Outline

1. Set up coding environment
   a. Terminal / WSL
   b. Install python3 and pip3
   c. Install visual studio code
2. Python fundamentals
3. Numpy, matplotlib, pandas and scipy

Terminal install (for Windows only)

Window 11
https://ubuntu.com/tutorials/install-ubuntu-on-wsl2-on-windows-11-with-gui-support#1-overview

1 Overview

2 Install WSL

3 Download Ubuntu

4 Configure Ubuntu

Skip 5 and 6
5 Install and use a GUI package

6 Enjoy Ubuntu on WSL!

Windows 10
https://ubuntu.com/tutorials/install-ubuntu-on-wsl2-on-windows-10#1-overview

1 Overview

2 Install WSL

3 Download Ubuntu

4 Configure Ubuntu

Skip 5, 6, 7
5 Install your first package

6 Customising your Terminal with Windows Terminal Preview

7 Enjoy Ubuntu on WSL!

Linux and Windows
1. sudo apt-get update
2. sudo apt-get install python3 python3-pip

Mac
1. Install homebrew
2. brew install python3 python3-pip

Install vscode: https://code.visualstudio.com/

Install vscode extensions
Must have: Python, Pylance, Code Runner
Recommend: Guides, TODO Highlight, vscode-icons

(speaker note: generally introduce vscode and how to use it)

Python

https://www.learnpython.org/
Numpy, matplotlib, pandas, scipy
More advanced topics: parallel, The book "High Performance Python"