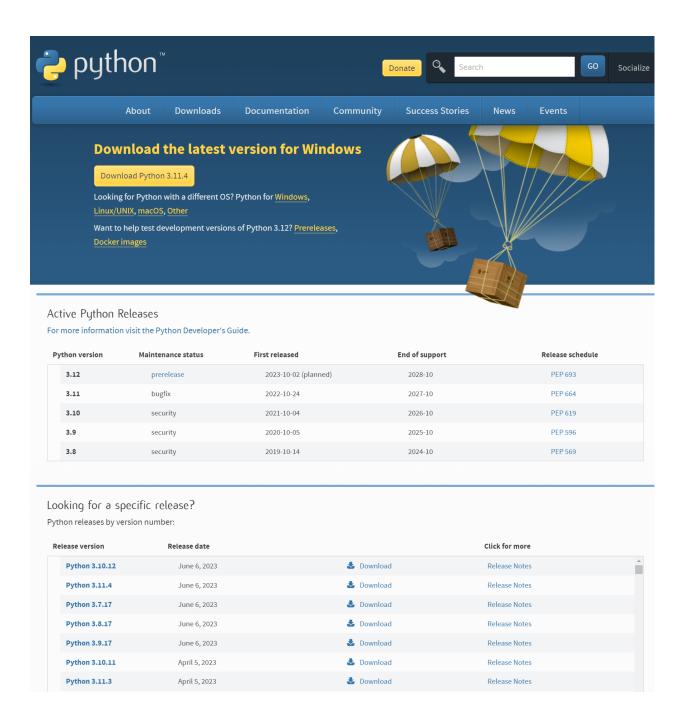
How to install Python on Windows?

To download Python on your system, you can use the following steps:

- Visit the official download page for Python on the Windows operating system- <u>LINK</u>
- Locate a reliable version of Python 3, preferably version 3.12.0(latest)
- Choose the correct link for your device from the options provided: either Windows installer (64-bit) or Windows installer (32-bit) and proceed to download the executable file.



Running the Executable Installer

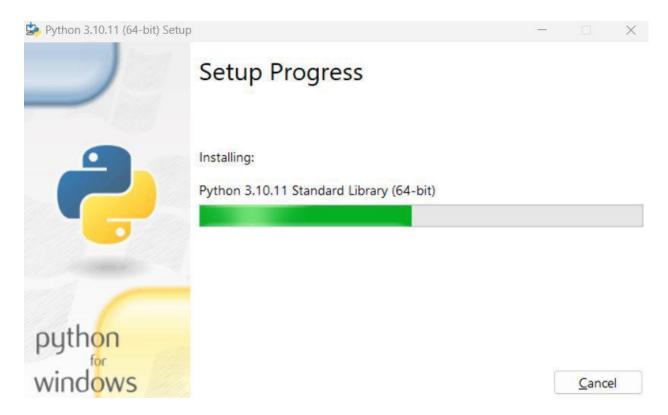
 Once you have downloaded the installer, open the .exe file, such as python-3.10.11-amd64.exe, by double-clicking it to launch the Python installer.

- Choose the option to Install the launcher for all users by checking the corresponding checkbox, so that all users of the computer can access the Python launcher application.
- Enable users to run Python from the command line by checking the Add python.exe to PATH checkbox.



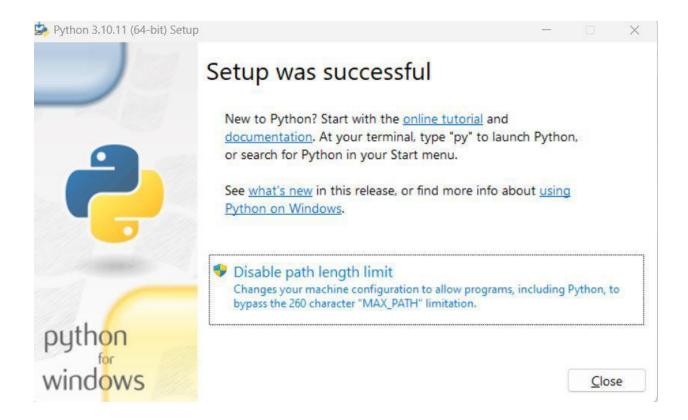
Setup Progress

After Clicking the Install Now Button the setup will start installing Python on your Windows system. You will see a window like this.



Final Installer Window

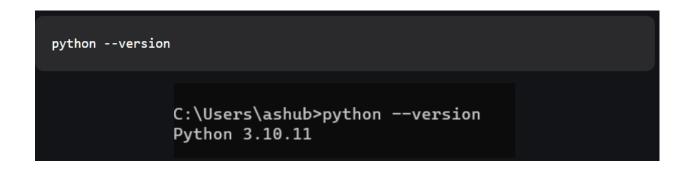
After completing the setup. Python will be installed on your Windows system. You will see a successful message.



Verify the Installation

Close the window after successful installation. You can check if the installation of Python was successful by using either the command line or the Integrated Development Environment (IDLE), which you may have installed.

To access the command line, click on the Start menu and type "cmd" in the search bar. Then click on Command Prompt.



How to install Jupyter Notebook on Windows?

Jupyter Notebook is an open-source web application that allows you to create and share documents that contain live code, equations, visualizations, and narrative text. Uses include data cleaning and transformation, numerical simulation, statistical modeling, data visualization, machine learning, and much more.

Jupyter has support for over 40 different programming languages and Python is one of them. Python is a requirement (Python 3.3 or greater, or Python 2.7) for installing the Jupyter Notebook itself.

Jupyter Notebook can be installed by using either of the two ways described below:

1. Using Anaconda:

Install Python and Jupyter using the Anaconda Distribution, which includes Python, the Jupyter Notebook, and other commonly used packages for scientific computing and data science. To install Anaconda, go through How to install Anaconda on windows? and follow the instructions provided.

2. Using PIP:

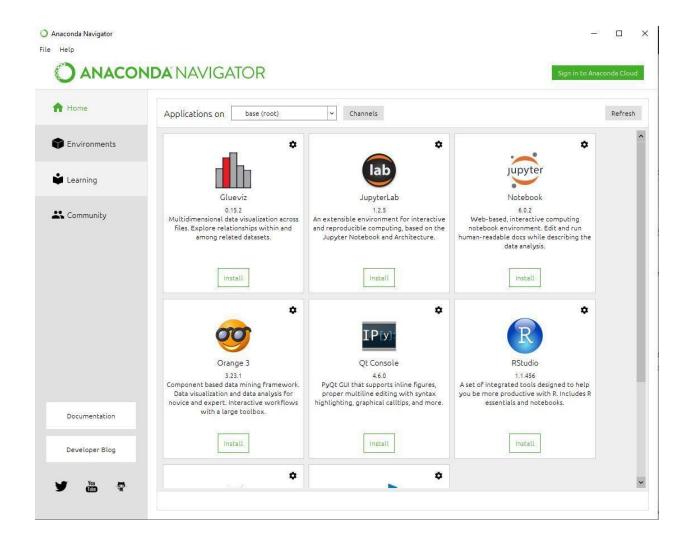
Install Jupyter using the PIP package manager used to install and manage software packages/libraries written in Python. To install pip, go through How to install PIP on Windows? and follow the instructions provided.

Installing Jupyter Notebook using Anaconda:

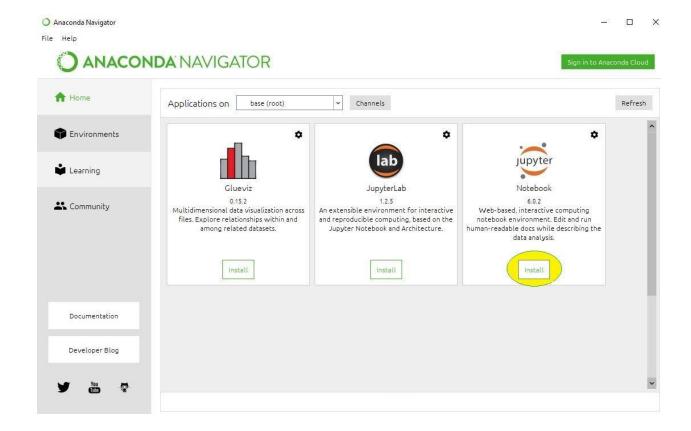
Anaconda is an open-source software that contains Jupyter, Spyder, etc. that is used for large data processing, data analytics, heavy scientific computing. Anaconda works for R and python programming language. Spyder (sub-application of Anaconda) is used for python. OpenCV for python will work in Spyder. Package versions are managed by the package management system called conda.

To install Jupyter using Anaconda, just go through the following instructions:

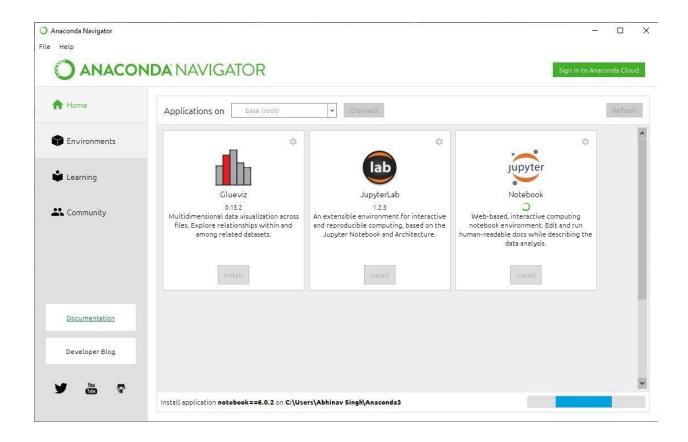
Launch Anaconda Navigator:



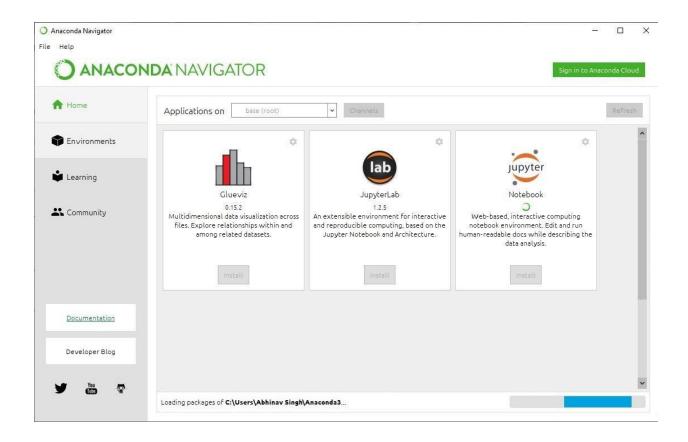
Click on the Install Jupyter Notebook Button:



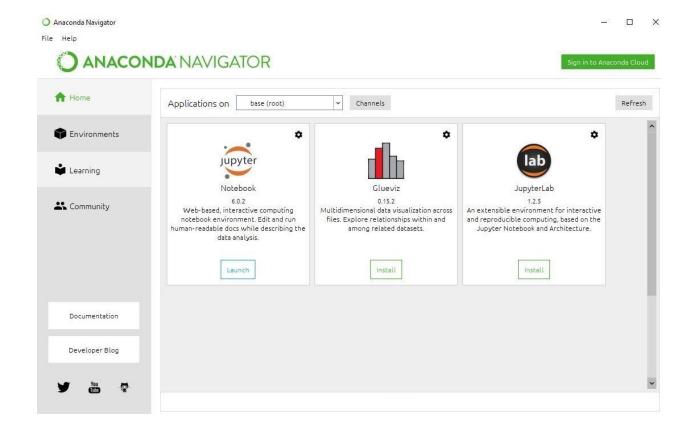
• Beginning the Installation:



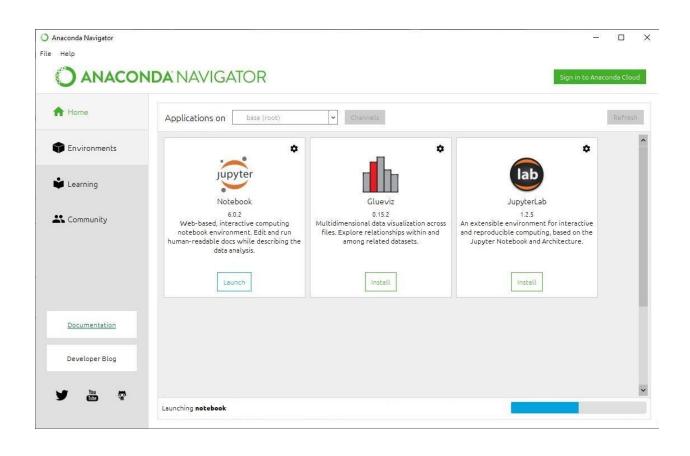
• Loading Packages:

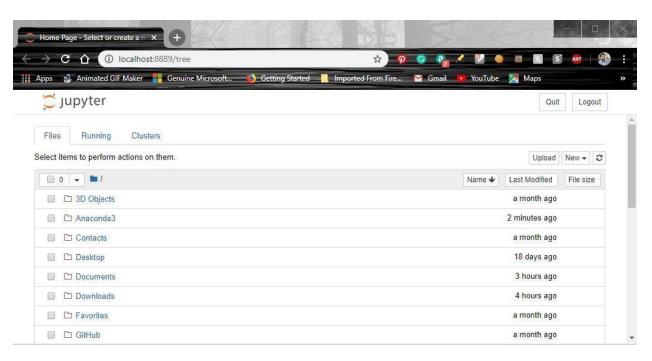


• Finished Installation:



• Launching Jupyter:





Installing Jupyter Notebook using pip:

PIP is a package management system used to install and manage software packages/libraries written in Python. These files are stored in a large "on-line repository" termed as Python Package Index (PyPI). pip uses PyPI as the default source for packages and their dependencies.

To install Jupyter using pip, we need to first check if pip is updated in our system. Use the following command to update pip:

```
python -m pip install --upgrade pip

Command Prompt - python -m pip install --upgrade pip

C:\Users\Abhinav Singh>python -m pip install --upgrade pip
Requirement already up-to-date: pip in c:\users\abhinav singh\anaconda3\lib\site-packages (19.3.1)
```

After updating the pip version, follow the instructions provided below to install Jupyter:

• Command to install Jupyter:

```
python -m pip install jupyter
```

• Beginning Installation:

```
C:\Users\Abhinav Singh>python -m pip install jupyter

Collecting jupyter

Using cached https://files.pythonhosted.org/packages/83/df/0f5dd132200728a86190397e1ea87cd76244e42d39ec5e88efd25b2abd7
e/jupyter-1.0.0-py2.py3-none-any.whl

Collecting jupyterel

Using cached https://files.pythonhosted.org/packages/e1/92/8fec943b5b81078399f969f00557804d884c96fcd0bc296e81a2ed4fd27
0/jupykernel-5.1.3-py3-none-any.whl

Collecting jupyter-console

Using cached https://files.pythonhosted.org/packages/0a/89/742fa5a80b552ffcb6a8922712697c6e6828aee7b91ee4ae2b79f00f840
1/jupyter_console-6.1.0-py2.py3-none-any.whl

Collecting nbconvert

Using cached https://files.pythonhosted.org/packages/79/6c/05a569e9f703d18aacb89b7ad6075b404e8a4afde2c26b73ca77bb644b1
```

Downloading Files and Data:

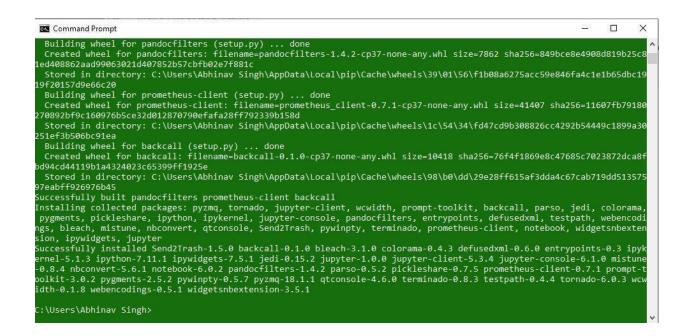
```
Using cached https://files.pythonhosted.org/packages/e9/97/55e575a5b49e5c3df9eb3c116c61021d7badf556c816be13bbd7baf55523  
4/jedi-0.15.2-py2.py3-none-any.wh1
Collecting colorama; sys_platform == "win32"
Using cached https://files.pythonhosted.org/packages/c9/dc/45cdef1b4d119eb96316b3117e6d5708a08029992b2fee2c143c7a0a5cc
5/colorama-0.4.3-py2.py3-none-any.wh1
Requirement already satisfied: setuptools>=18.5 in c:\users\abhinav singh\anaconda3\lib\site-packages (from ipython>=5.0
.0-.ipykernel-jupyter) (44.0.0.post20200106)
Collecting pickleshare
Using cached https://files.pythonhosted.org/packages/9a/41/220f49aaea88bc6fa6cba8d05ecf24676326156c23b991e80b3f2fc24c7
7/pickleshare-0.7.5-py2.py3-none-any.wh1
Collecting wcwidth
Downloading https://files.pythonhosted.org/packages/58/b4/4850a0ccc6f567cc0ebe7060d20ffd4258b8210efadc259da62dc6ed9c65
/wcwidth-0.1.8-py2.py3-none-any.wh1
Requirement already satisfied: jsonschema!=2.5.0,>=2.4 in c:\users\abhinav singh\anaconda3\lib\site-packages (from nbformat>=4.4->nbconvert-)jupyter) (3.2.0)
Requirement already satisfied: MarkupSafe>=0.23 in c:\users\abhinav singh\anaconda3\lib\site-packages (from jinja2>=2.4->nbconvert-)jupyter) (1.1.1)
Collecting webencodings
Using cached https://files.pythonhosted.org/packages/f4/24/2a3e3df732393fed8b3ebf2ec078f05546de641fe1b667ee316ec1dcf3b
7/webencodings-0.5.1-py2.py3-none-any.wh1
Collecting pwintpty>=0.5.orame==="nt"
Downloading https://files.pythonhosted.org/packages/7b/de/c69772738f10140d531b46b7462fc1dccb4175987daaa851a8cda2326251
/pywintpty-0.5.7-cp37-cp37m-win_amd64.wh1 (1.3M8)
| 1.3MB 547kB/S

Collecting parso>=0.5.2
| Downloading https://files.pythonhosted.org/packages/9b/b0/90353a5ece0987279837835224dead0c424833a224195683e188d384e06b
/parso-0.5.2-py2.py3-none-any.wh1 (99k8)
```

• Installing Packages:

```
X
 Command Prompt - python -m pip install jupyter
Requirement already satisfied: more-itertools in c:\users\abhinav singh\anaconda3\lib\site-packages (from zipp>=0.5->imp \
ortlib-metadata; python_version < "3.8"->jsonschema!=2.5.0,>=2.4->nbformat>=4.4->nbconvert->jupyter) (8.0.2)
Building wheels for collected packages: pandocfilters, prometheus-client, backcall
Building wheel for pandocfilters (setup.py) ... done
Created wheel for pandocfilters: filename=pandocfilters-1.4.2-cp37-none-any.whl size=7862 sha256=849bce8e4908d819b25c8
1ed408862aad99063021d407852b57cbfb02e7f881c
   Stored in directory: C:\Users\Abhinav Singh\AppData\Local\pip\Cache\wheels\39\01\56\f1b08a6275acc59e846fa4c1e1b65dbc19
  Building wheel for prometheus-client (setup.py) ... done
Created wheel for prometheus-client: filename=prometheus_client-0.7.1-cp37-none-any.whl size=41407 sha256=11607fb79180
270892bf9c160976b5ce32d012870790efafa28ff792339b158d
  Stored in directory: C:\Users\Abhinav Singh\AppData\Local\pip\Cache\wheels\1c\54\34\fd47cd9b308826cc4292b54449c1899a30
251ef3b506bc91ea
  Building wheel for backcall (setup.py) ... done
Created wheel for backcall: filename=backcall-0.1.0-cp37-none-any.whl size=10418 sha256=76f4f1869e8c47685c7023872dca8f
 od94cd44119b1a4324023c65399ff1925e
   Stored in directory: C:\Users\Abhinav Singh\AppData\Local\pip\Cache\wheels\98\b0\dd\29e28ff615af3dda4c67cab719dd513575
 Successfully built pandocfilters prometheus-client backcall
 Installing collected packages: pyzmq, tornado, jupyter-client, wcwidth, prompt-toolkit, backcall, parso, jedi, colorama,
pygments, pickleshare, ipython, ipykernel, jupyter-console, pandocfilters, entrypoints, defusedxml, testpath, webencodi
ngs, bleach, mistune, nbconvert, qtconsole, Send2Trash, pywinpty, terminado, prometheus-client, notebook, widgetsnbexten
sion, ipywidgets, jupyter
```

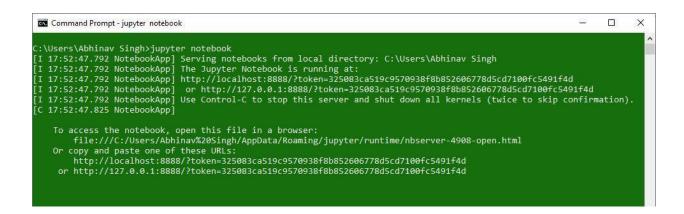
Finished Installation:

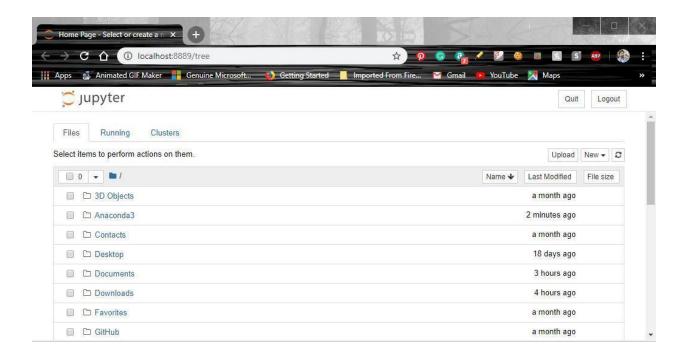


Launching Jupyter:

Use the following command to launch Jupyter using command-line:

```
jupyter notebook
```





How to install Python & Jupyter Notebook on Mac?

- Install Python https://www.dataquest.io/blog/installing-python-on-mac/
- Install Jupyter Notebook https://medium.com/@vinitasilaparasetty/how-to-install-jupyter-noteb ookon-mac-f2daca0aa7b2