

FinTech @ IU Python Session #1 – Getting Started

Prepared by

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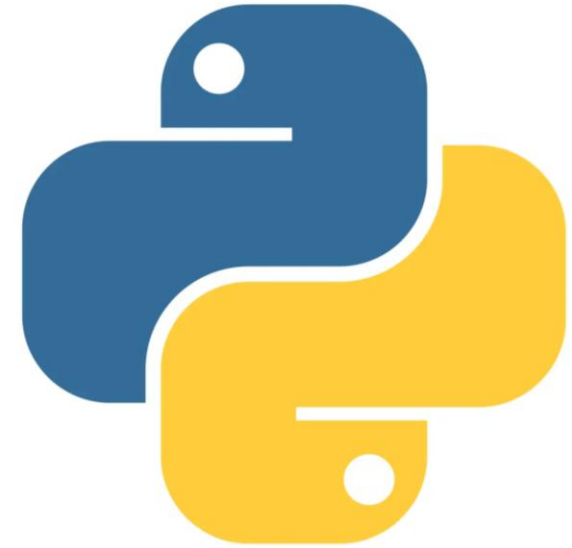
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Why Learn Python & Coding

- Most widely used programming language, allowing you to interface directly with your computer
- Knowing how to code empowers you to automate tasks, and to better understand AI, allowing you to get more out of it
- Easy and concise syntax makes it useful for data analysis
- Integrated into Excel
- Gives you the edge up on students



Printing “Hello Fintech” in Java (left) vs Python (right)

```
public class Main {  
    public static void main(String[] args) {  
        System.out.println("Hello Fintech!");  
    }  
}
```

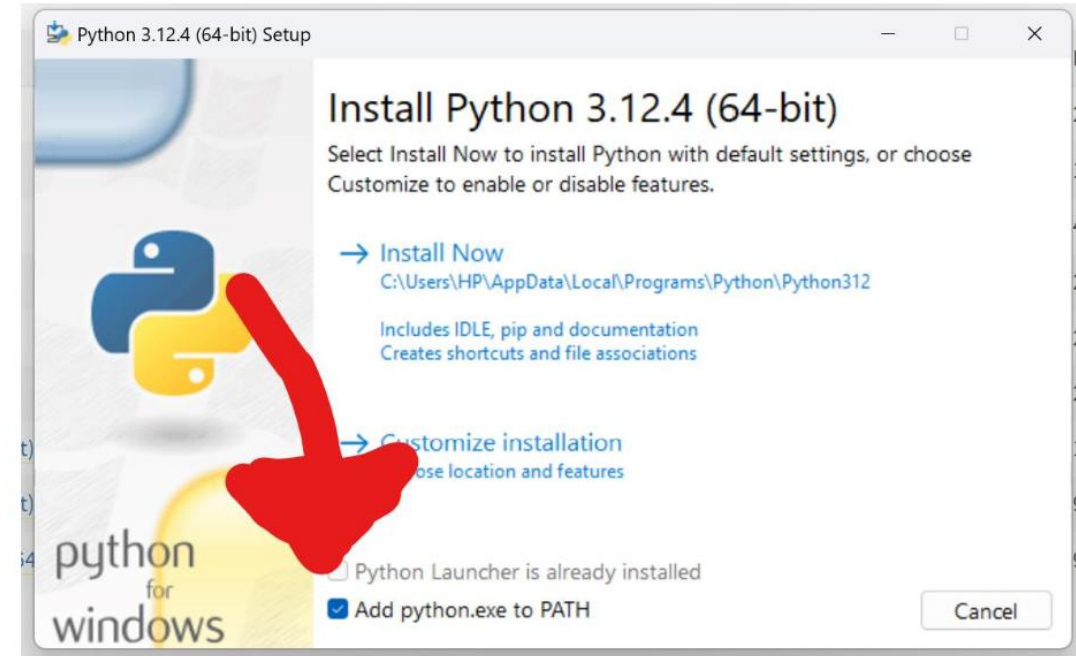
```
print("Hello Fintech")
```

Python Installation

- Navigate to <https://www.python.org/downloads/>



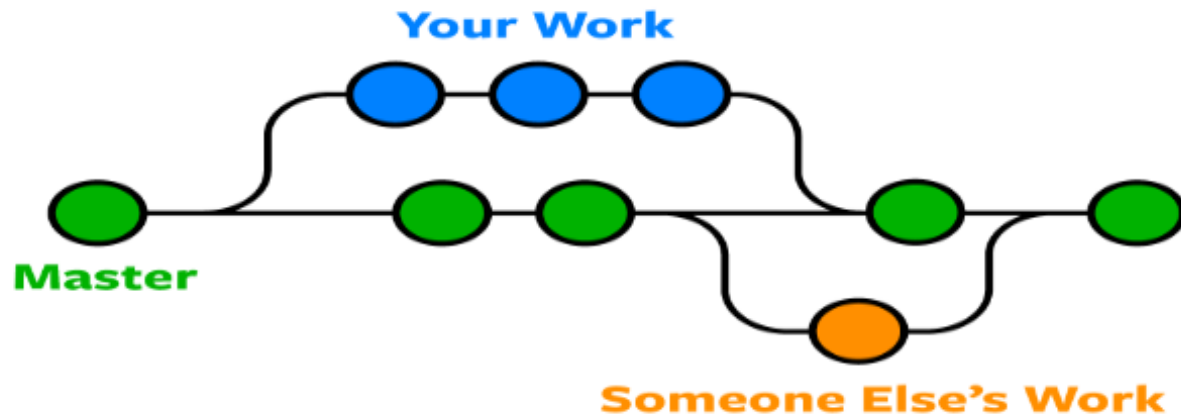
Download the latest version of Python, and most then open the installer. Go with default options, BUT →



Make sure to check to add Python to PATH !!

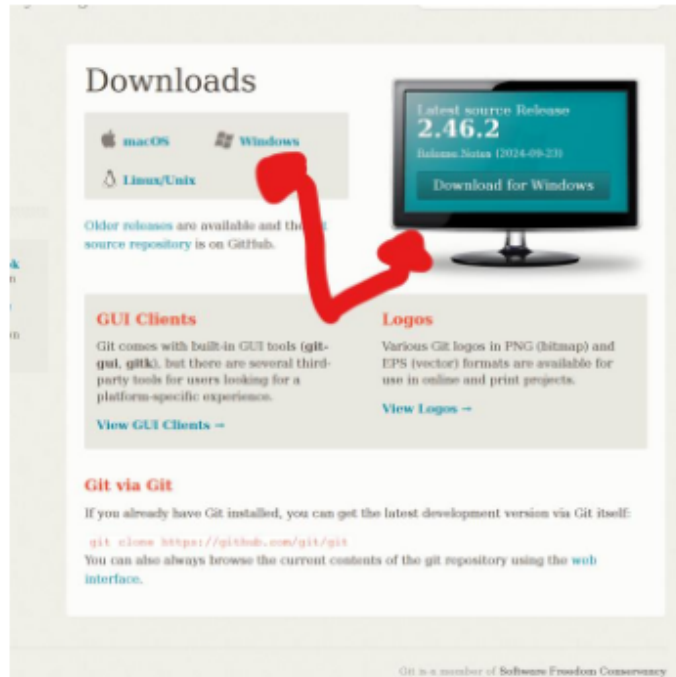
Why Install and Use GIT

- Go-to version control system
- Allows multiple people to work on one project separately
- People can “pull” updated versions of the code to their machine and “push” and “commit” changes they have made
- Kind of like a well-managed shared Google Doc

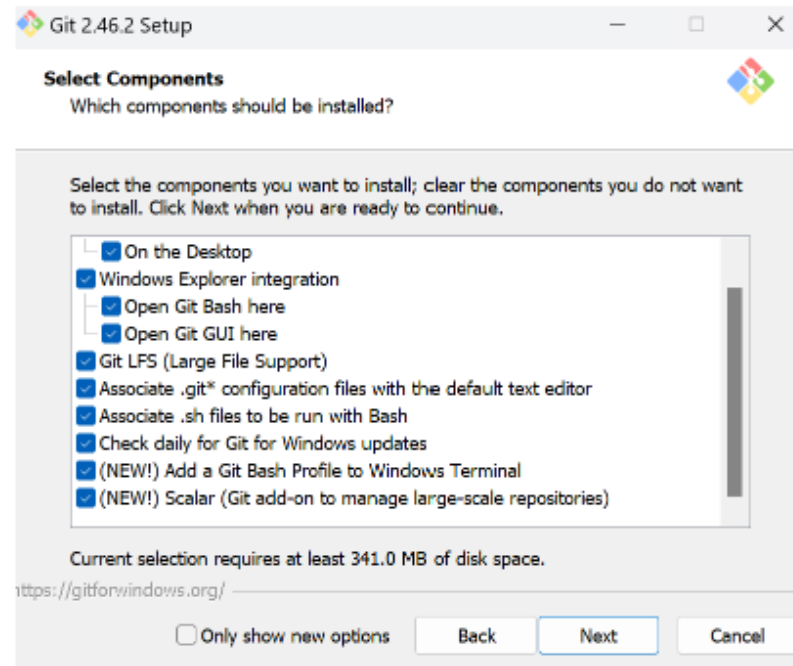


Install Git

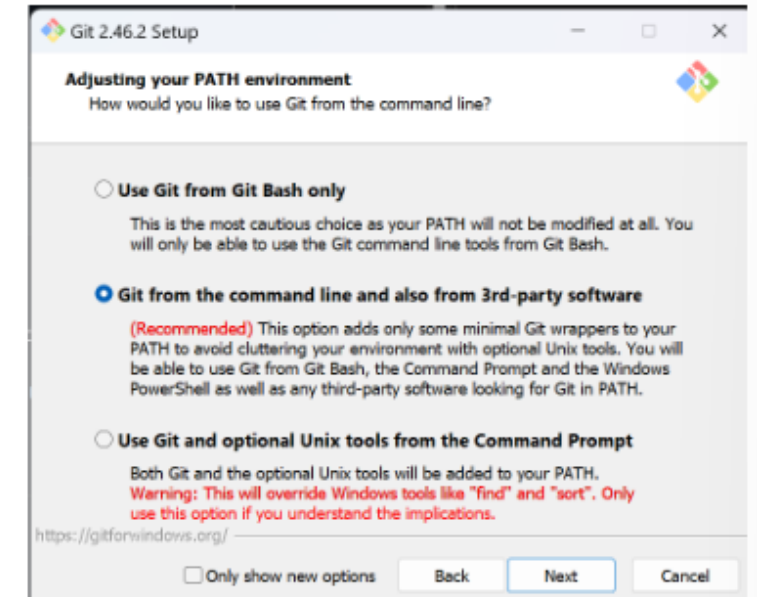
- Navigate to <https://git-scm.com/downloads>



1. Download and open the installer.



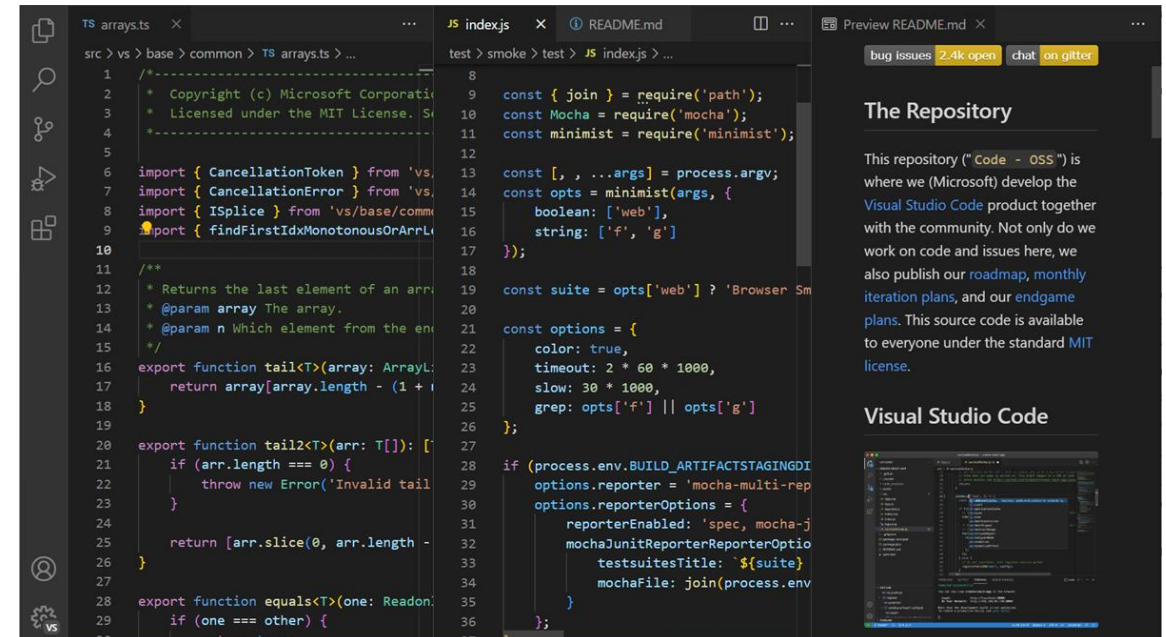
2. Check all options!



3. Go for the middle option.

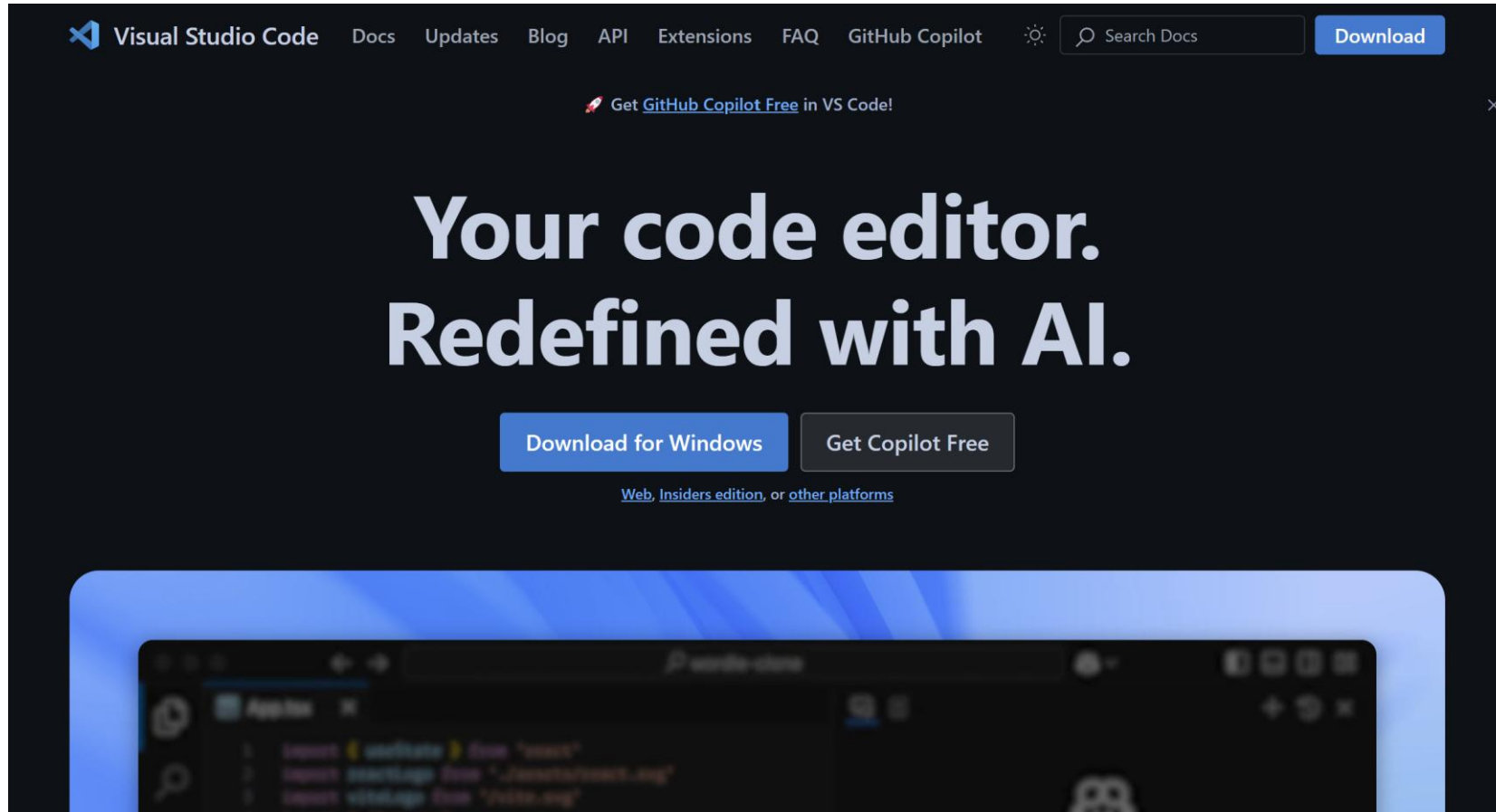
Why Install and Use VS Code

- Allows the user to access, change, and run code
- One of the most widely used code editor with plenty of extensions
- This is where we will be coding



Installing VS Code

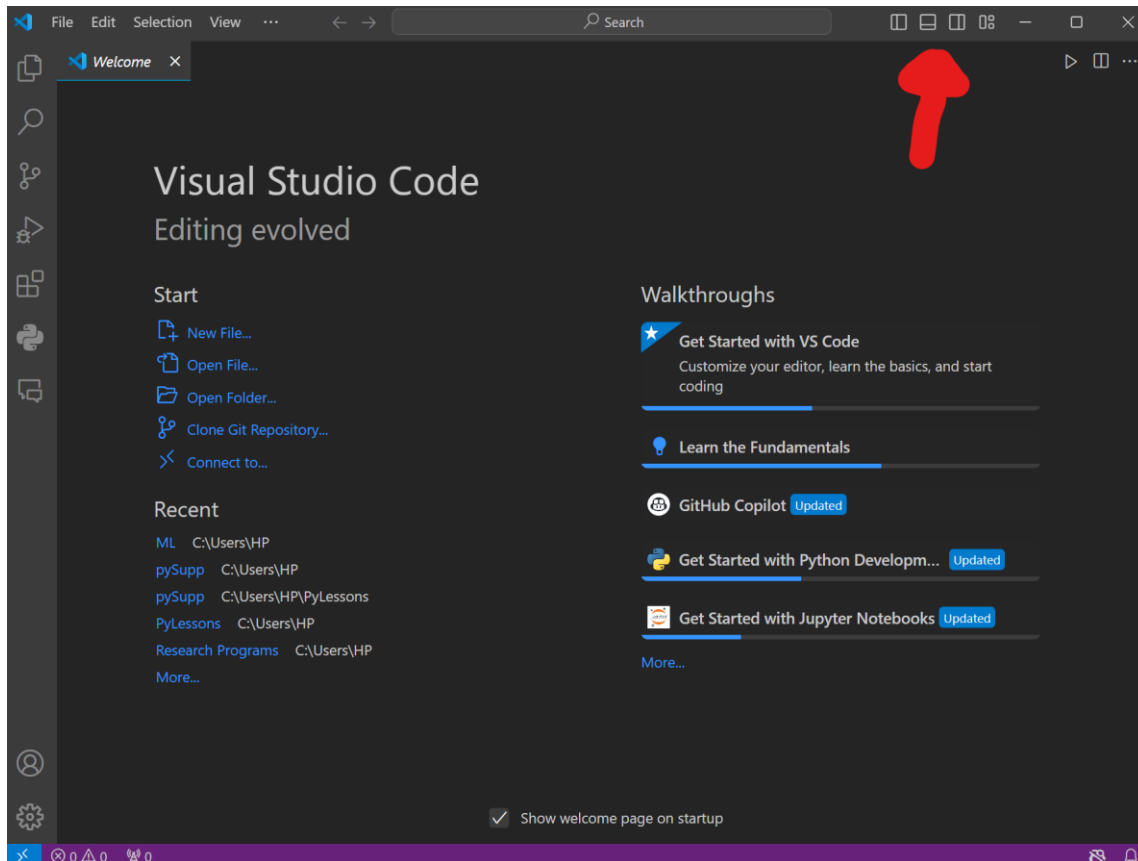
- Navigate to <https://code.visualstudio.com/>



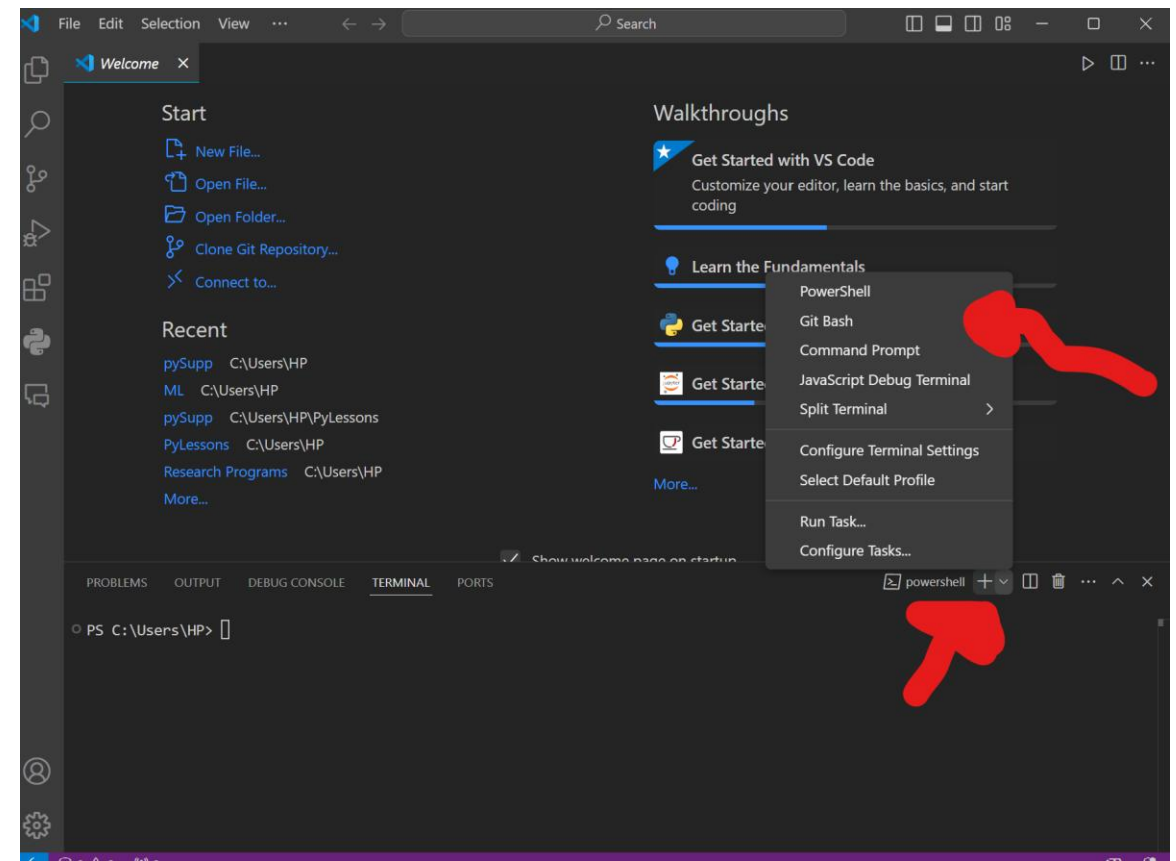
Follow setup in the .exe with default configs

Setting Up Our First Project

- Open VS Code!



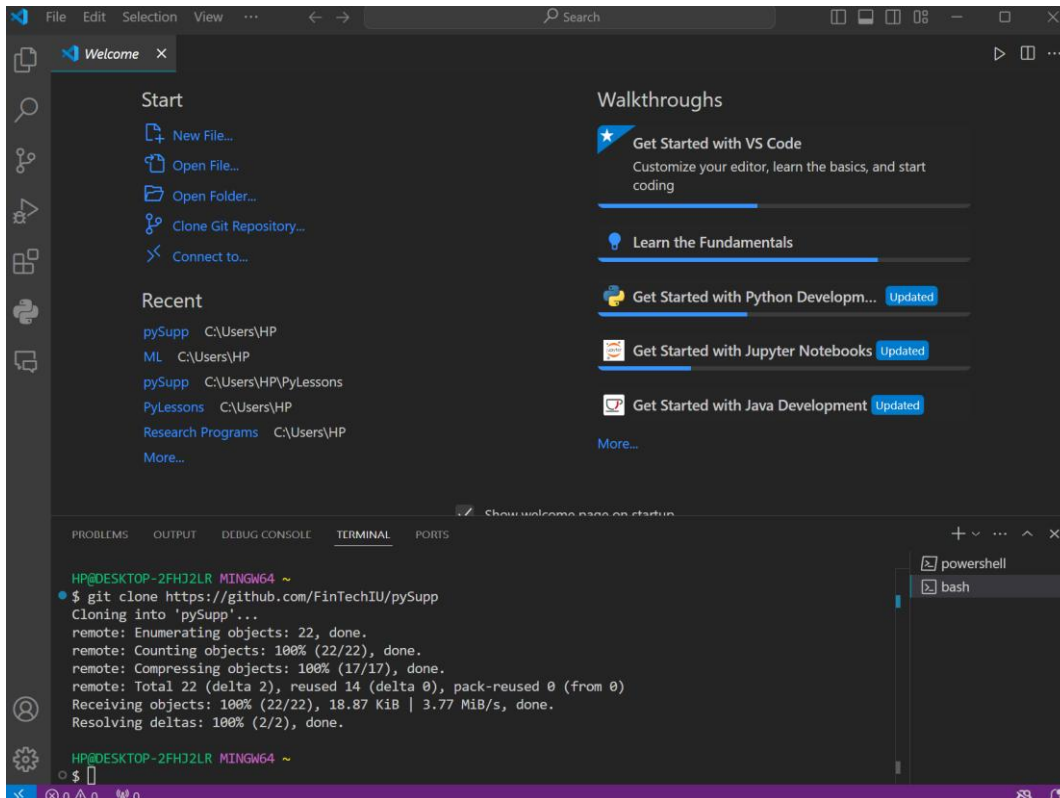
1. Navigate to the top right and click on the second from the left option to open the terminal.



2. Click on the dropdown by “powershell” and click on “Git Bash in the options.

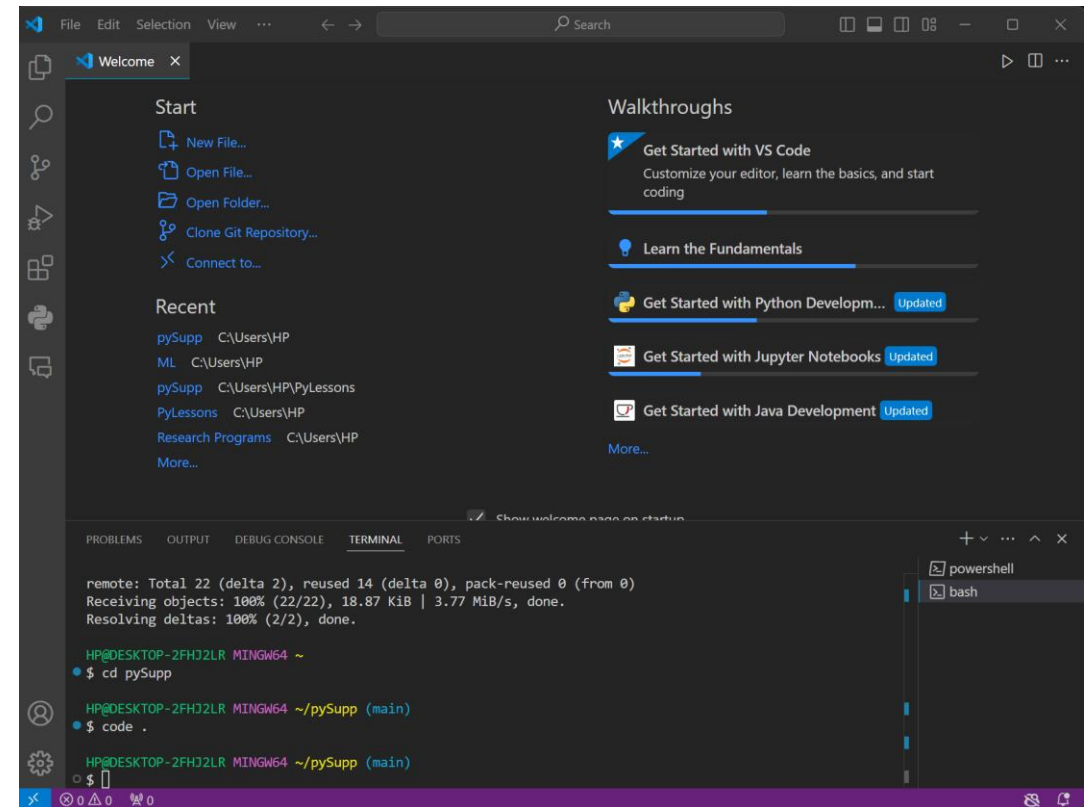
Setting Up Our First Project Cont.

- This is the difficult part, don't worry!



The screenshot shows the Visual Studio Code interface. The terminal at the bottom displays the command `git clone https://github.com/FinTechIU/pySupp` and its output, indicating a successful clone. The file explorer on the left shows the cloned repository structure, including folders like `pySupp` and `ML`.

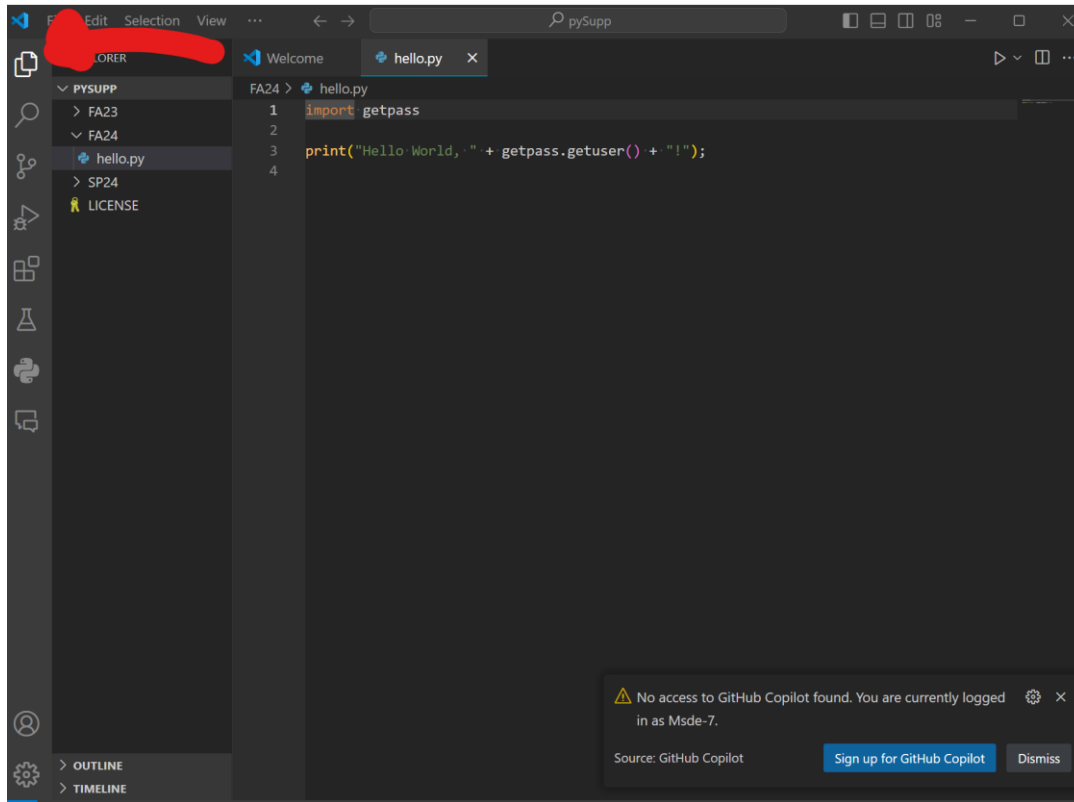
3. Type in “`git clone https://github.com/FinTechIU/pySupp`” by the \$ and press enter.



The screenshot shows the Visual Studio Code interface. The 'Start' panel on the left lists options like 'New File...', 'Open File...', and 'Open Folder...'. The 'Walkthroughs' panel on the right shows 'Get Started with VS Code' and 'Learn the Fundamentals'. The terminal at the bottom shows the command `cd pySupp` and `code .` being entered, which opens the file in the editor.

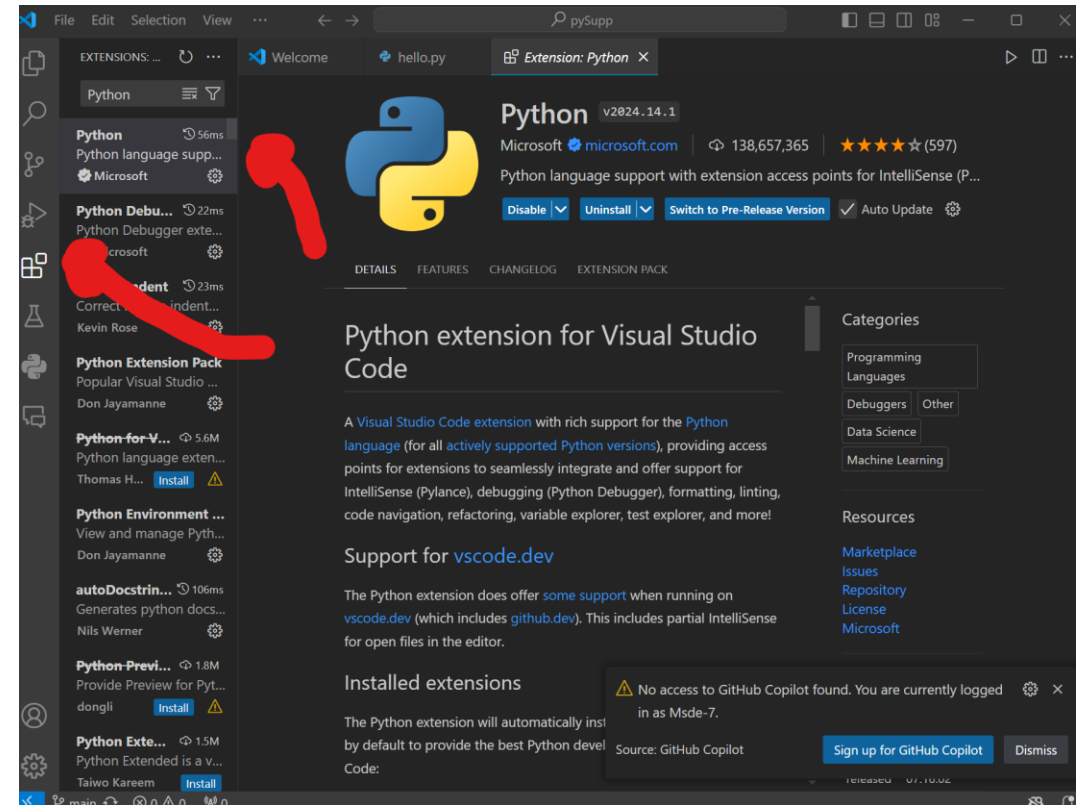
4. Type “`cd pySupp`”, enter, and then “`code .`”, enter to open the file. Alternatively navigate via open folder under start. It should be under Users/YourName/PySupp. Either way works.

Open and Run Project



Click on the top left explorer button, and then in the dropdown.

Go to SP25 -> hello.py

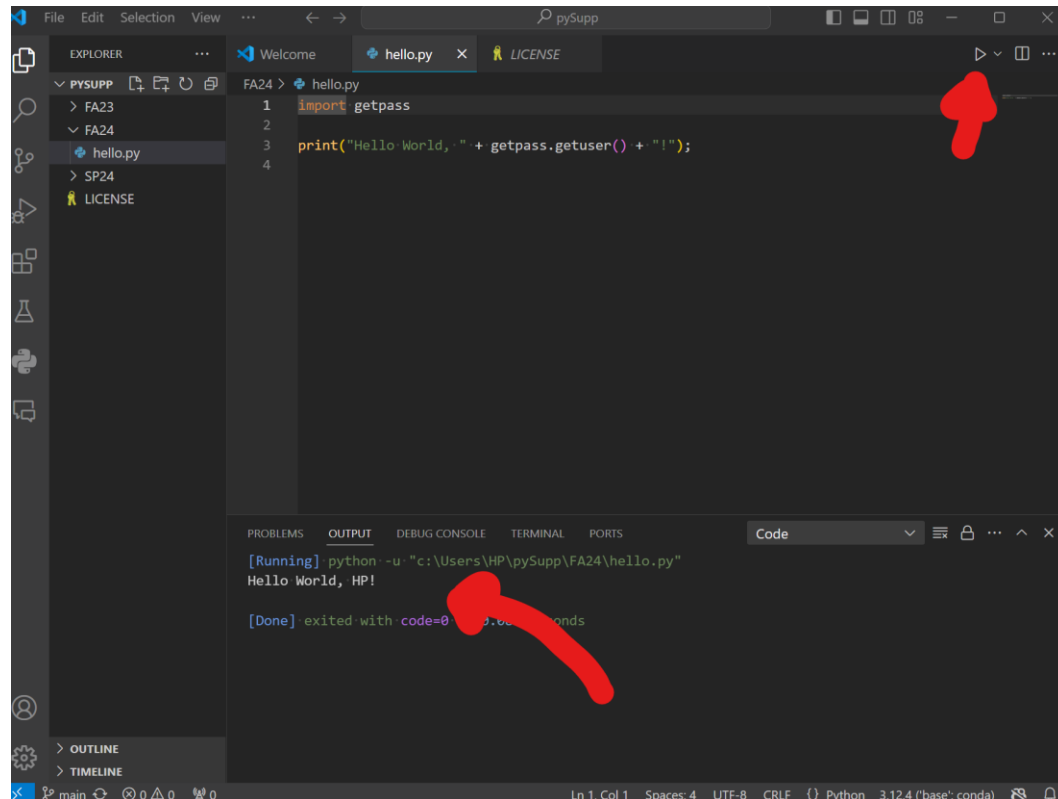


If an option to install the Python extension appears, do so.

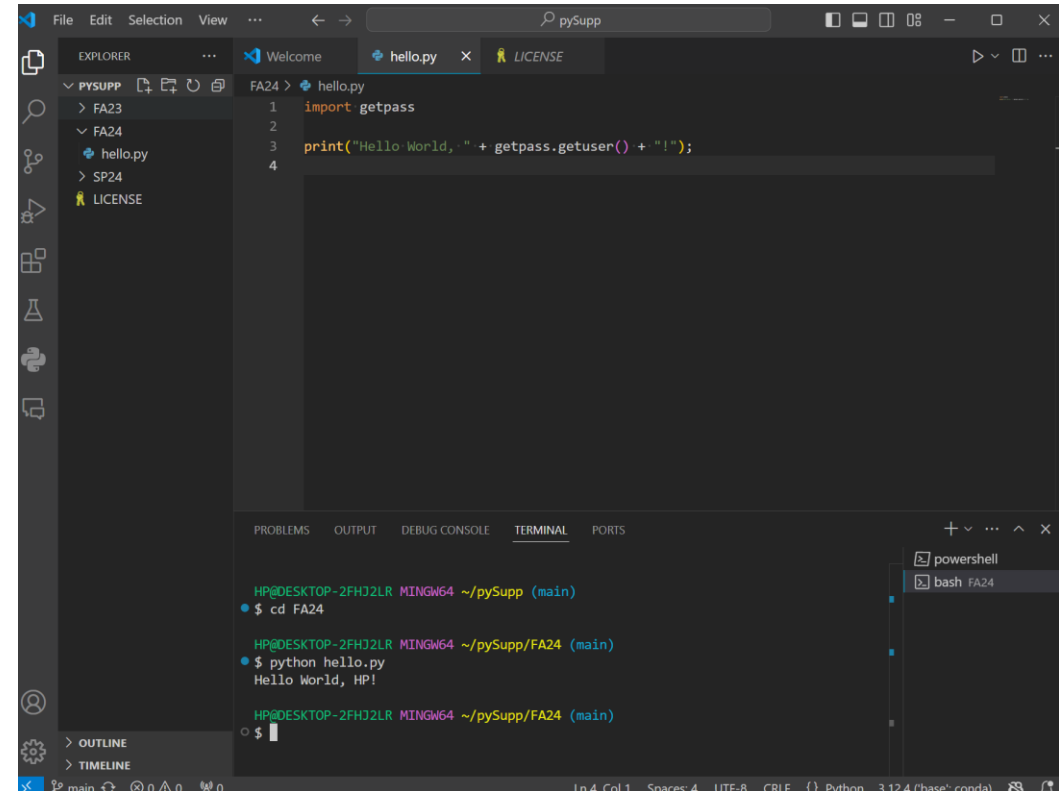
If not click on the boxes on the side, type in Python, and install the first one.

Do the last step to get back.

Open and Run Project



Click the run button in the upper right, and an output saying "Hello world, <Your Username>!" should appear.



Alternatively, navigate to the terminal (click on the name in the bottom window or click on the top right button to open up the window), click the dropdown by powershell/ the + button, and click git bash. Type cd SP25 to open the SP25 folder and then python hello.py to run our file.

The End!

- Don't be discouraged if anything was confusing or you had any problems
- Setup is often the lengthiest day in the first few coding classes, and we still encounter issues
- Next lesson will dive into Python basics so that we can later start to see some applications to finance
- If you have any questions message the GroupMe or Gabe Shores and/or Cameron Nelson
- Thank you!