CEC Continuing Education Center

DesignNews

Raspberry Pi 5 Automation Lecture Series

Day 1:
Raspberry Pi 5 Automation Toolbox

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Webinar Logistics

- Turn on your system sound to hear the streaming presentation.
- If you have technical problems, click “Help” or submit a question asking for assistance.
- Participate in ‘Attendee Chat’ by maximizing the chat widget in your dock.

Fred Eady

Visit ‘Lecturer Profile’ in your console for more details.

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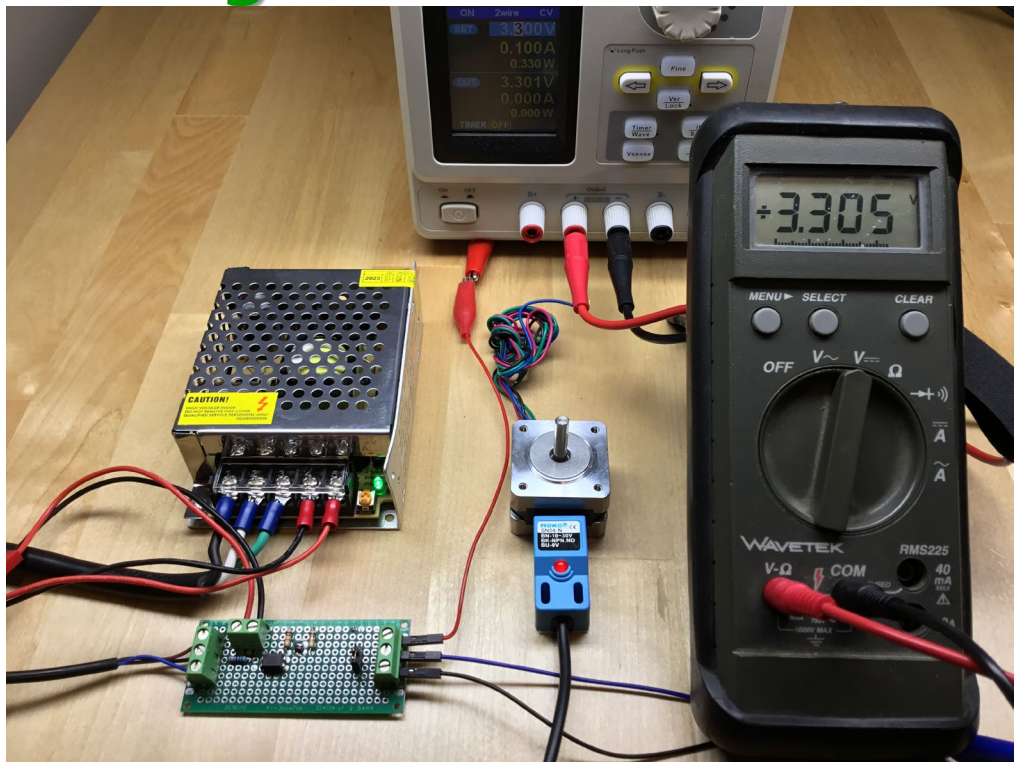
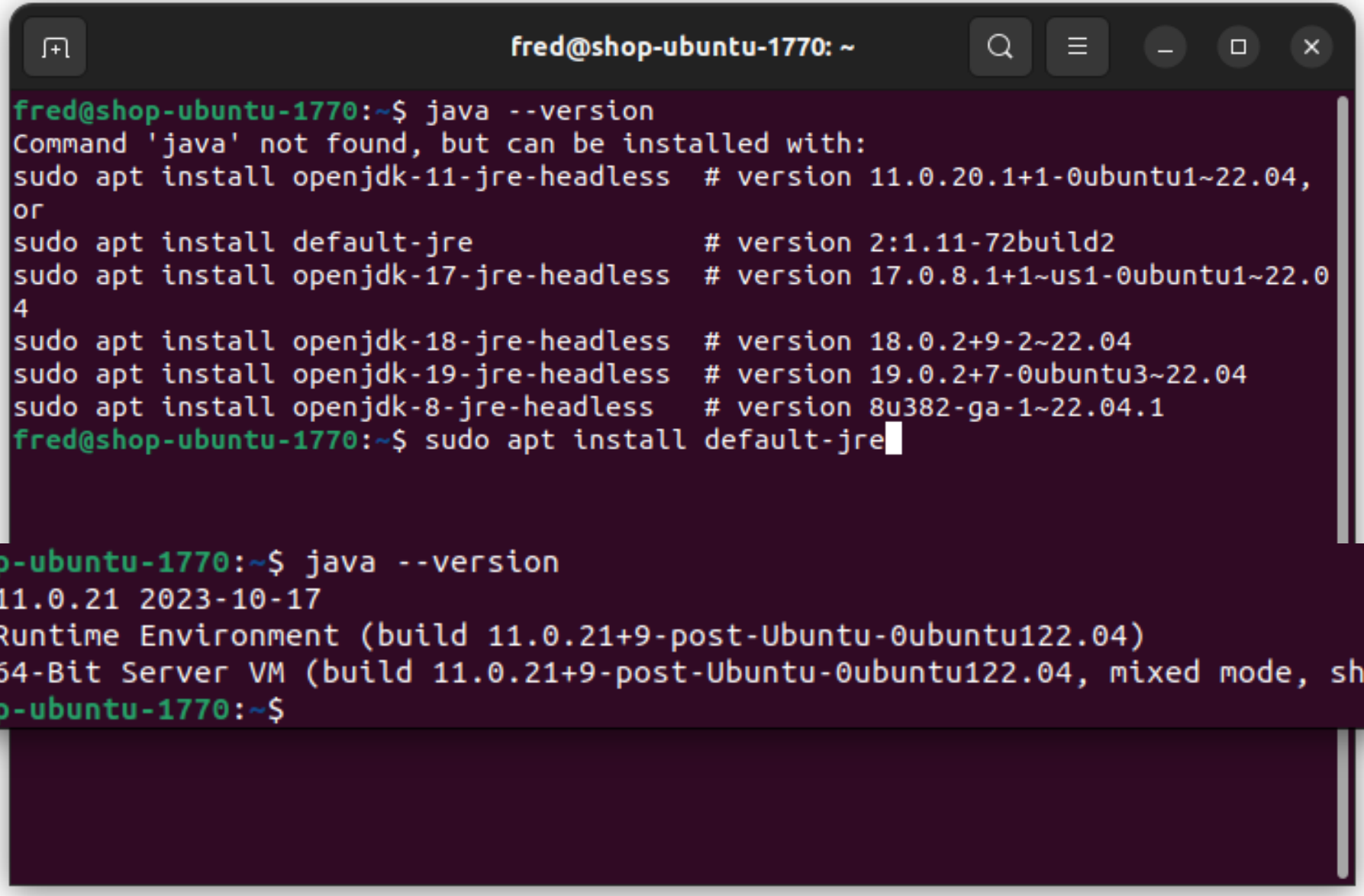
AGENDA

DigiKey

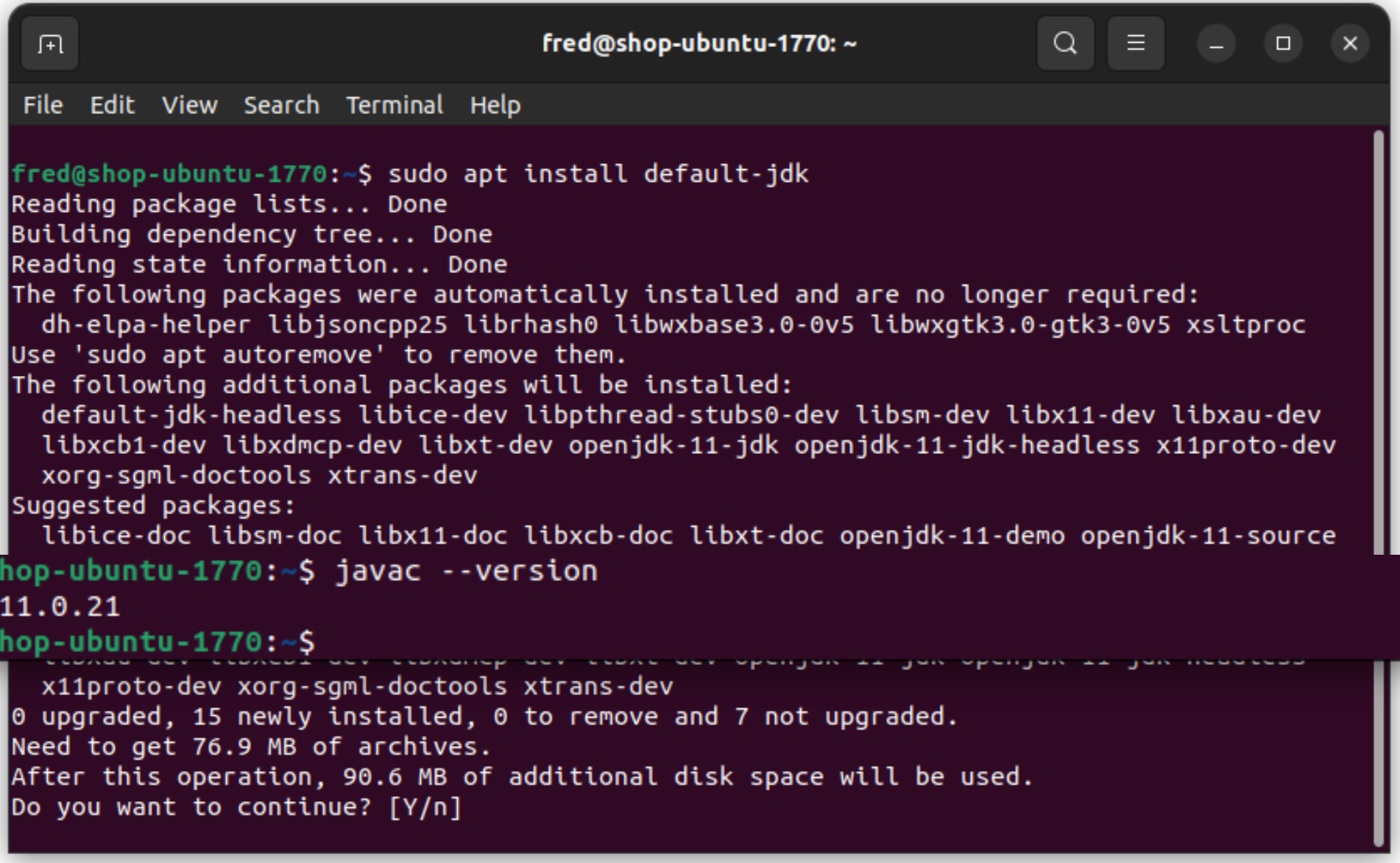
- Install Java JRE and Java SDK
- Install and Configure Eclipse
- Install PyDev
- Install and Configure Visual Studio Code
- Construct an Electromagnetic Sensor Interface



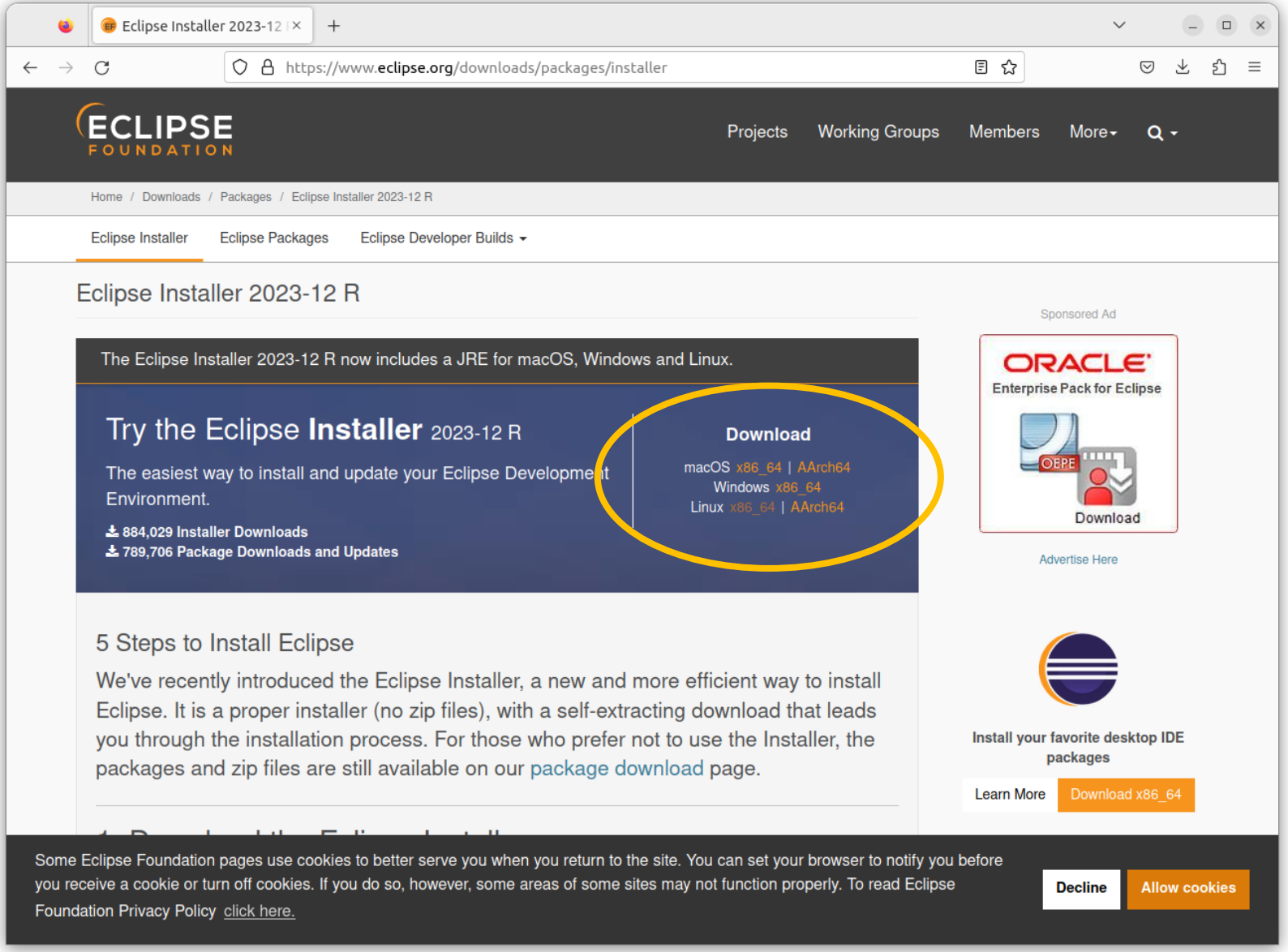
Install Default Ubuntu Version of Java JRE



Install the Default Ubuntu Version of Java JDK



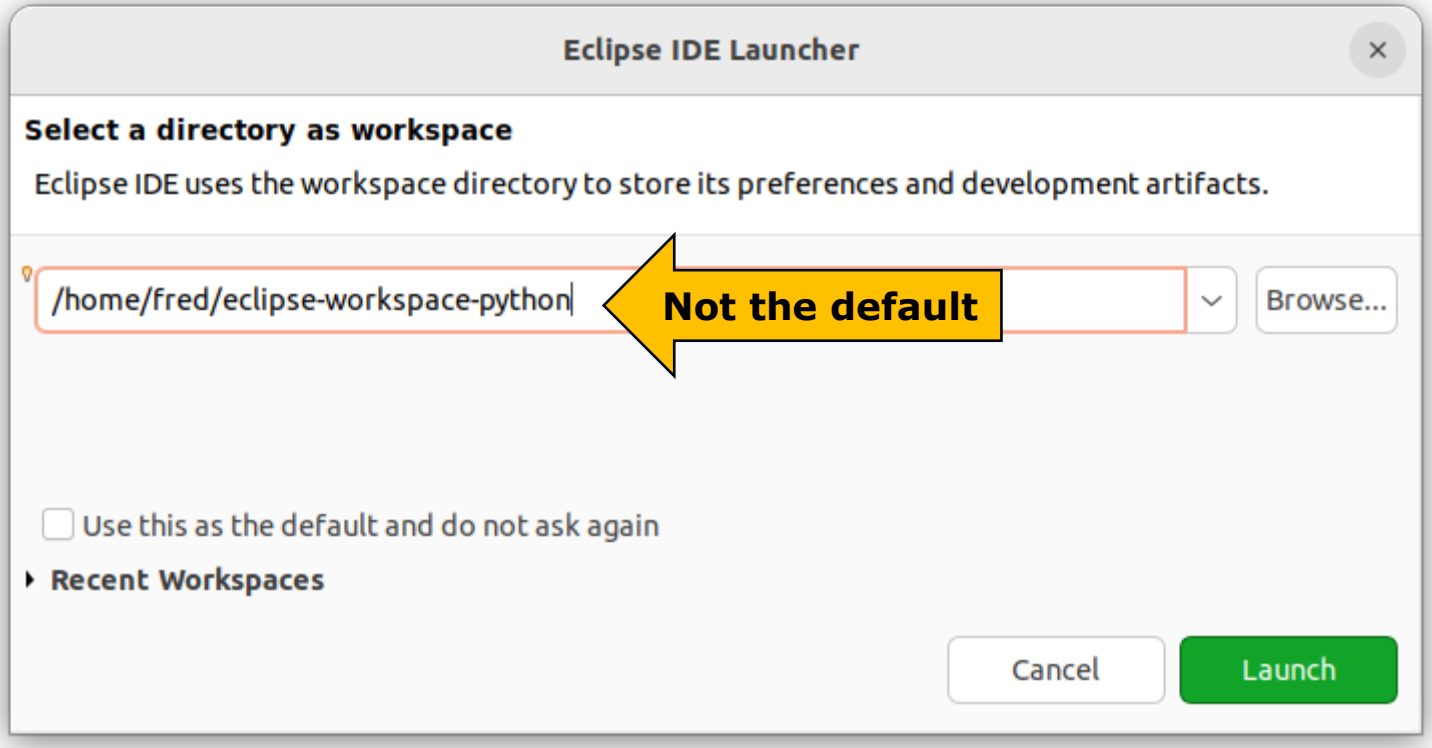
Install Eclipse



Install Eclipse

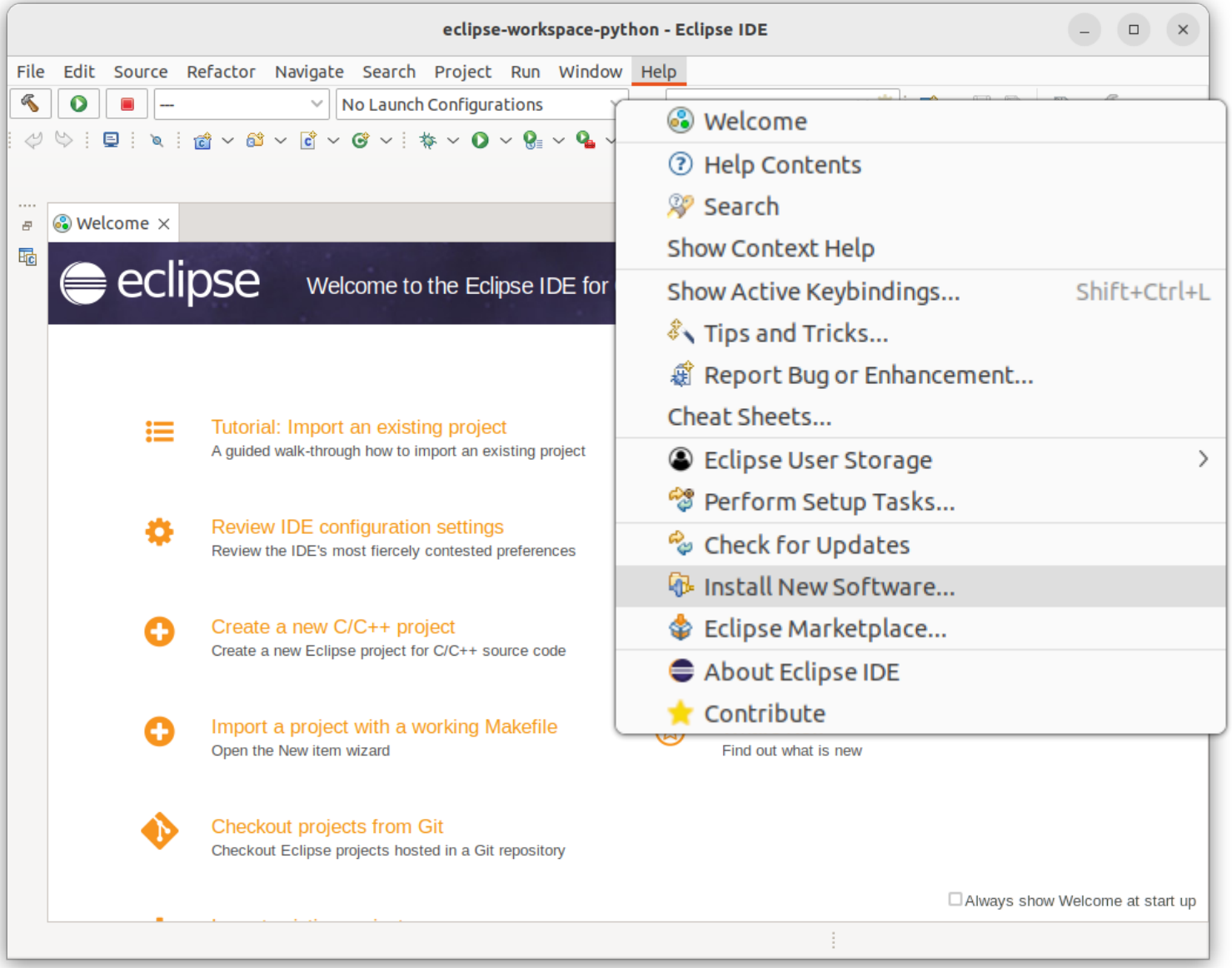
Install This One

Launch Eclipse

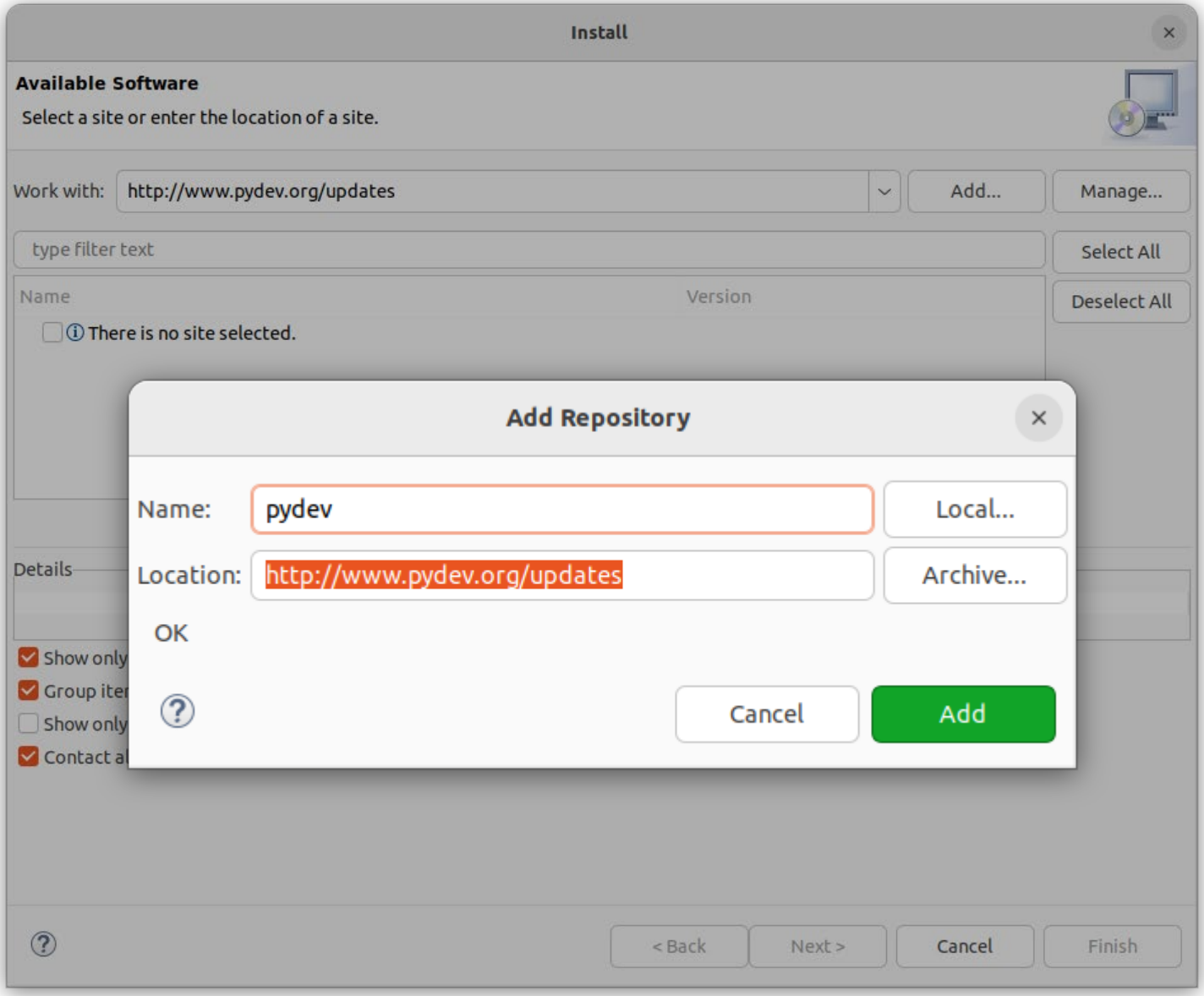


To configure Eclipse SSH capability reference *raspberrypi5_eclipse_how_to.pdf* in today's download package.

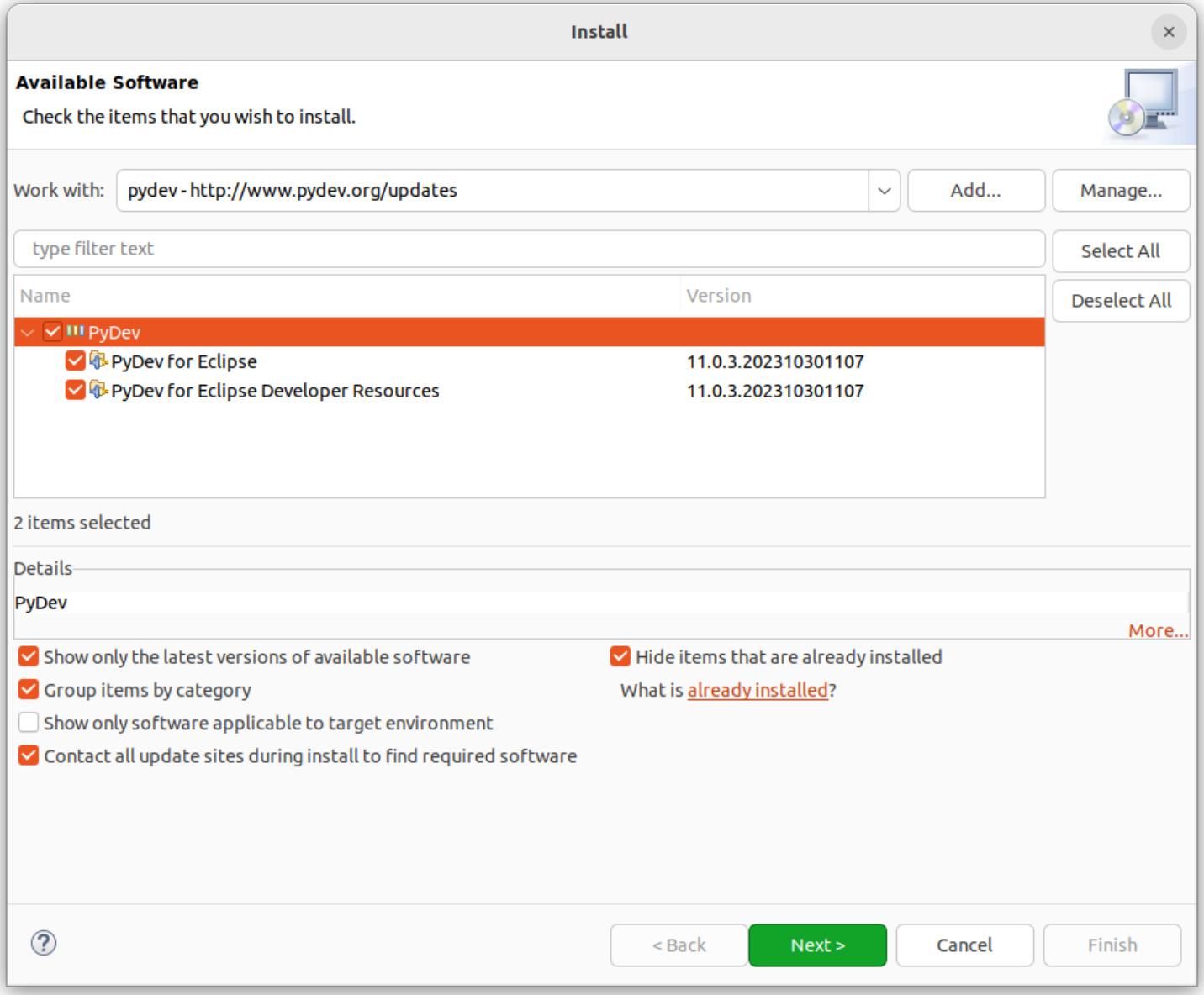
Install the PyDev for Eclipse Plugin



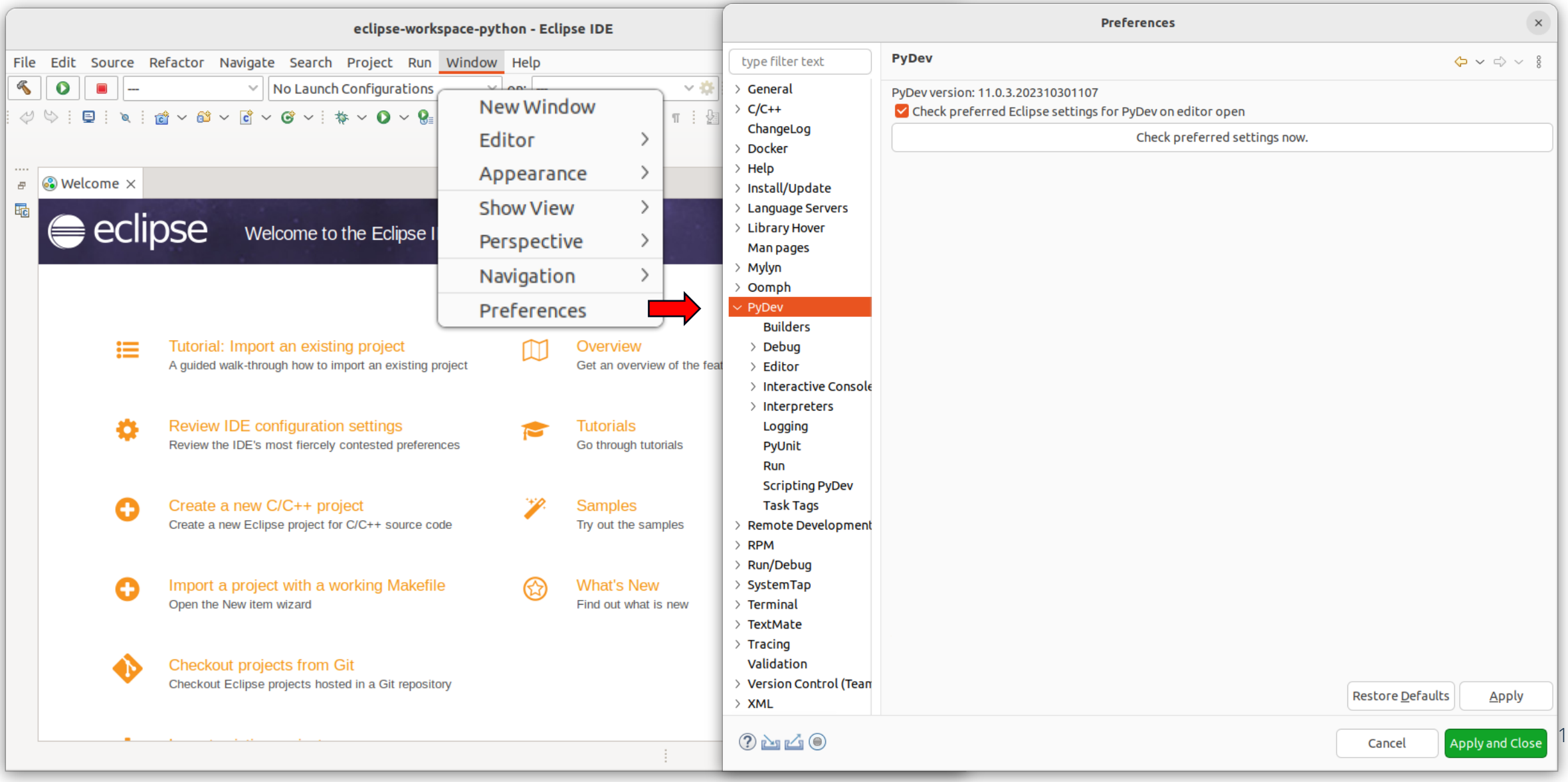
Point to the PyDev Repository



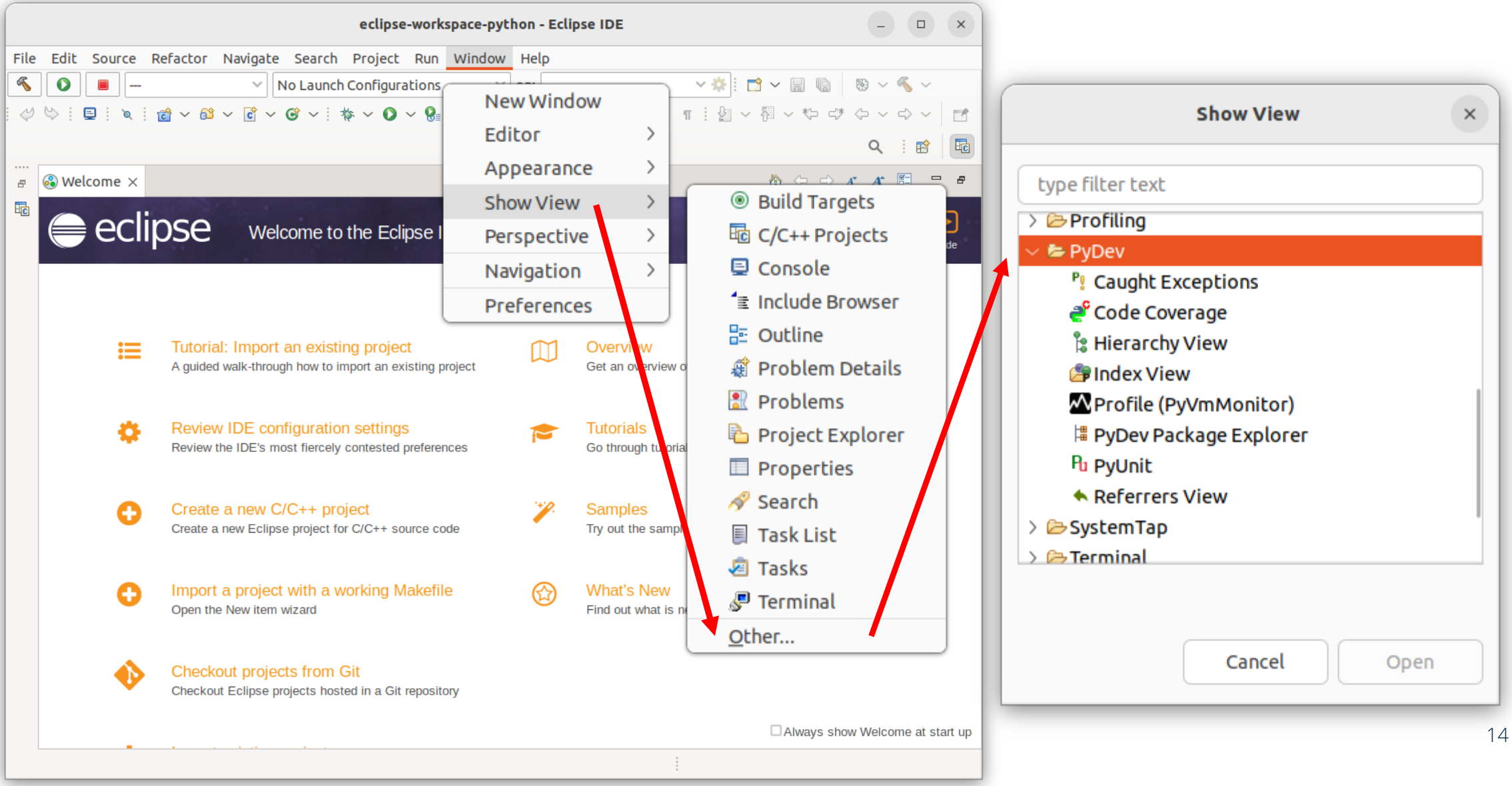
Download and Install PyDev for Eclipse Plugin



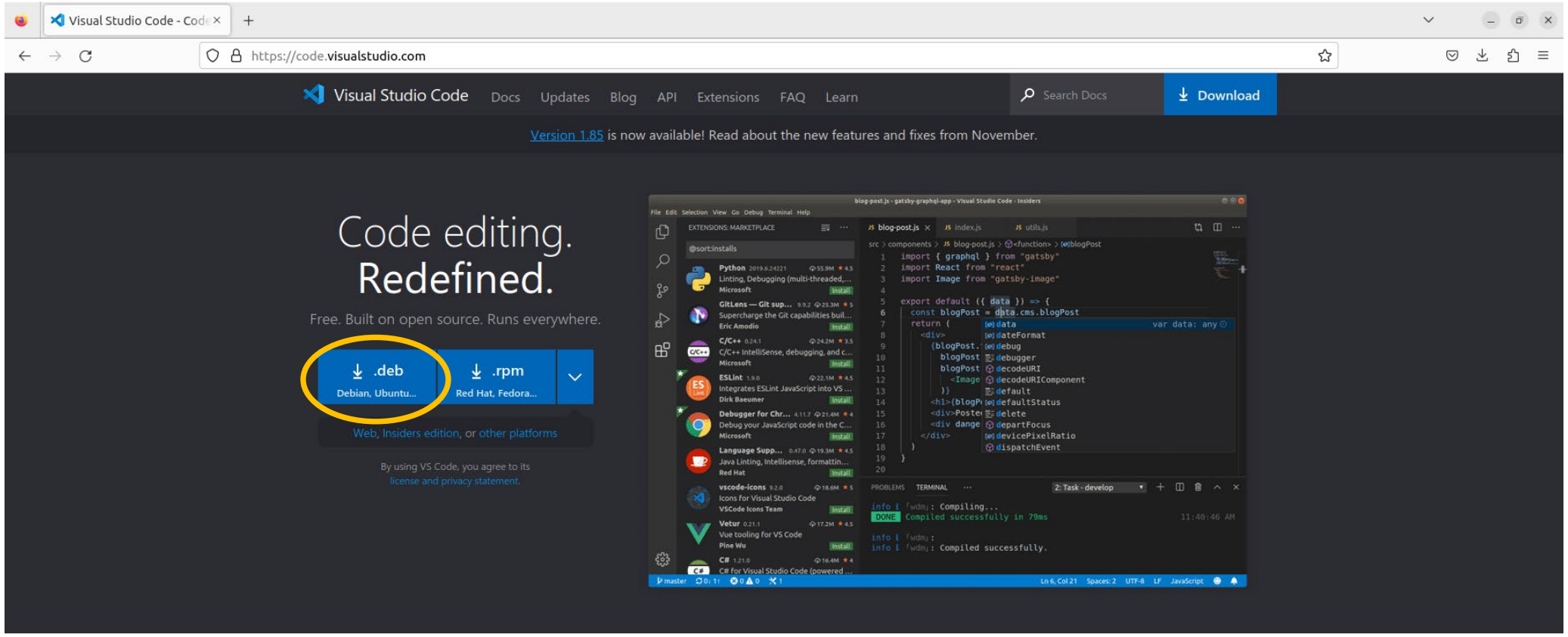
Verify the PyDev Installation



PyDev Views


eclipse-workspace-python - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
No Launch Configurations
New Window
Editor
Appearance
Show View
Perspective
Navigation
Preferences
Build Targets
C/C++ Projects
Console
Include Browser
Outline
Problem Details
Problems
Project Explorer
Properties
Search
Task List
Tasks
Terminal
Other...
Welcome
eclipse
Welcome to the Eclipse I
Tutorial: Import an existing project
A guided walk-through how to import an existing project
Review IDE configuration settings
Review the IDE's most fiercely contested preferences
Create a new C/C++ project
Create a new Eclipse project for C/C++ source code
Import a project with a working Makefile
Open the New item wizard
Checkout projects from Git
Checkout Eclipse projects hosted in a Git repository
Always show Welcome at start up
Show View
type filter text
Profiling
PyDev
Caught Exceptions
Code Coverage
Hierarchy View
Index View
Profile (PyVmMonitor)
PyDev Package Explorer
PyUnit
Referrers View
SystemTap
Terminal
Cancel
Open

Install Visual Studio Code

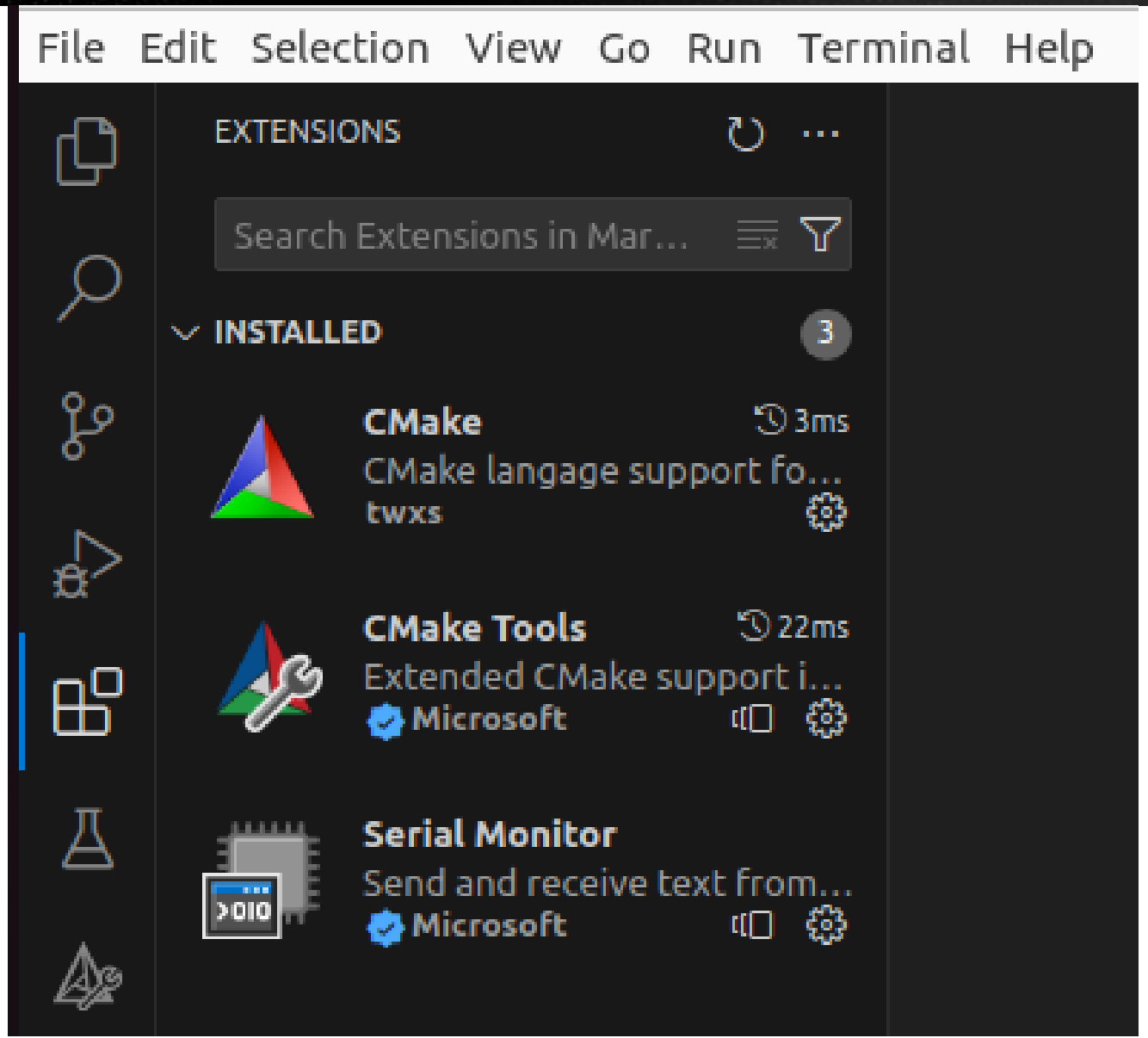


IntelliSense | Run and Debug | Built-in Git | Extensions

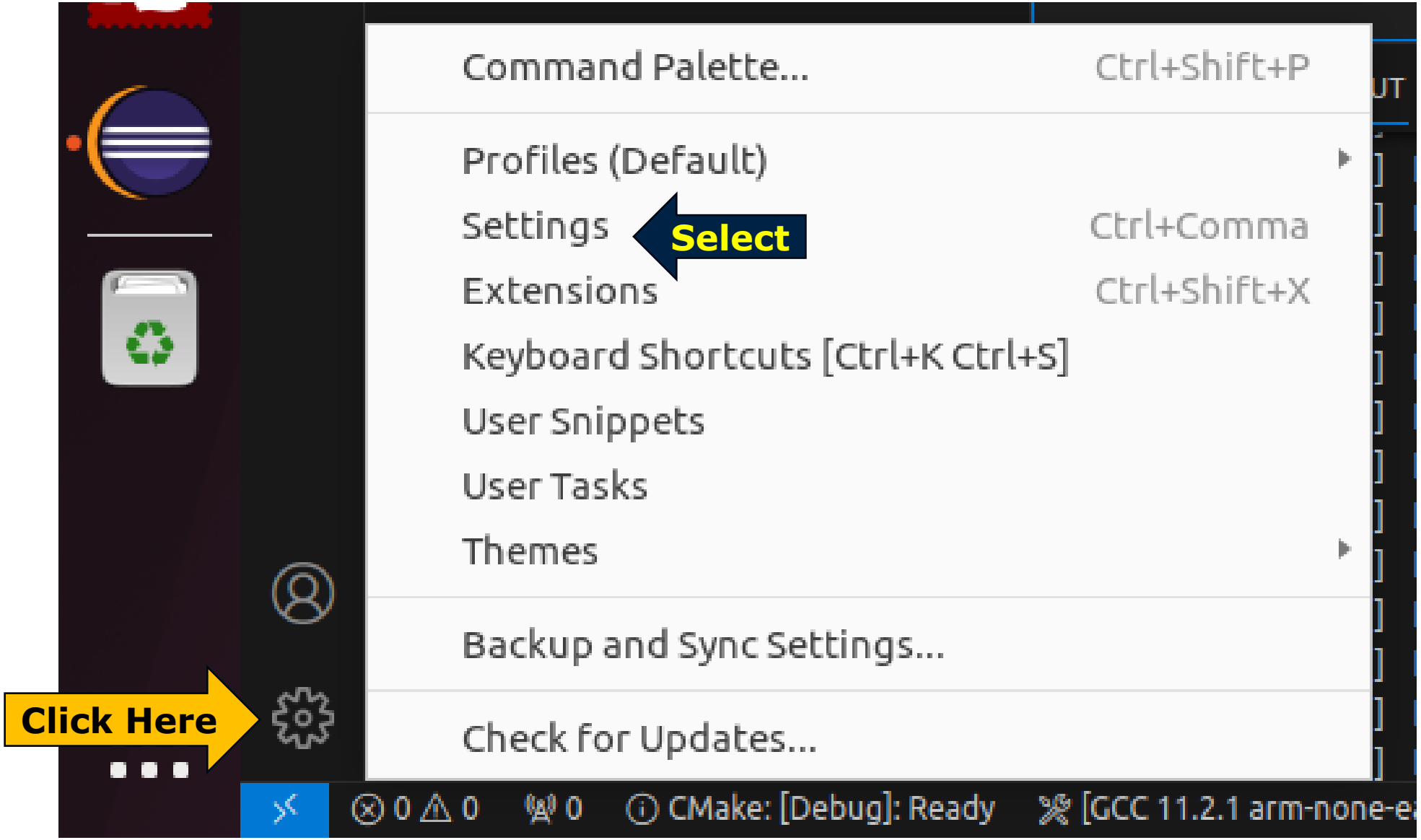
Meet IntelliSense.

Go beyond syntax highlighting and autocomplete with IntelliSense, which

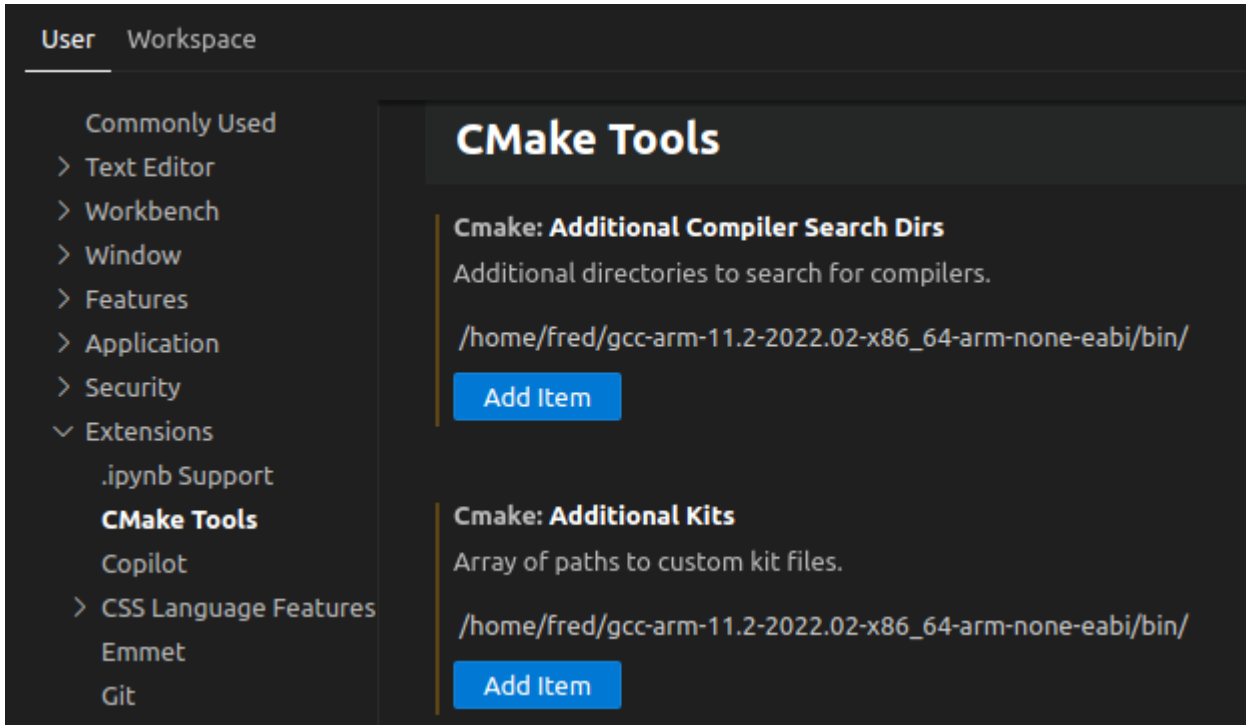
Install Visual Studio Code Extensions



Configure Visual Studio Code



Configure Visual Studio Code



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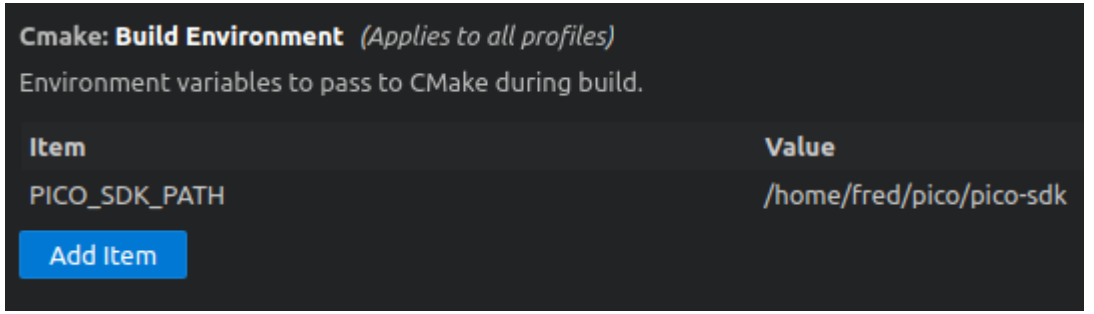
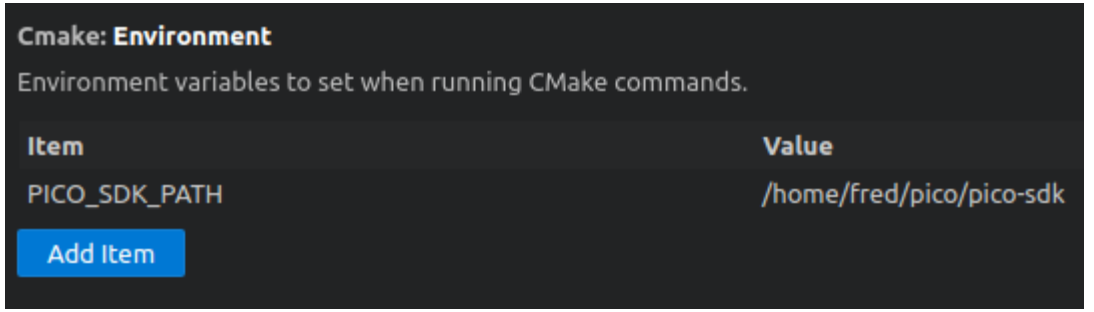
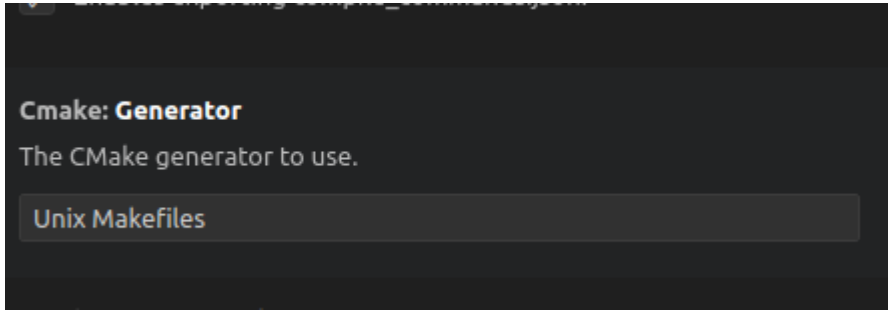
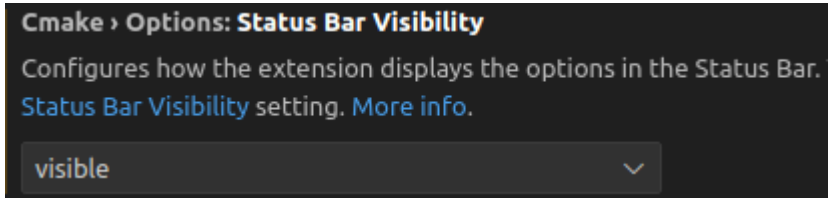
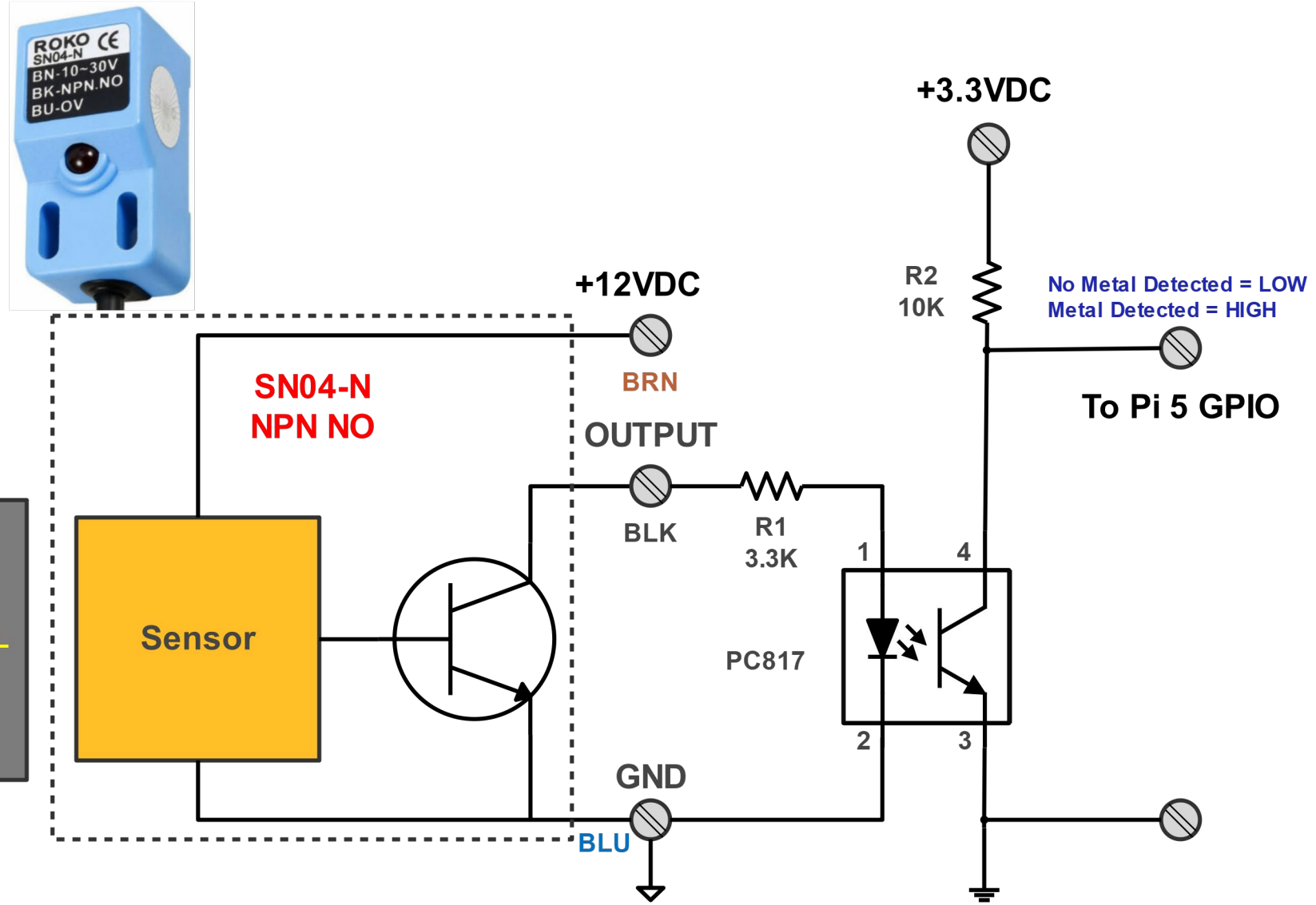




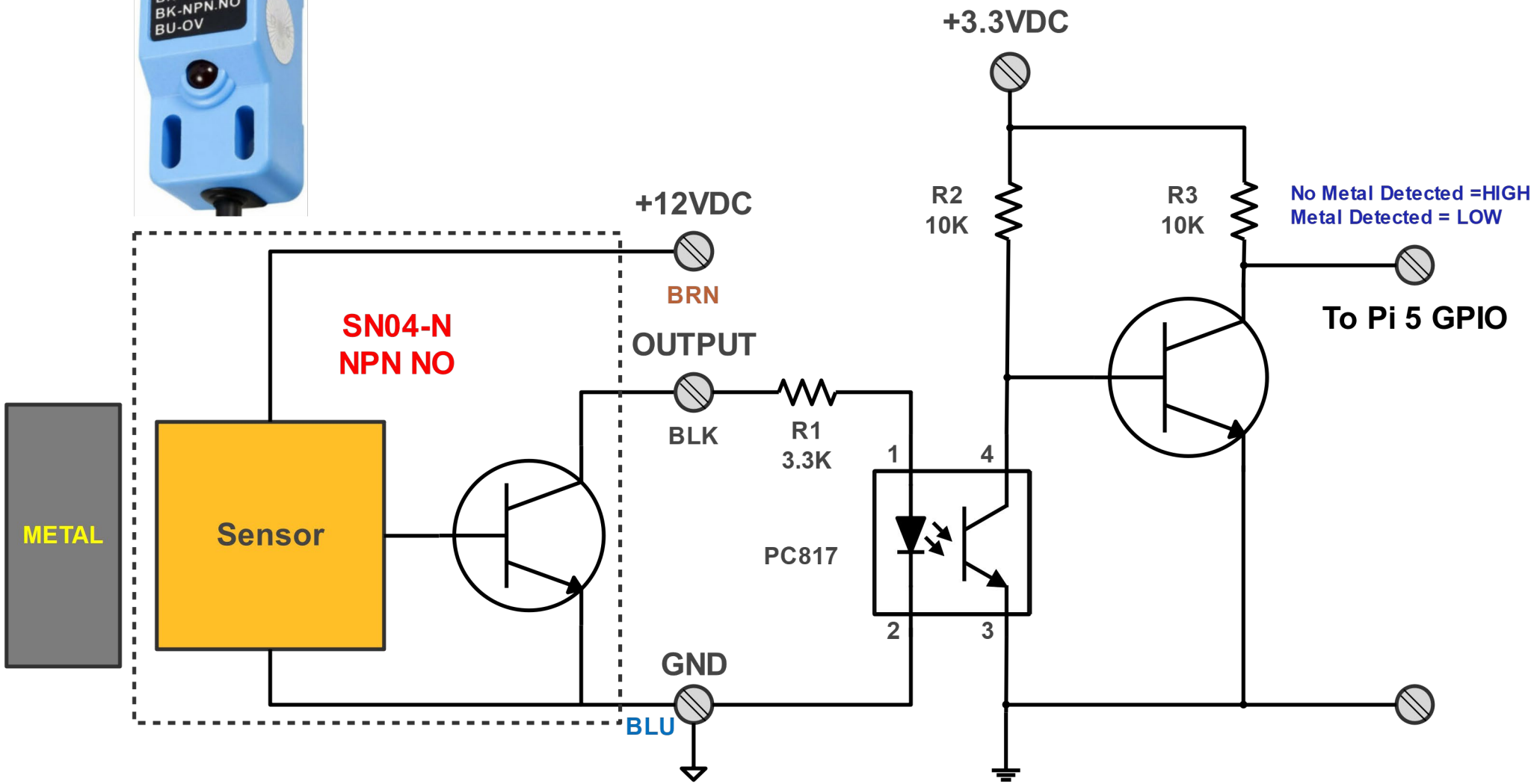




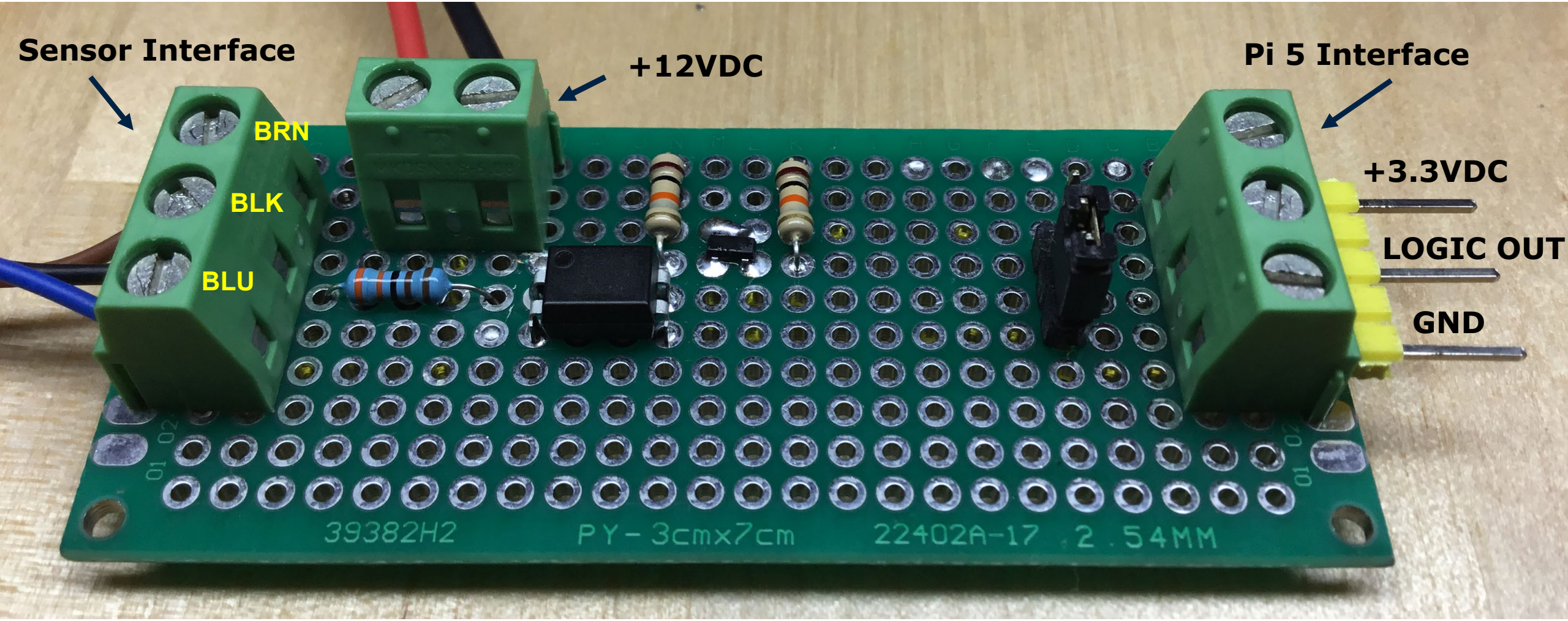
Opto-Isolated SN04-N Noninverted Output Interface



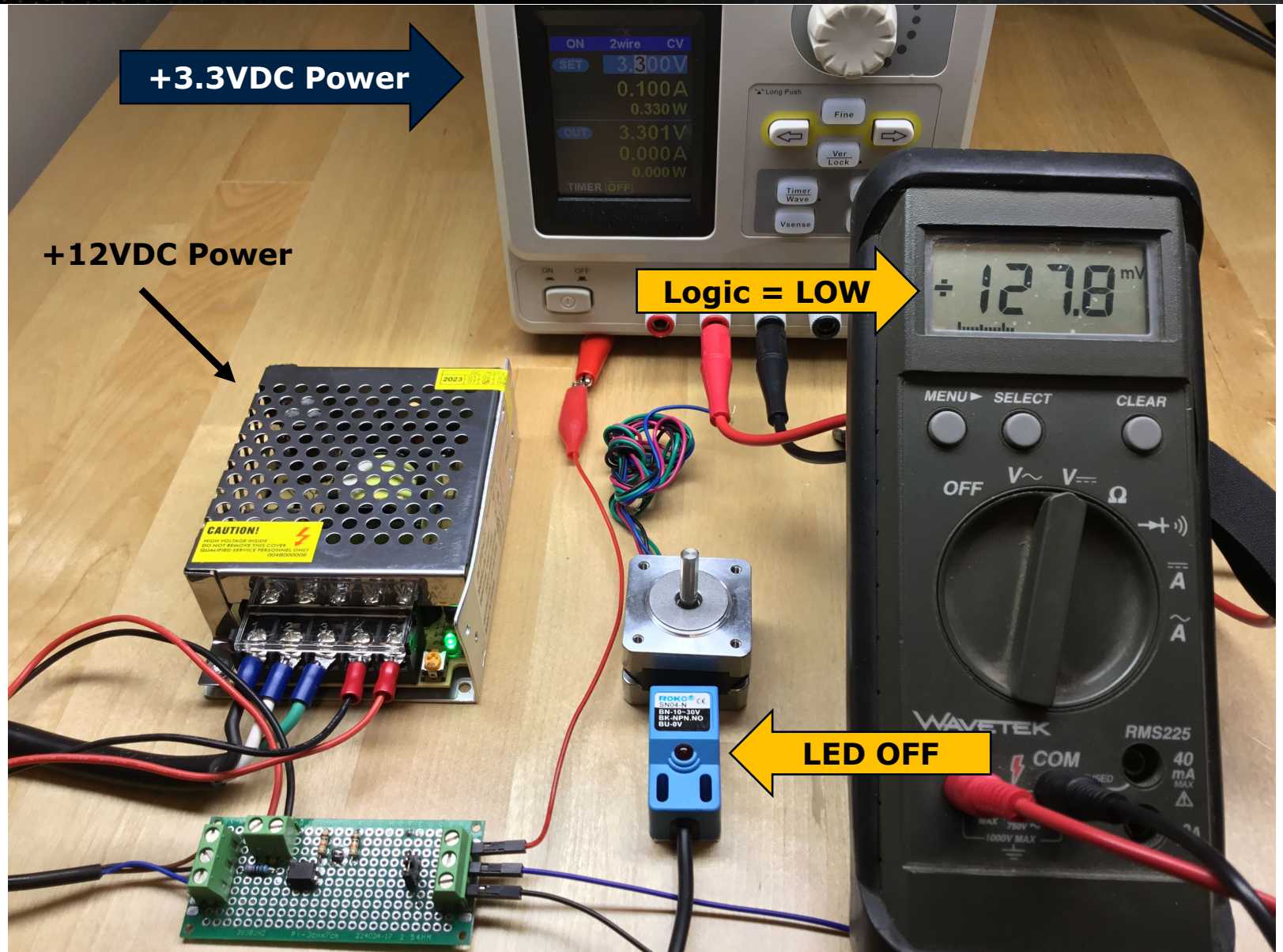
Opto-Isolated SN04-N Inverted Output Interface



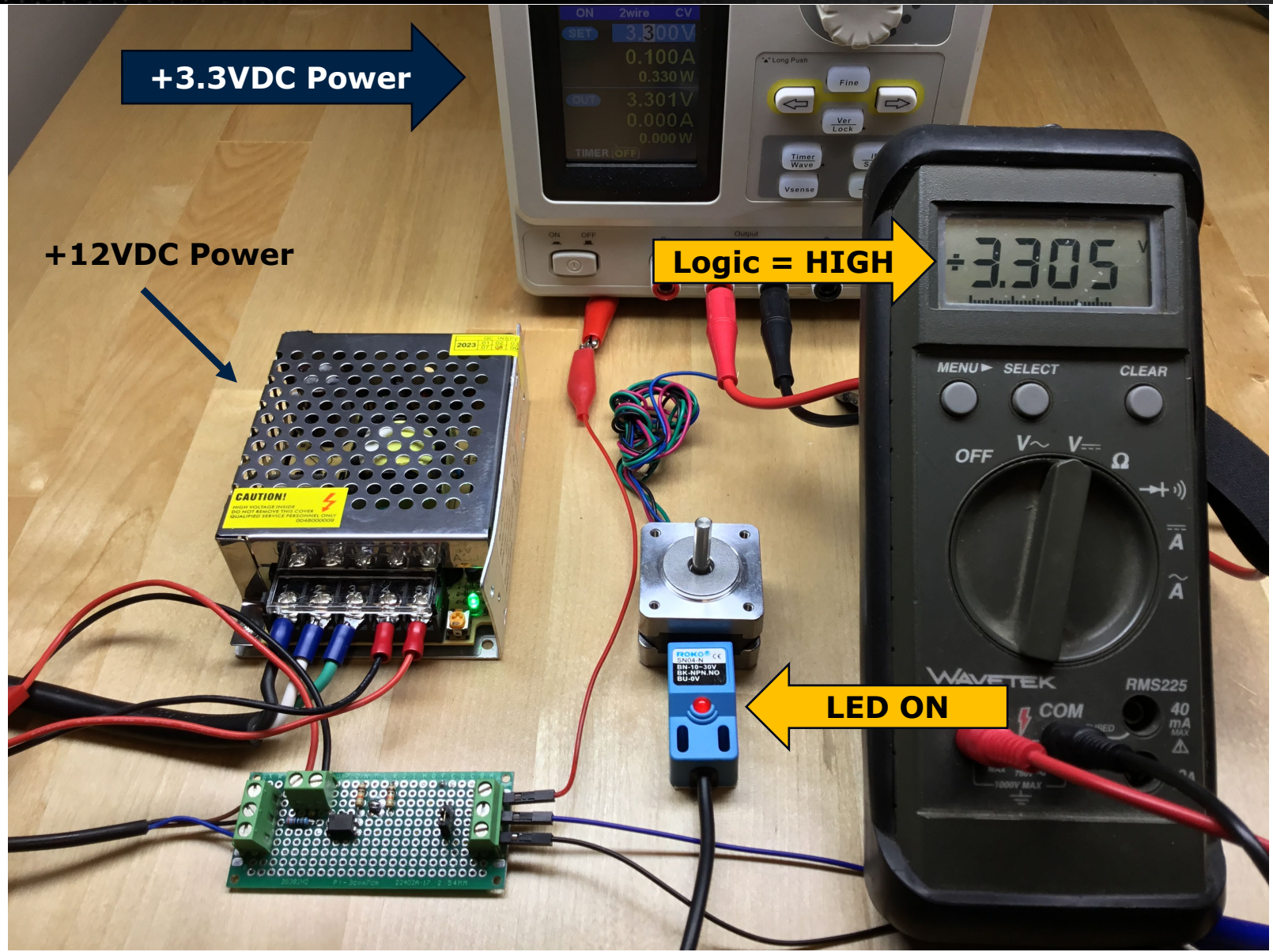
Opto-Isolated SN04-N Output Interface



Metal Not Detected (Noninverted Output)



Metal Detected (Noninverted Output)



Next Time…

MORE TO COME..

Thank you for attending!!!

Please consider the resources below:

- Today's Download Package
- raspberrypi.org
- SN04-N Datasheet

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Thank You

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