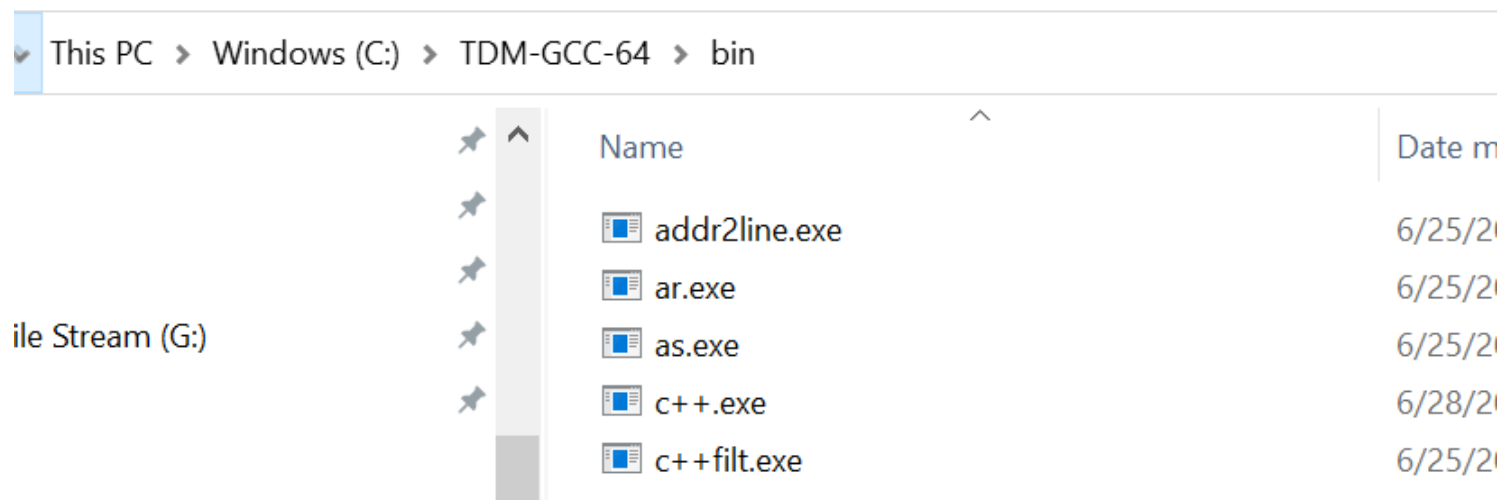
OpenMPTraining with Eclipse: Installation Instructions on Windows

Table of Contents

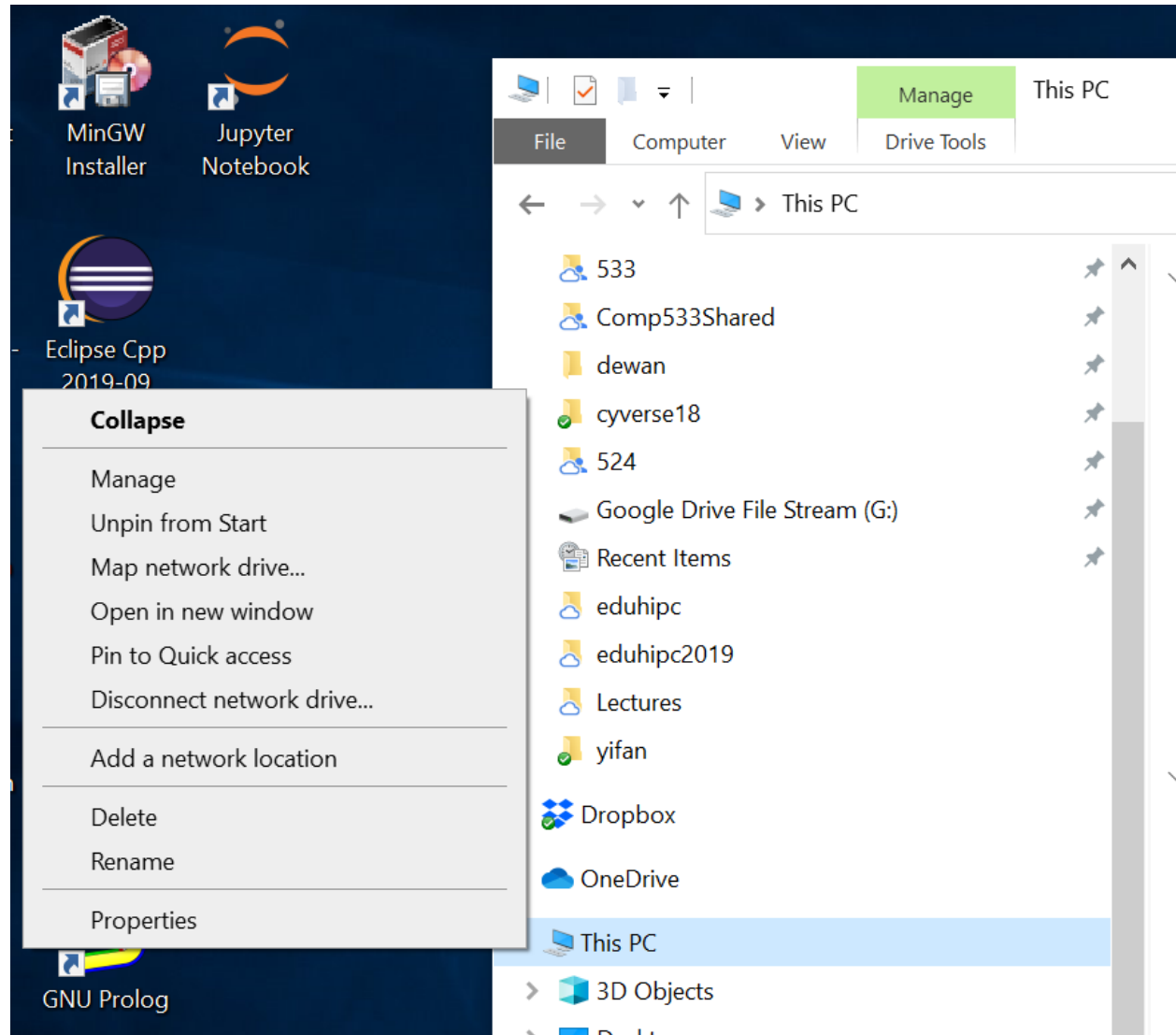
- [Setting up the C++ development environment](#)
- [Setting Up the Eclipse C++ Environment](#)
- [Installing Logging Plug-in](#)
- [Importing the Training Git Project](#)
- [Building Project \(Once\)](#)
- [Editing and Running Project](#)
- [Recording Difficulties](#)
- [Uninstalling Logging Plugin](#)

Install TDM-GCC

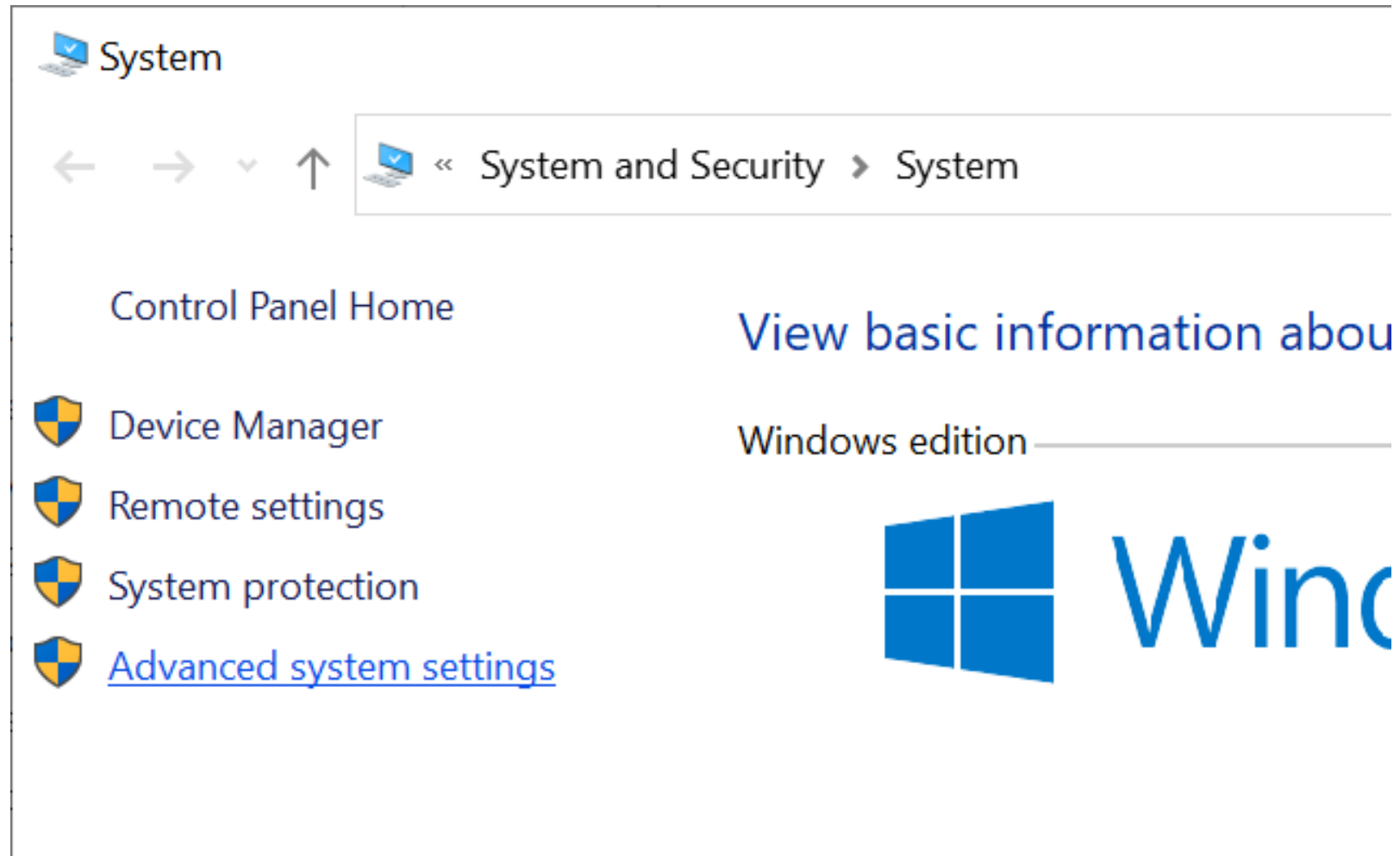
- Download the TDM-GCC zip and extract it.
- In the examples below, we will assume it is extracted into: C:\TDM-GCC-64
- Keep the location of bin sub folder of the extracted folder.
 - In the examples below we will assume it is: **C:\TDM-GCC-64\bin**



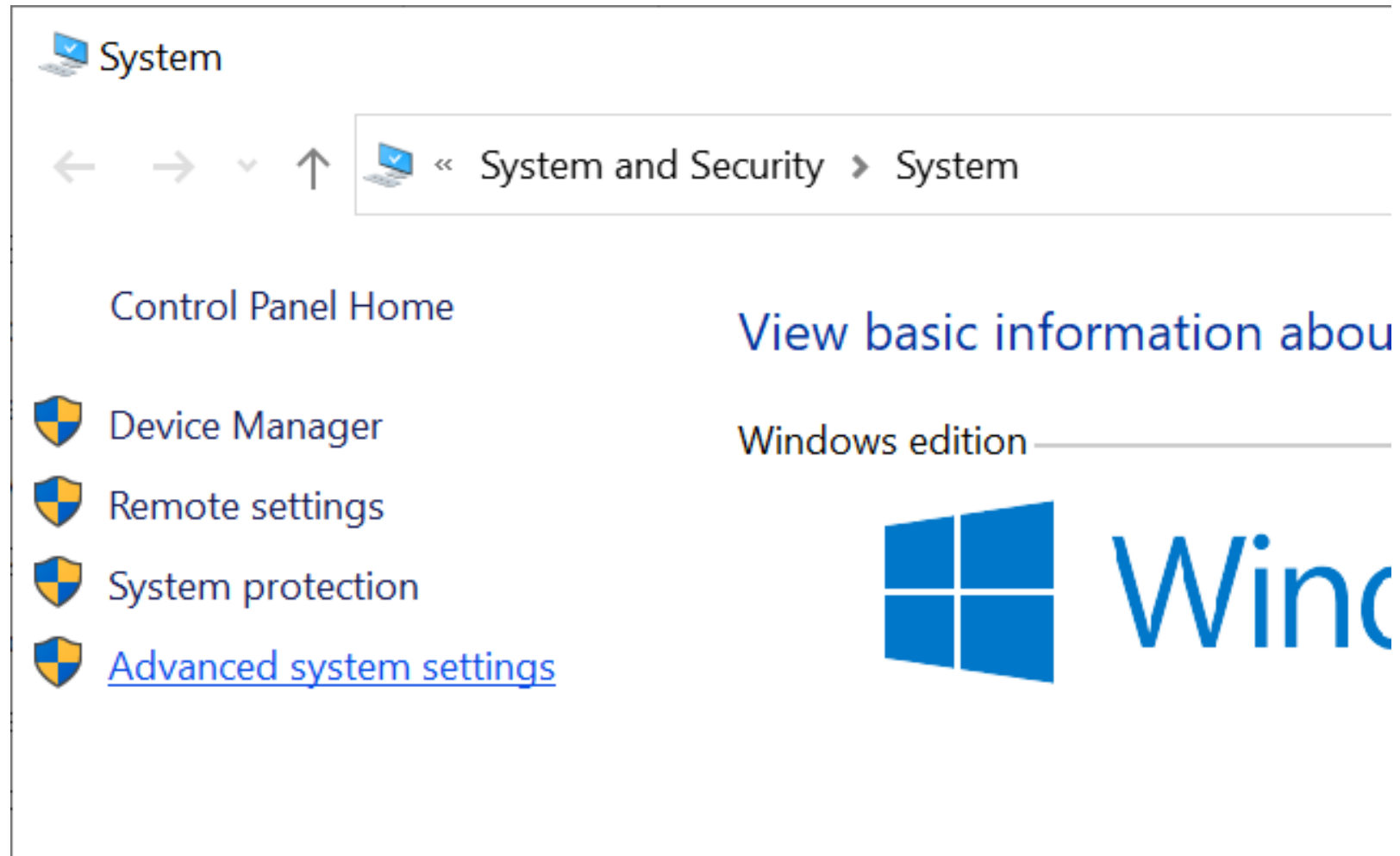
Change Path: This PC → Properties (Right Click)



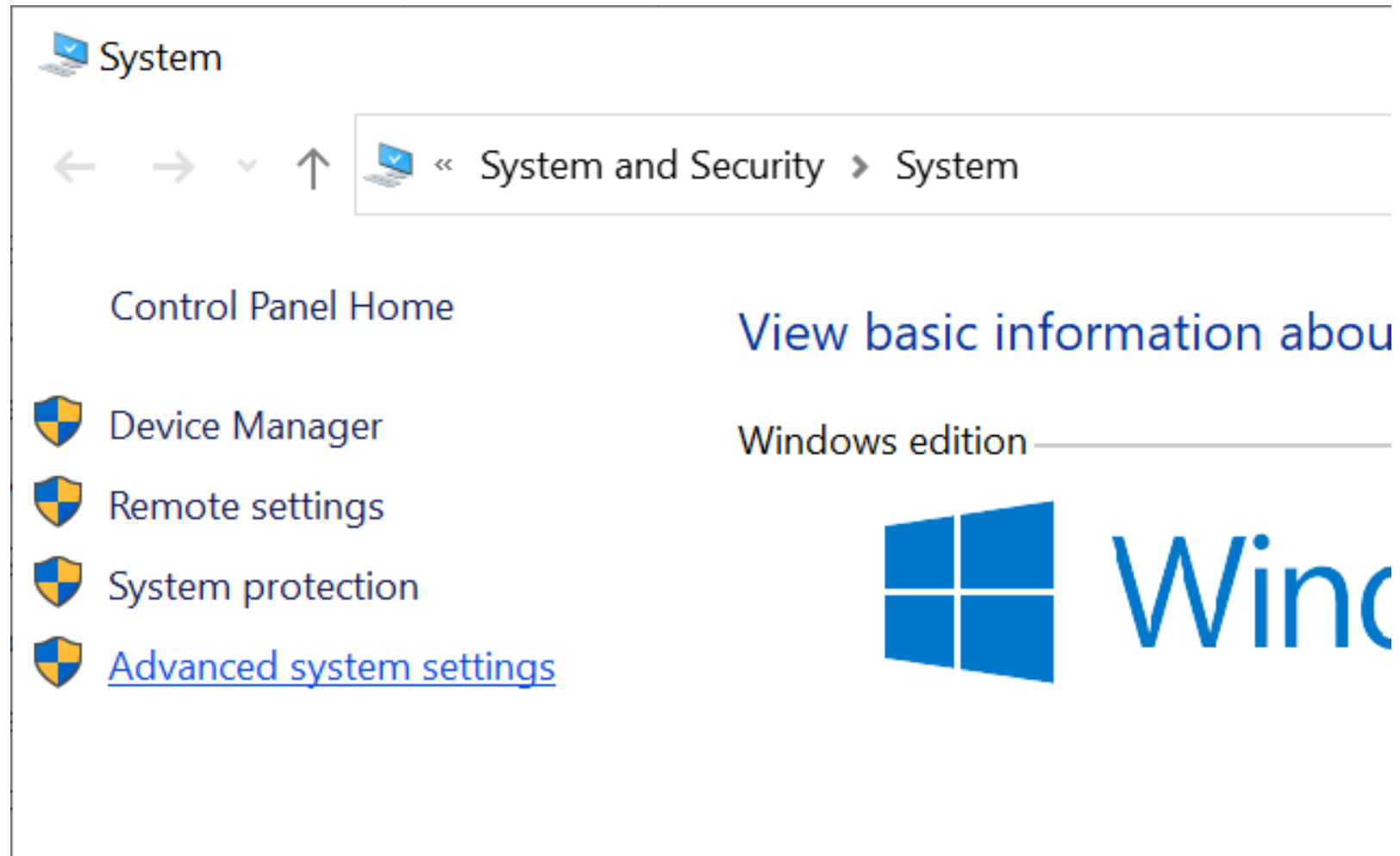
Change Path: Go to Advanced System Settings



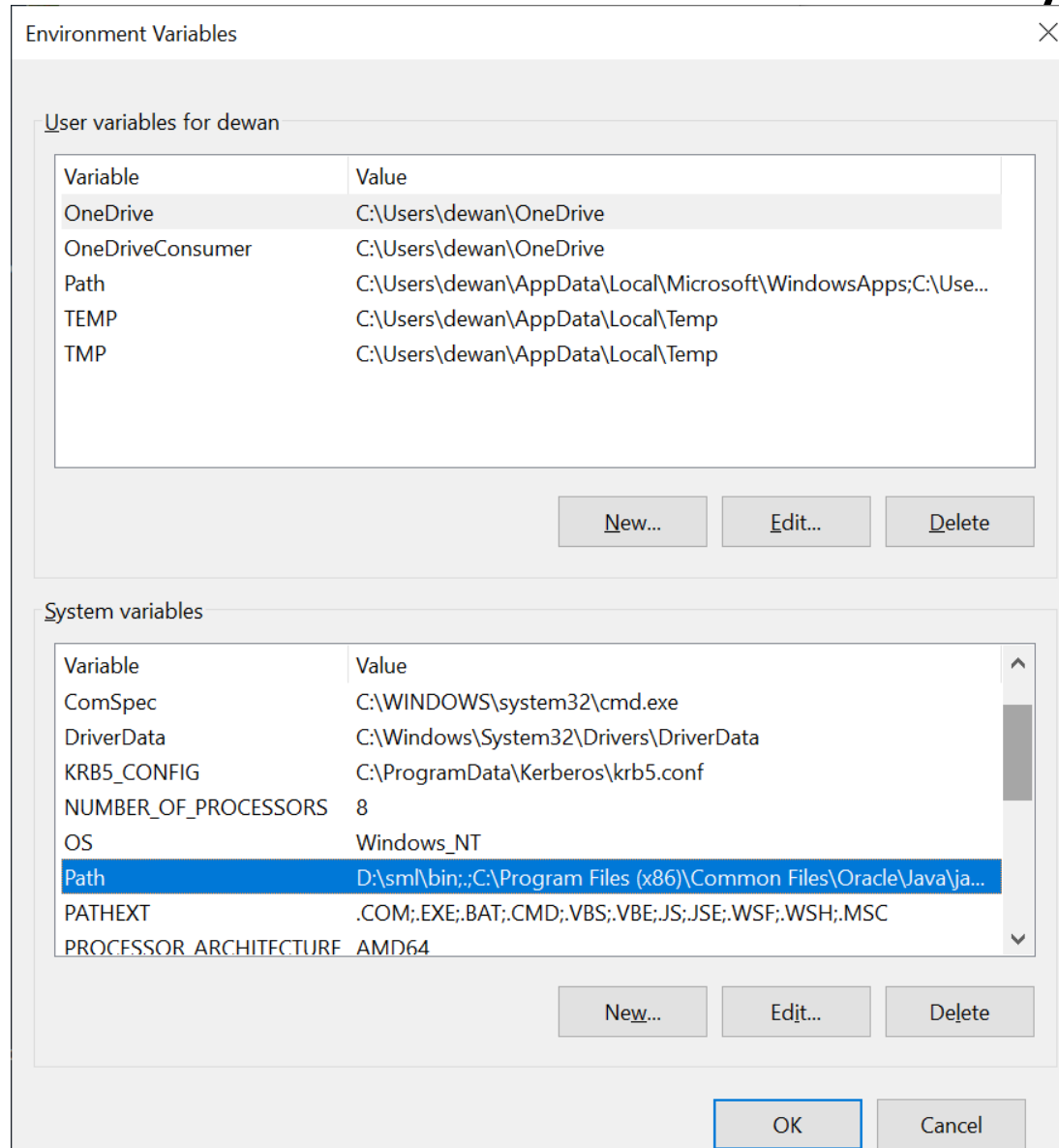
Change Path: Go to Environment Variables



Change Path: Go to Environment Variables



Change Path: Select Path in System Variables



Change Path: Select Path and Execute Edit

OneDriveConsumer	C:\Users\dewan\OneDrive
Path	C:\Users\dewan\AppData\Local\Microsoft\WindowsApps;C:\Use...
TEMP	C:\Users\dewan\AppData\Local\Temp
TMP	C:\Users\dewan\AppData\Local\Temp

New...

Edit...

Delete

System variables

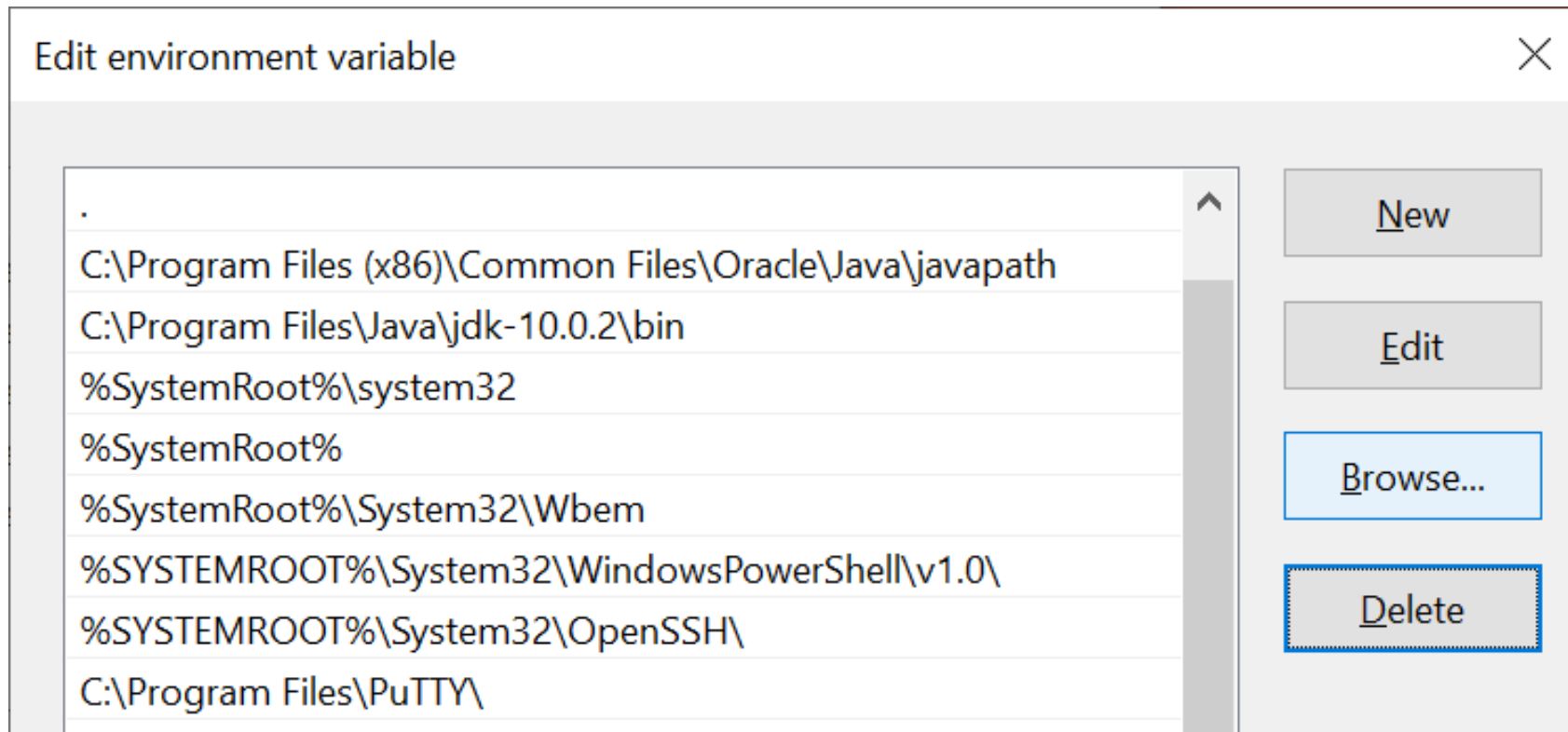
Variable	Value
ComSpec	C:\WINDOWS\system32\cmd.exe
DriverData	C:\Windows\System32\Drivers\DriverData
KRB5_CONFIG	C:\ProgramData\Kerberos\krb5.conf
NUMBER_OF_PROCESSORS	8
OS	Windows_NT
Path	D:\sml\bin;.C:\Program Files (x86)\Common Files\Oracle\Java\ja...
PATHEXT	.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;.WSH;.MSC
PROCESSOR_ARCHITECTURE	AMD64

New...

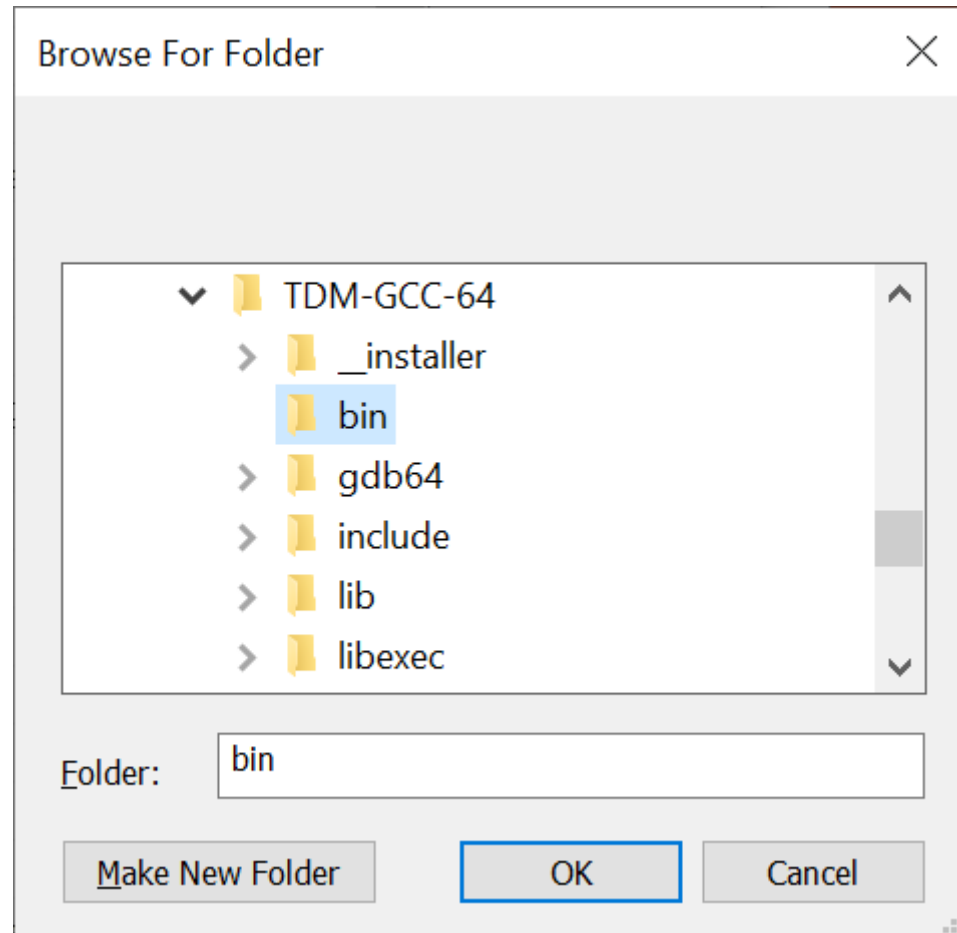
Edit...

Delete

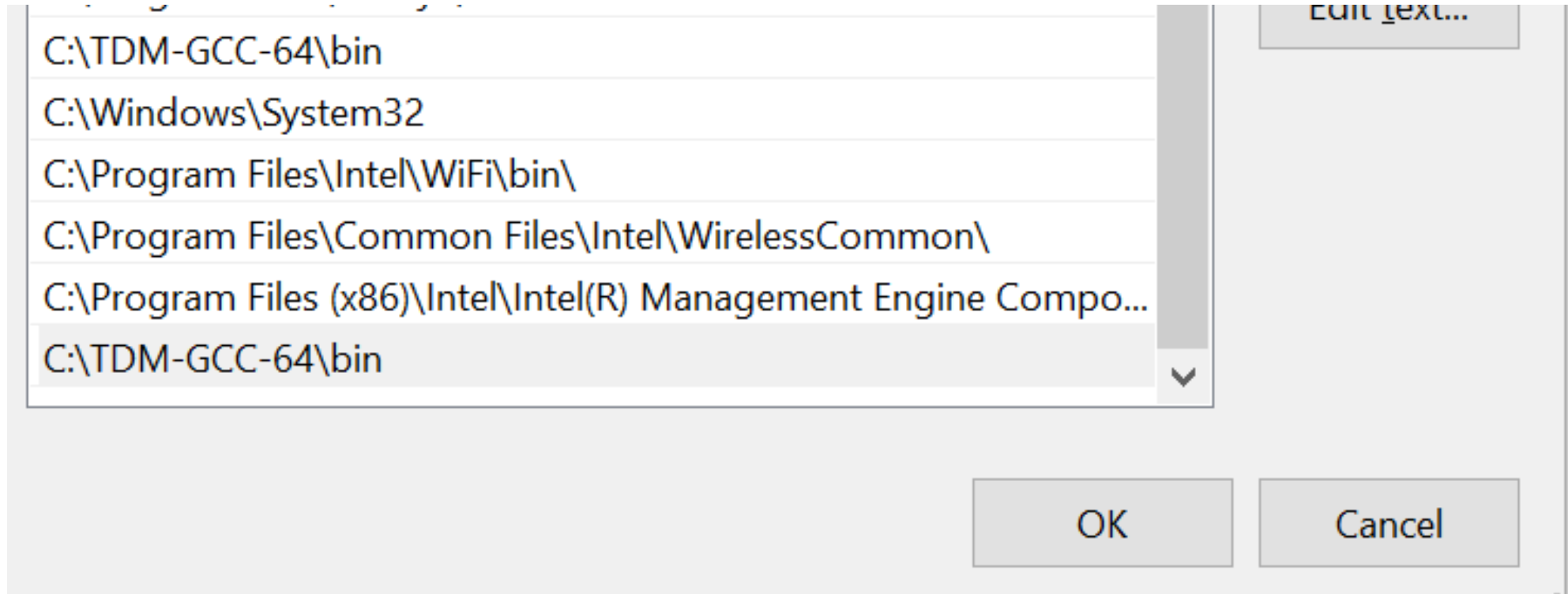
Change Path: Execute Browse



Change Path: Select the bin directory



Change Path: The directory should appear at the bottom





Change Path: Press OK and then Apply

Eclipse C++ Support

If you already have Eclipse


- Choose Help → Eclipse Marketplace
- Find: CDT
- Choose the following and press Install and then restart Eclipse

Eclipse C/C++ IDE CDT 9.4 (Oxygen.2)

 Eclipse CDT (C/C++ Development Tooling) <http://eclipse.org/cdt/> is top level Eclipse Foundation. Get it as standalone Eclipse IDE for C/C++ Developers... 

by [Eclipse CDT](#), EPL

[c c++ CDT fileExtension c fileExtension cpp ...](#)

★ 176  Installs: **186K** (2,456 last month)

If you already do not have Eclipse

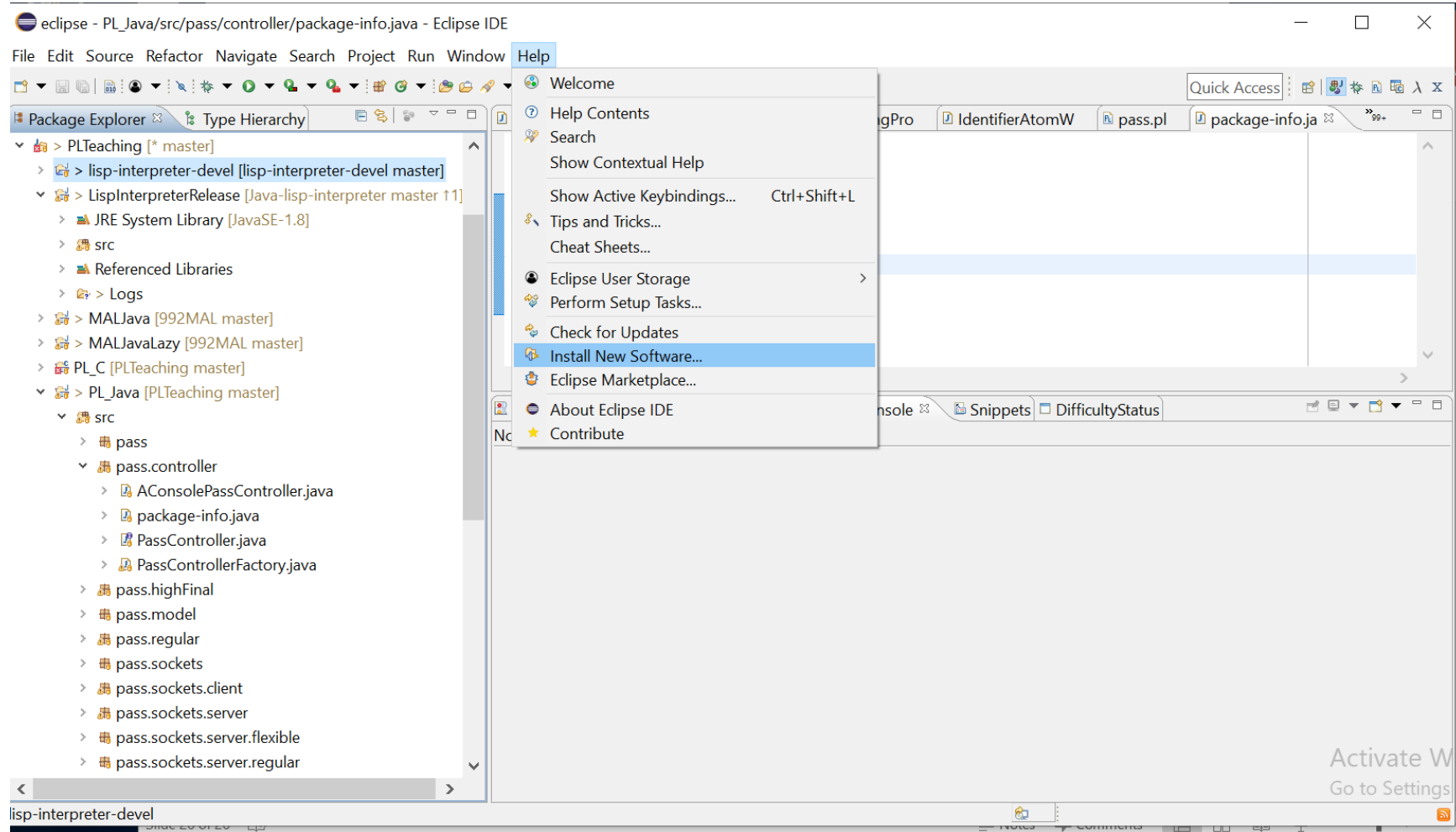
- Search for Eclipse C++ download
- Download the windows installer for 64 bit
- Choose C++ when installing

Installing Logging Plug-in

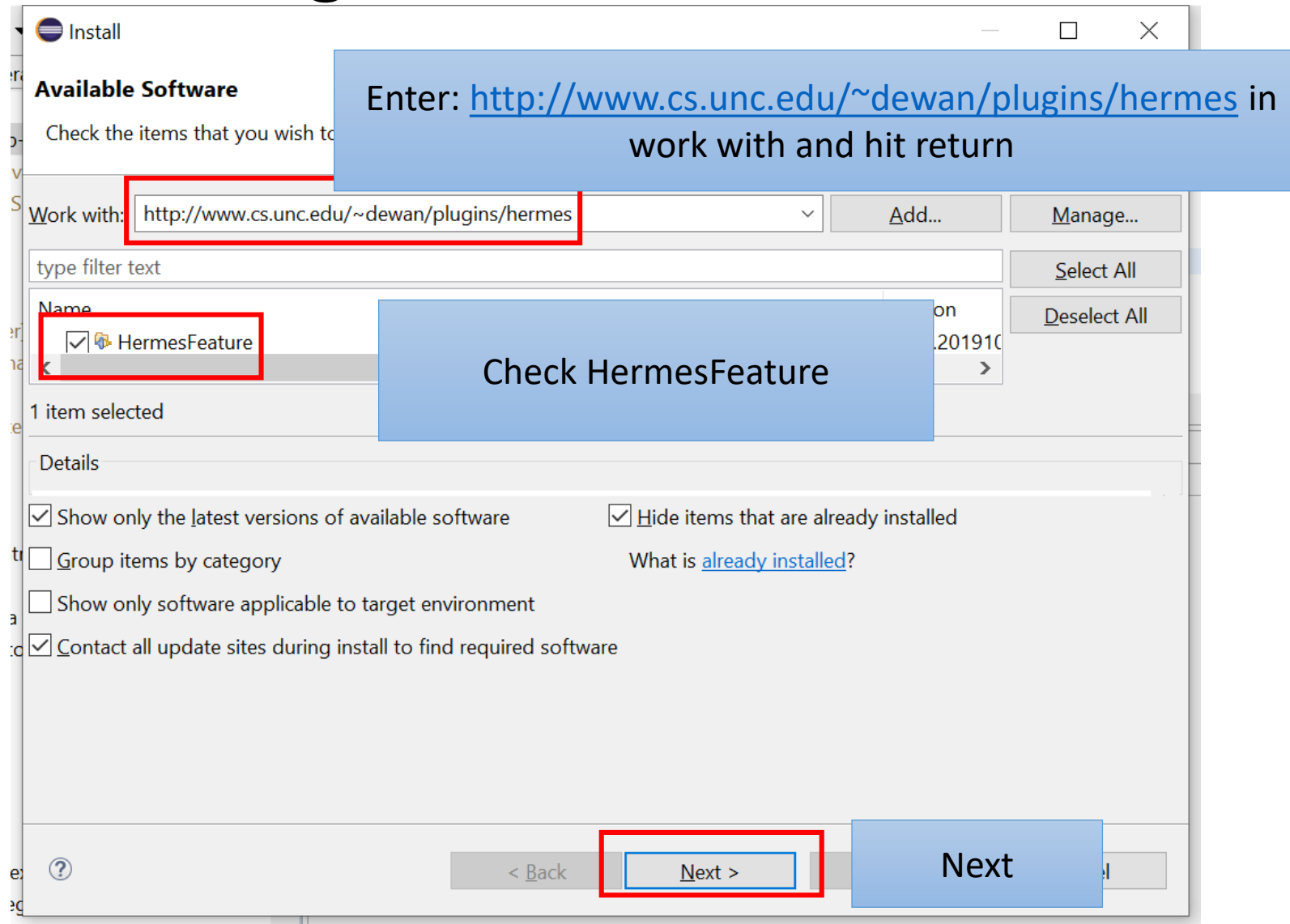
A plug-in can possibly misbehave/slow you down

We show you both how to install it and uninstall it

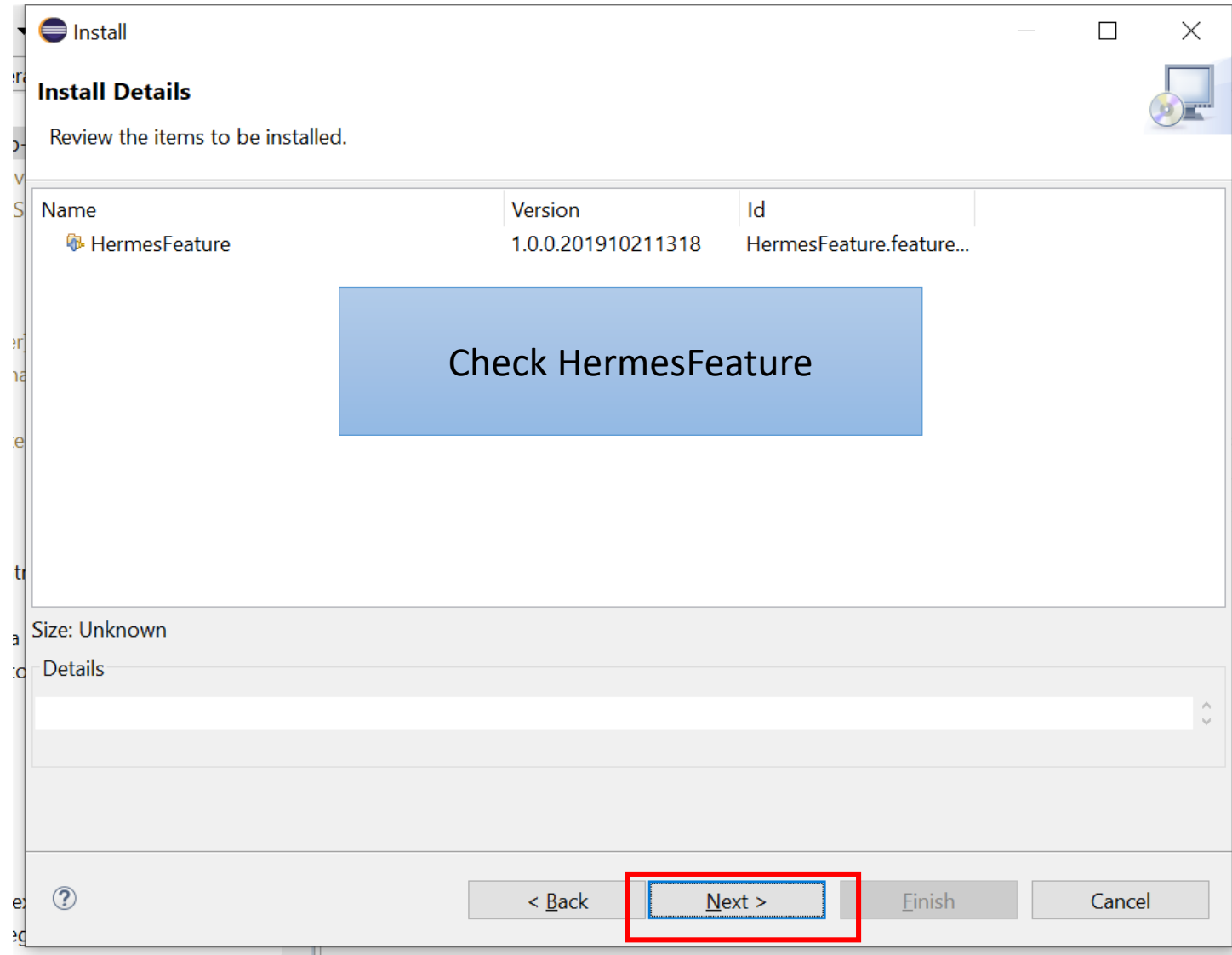
Help → Install New Software



Hermes Plug-in Site and Check Hermes:



Confirm



Accept License

Install

Review Licenses

Licenses must be reviewed and accepted before the software can be installed.

License text (for HermesFeature 1.0.0.201910211318):

[Enter License Description here.]

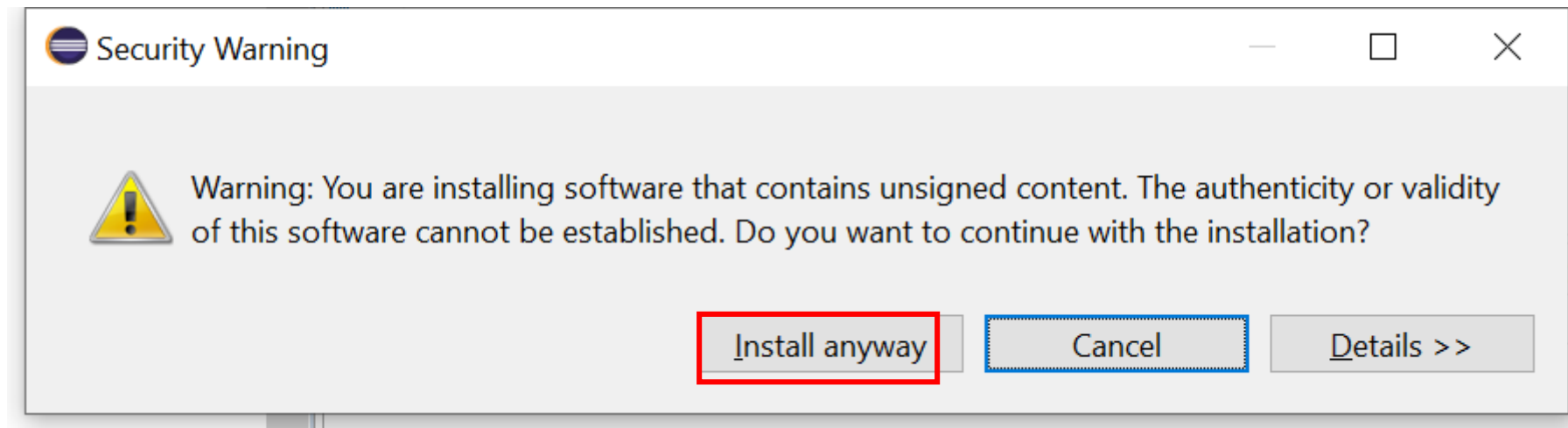
License is empty now, but may add text

☒ I accept the terms of the license agreement

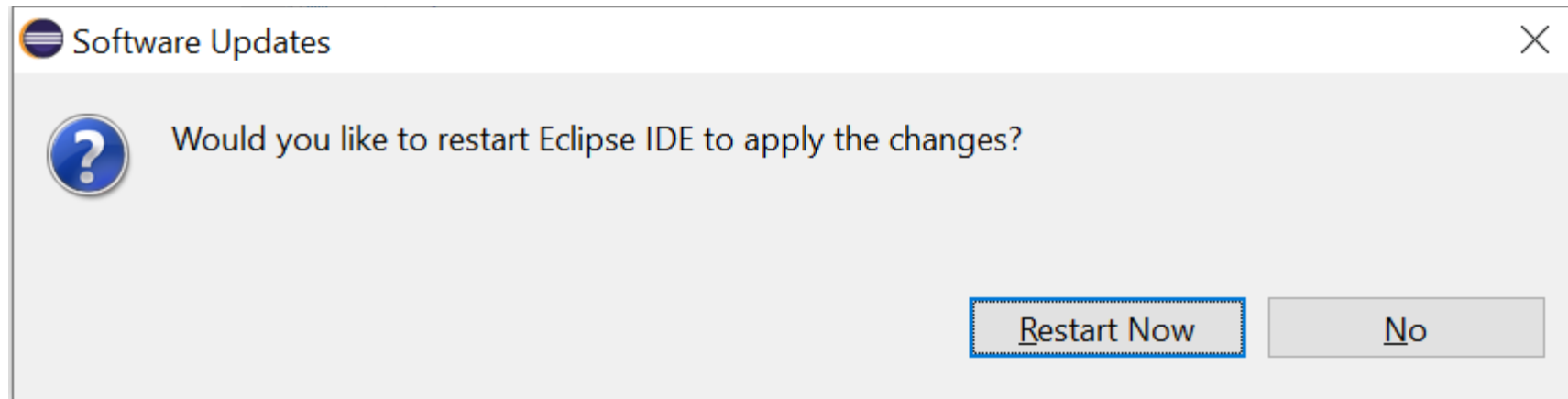
☐ I do not accept the terms of the license agreement

? < Back Next > Finish Cancel

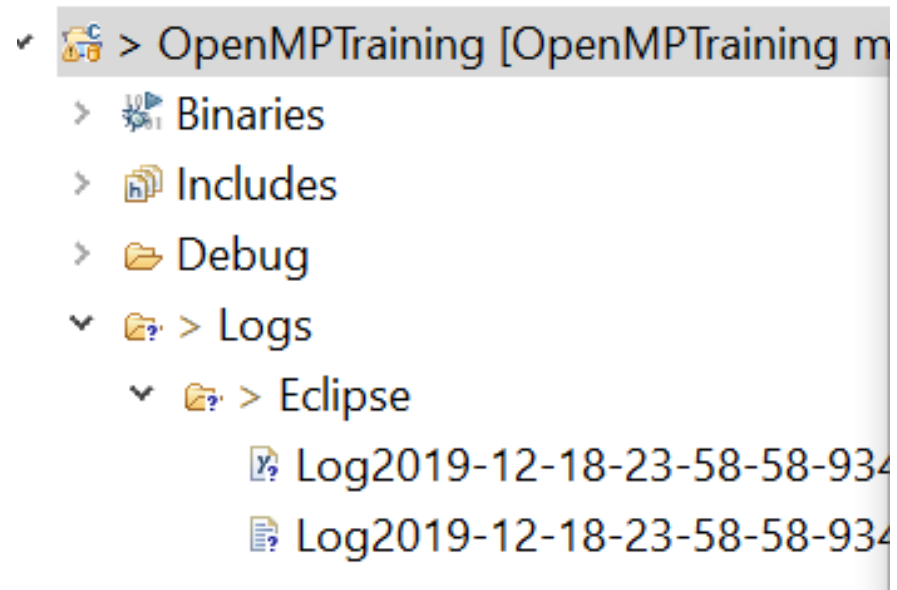
Trust Us



Restart Eclipse



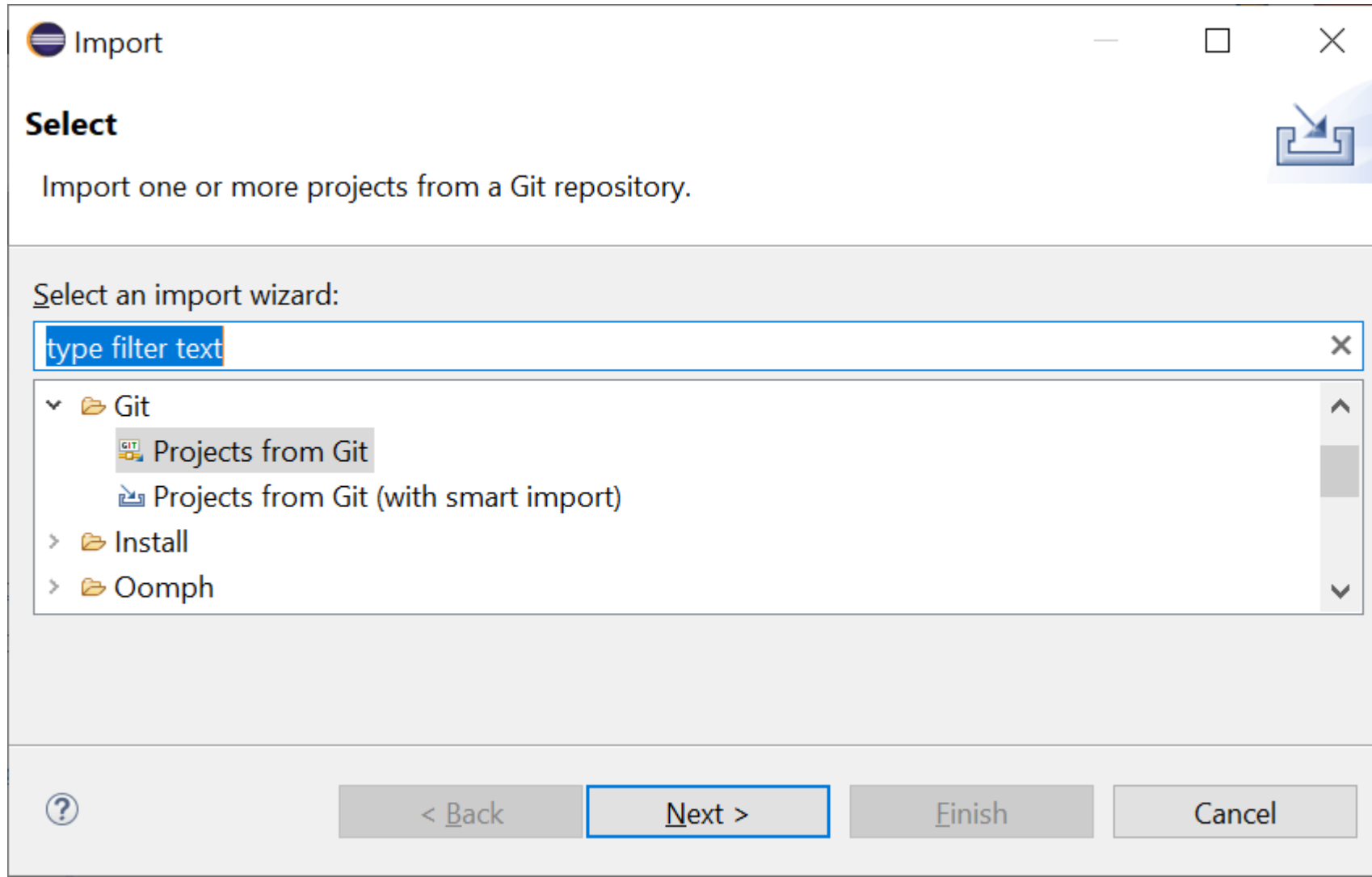
Logs



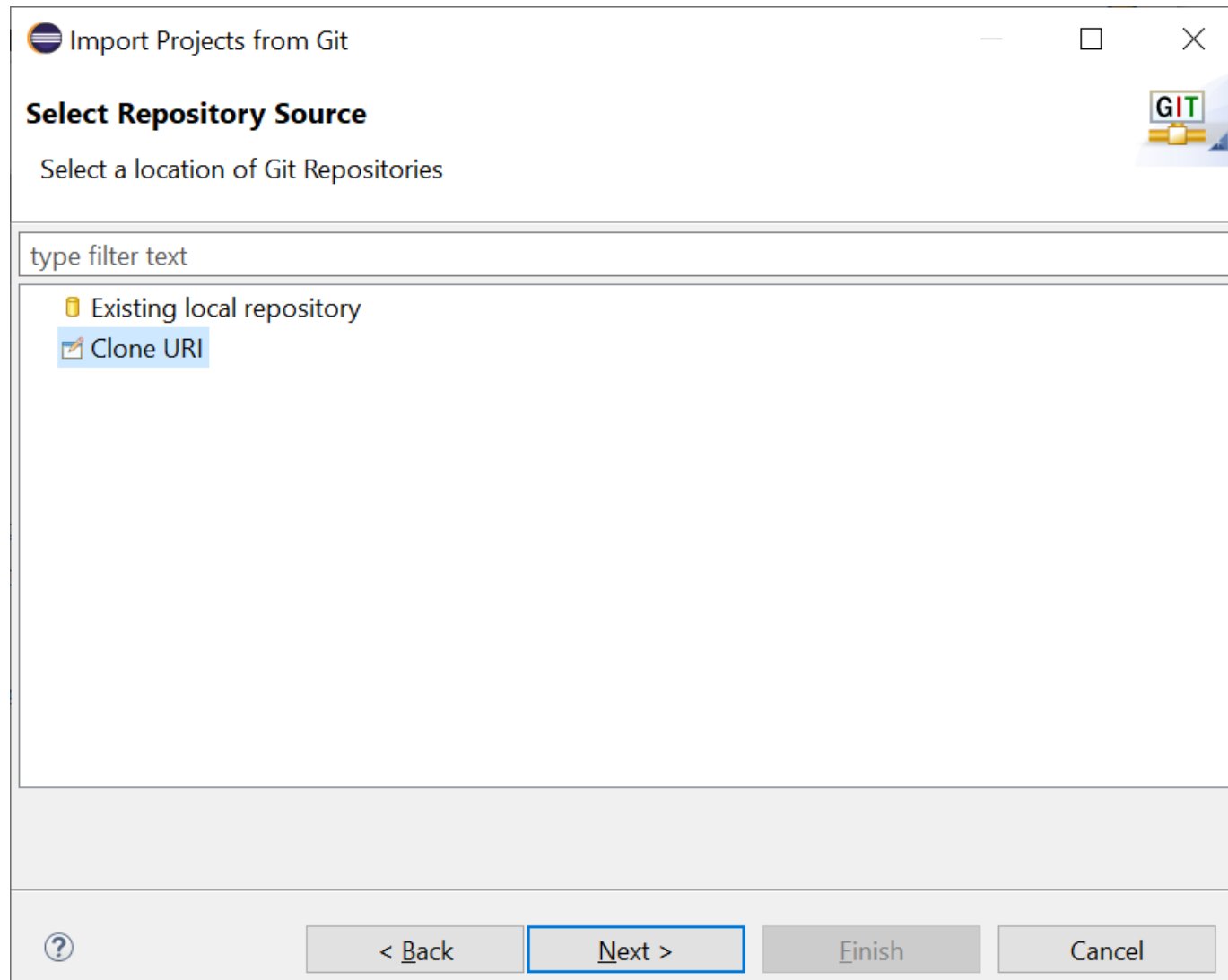
After some interaction, refreshing the project will show you the logs folder

Import Git Project:

ExecuteFile → Import → Git → Projects from GIT



Import Git Project: CloneURI



Import Git Project: CloneURI

Source Git Repository

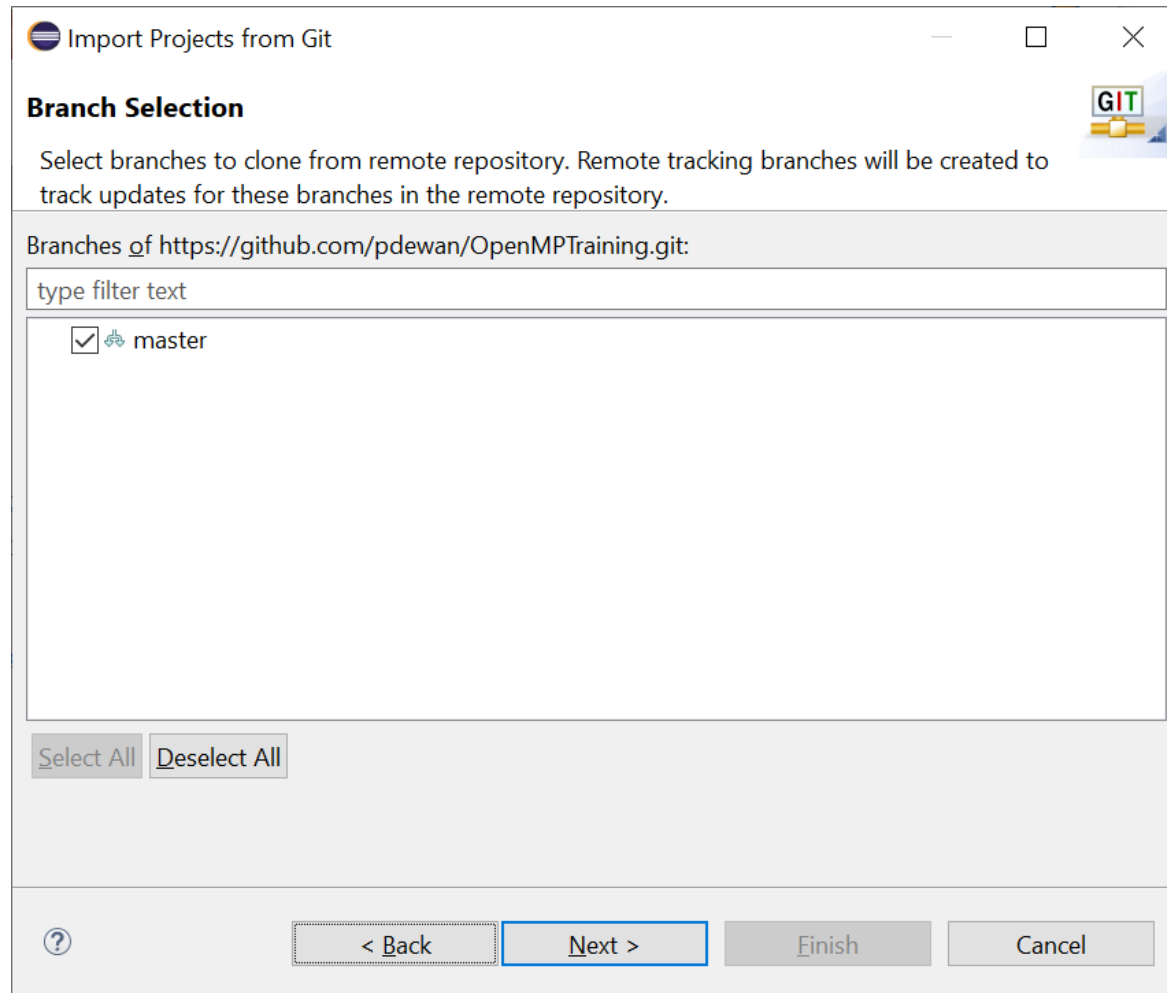
Enter the location of the source repository.



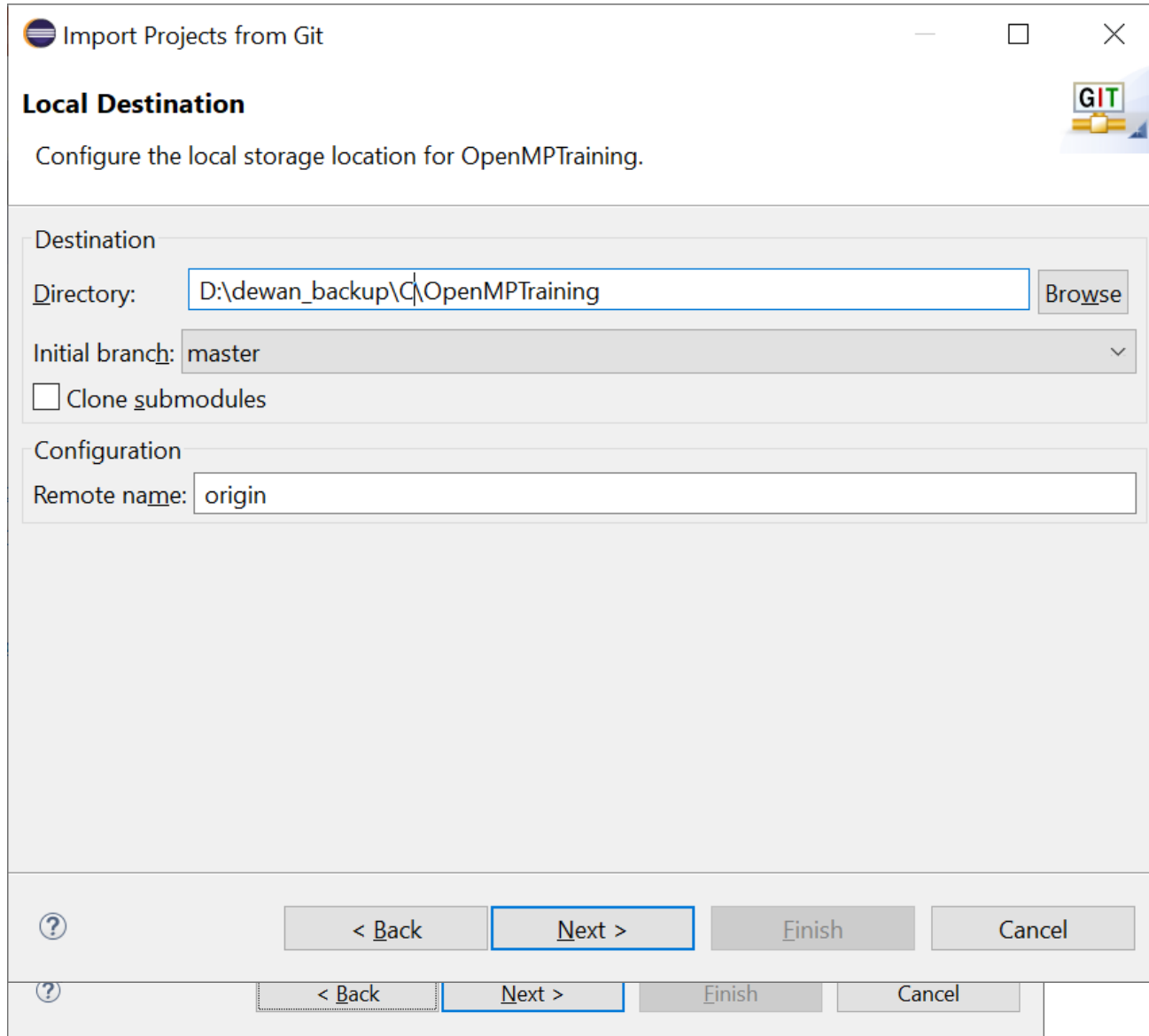
Location	
URI:	<input type="text" value="https://github.com/pdewan/OpenMPTraining.git"/> <input data-bbox="1332 686 1444 715" type="button" value="Local File..."/>
Host:	<input type="text" value="github.com"/>
Repository path:	<input type="text" value="/pdewan/OpenMPTraining.git"/>

`https://github.com/pdewan/OpenMPTraining.git`

Import Git Project: Select Branch



Import Git Project: Save in Local Directory



Import Projects from Git

Local Destination

Configure the local storage location for OpenMPTraining.

Destination

Directory:

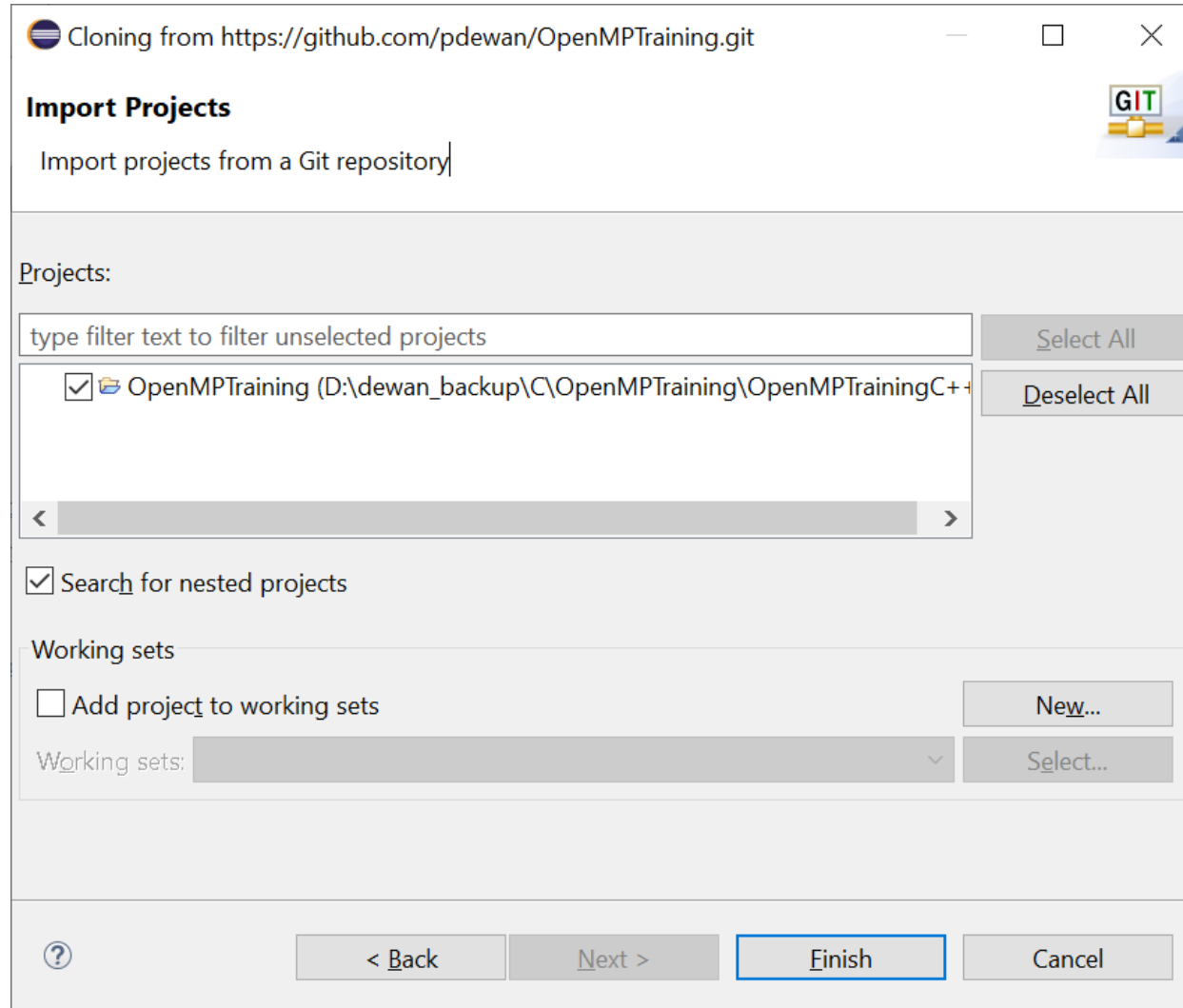
Initial branch:

☐ Clone submodules

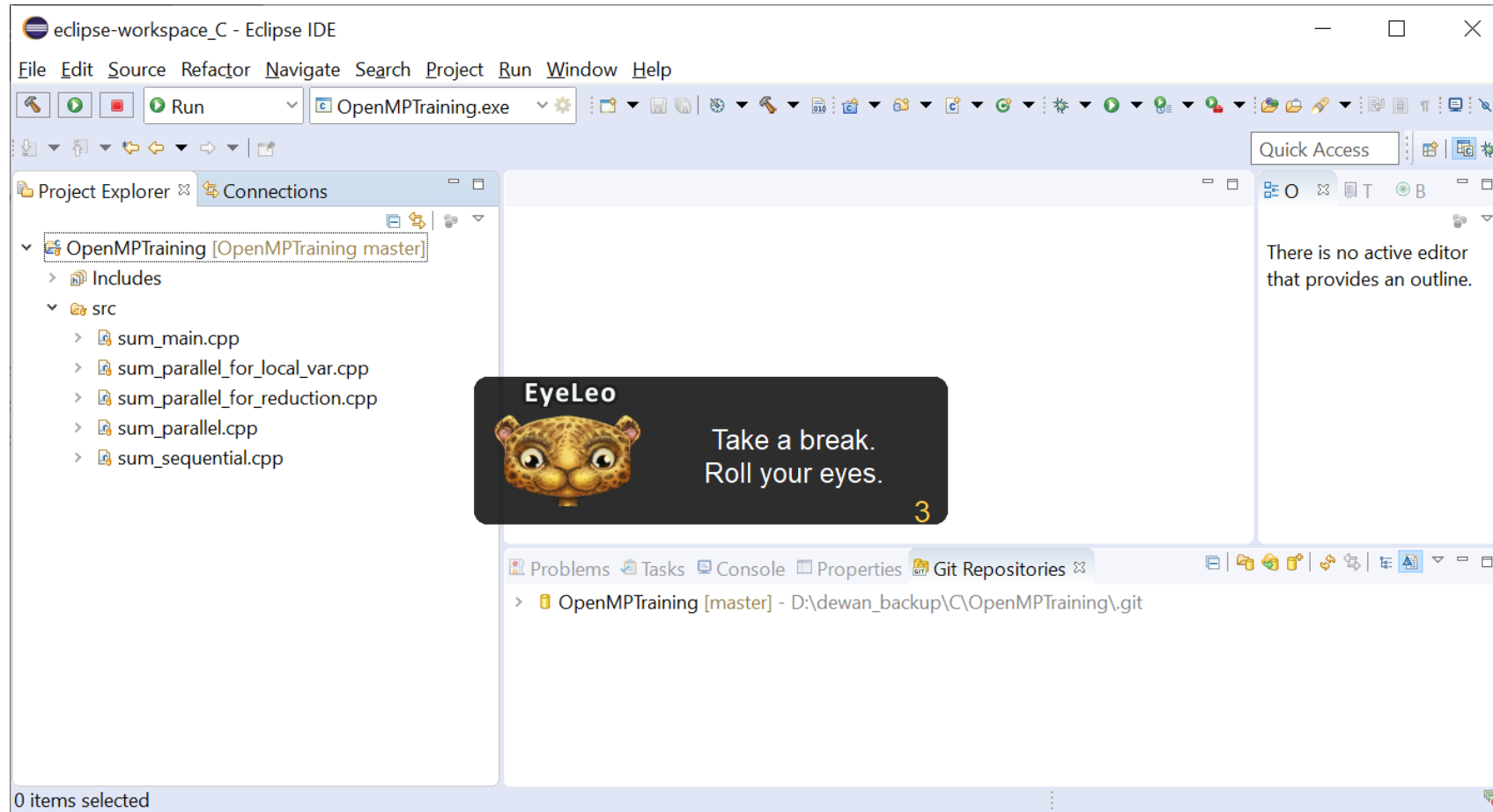
Configuration

Remote name:

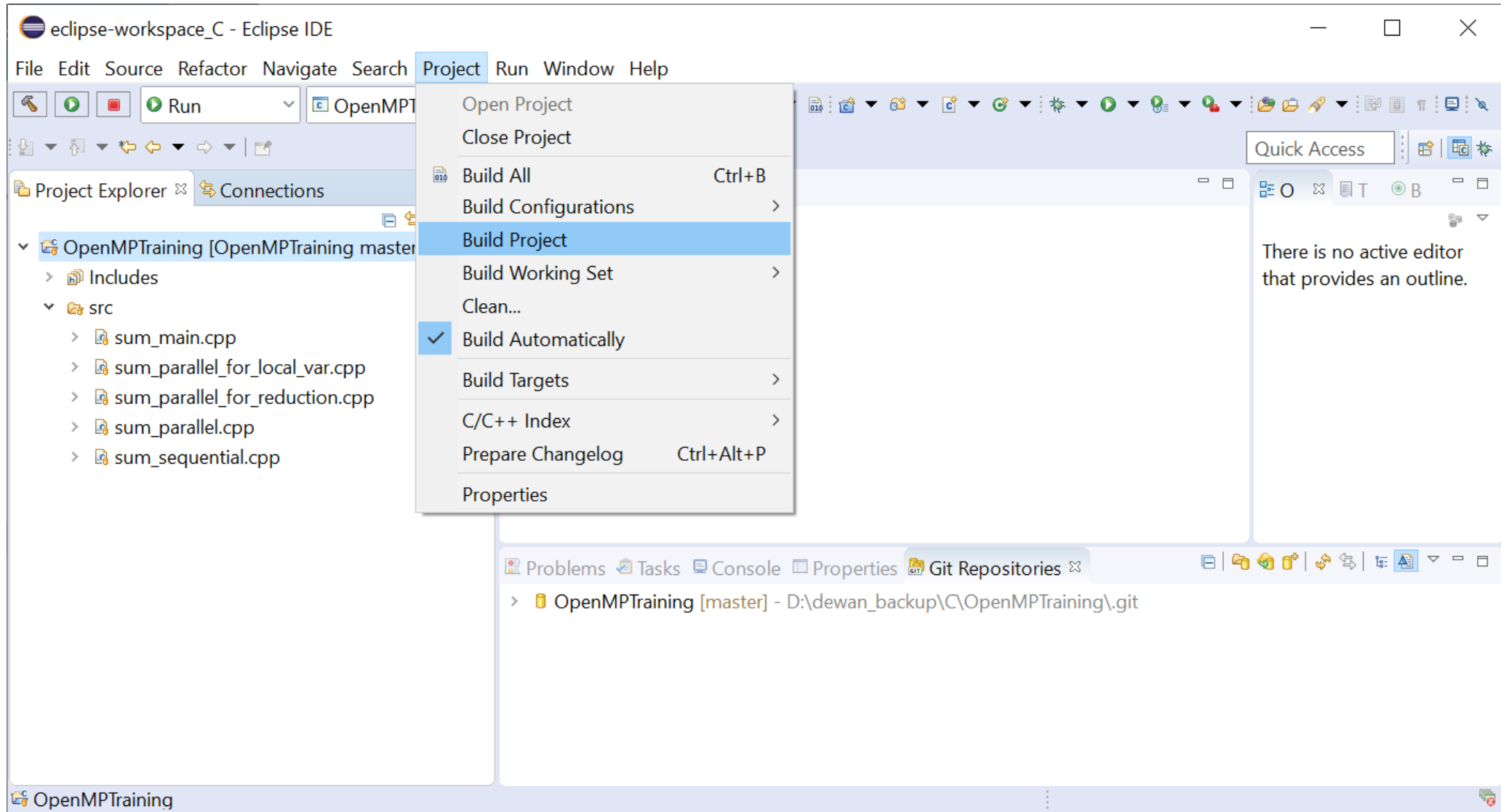
Import Git Project: Select OpenMPTraining



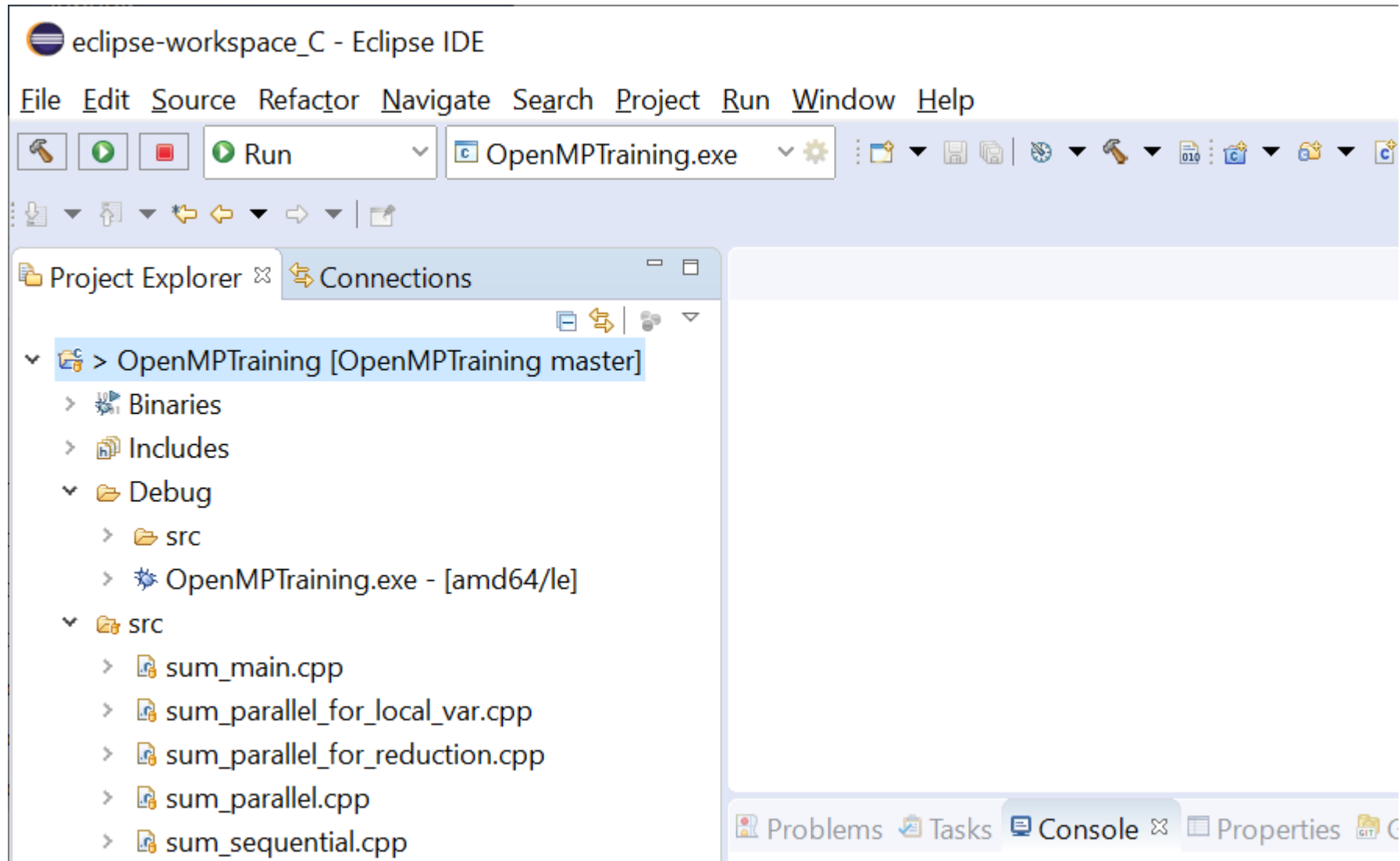
Import Git Project: Select Finish



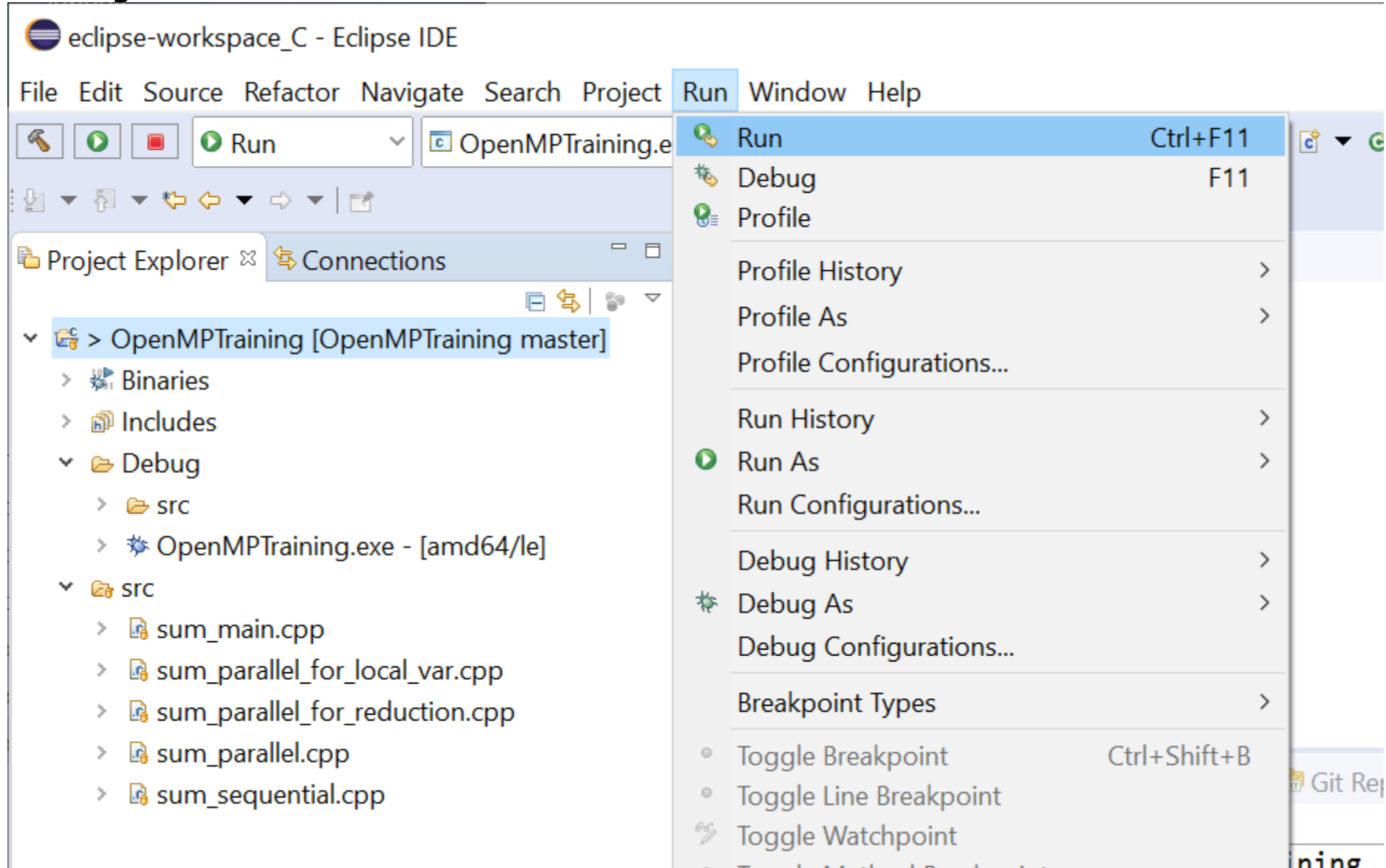
Build Project



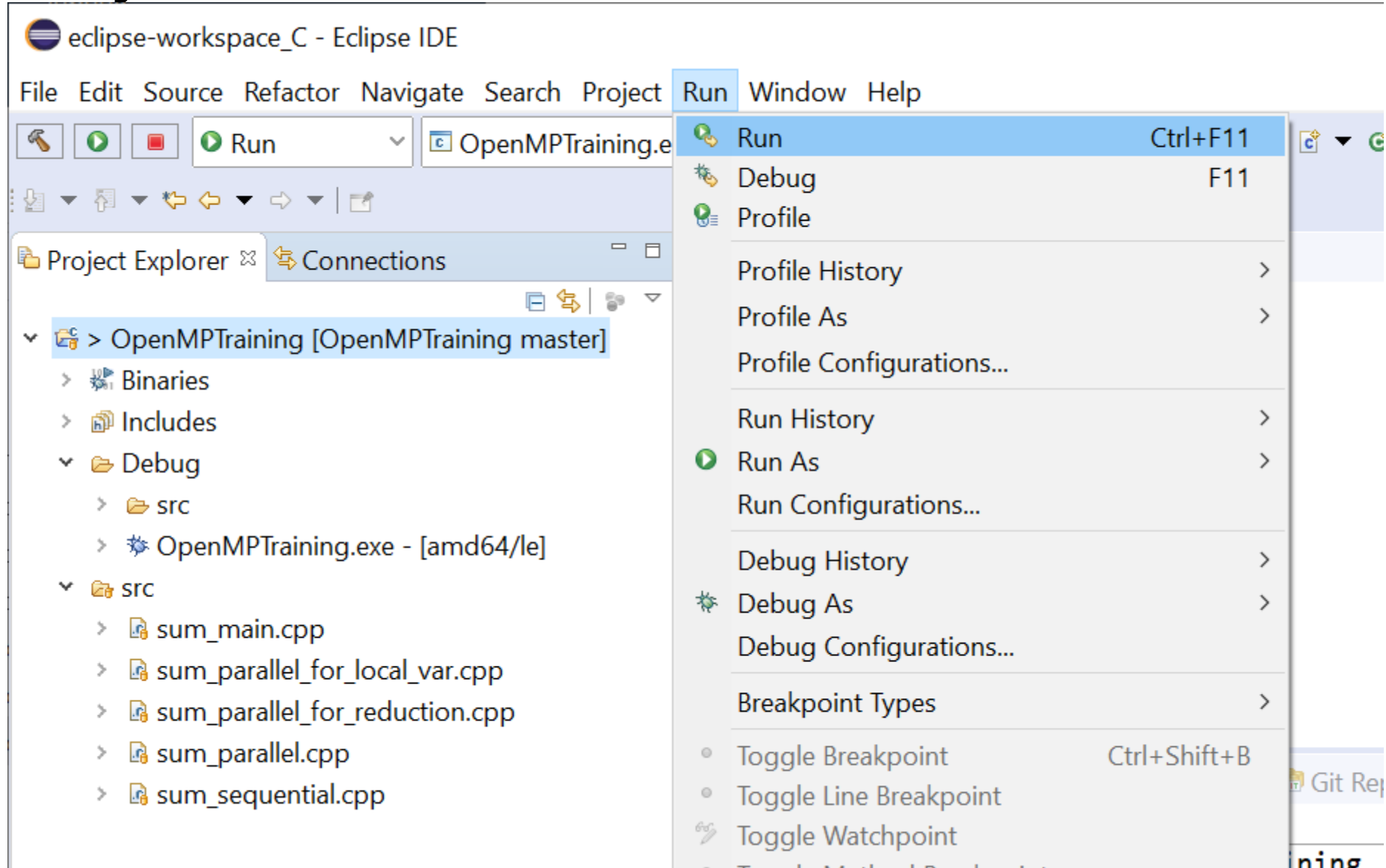
Built Project



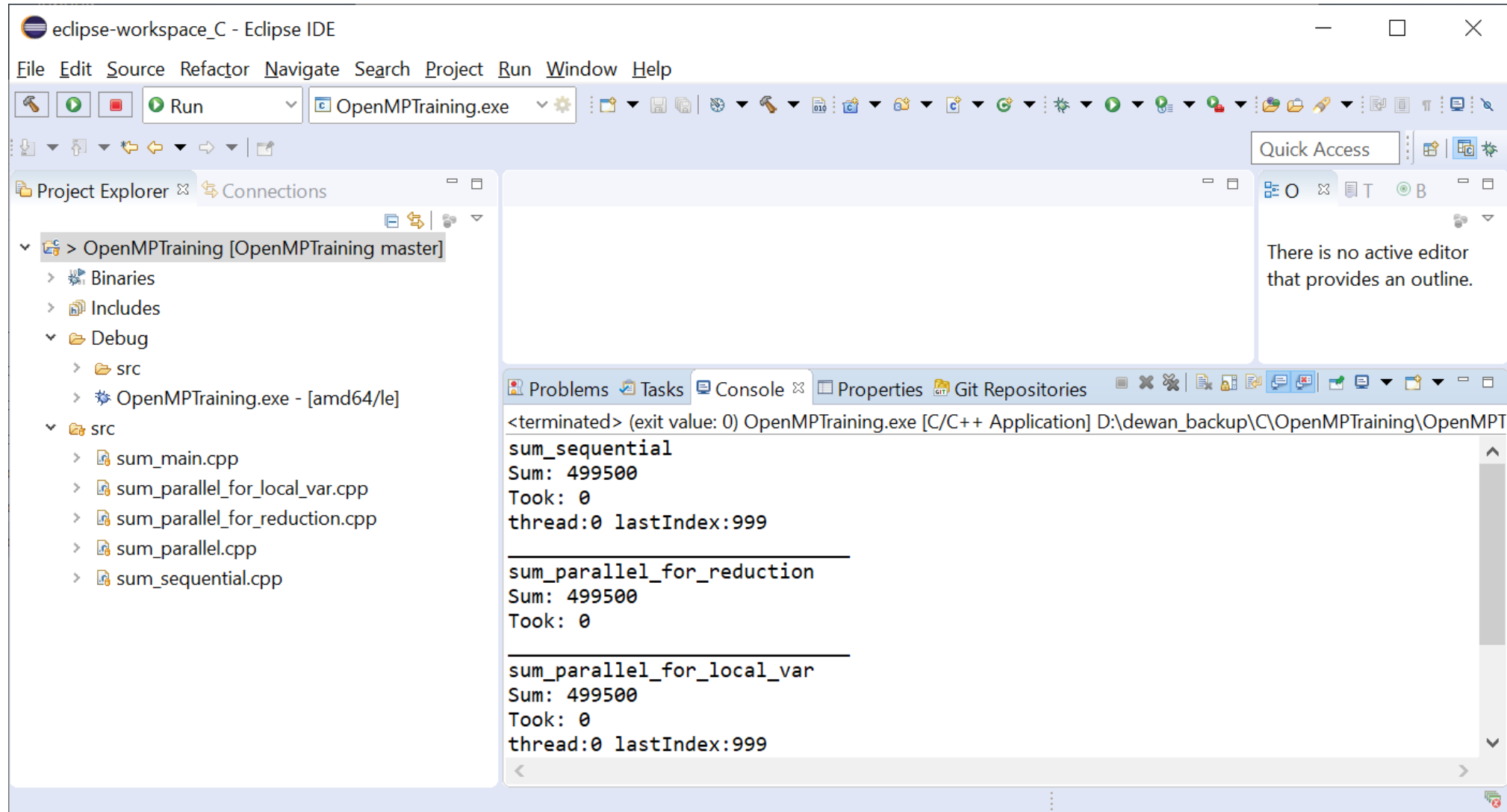
Run Project



Run Project



Output



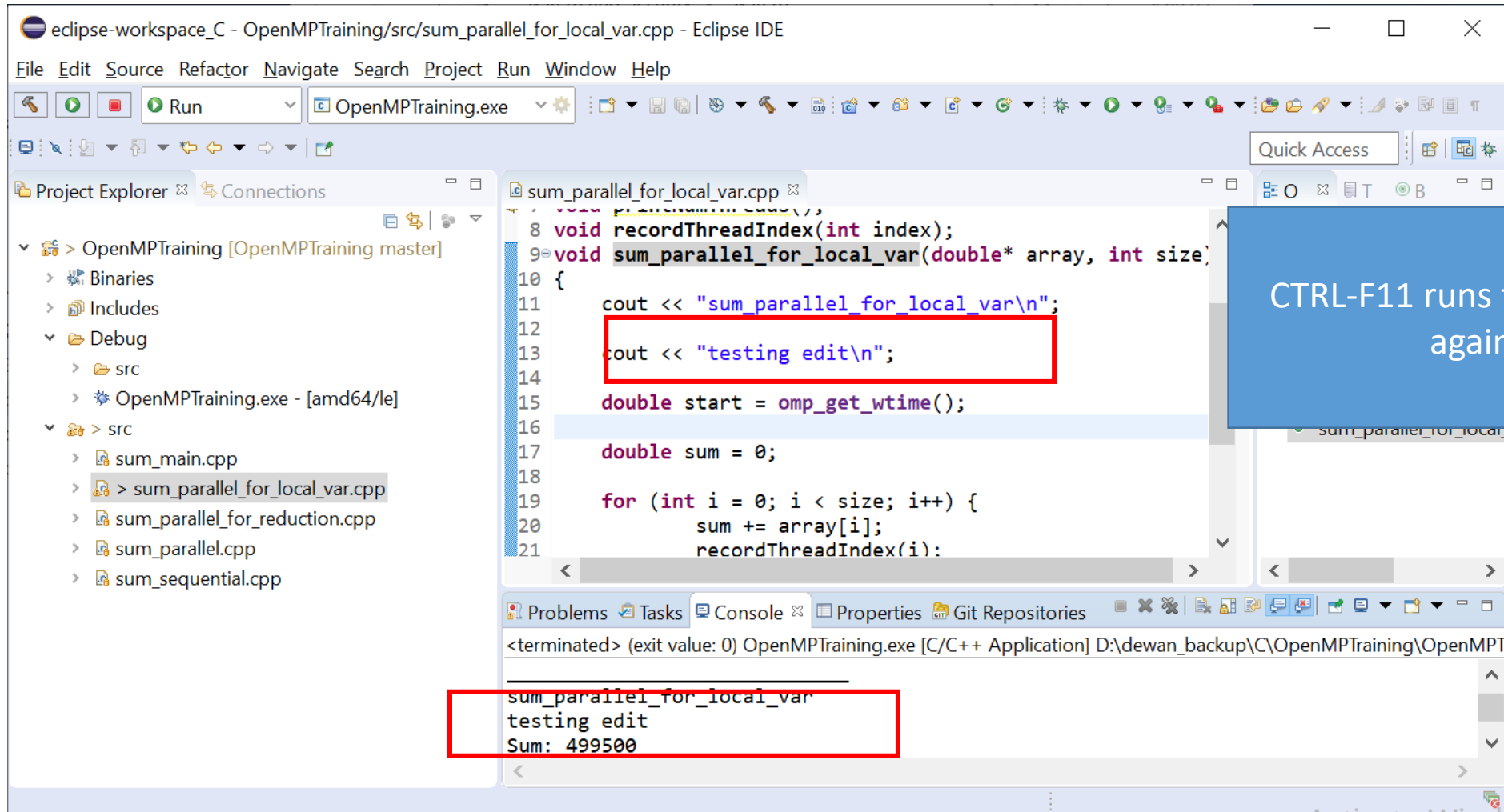
The screenshot shows the Eclipse IDE interface. The top menu bar includes File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. The toolbar contains icons for Run, OpenMPTraining.exe, and other development tools. The Project Explorer on the left shows the project structure for OpenMPTraining [OpenMPTraining master], including Binaries, Includes, Debug, and src folders. The src folder is expanded, showing files like sum_main.cpp, sum_parallel_for_local_var.cpp, sum_parallel_for_reduction.cpp, sum_parallel.cpp, and sum_sequential.cpp. The Console window at the bottom displays the output of the application, showing the results of three different sum calculations: sequential, parallel_for_reduction, and parallel_for_local_var. Each calculation shows a sum of 499500 and a time taken of 0. The output is as follows:

```
<terminated> (exit value: 0) OpenMPTraining.exe [C/C++ Application] D:\dewan_backup\C\OpenMPTraining\OpenMPT
sum_sequential
Sum: 499500
Took: 0
thread:0 lastIndex:999

sum_parallel_for_reduction
Sum: 499500
Took: 0

sum_parallel_for_local_var
Sum: 499500
Took: 0
thread:0 lastIndex:999
```

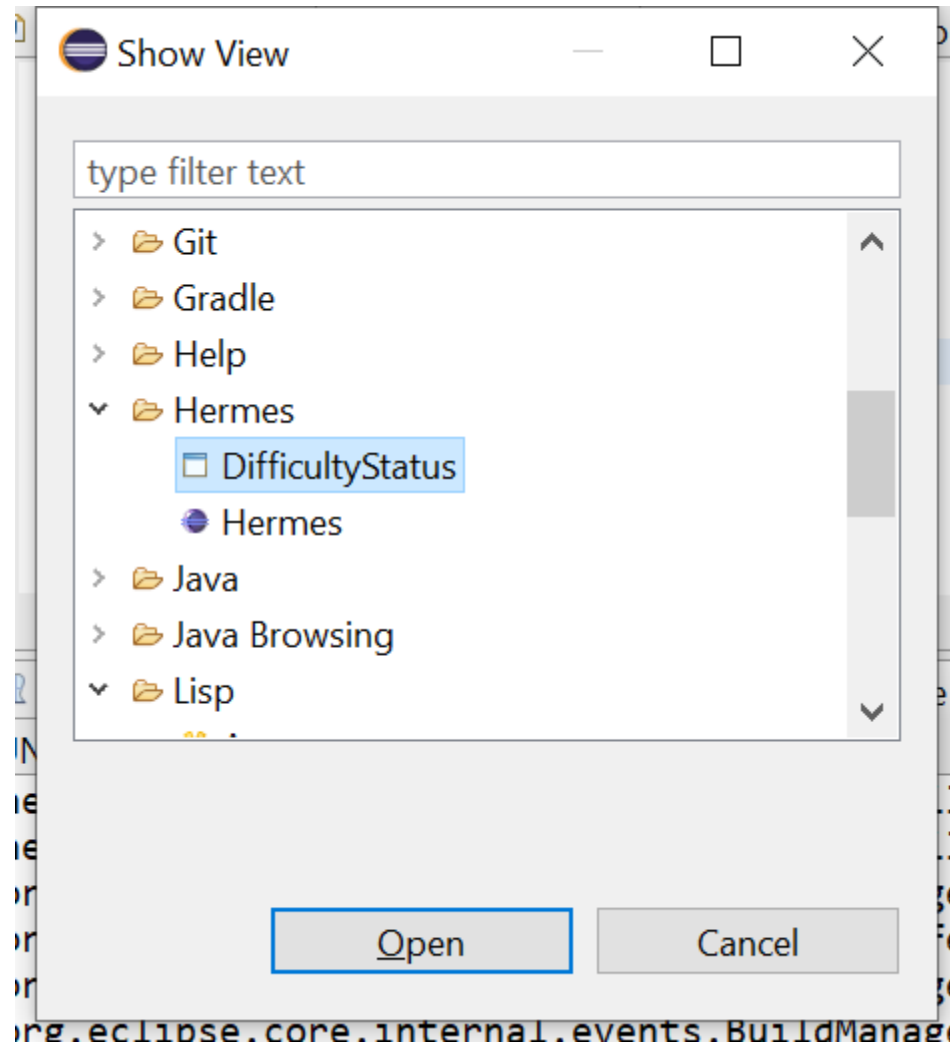
Adding “Testing edit” and Running again



The screenshot shows the Eclipse IDE interface. The 'Window' menu is open, and the 'Show View' option is selected, which has opened a submenu. In this submenu, the 'Others' view is highlighted. The background shows the Package Explorer on the left with a project named 'PLTeaching' selected. The main editor area displays Java code from 'Project.java'. An 'Updates Available' dialog box is visible in the bottom right corner, indicating that updates are available for the software.

Open View

Hermes→DifficultyStatus



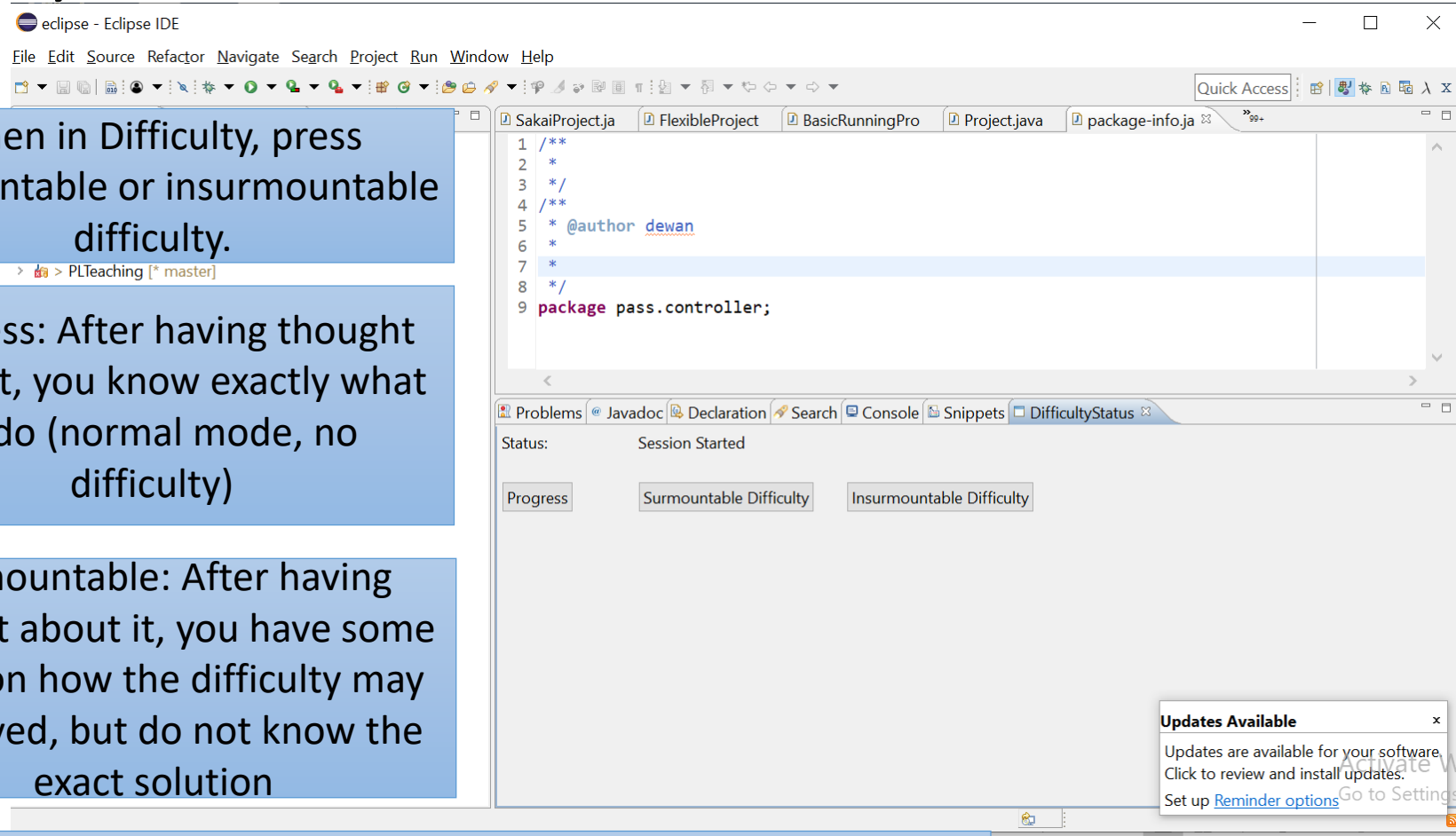
Difficulty Status View

When in Difficulty, press surmountable or insurmountable difficulty.

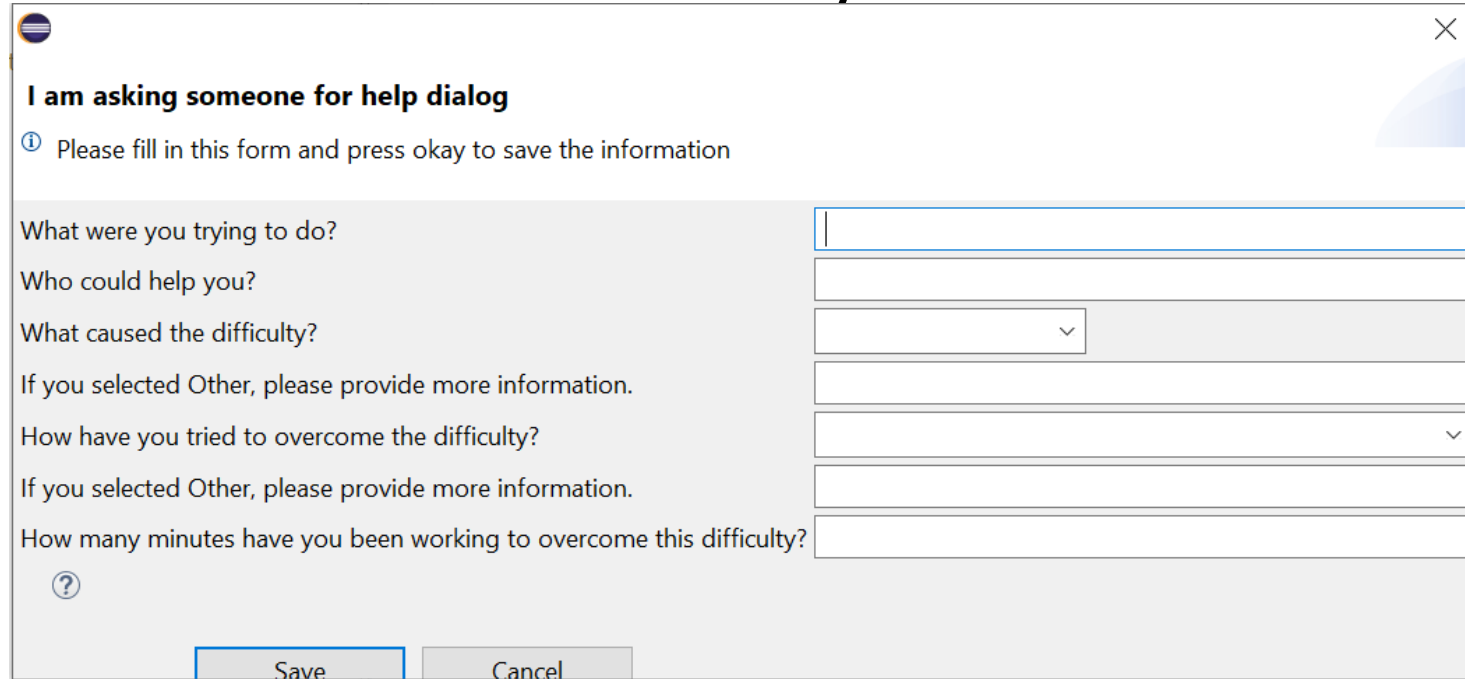
Progress: After having thought about it, you know exactly what to do (normal mode, no difficulty)

Surmountable: After having thought about it, you have some ideas on how the difficulty may be solved, but do not know the exact solution


Insurmountable: After having thought about it, you have no clue right now on how to solve the problem and are stopping to ask for help or think later



Elaborate on Surmountable or Insurmountable Difficulty



I am asking someone for help dialog

 Please fill in this form and press okay to save the information

What were you trying to do?

Who could help you?


What caused the difficulty?

If you selected Other, please provide more information.

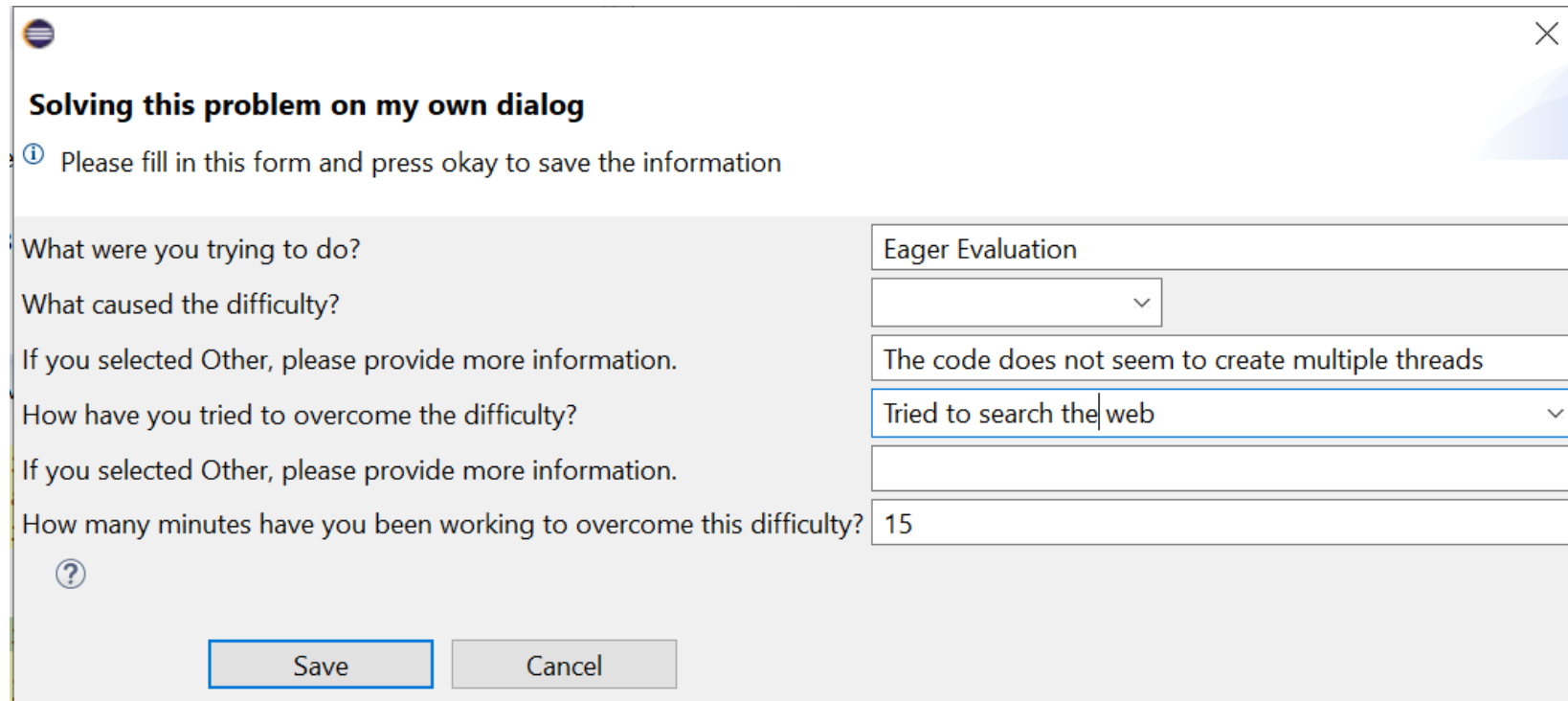
How have you tried to overcome the difficulty?



If you selected Other, please provide more information.


How many minutes have you been working to overcome this difficulty?



Example Filled Form



 **Solving this problem on my own dialog** 

 Please fill in this form and press okay to save the information

What were you trying to do?


What caused the difficulty?

If you selected Other, please provide more information.

How have you tried to overcome the difficulty?

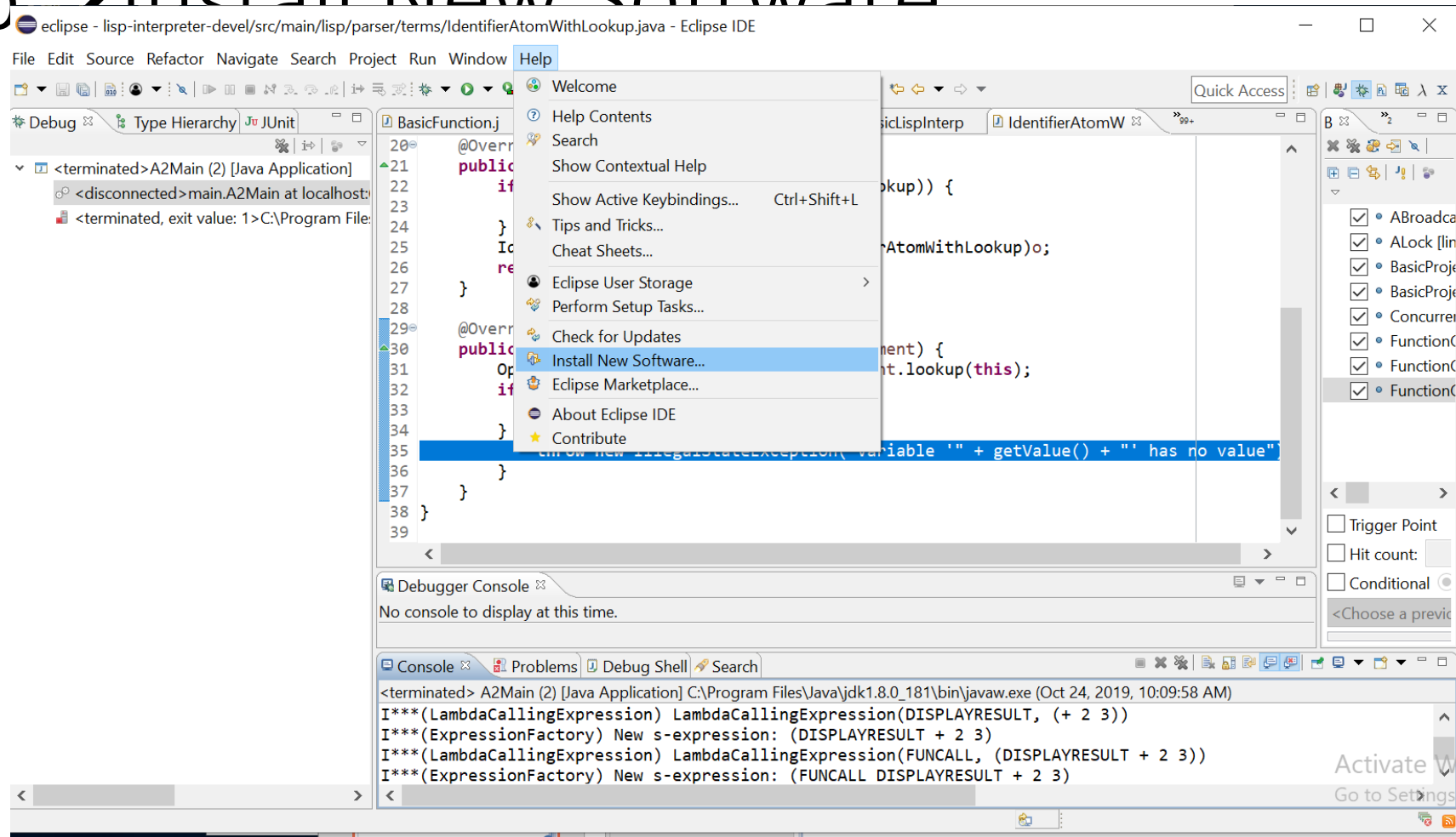
If you selected Other, please provide more information.

How many minutes have you been working to overcome this difficulty?

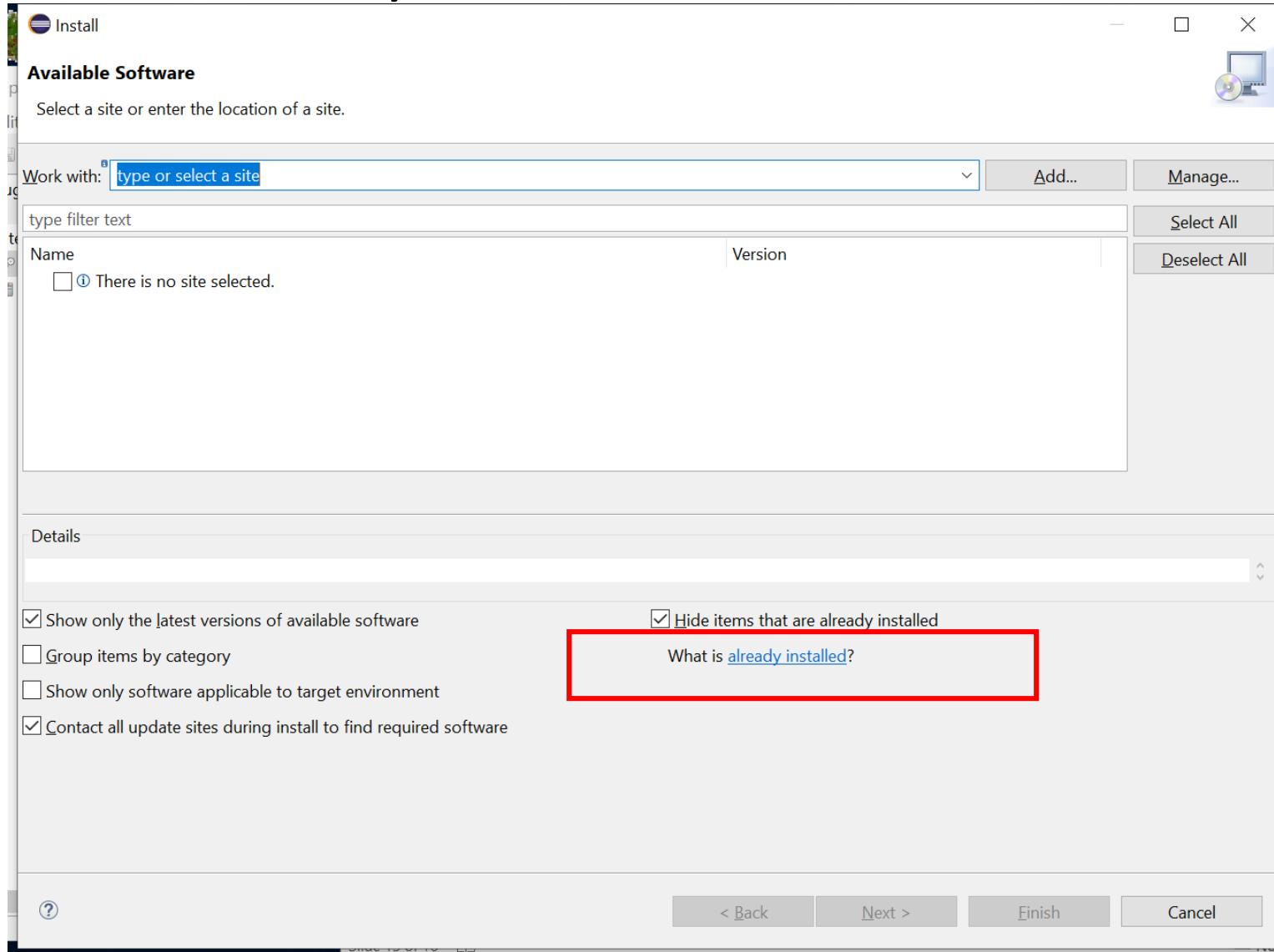


Uninstalling Plugin

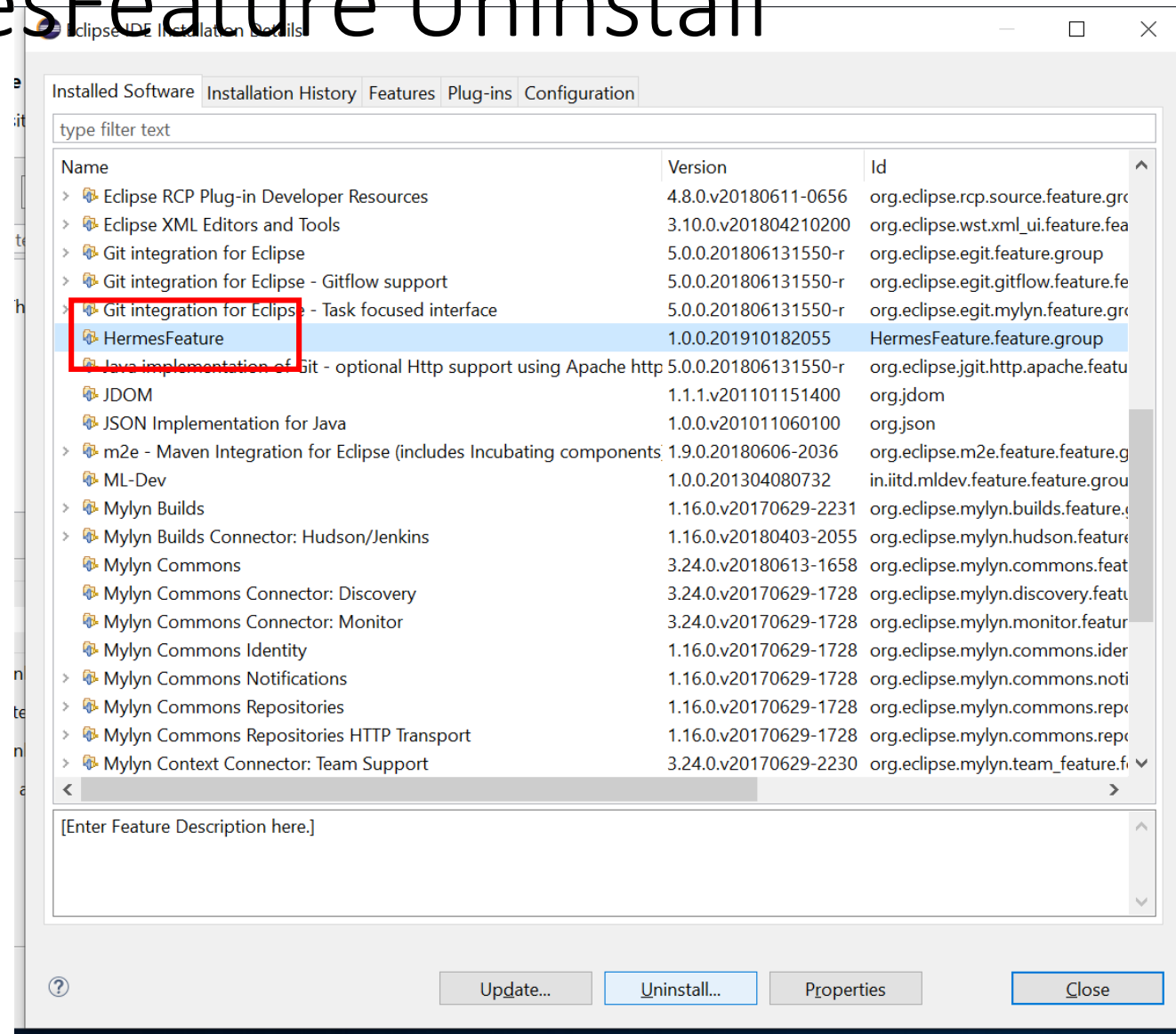
Help → Install New Software



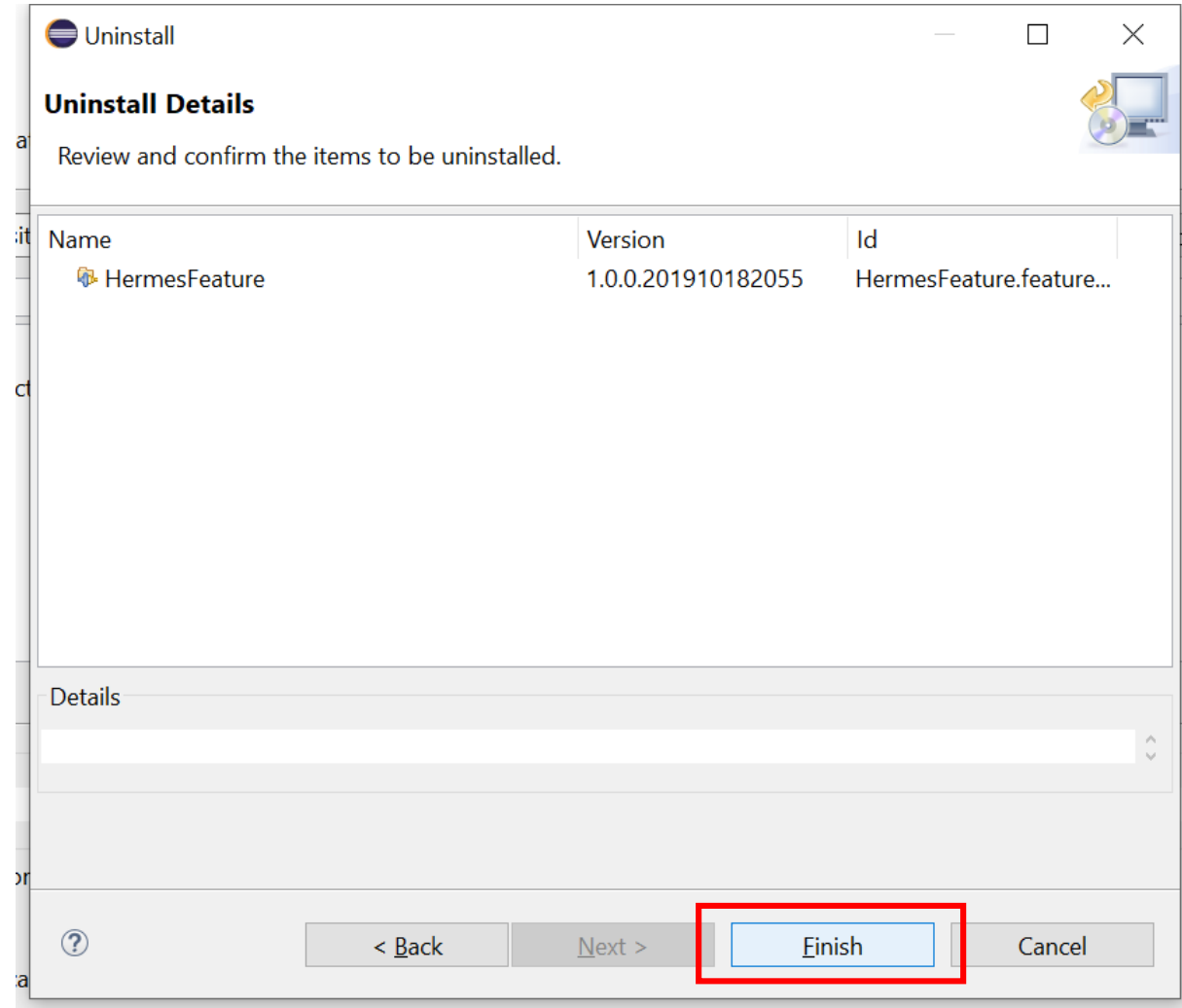
Click on: Already Installed



HermesFeature Uninstall



Click Finish



Restart Eclipse

