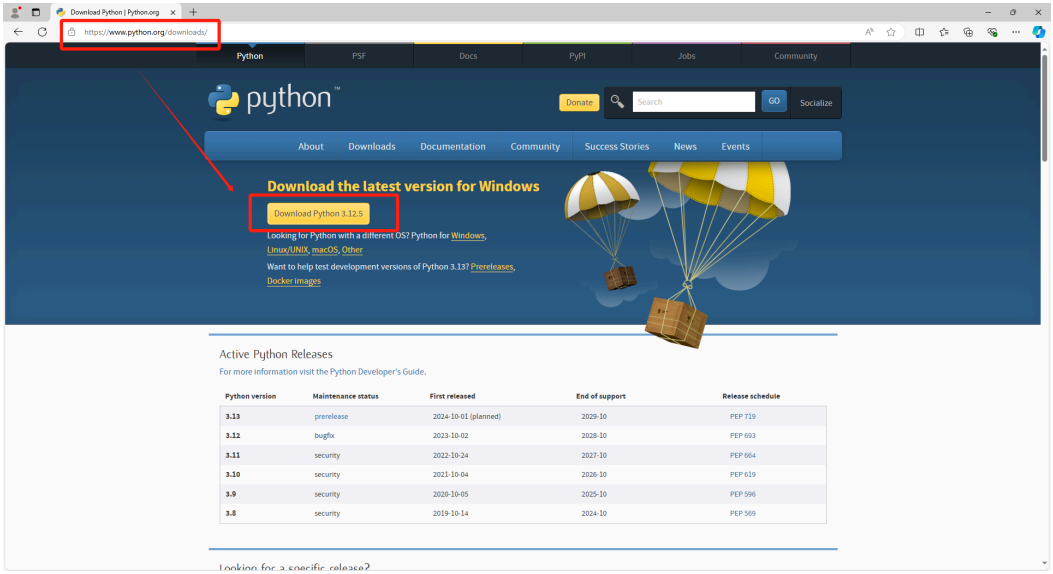
Note: This guide is designed based on Windows system. If you are using macOS, the basic process is similar; however, you can skip the step of setting up the System Environment Path.

I. How to Install Python

Step 1: Download Python

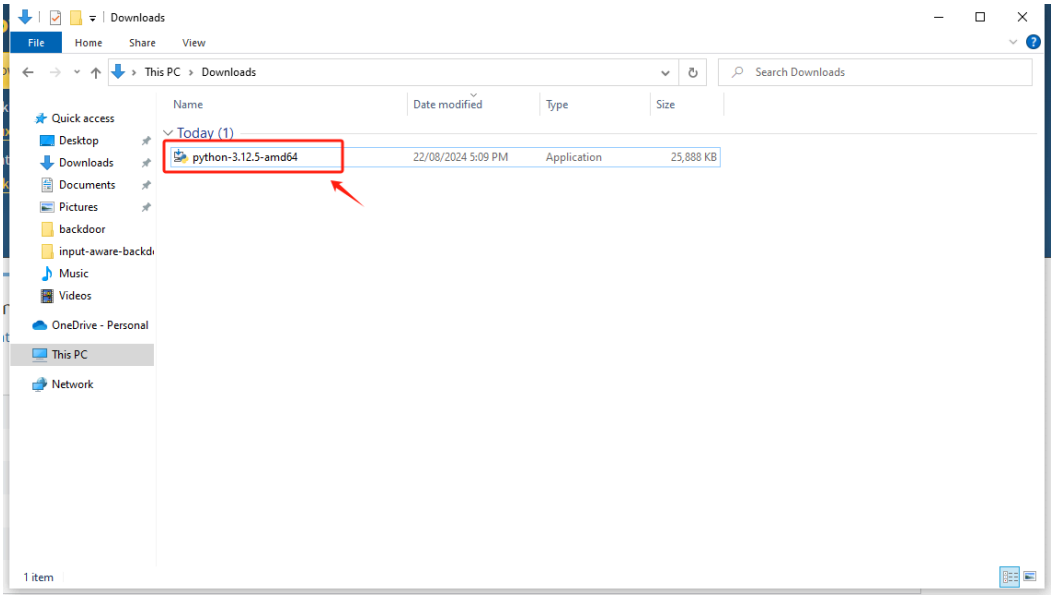
1. Go to the python official website: https://www.python.org/downloads/



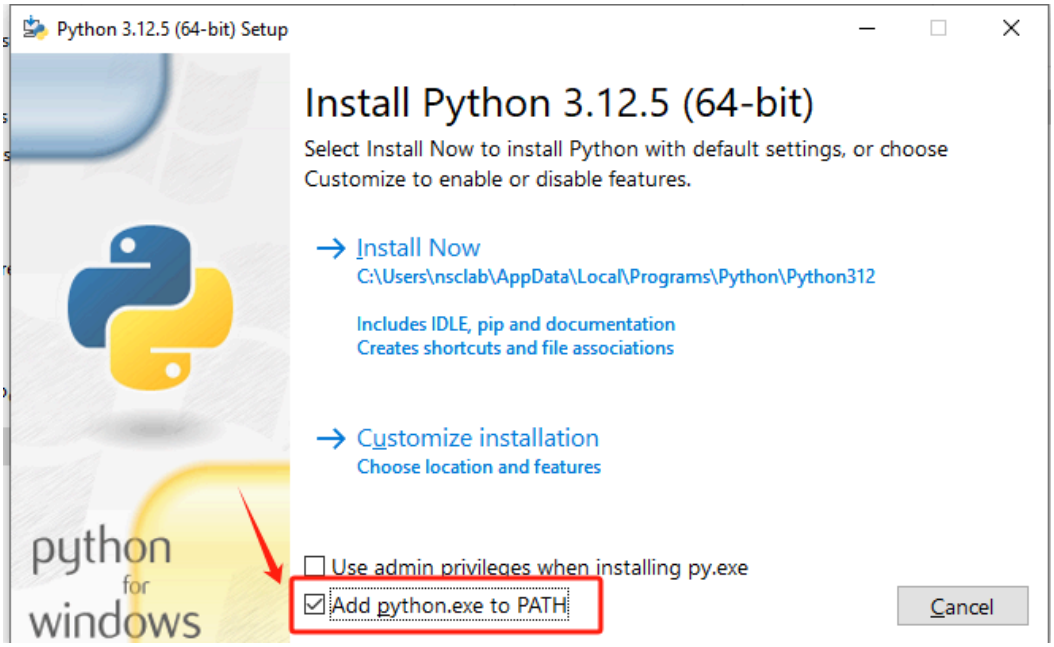
2. Click the Download button, and wait for the download to complete.

Step 2: Install Python

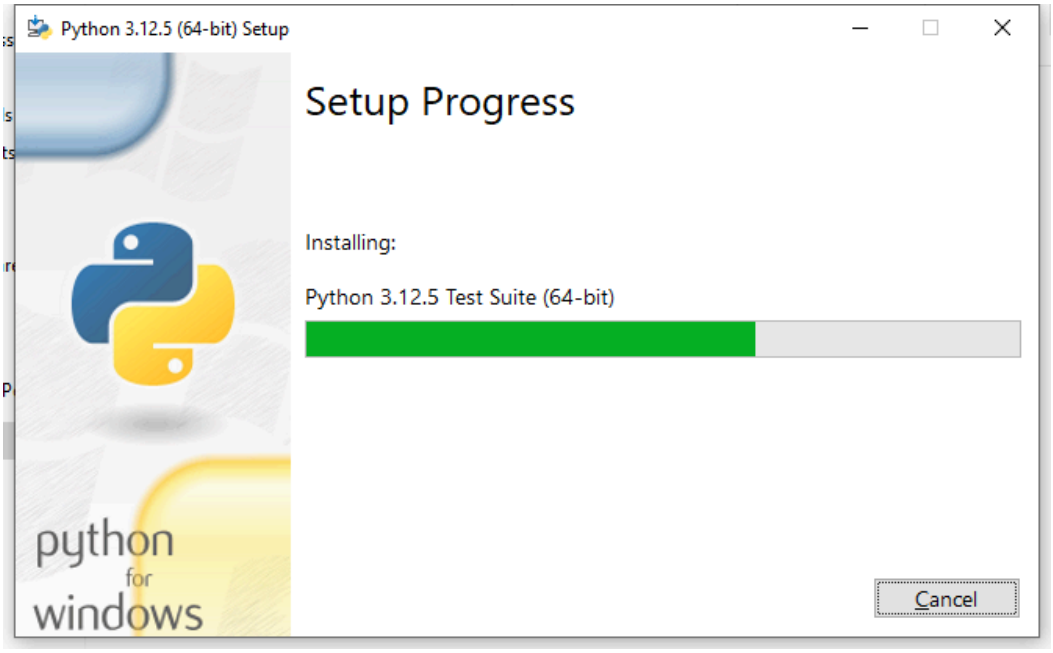
1. Run the installer



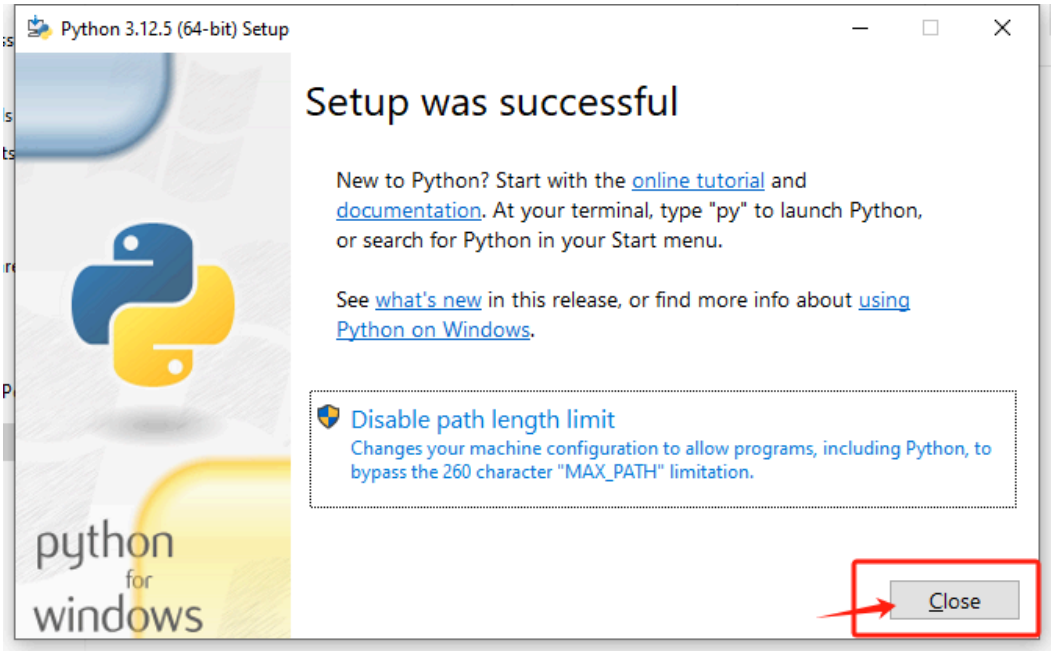
2. Make sure you have selected the **Add python.exe to PATH** option.



3. Click the **Install Now**, and wait for the progress to finish.

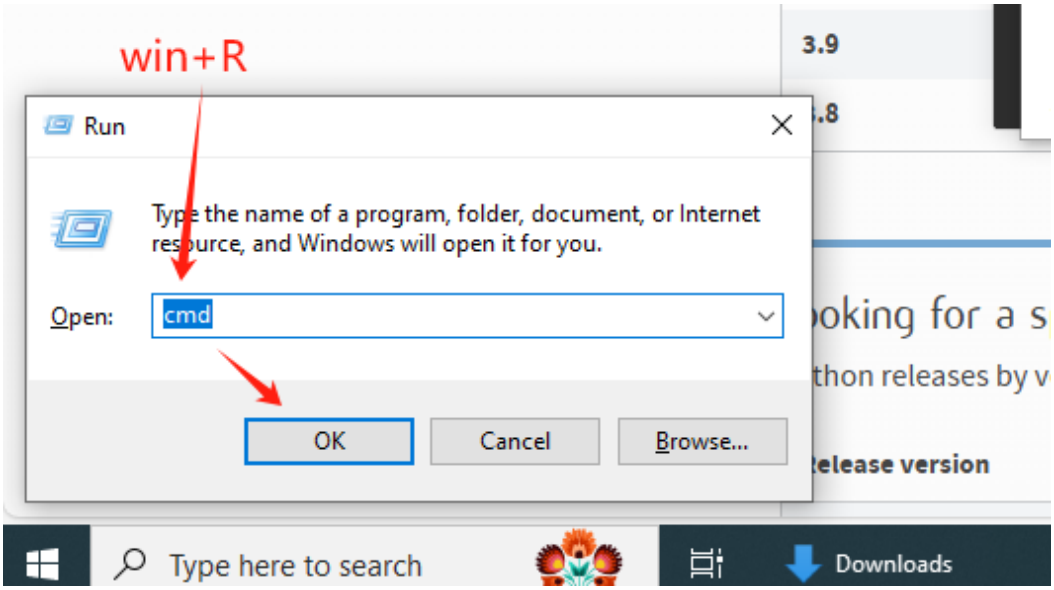


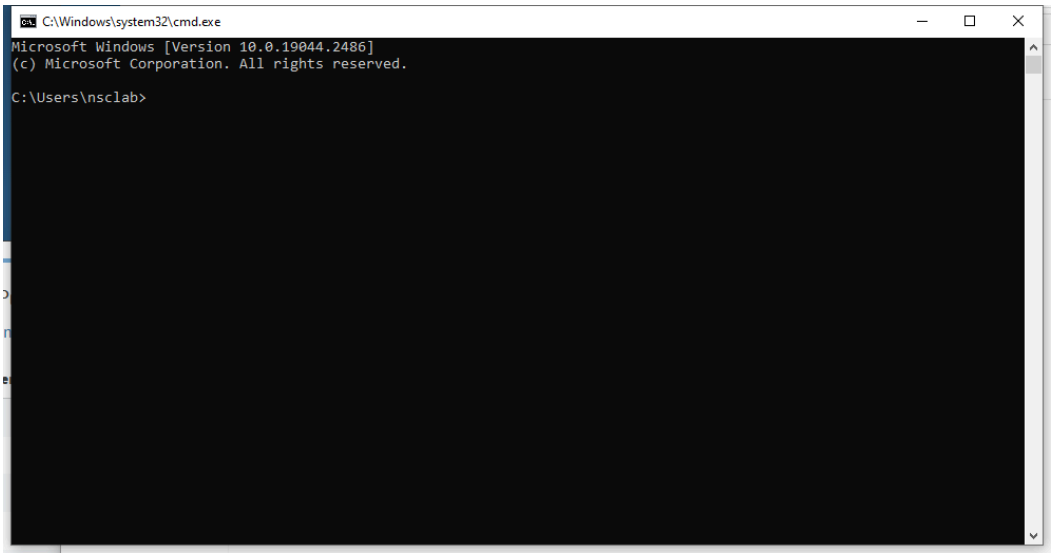
4. Then you can close the interface.



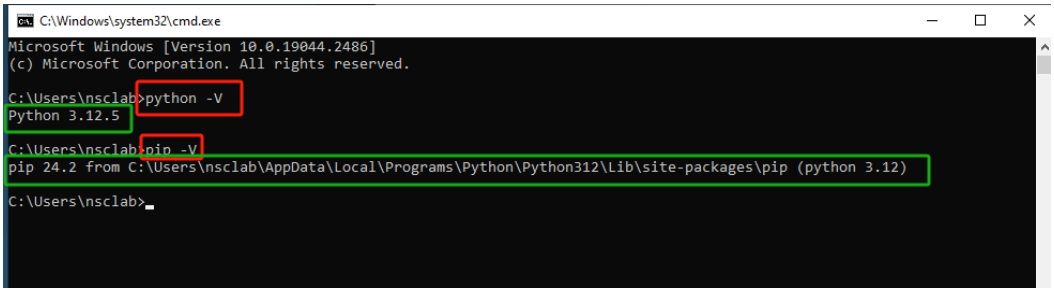
Step 3: Check if the Python is successfully downloaded, you can follow these steps

1. Press **Win + R** on your keyboard to open the Run dialog. Type cmd and press Enter. This will open the Command Prompt.





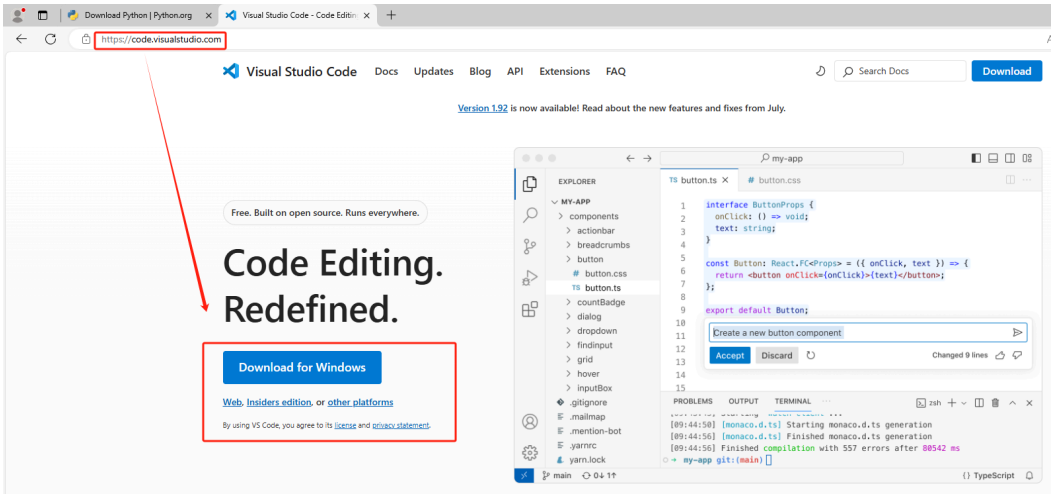
2. In the Command Prompt, type the command python -V, and press Enter, You should see a message that shows the installed Python version, such as `Python 3.x.x`.



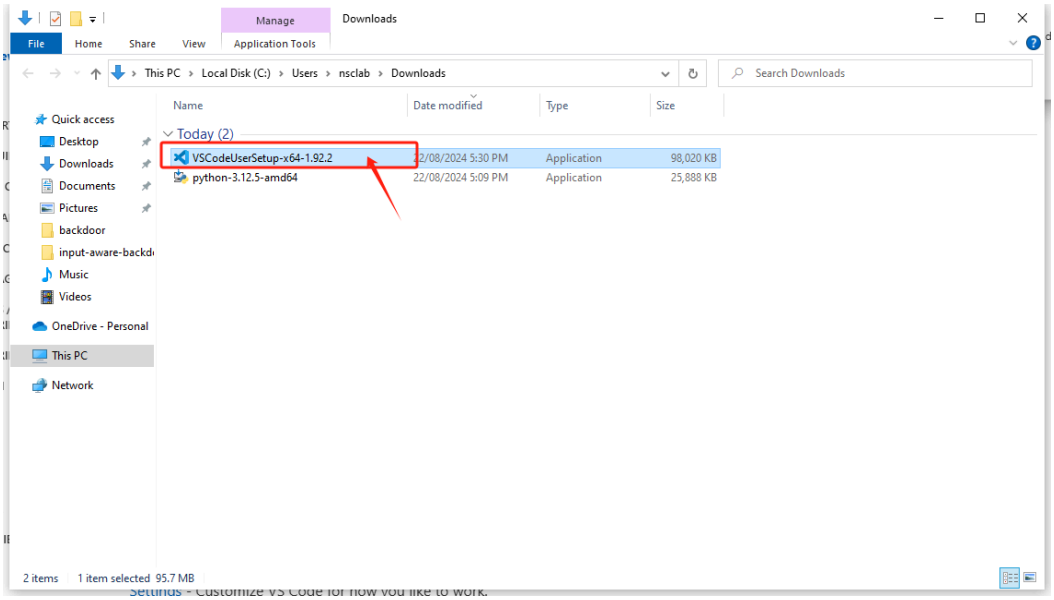
II. How to Install VScode

Step 1: Download VSCode

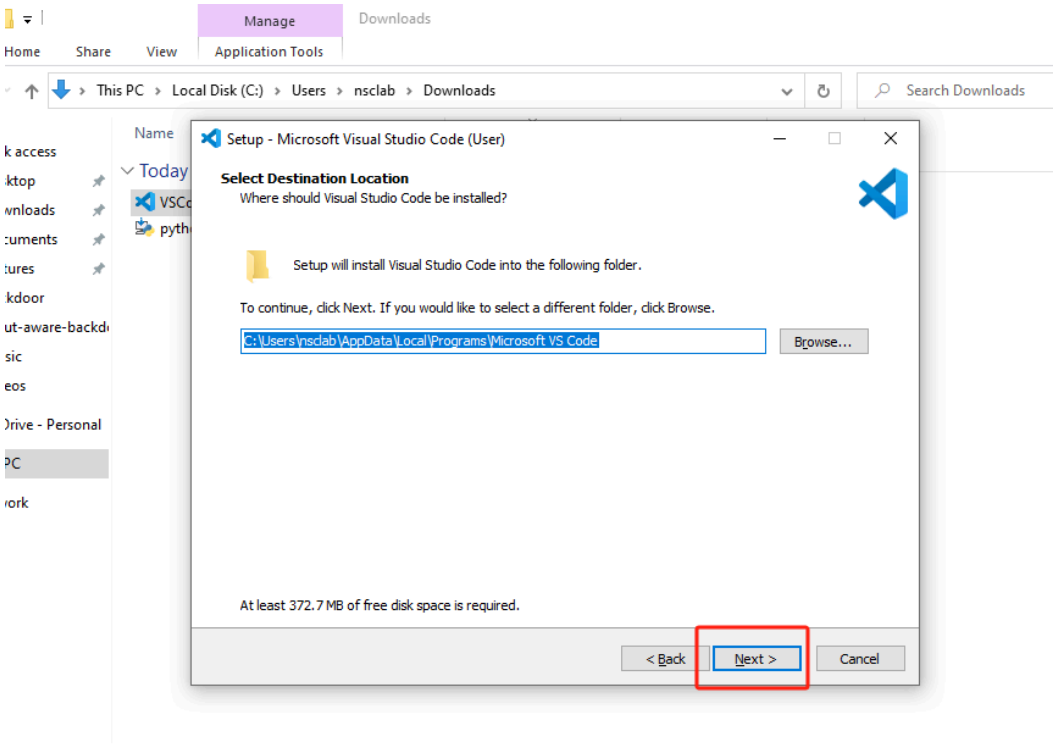
1. Go to the VSCode official website: https://code.visualstudio.com/, and click the download button.



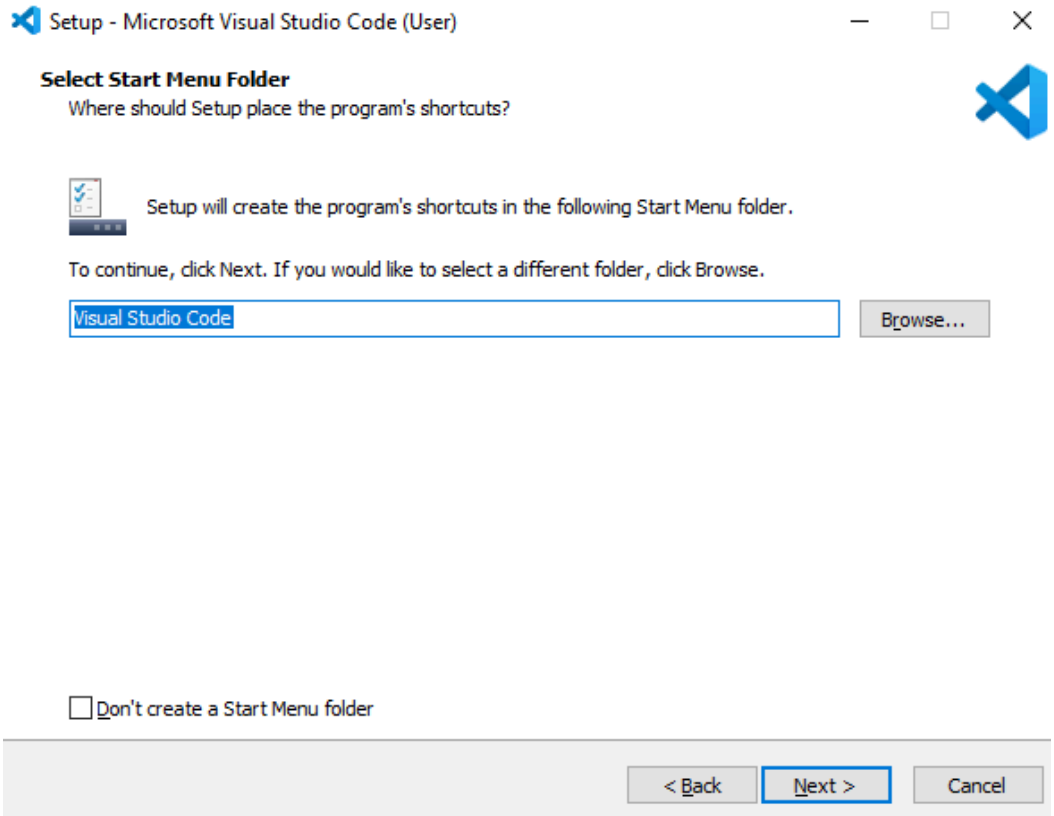
2. Wait until it is downloaded, then open the downloaded file, double click to open.



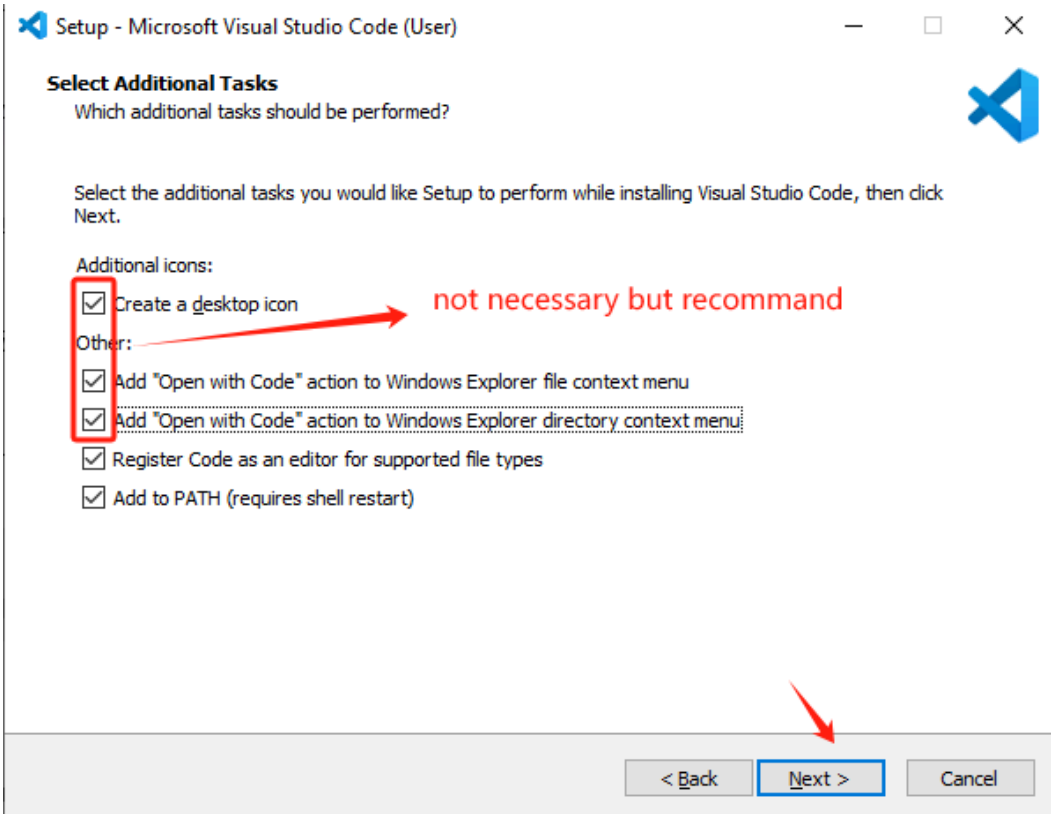
3. Choose your installation folder then click Next.



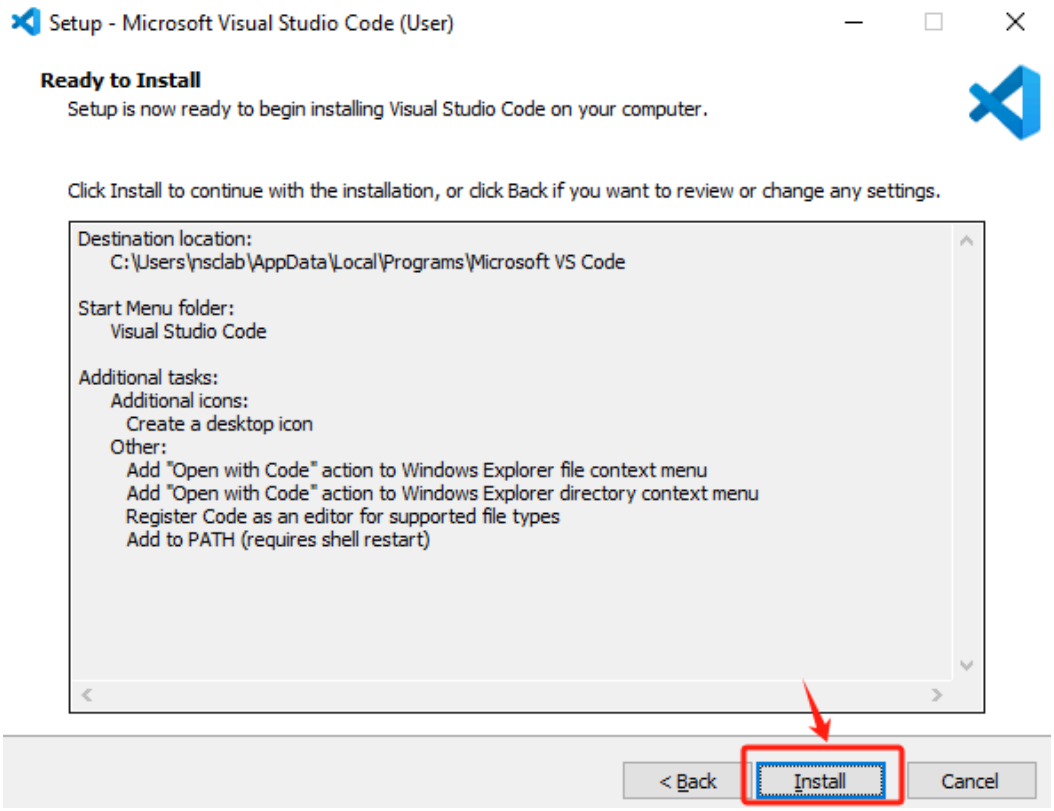
4. Keep click Next.



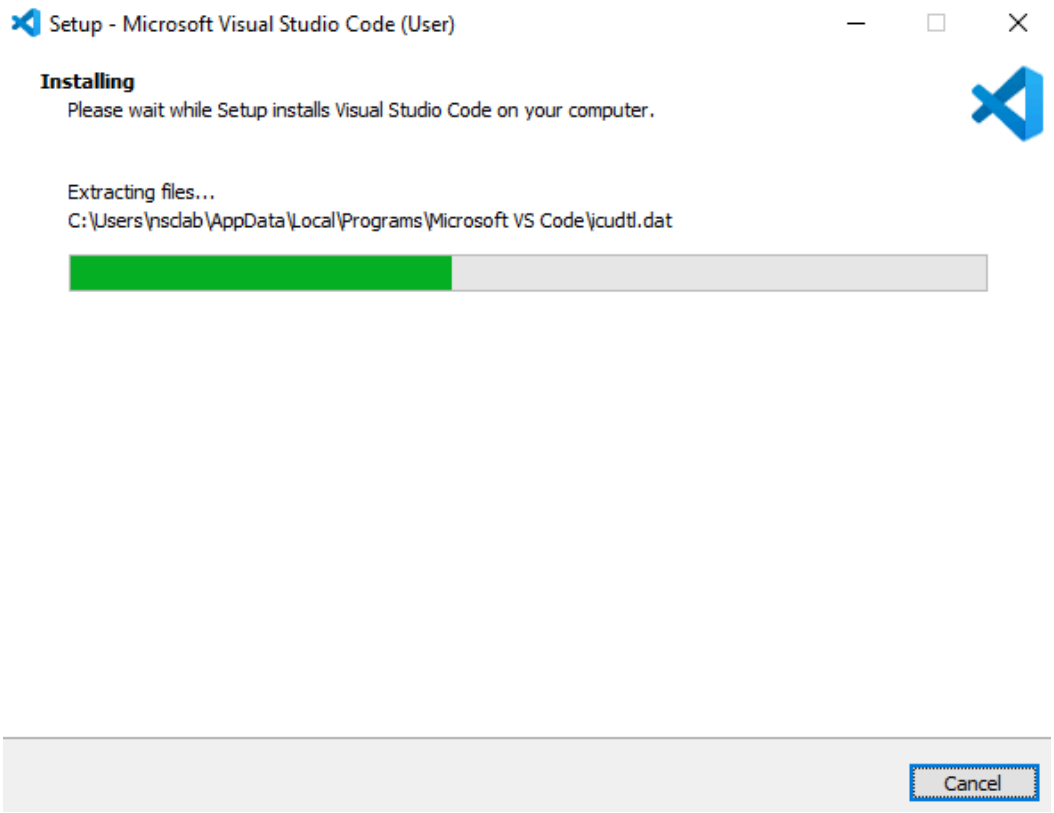
5. We recommend you select all the options, then click Next.



6. Click the **install** button.

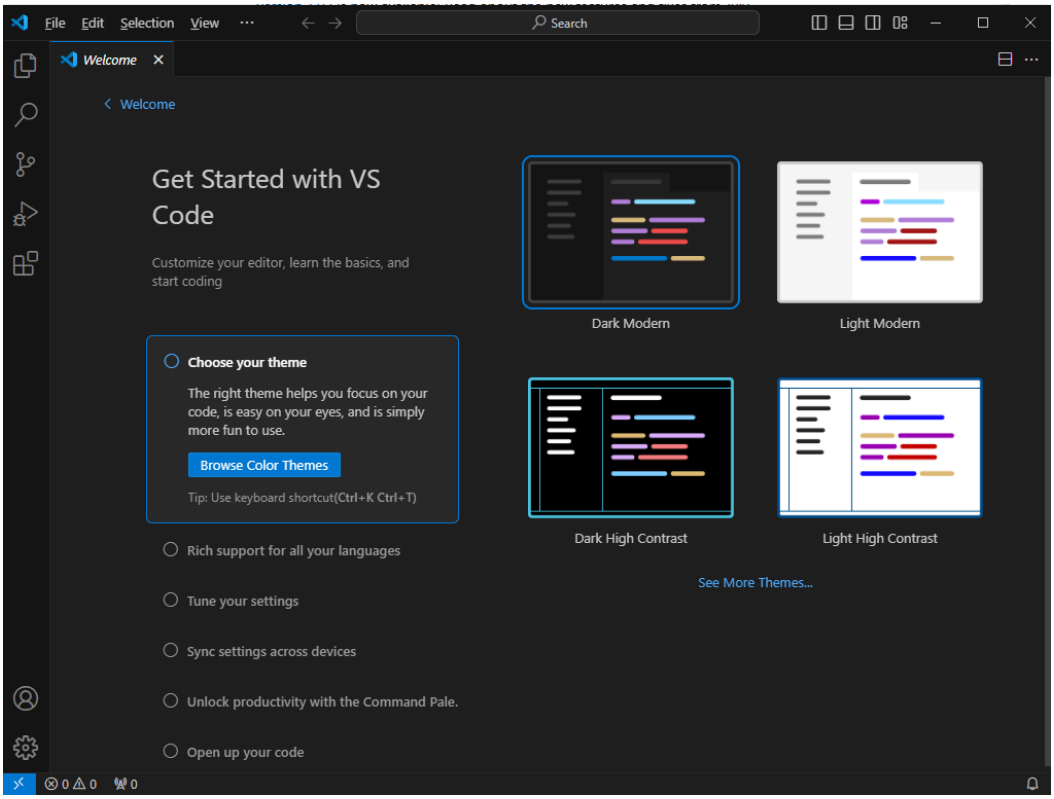


7. Wait it to be finished.

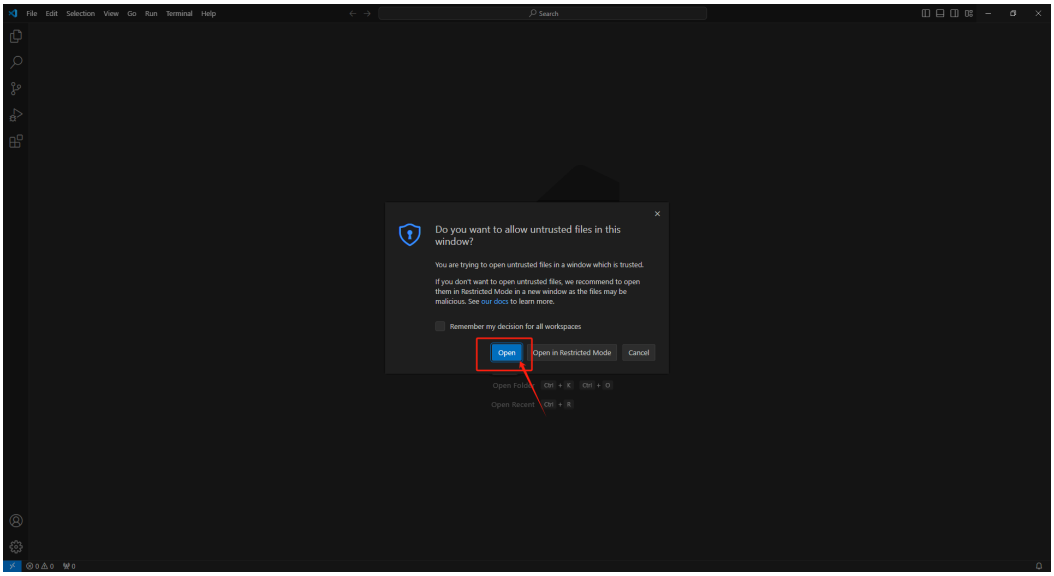


III. How to Setup VScode

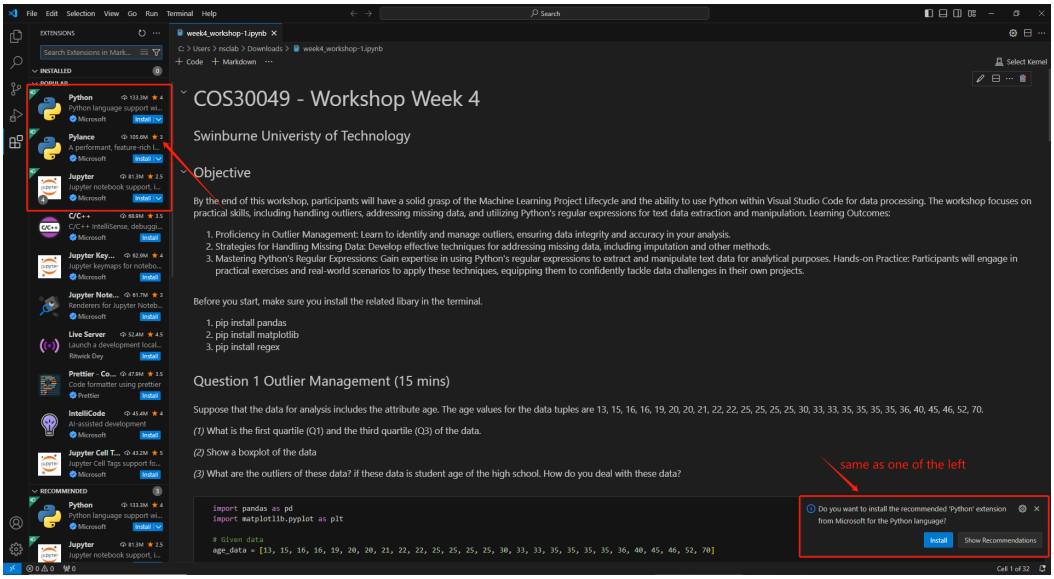
1. Open the VSCode we just installed.



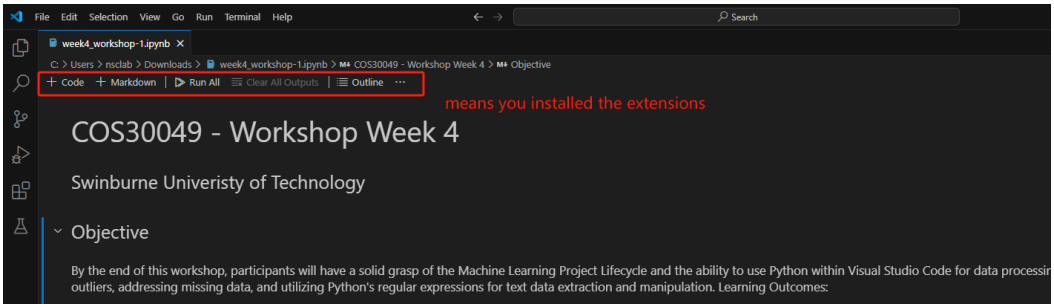
2. Open the week 4 material file: week4_workshop.ipynb.



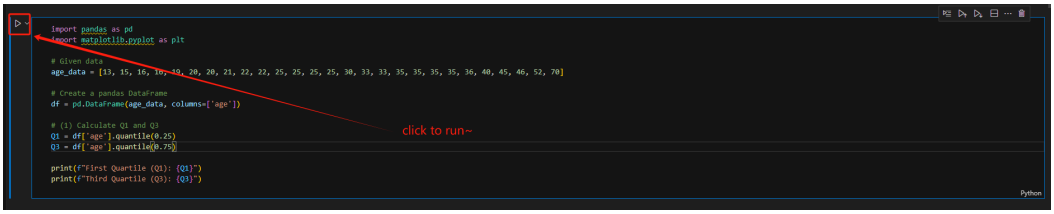
3. From the left bar, select the Extensions, and download all the three extensions.



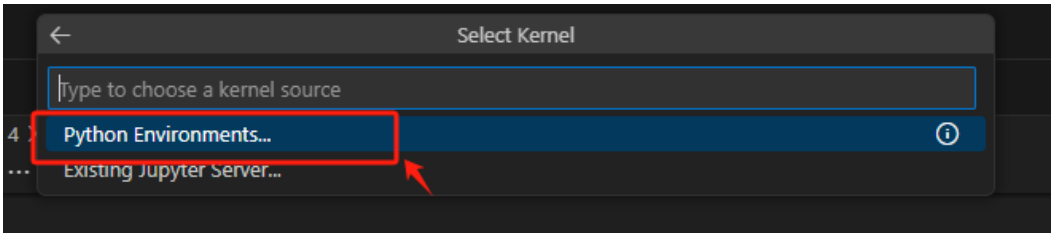
4. Check the information we circled, it should show the information which means you installed the extensions successfully.



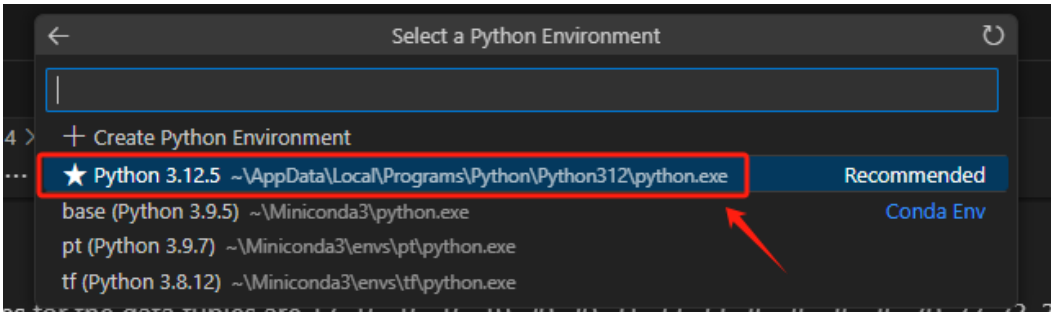
5. So now, let's give it a try, click the button we circled.



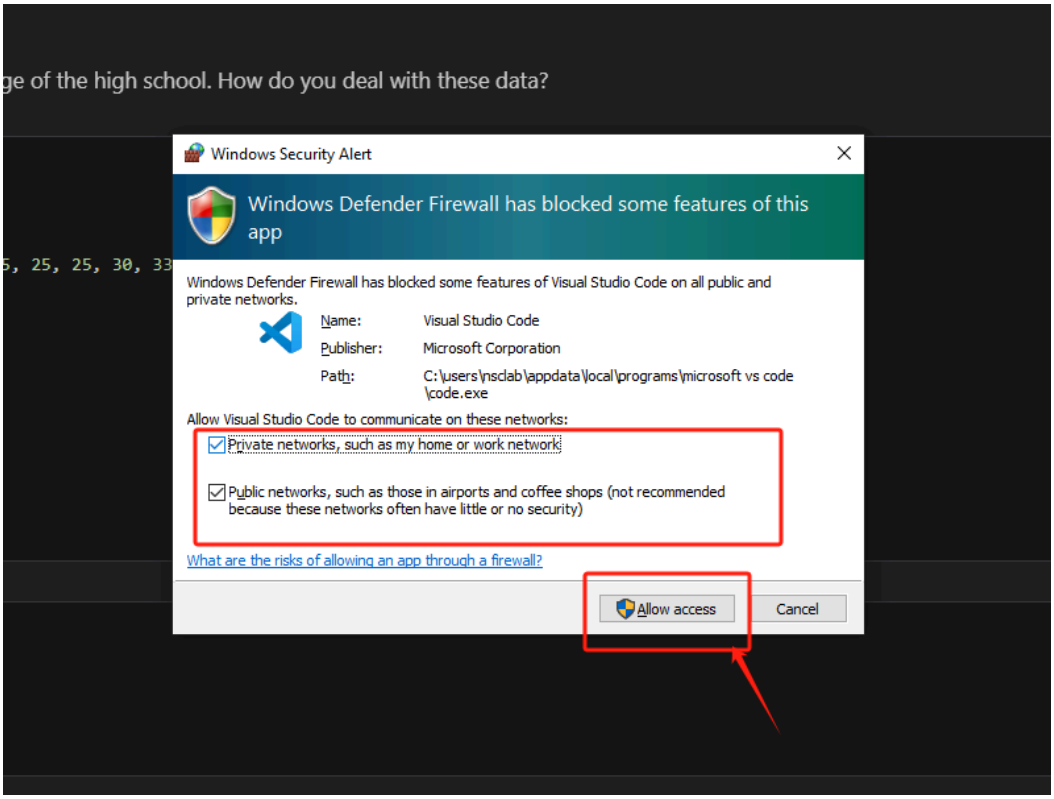
6. When the dropdown menu appears, select the Python environments.



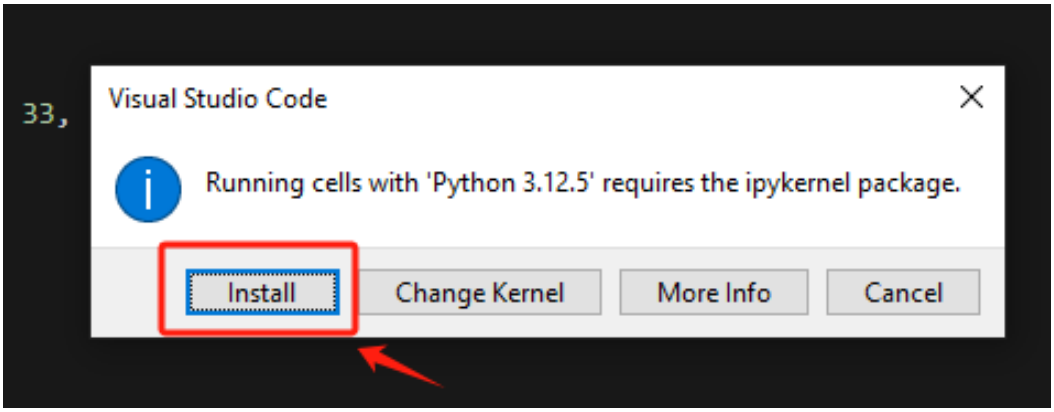
7. Then choose the python we installed



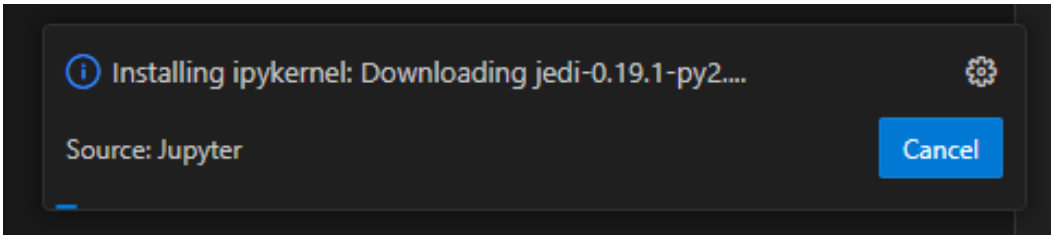
8. If this window pulped up, select all and click the **Allow access** button.



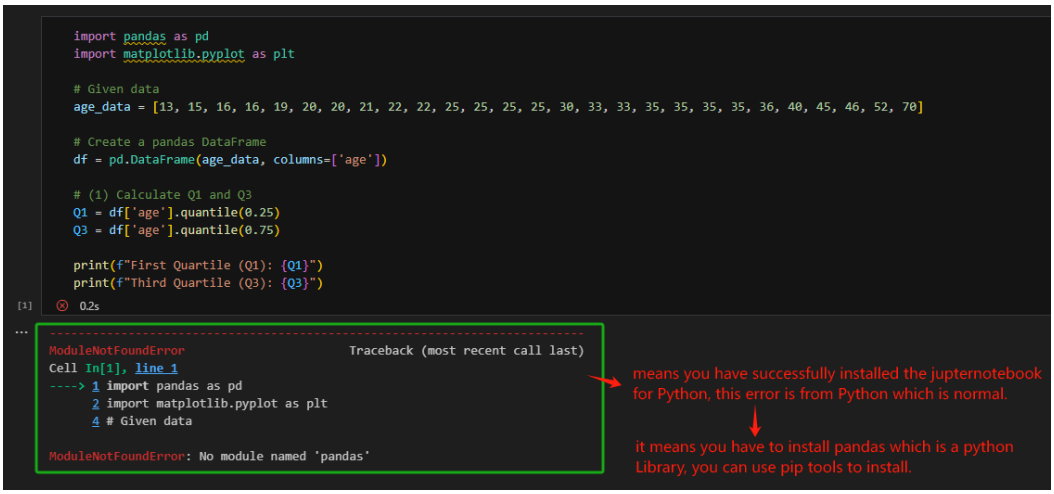
9. If this window is pulped up, select **Install.**



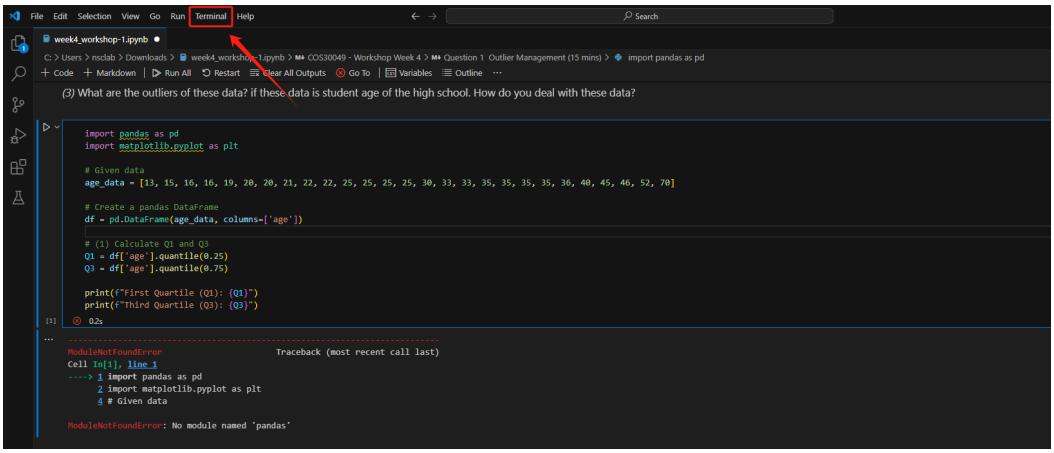
10. Wait until the installing finished.



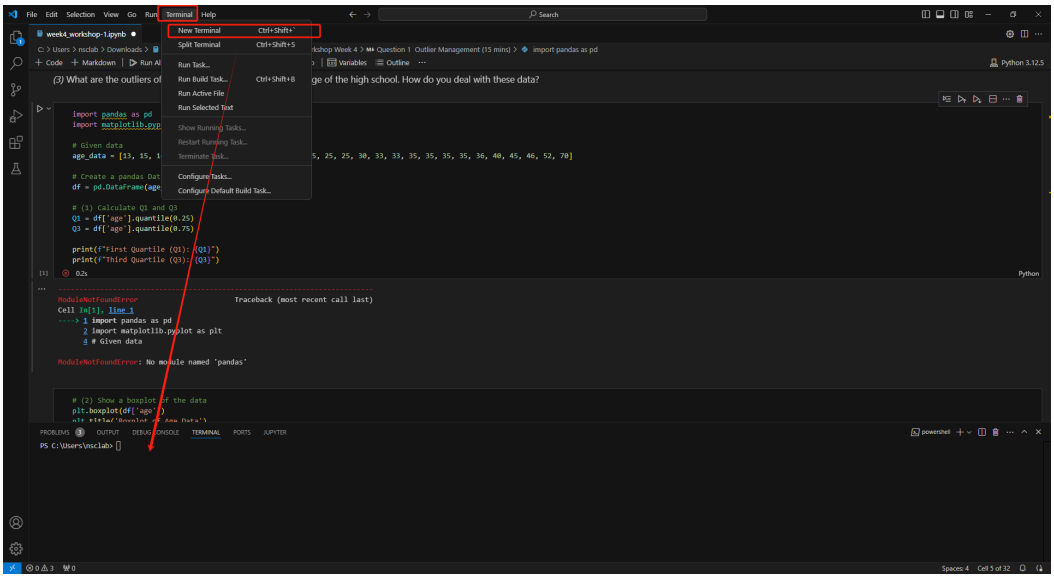
11. So let's click the run button again, and see what can we get!



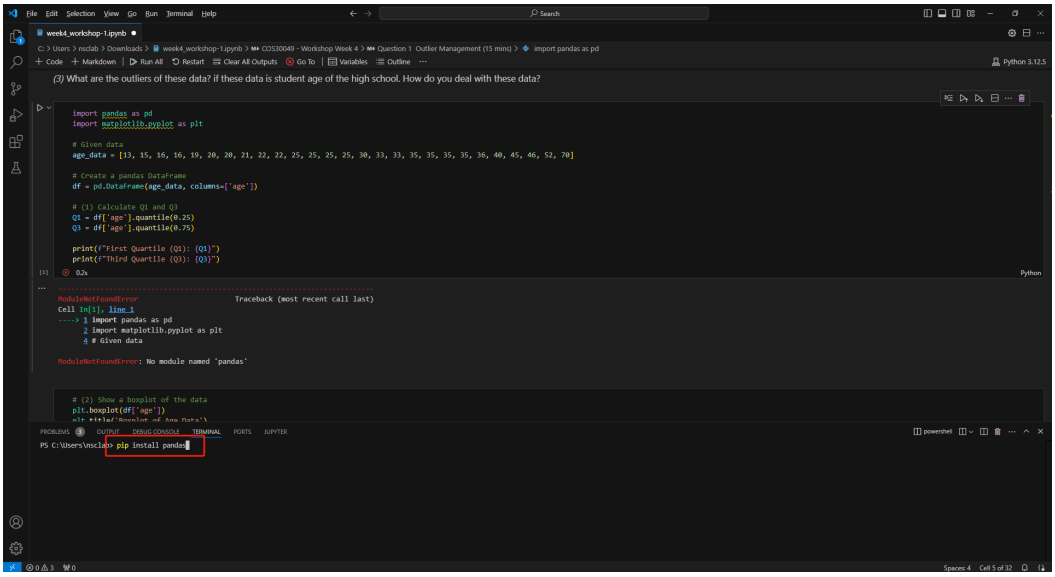
12. Now let' install some libraries/packages



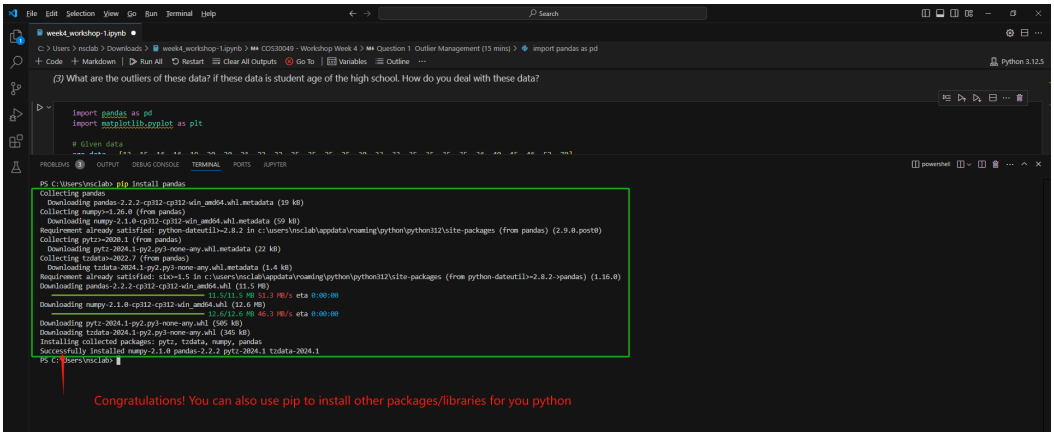
13. First, let's open the terminal.



14. Let’s input pip install pandas

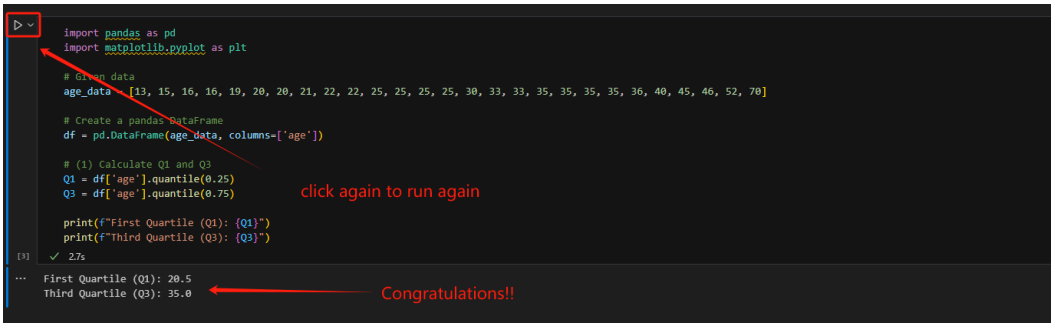


15. If you get the same message, it means you have successfully installed pandas.



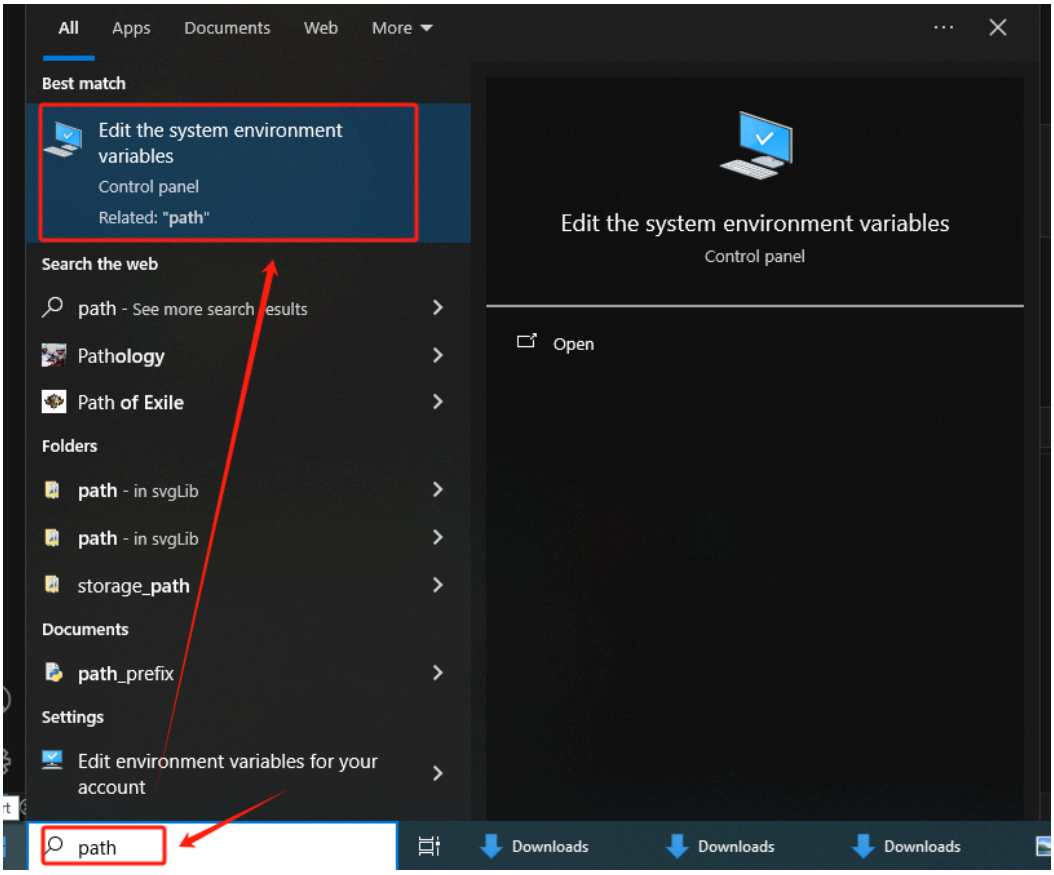
16. Now, let’s try another package

17. With everything ready, let's run the cell again!

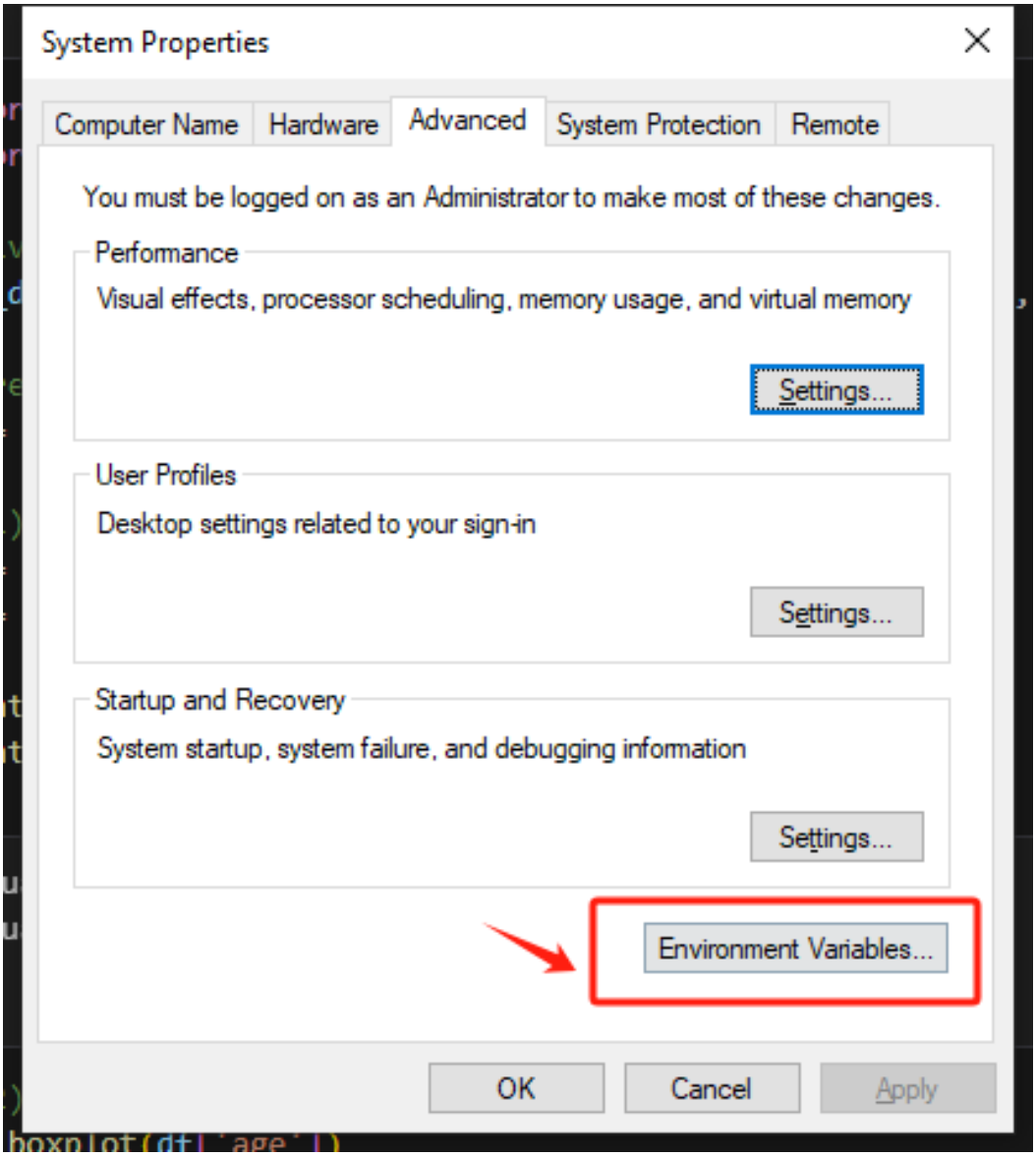


IV. How to Setup the System Environment Path (If You Encounter Errors with `pip install` After Installing Python) (Only for windows users)

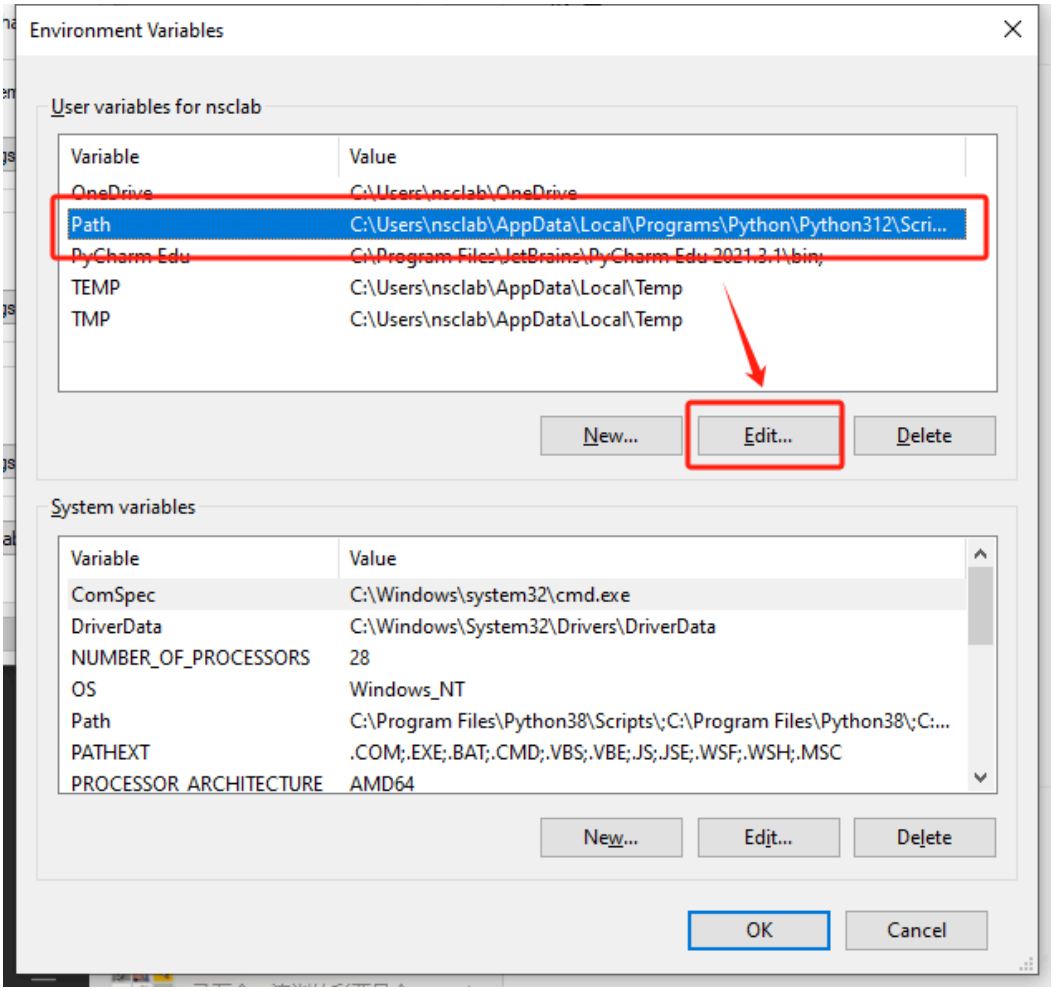
1. Search **path** from the start menu, and open **Edit the system environment variables** menu.



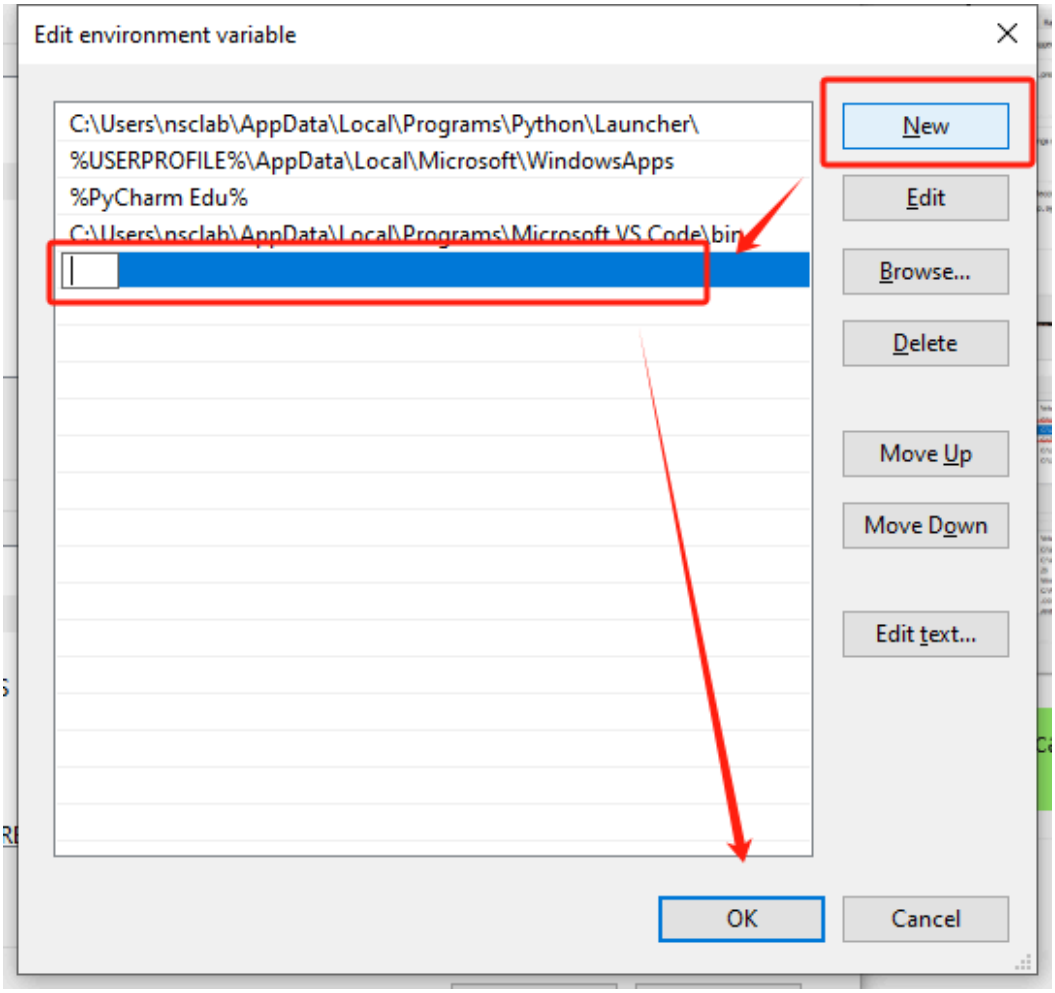
2. Click the **Environment Variables** button.



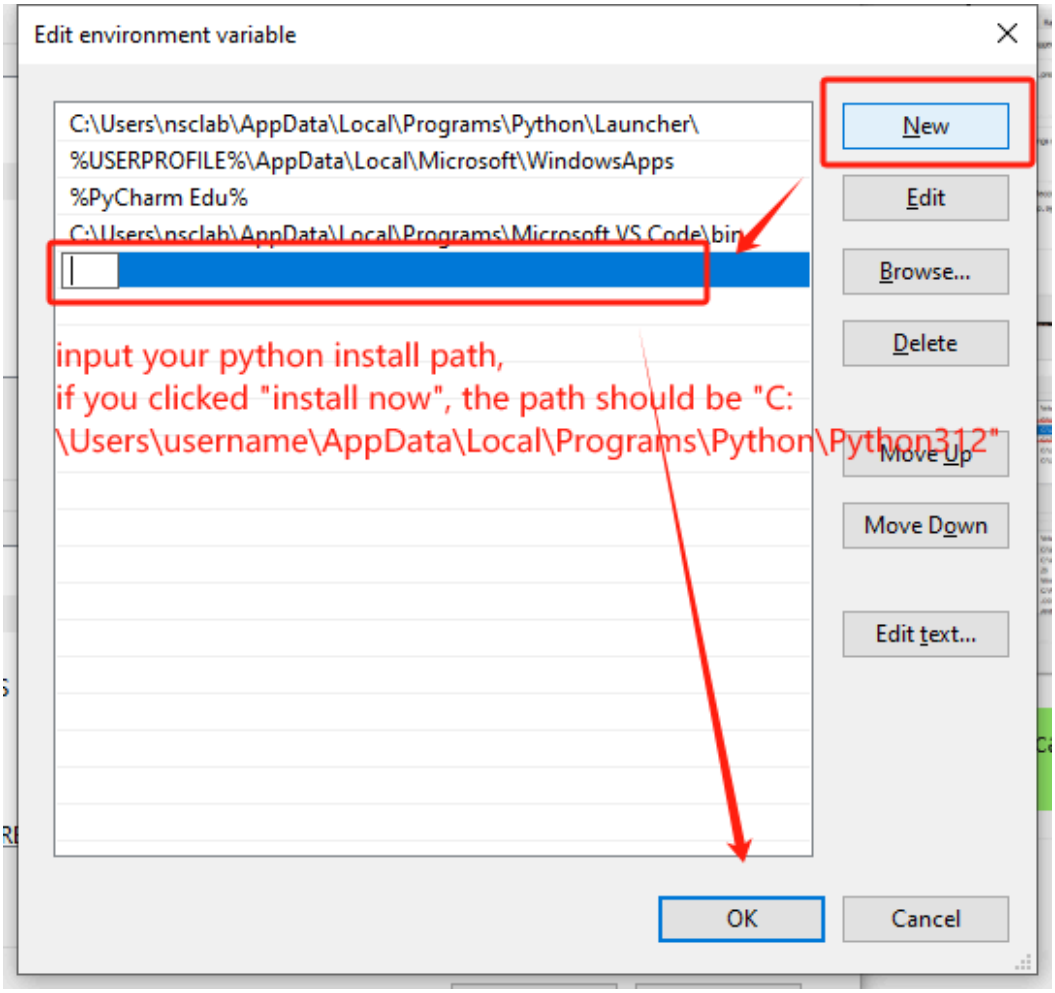
3. From the **Path** variable, click edit.



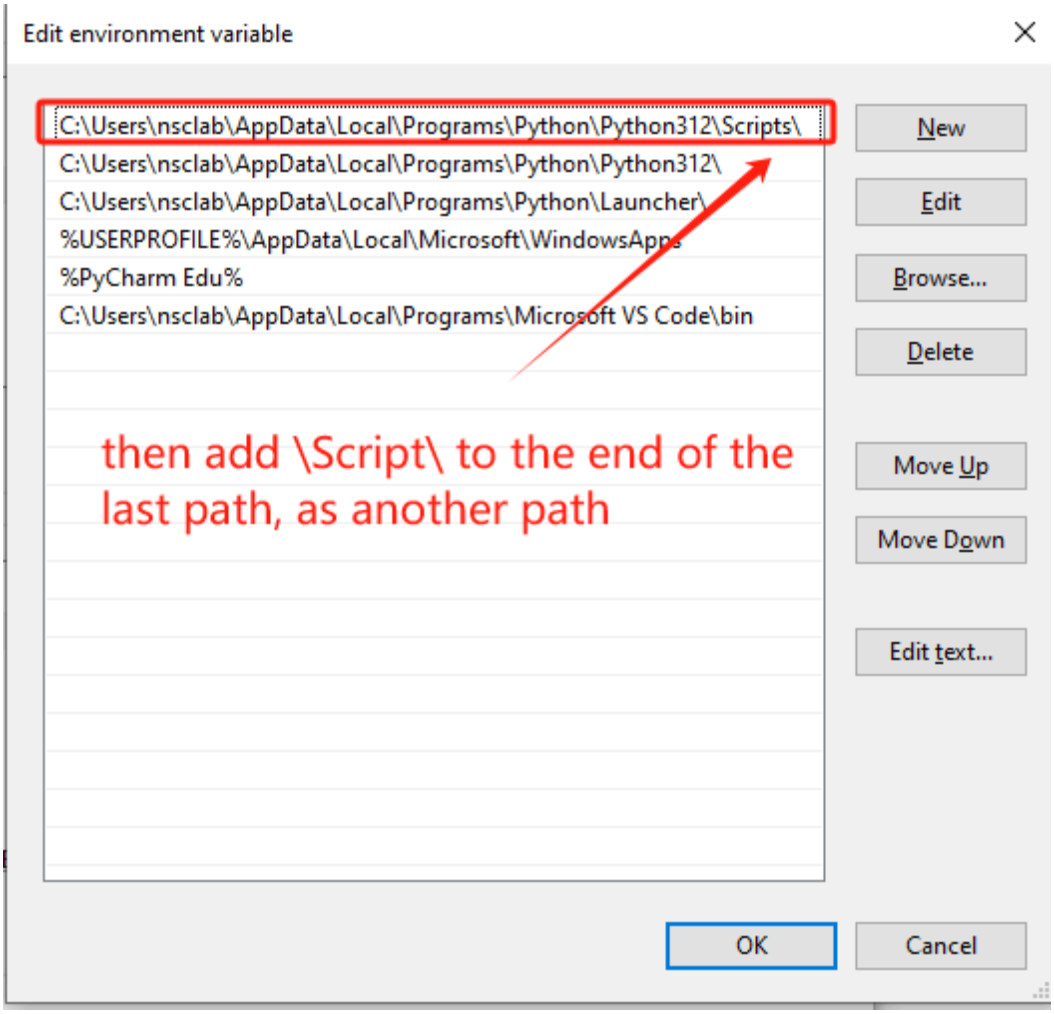
4. Click the New button,



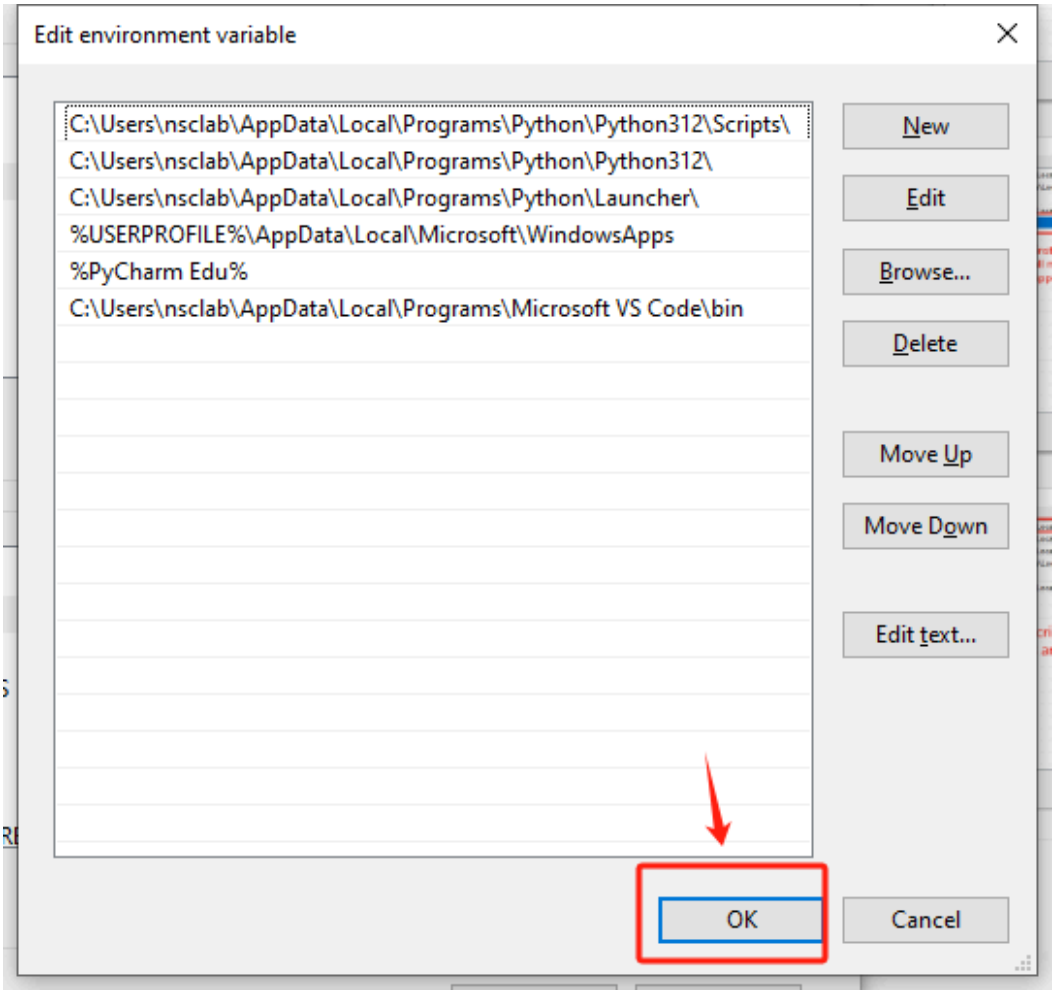
5. Find where your python is installed, and type it in, for example: if you didn't change yoru installation path, the default should be: C:\Users\nsclab\AppData\Local\Programs\Python\Python312\



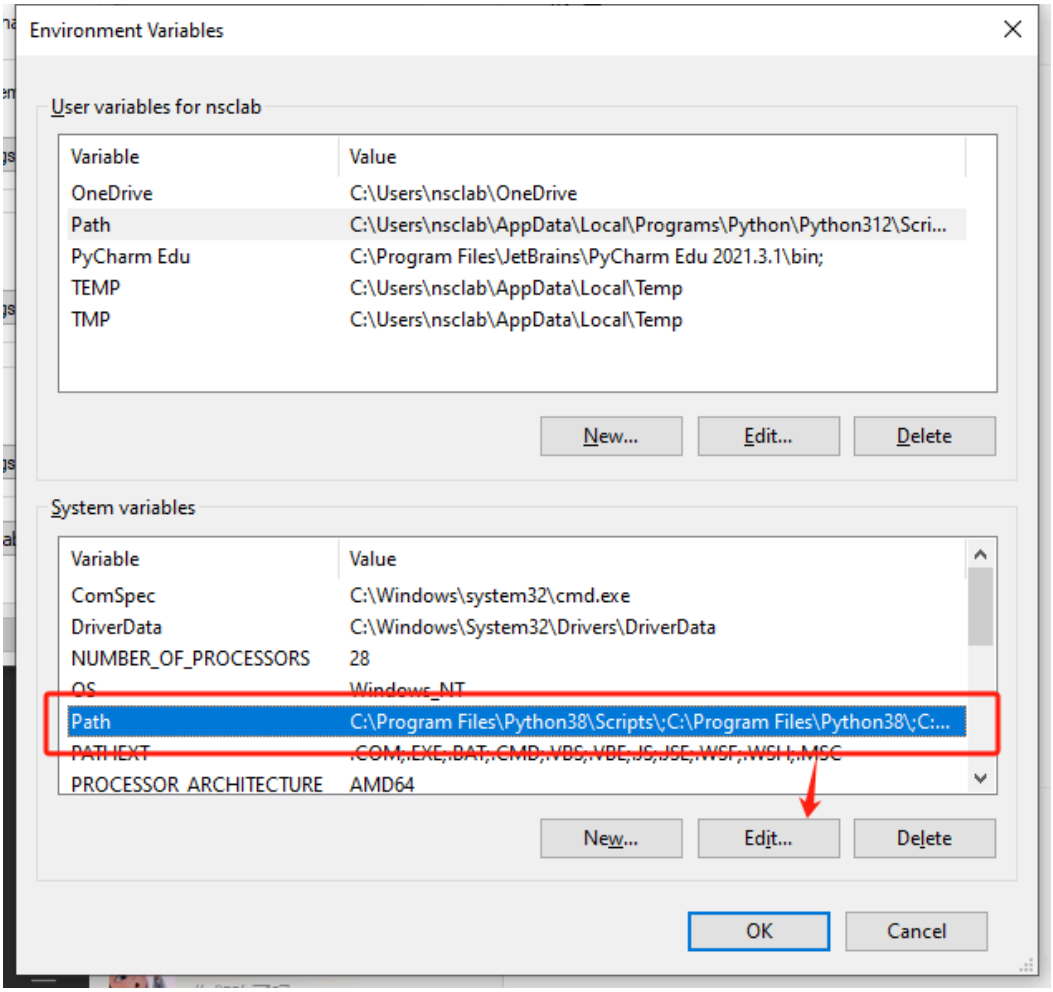
6. Add anotehr path with \Script\ added at the end, for example: In our case, C:\Users\nsclab\AppData\Local\Programs\Python\Python312\Scripts\


Edit environment variable
C:\Users\nsclab\AppData\Local\Programs\Python\Python312\Scripts\
C:\Users\nsclab\AppData\Local\Programs\Python\Python312\
C:\Users\nsclab\AppData\Local\Programs\Python\Launcher\
%USERPROFILE%\AppData\Local\Microsoft\WindowsApps
%PyCharm Edu%
C:\Users\nsclab\AppData\Local\Programs\Microsoft VS Code\bin
then add \Script\ to the end of the last path, as another path
New
Edit
Browse...
Delete
Move Up
Move Down
Edit text...
OK
Cancel

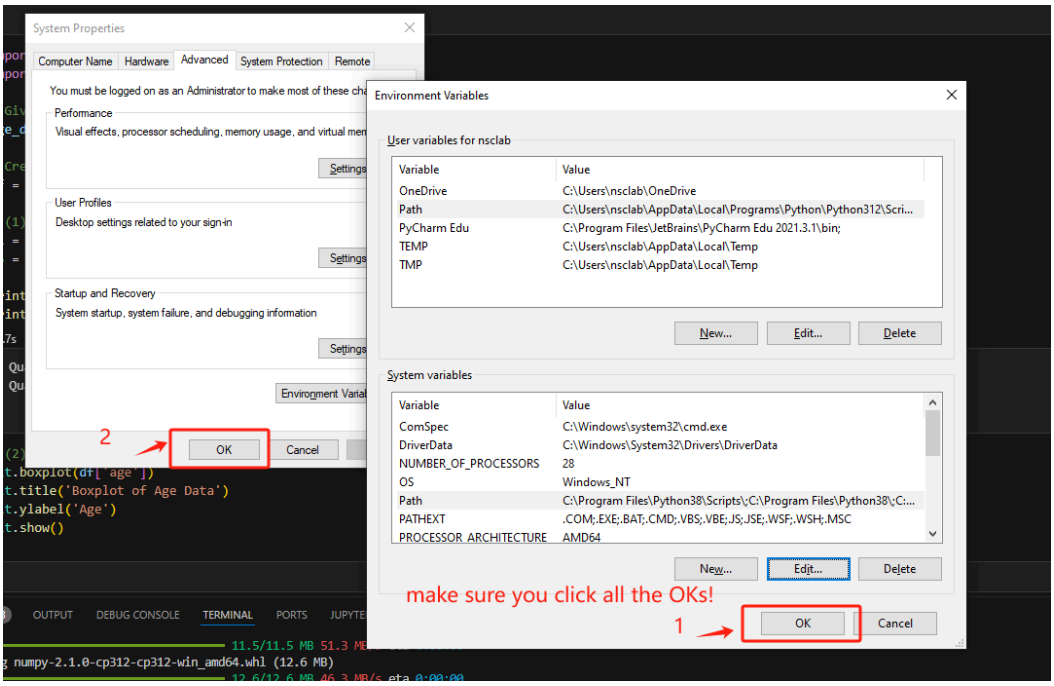
7. Click OK



8. You can do the same thing from the system variables.



9. Click all the OKs and Restart your VScode if it was opened before.


System Properties
Computer Name
Hardware
Advanced
System Protection
Remote
Performance
Visual effects, processor scheduling, memory usage, and virtual mem
Settings
User Profiles
Desktop settings related to your sign-in
Settings
Startup and Recovery
System startup, system failure, and debugging information
Settings
Environment Variables
2
OK
Cancel
Environment Variables
User variables for nsclab
Variable
Value
OneDrive
C:\Users\nsclab\OneDrive
Path
C:\Users\nsclab\AppData\Local\Programs\Python\Python312\Scri...
PyCharm Edu
C:\Program Files\JetBrains\PyCharm Edu 2021.3.1\bin;
TEMP
C:\Users\nsclab\AppData\Local\Temp
TMP
C:\Users\nsclab\AppData\Local\Temp
New...
Edit...
Delete
System variables
Variable
Value
ComSpec
C:\Windows\system32\cmd.exe
DriverData
C:\Windows\System32\Drivers\DriverData
NUMBER_OF_PROCESSORS
28
OS
Windows_NT
Path
C:\Program Files\Python38\Scripts\;C:\Program Files\Python38\;C:...
PATHEXT
.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;.WSH;.MSC
PROCESSOR_ARCHITECTURE
AMD64
New...
Edit...
Delete
make sure you click all the OKs!
1
OK
Cancel
t.boxplot(df['age'])
t.title('Boxplot of Age Data')
t.ylabel('Age')
t.show()
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
11.5/11.5 MB 51.3 MB
numpy-2.1.0-cp312-cp312-win_amd64.whl (12.6 MB)