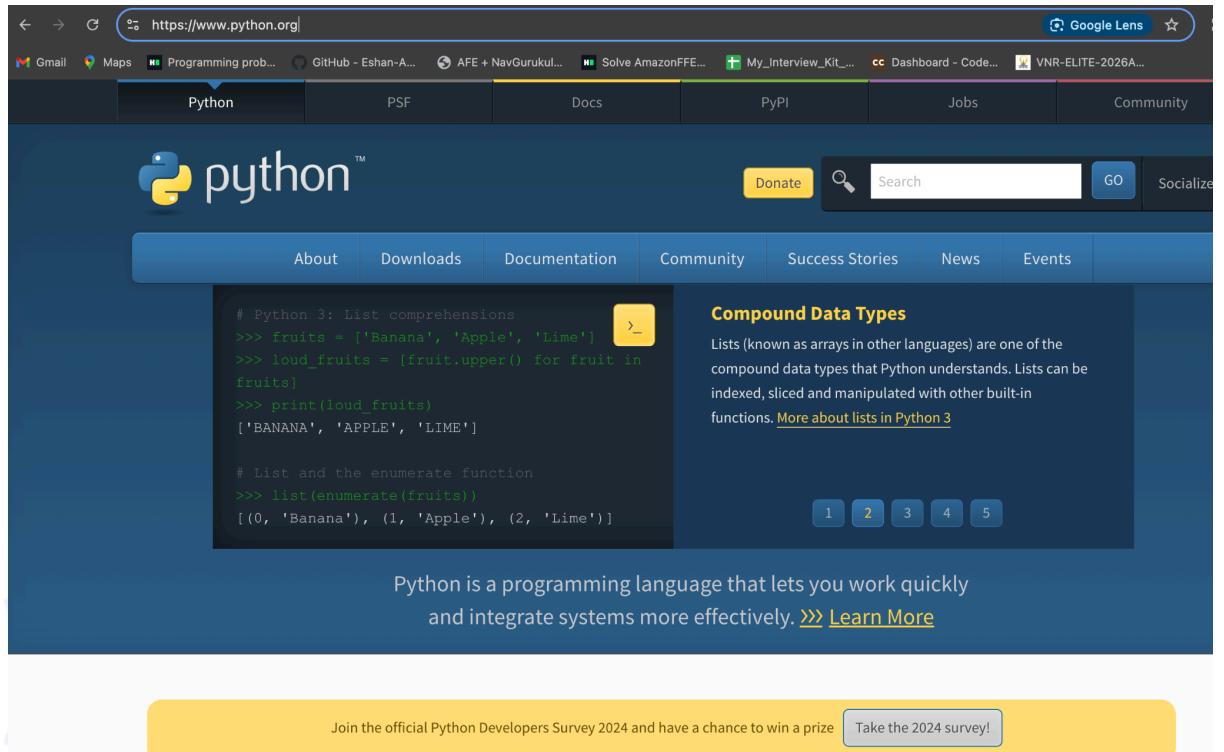


# Python Installation Guide

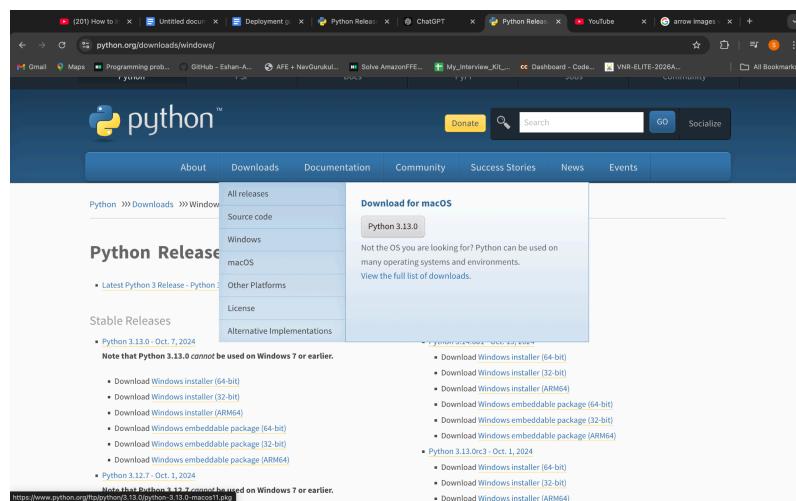
## 1. Installing Python on Windows

### Step 1: Download the Python Installer

- Open your web browser and go to the official Python website: [python](https://www.python.org) (or by typing python in the web browser and open the first link)
- You will get redirected to this page.



- You will see a button to download the latest version of Python (e.g., Python 3.13.0). Click the button to download the installer.

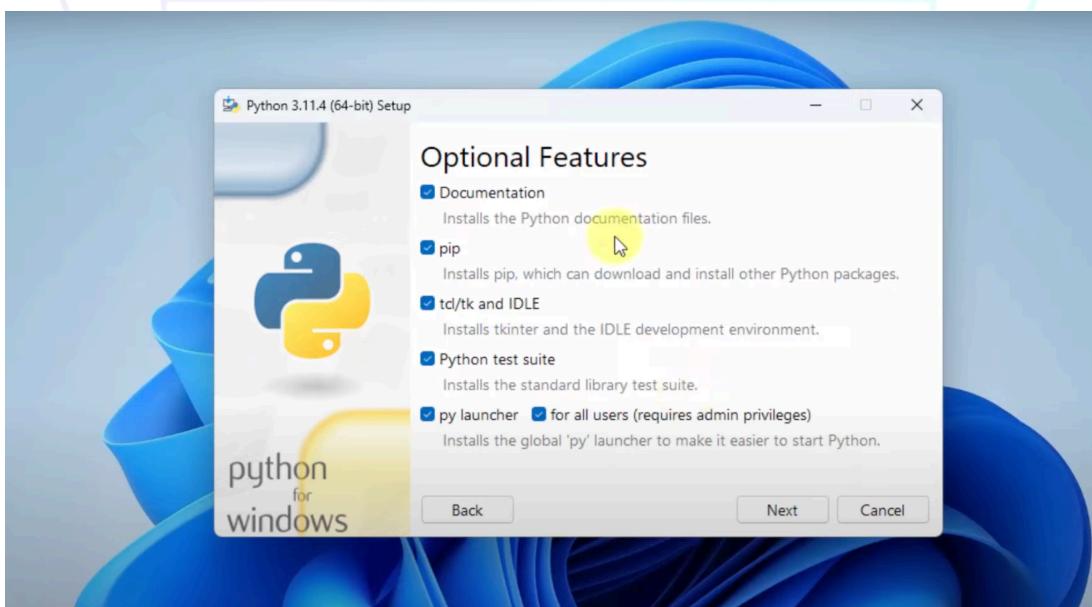


## Step 2: Run the Installer

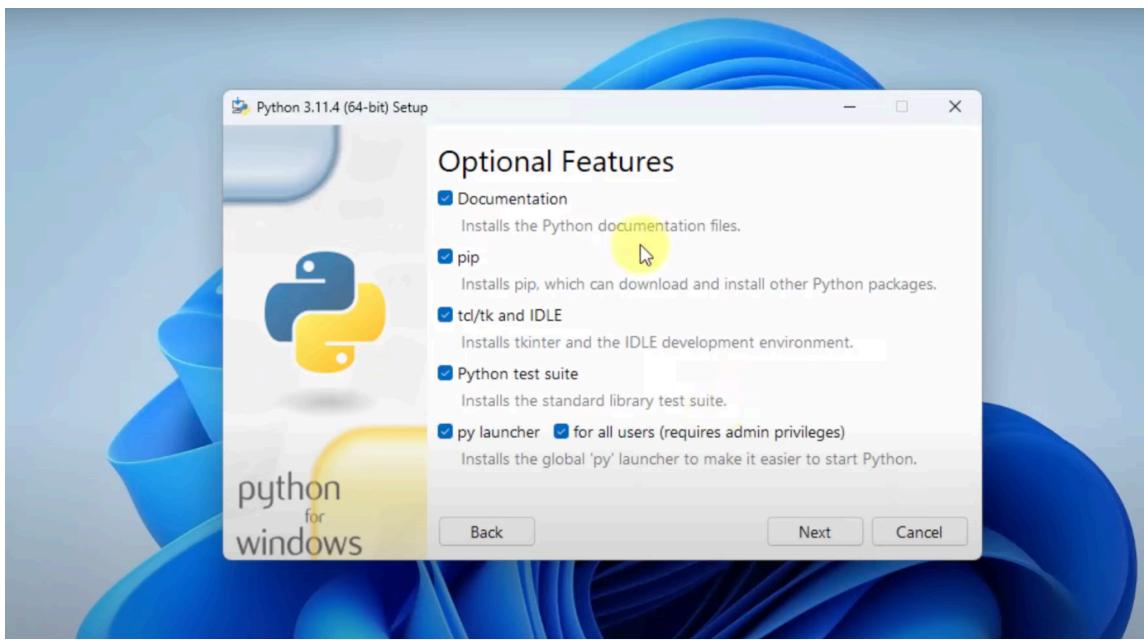
- Once the installer is downloaded, double-click on the `.exe` file to run it.
- On the first screen of the setup, make sure to **check the box** that says **“Add Python to PATH”**. This is crucial, as it allows you to run Python from the command line without needing to specify the full installation path.



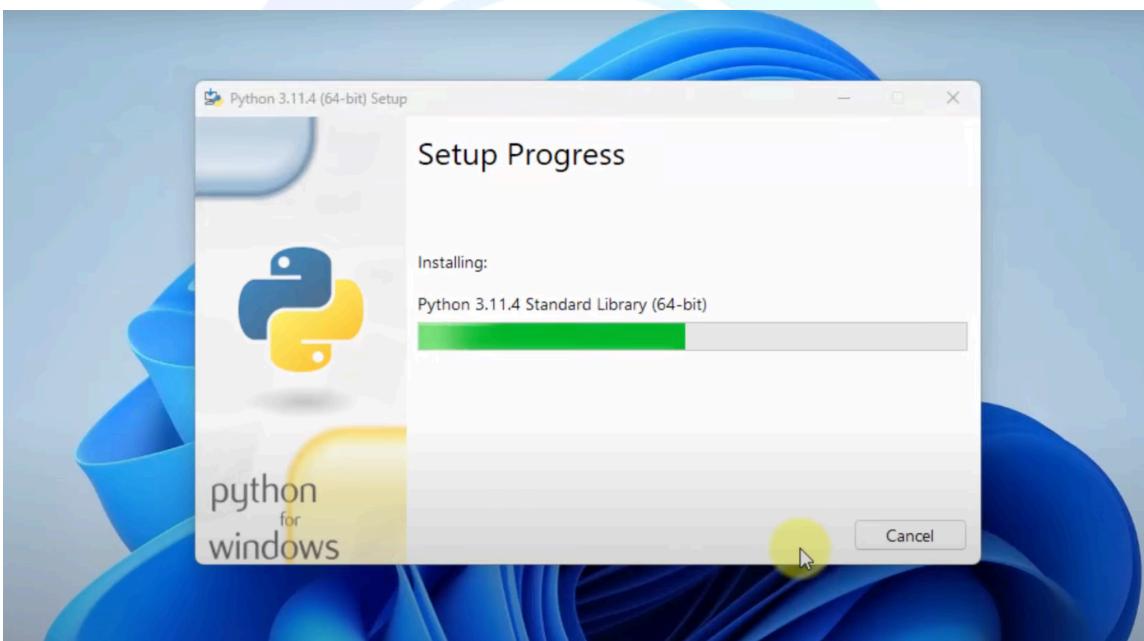
- choose **“Customize installation”** so that we can know what we are installing.



- Keep all checkboxes as selected and click **“next”**.



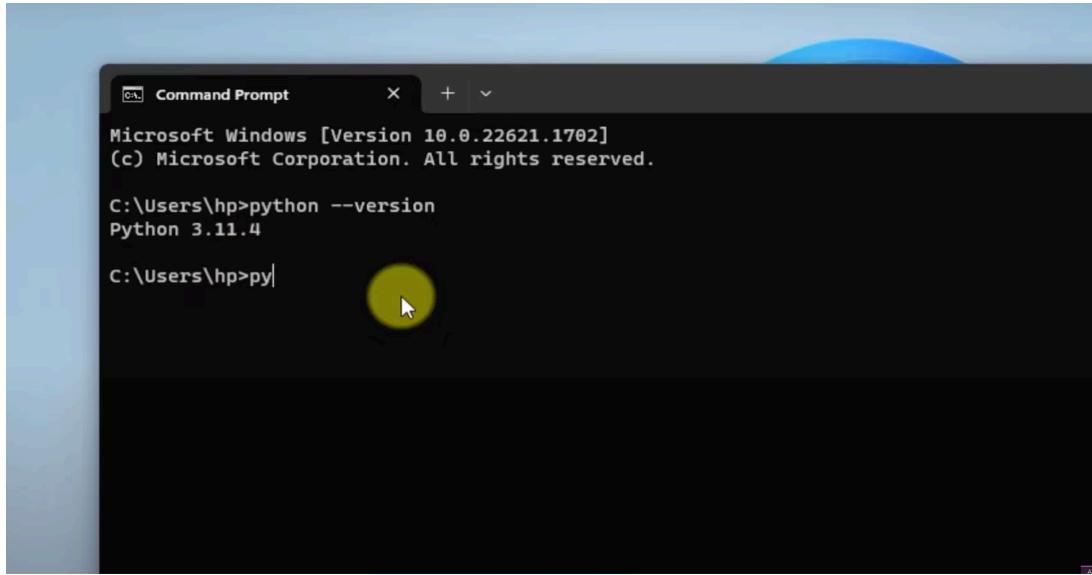
- Now select all the checkboxes as shown in above figure and click “next”.



- Set up will be initiated , Once it's done, you will see a screen that says "**Setup was successful.**"
- You can click on the "**Disable path length limit**" option if it appears. This prevents issues related to long file paths on Windows.

### Step 3: Verify the Installation

- Open the Command Prompt by typing **cmd** in the Start Menu search.
- Type the following command "**python --version**"and press Enter



If Python is installed correctly, it will show the installed version number, like **Python 3.x.x**.

---

## 2. Installing Python on MacOS

### Step 1: Download the Python Installer

- Open your web browser and go to the official Python website: [python](https://www.python.org)(or by typing python in the web browser and open the first link)
- You will get redirected to this page.

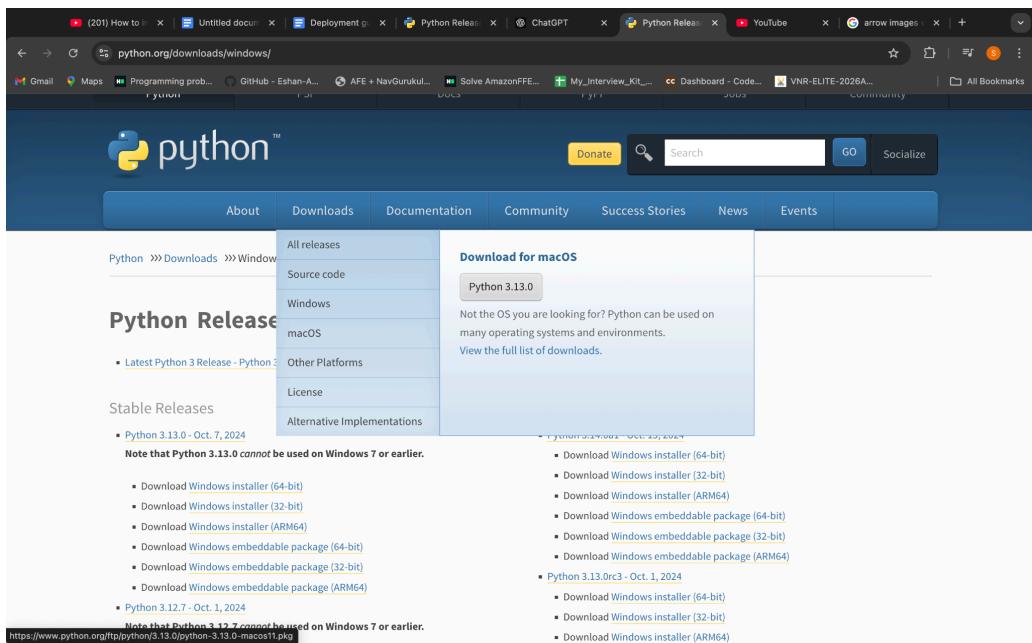
A screenshot of the Python.org homepage. The URL in the address bar is https://www.python.org. The page features a dark blue header with the Python logo and the word "python" in white. Below the header is a navigation menu with links for "About", "Downloads", "Documentation", "Community", "Success Stories", "News", and "Events". A central content area displays a code snippet in a terminal window:

```
# Python 3: List comprehensions
>>> fruits = ['Banana', 'Apple', 'Lime']
>>> loud_fruits = [fruit.upper() for fruit in
fruits]
>>> print(loud_fruits)
['BANANA', 'APPLE', 'LIME']

# List and the enumerate function
>>> list(enumerate(fruits))
[(0, 'Banana'), (1, 'Apple'), (2, 'Lime')]
```

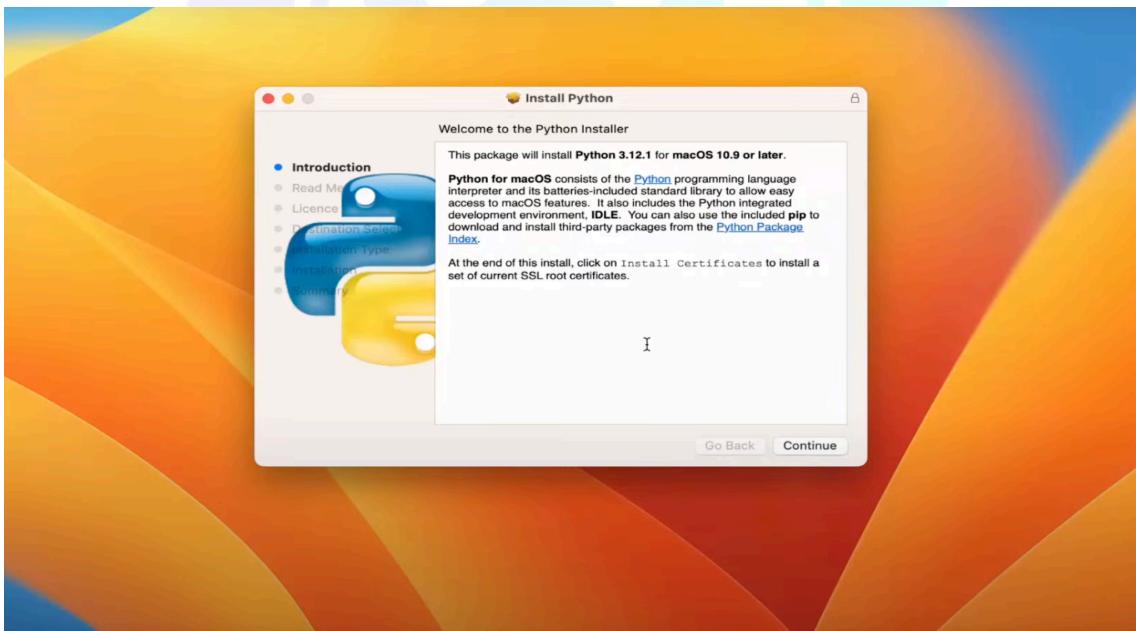
To the right of the code, there is a section titled "Compound Data Types" with a brief description and a "More about lists in Python 3" link. At the bottom of the page, there is a banner with the text "Python is a programming language that lets you work quickly and integrate systems more effectively." followed by a "Learn More" link.

- You will see a button to download the latest version of Python (e.g., Python 3.13.0). Click the button to download the installer.

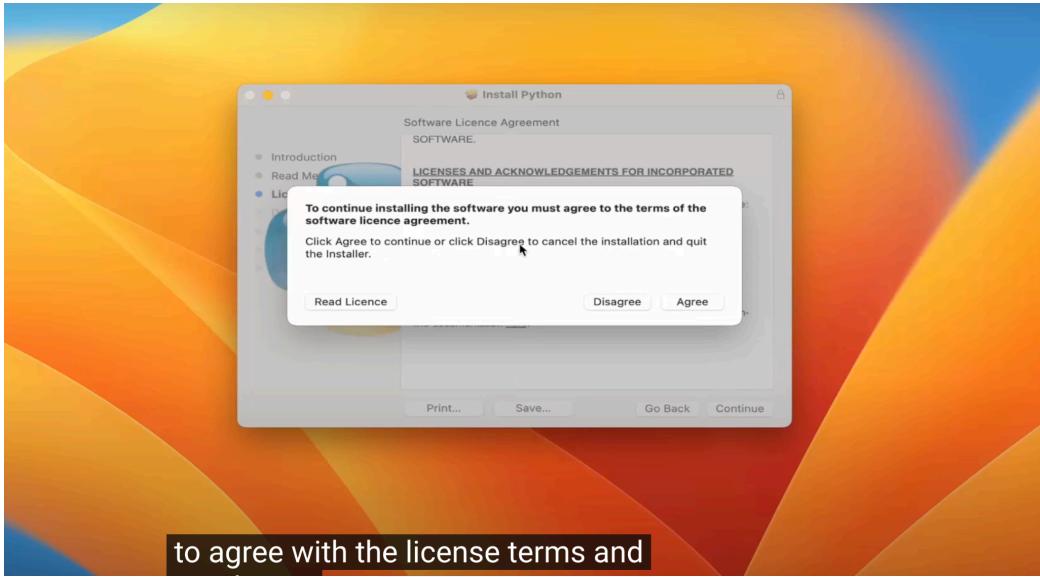


## Step 2: Run the Installer

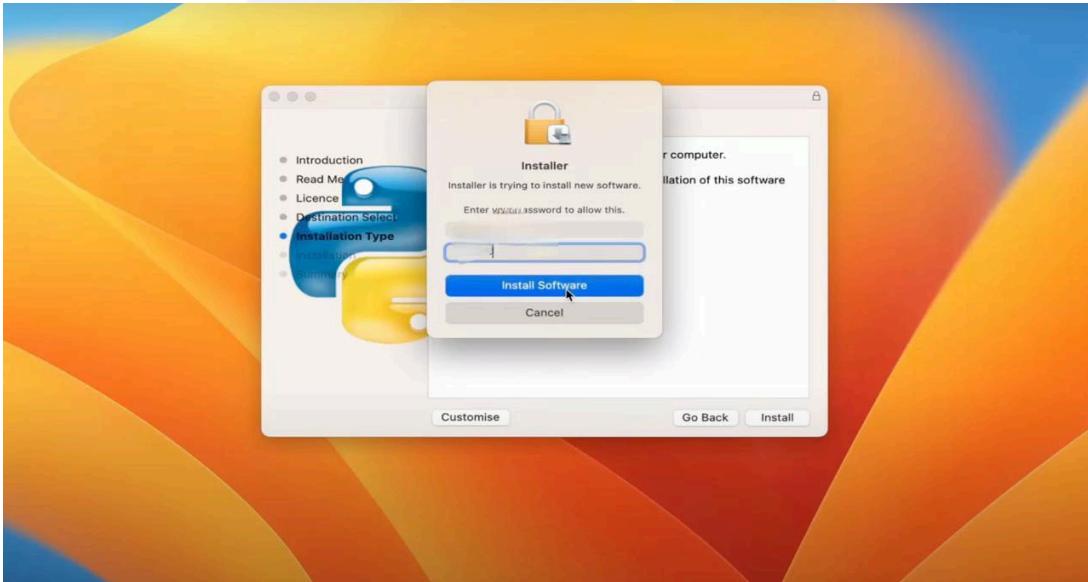
- Once the installer is downloaded, double-click on the .exe file to run it.



- Then the installation of python will be started, click continue and accept the terms and conditions.
- Accept all conditions and at last click “agree”



- Once you agree to the conditions, it will ask for your mac password. Give the password and click “Install”.



- Here give access to our folders.

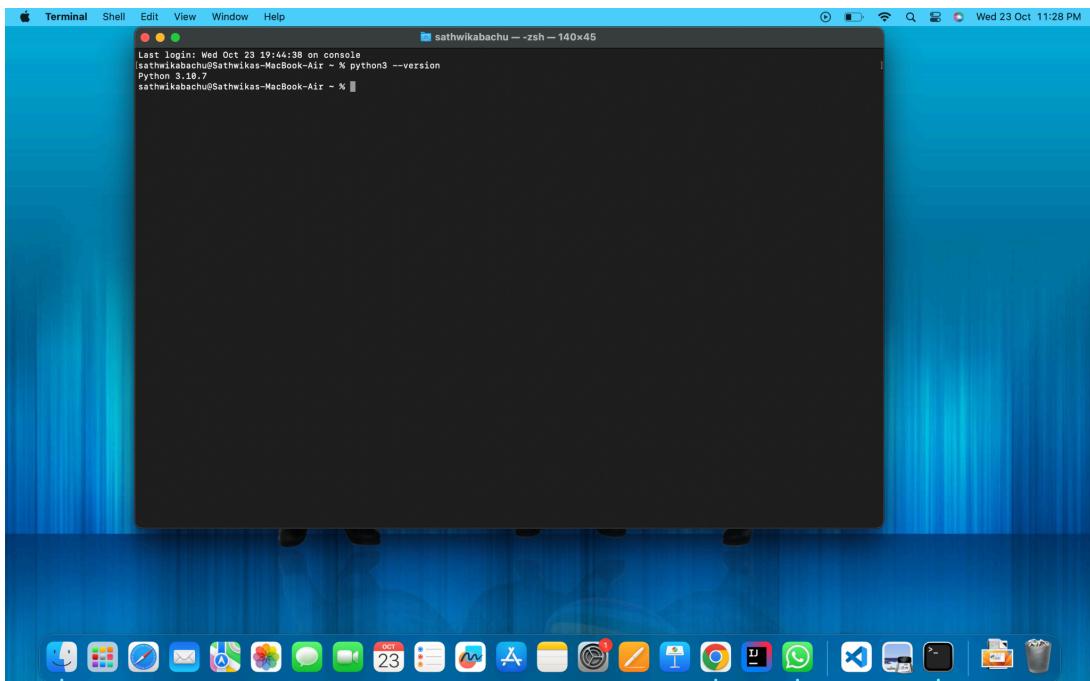


- Then the installation starts.

- Once it is finished. You can verify using a terminal.

### Step 3: Verify the Installation

- Open terminal using search option.
- Type the following command “**python3 --version**”and press Enter



- If it gives the version then the installation is successful.



# Jupyter notebook Installation

**Step 1:** Install Python.

**Step 2 :** Install pip if not already available:

Run this command in the terminal/command prompt to install.

**“sudo apt install python3-pip”**

**Step 3:** Install Jupyter

- Windows : pip install jupyter
- Mac OS : pip3 install jupyter

Use the above commands to install.

```
Last login: Wed Oct 23 23:27:44 on ttys000
sathwikabchu@sathwikas-MacBook-Air ~ % pip3 --version
ERROR: Unknown command: version
sathwikabchu@sathwikas-MacBook-Air ~ % pip3 --version
pip 22.2.2 from /Library/Frameworks/Python.framework/Versions/3.10/lib/python3.10/site-packages/pip (python 3.10)
sathwikabchu@sathwikas-MacBook-Air ~ % pip3 install jupyter
```

**Step 4:** Launch Jupyter Notebook

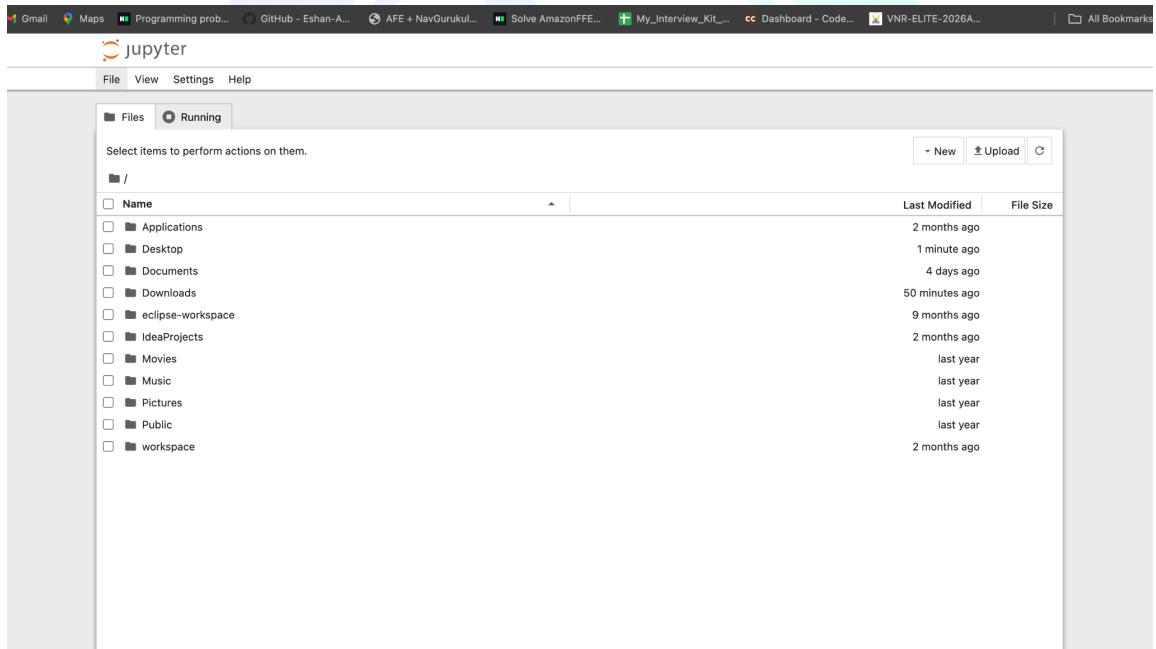
- After installation, run: “**jupyter notebook**” in terminal/command prompt.
- It will open a jupyter notebook in the web browser.

```

Last login: Thu Oct 24 00:00:03 on ttys000
sathwikabachu@Sathwika-MacBook-Air ~ % jupyter notebook
[I 2024-10-24 00:12:09.171 ServerApp] Jupyter server terminals | extension was successfully linked.
[I 2024-10-24 00:12:09.173 ServerApp] JupyterLab | extension was successfully linked.
[I 2024-10-24 00:12:09.178 ServerApp] notebook | extension was successfully linked.
[I 2024-10-24 00:12:09.180 ServerApp] Jupyter server cookie secret: /Users/sathwikabachu/Library/Jupyter/runtime/jupyter_cookie_secret
[I 2024-10-24 00:12:09.185 ServerApp] notebook_shim | extension was successfully linked.
[I 2024-10-24 00:12:09.189 ServerApp] notebook_shim | extension was successfully loaded.
[I 2024-10-24 00:12:09.198 ServerApp] Jupyter_LSP | extension was successfully loaded.
[I 2024-10-24 00:12:09.201 ServerApp] JupyterLab | extension was successfully loaded.
[I 2024-10-24 00:12:09.203 ServerApp] JupyterLab application directory is /Library/Frameworks/Python.framework/Versions/3.10/site-packages/jupyterlab
[I 2024-10-24 00:12:09.208 ServerApp] Extension Manager is 'pip'.
[I 2024-10-24 00:12:09.216 ServerApp] JupyterLab | extension was successfully loaded.
[I 2024-10-24 00:12:09.218 ServerApp] notebook | extension was successfully loaded.
[I 2024-10-24 00:12:09.219 ServerApp] Service notebook | extension was successfully loaded.
[I 2024-10-24 00:12:09.220 ServerApp] Jupyter Server 2.14.2 is running at:
[I 2024-10-24 00:12:09.221 ServerApp] http://localhost:8888/tree?token=3747e423c2f69dddf3298469935c10fb84752eed4b2d0726
[I 2024-10-24 00:12:09.224 ServerApp] http://127.0.0.1:8888/tree?token=3747e423c2f69dddf3298469935c10fb84752eed4b2d0726
[I 2024-10-24 00:12:09.226 ServerApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[O 2024-10-24 00:12:09.228 ServerApp]

To access the server, open this file in a browser:
  file:///Users/sathwikabachu/Library/Jupyter/runtime/jpserver-2862-open.html
Or copy and paste one of these URLs:
  http://localhost:8888/tree?token=3747e423c2f69dddf3298469935c10fb84752eed4b2d0726
  http://127.0.0.1:8888/tree?token=3747e423c2f69dddf3298469935c10fb84752eed4b2d0726
[II 2024-10-24 00:12:14.777 ServerApp] Skipped non-installed server(s): bash-language-server, dockerfile-language-server-nodejs, javascript-typescript-langserver, jedi-language-server, julia-language-server, pyright, python-language-server, python-lsp-server, z-languageserver, sql-language-server, texlab, typescript-language-server, unified-language-server, vscode-css-languageserver-bin, vscode-html-languageserver-bin, vscode-json-languageserver-bin, yaml-language-server

```



Jupyter Notebook is now installed and fully set up! You can start coding interactively and experimenting with your Python projects.

## References:

**Windows:** [python download](#)

**Mac:** [python download](#)