

INSTALLING PYTHON

In this course you will use Python and PyCharm to write and execute Python programs. Python and PyCharm are already installed in our computer labs. If you take this course online or want to write Python programs at home, you can install Python and PyCharm on your home computer.

For this course we will be using the latest version of Python, (Python 3.13.x). You should have some version of Python 3.13 or greater installed on your computer.

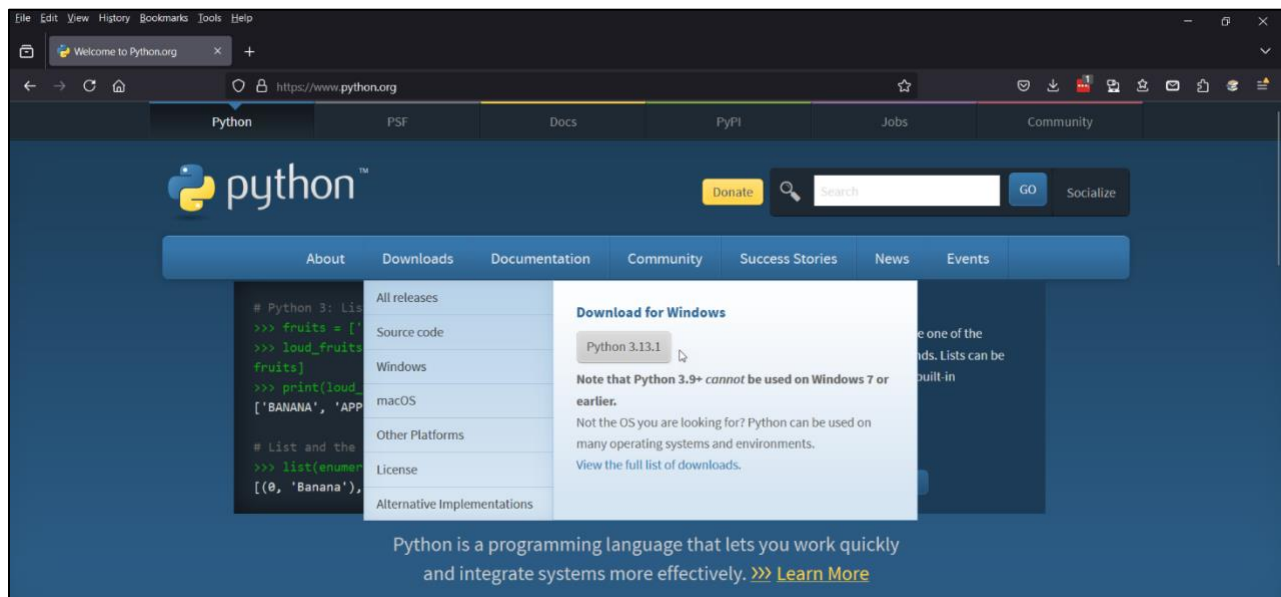
This document will describe how to install Python. In another document, we'll describe how to install PyCharm and how to configure PyCharm to use the Python that we'll be using in the course.

Note that the screenshots for this document are shown for a Windows 10 installation. You should follow a similar process for Windows 11 and MacOS.

INSTALLING PYTHON 3.13

STEP 1 - DOWNLOAD

For Window 10, Windows 11, and MacOS, the recommended way to install Python is by downloading the latest version from <https://www.python.org>.



Move your cursor over the Downloads menu option and click on the Python 3.13.x button on the Download panel that appears.

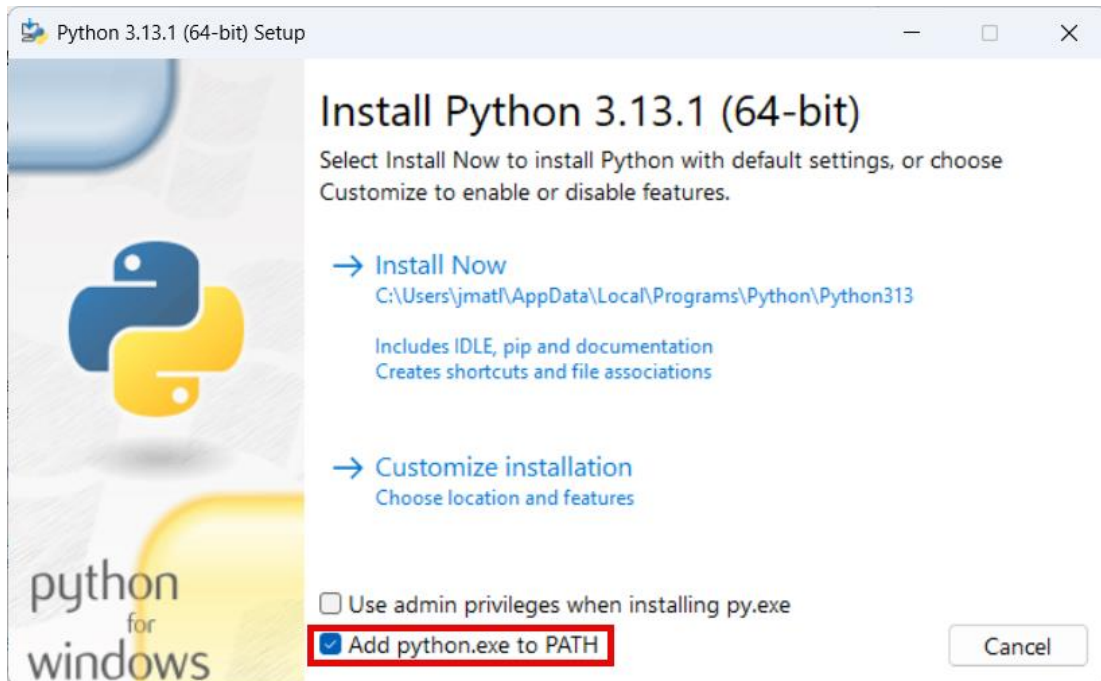
STEP 2 – OPEN THE DOWNLOAD FILE

For Windows, clicking the button will download the appropriate **python.exe**, and on Mac OS, clicking the button will download the appropriate **python.pkg**. Once downloaded, open the file to start the installation process.

STEP 3 – VERY IMPORTANT: INSTALL WITH PATH OPTION

During the installation process, you should accept all the defaults that are offered in the dialog boxes with one difference for Windows 10+:

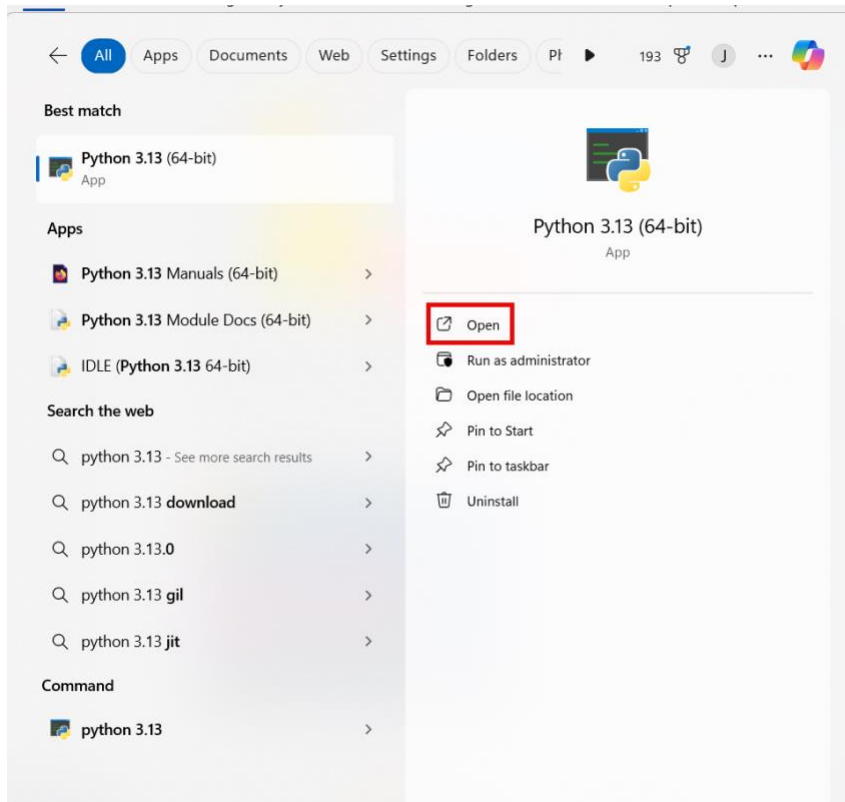
- On Windows 10+, you are offered two checkboxes at the bottom of the install dialog with the second checkbox labeled "Add python.exe to PATH". That is unchecked by default. **You should check that box.**



STEP 4 – GET THE INSTALLATION PATH

Python is now installed. You should take one additional step now to make sure that you will be able to configure PyCharm with your version of Python. You need to get the path of the Python executable:

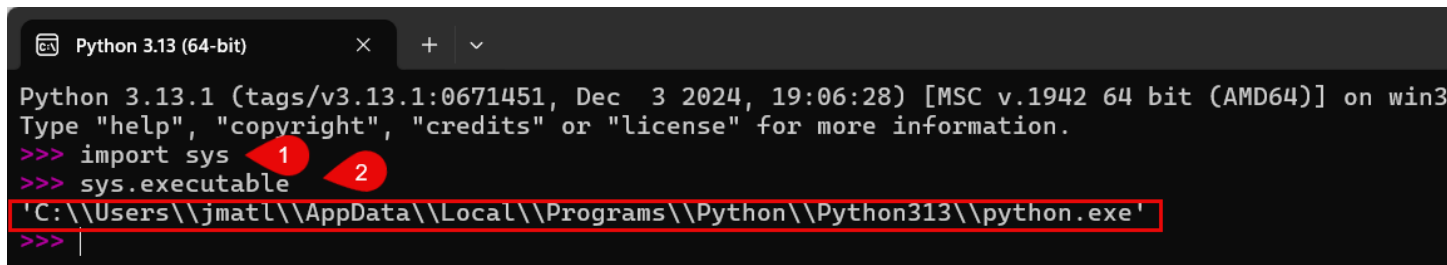
- On Windows 10+, open Python in a command window by going to the Start menu, and searching for Python 3.13.



- In MacOS, open the Terminal app, type "python", and hit Enter.
 - Make sure that the first line that appears after entering "python" says the version is 3.13. If it doesn't, you may need to reinstall Python and make sure that you indicate to add it to your PATH.

The window that opens puts you in the Python 3.13.x interpreter. Type these commands to get the executable path for Python:

- `import sys`
- `sys.executable`



```
Python 3.13 (64-bit)
Python 3.13.1 (tags/v3.13.1:0671451, Dec 3 2024, 19:06:28) [MSC v.1942 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import sys
>>> sys.executable
'C:\\Users\\jmatl\\AppData\\Local\\Programs\\Python\\Python313\\python.exe'
>>>
```

- The path shown is where Python is installed. Make a note of this path for possible use when configuring PyCharm.
- You may close the window that was opened and continue with the process.

Alternate Ways to Install Python

There are other ways that Python can be installed you can explore, however if you need help with your Python and PyCharm Community installations, your instructors may not be able to help you if you use other methods. Still, here's a couple of alternatives that can be considered:

- For Windows 10 and above, Python 3.13 can be installed using the Microsoft Store app. This method has been provided by the same group that supplies the download on python.org. It should be a fairly reliable method.
- **For Macs, the package provided by python.org is the best option**, but there are instructions on the Internet for using an application called **homebrew**. This method should only be considered by advanced students who have an intermediate knowledge of MacOS and the Mac Terminal.

Now you have installed Python 3.13.x and gathered important information. Time to move to installing PyCharm.