# Intro to Python

DATA ANALYSIS, VISUALIZATION, AND SCRIPTING

# AGENDA

- 1. Get VS Code
- 2. Setup VS Code Environment
- 3. Code Basics!
- 4. Bioinformatics Crash Course

## INTSALL PYTHON

- 1. Google Python
- 2. Click "Download" for your computer version
- 3. Run the installation
- 4. Verify install in terminal
  - a. Type "Python" in your terminal and hit run



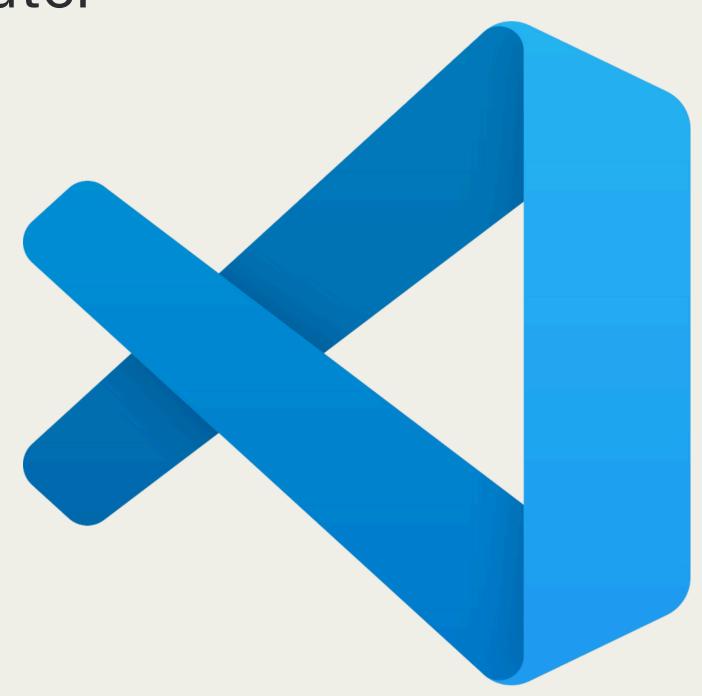
## INTSALL VS CODE

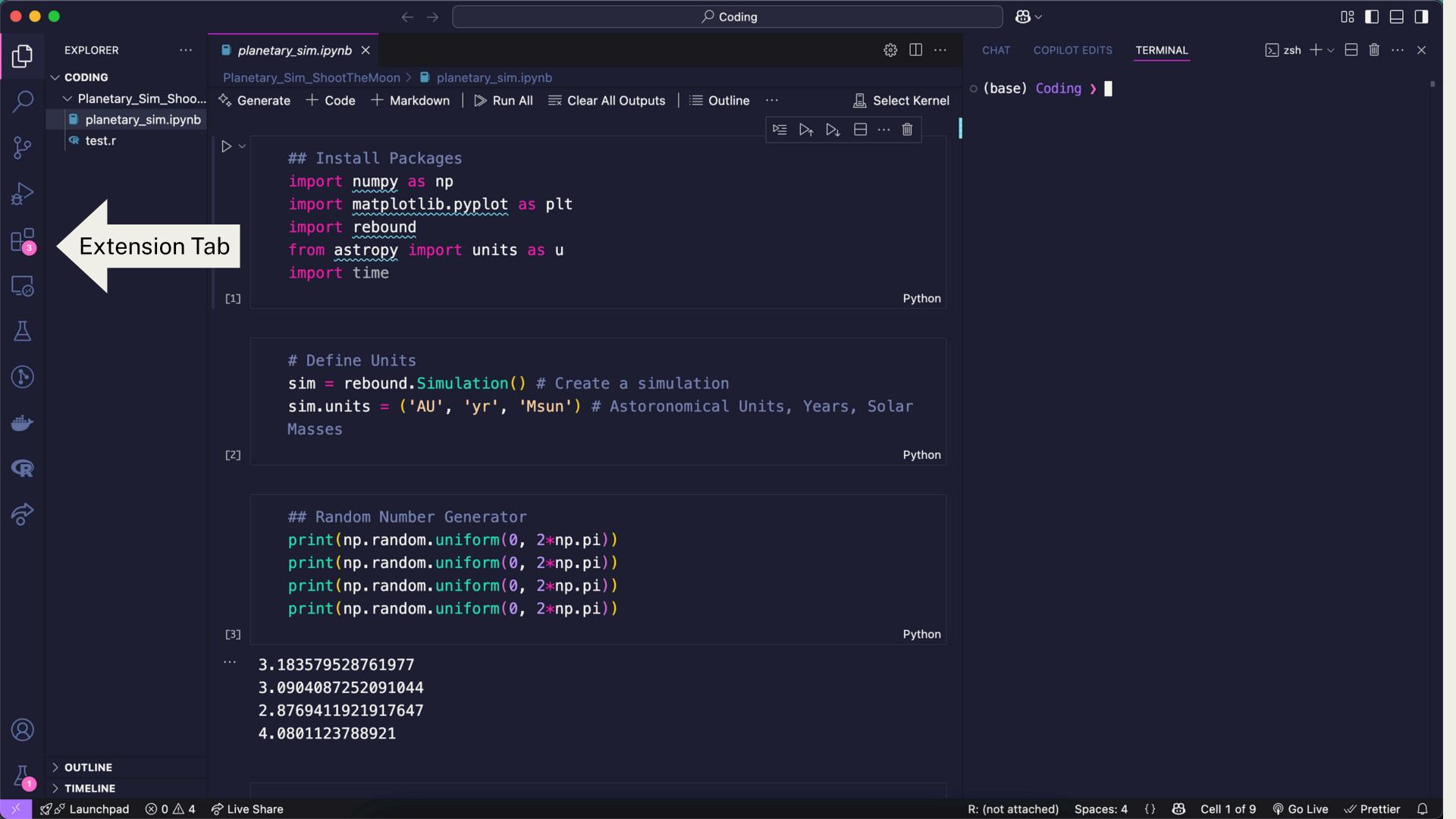
- 1. Google VS Code
- 2. Click "Download" for your computer

version

3. Open up VS Code

Lets take a quick tour!





# VS CODE EXTENSIONS

- 1. Download the following extensions:
  - a. Prettier
  - b. Path Autocomplete
  - c. Git
  - d. GitHub Copilot
  - e. Python
  - f. Rainbow CSV
  - g. Jupyter Notebooks

## MAKE A GITHUB ACCOUNT

- 1. When prompted, connect your GitHub to your VS Code, we will use this for AI integration (Copilot)
- 2. To make an account use whatever email you would like, GitHub is free, and once you have an account you can connect it to VS Code to enable Copilot



- Unlike R, Python is like a swiss army knife, able to do numerous things like automate your email, perform complex image analysis, and visualize your crashing stock portfolio, all in the same language
- In comparison, R is more specialized, meant for statistical analysis and visualization, and while it can be used for bioinformatics, typically there are more frameworks built on Python

## LETS GET CODING

- In the top left of your
  screen, click File, then
  "Open Folder" in VS Code
- Then open the folder I have sent in the Teams chat

