**Python - Installation**

Python Software installation on Windows

Now a days most of the people use 64bit operating system and hence can use 64-bit version of python by visiting the link:

https://www.python.org/downloads/

Check for the latest version to be downloaded for respective operating system.

By Clicking the Download latest version displayed , "Python - version .exe "file will be downloaded. Double click the downloaded exe , then installation setup dialog box appears . In this box please select the Add python to path option with out fail and continue to install All the process is self explanatory. and finish the installation.

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**Testing the Installation on Windows**

Click the start button on the task bar of your OS You will be able to find Python Folder In this folder there will be IDLE Python Python Module Docs

You can use different options to write Python code.

1. Click the IDLE which is Integrated Development Environment , GUI window will be opened. in the window you will have >>> prompt , from where you can start writing your python programs To close the window use quit() option. aprt from the prompt you can use files option to save the code written and use Run option to execute the file.
2. Click the start button on the windows and open command line window in the command prompt , you can type python --version if python software is installed you will be able to find the version of the software installed else it will display un recognised command To go to the Python prompt , in the coomad line type python and press enter it will enter to the python prompt >>>. This will be interactive window , and you will be able to type the python code

**Installing various Packages**

To Download and install various packages we need to ensure our system is connected to internet We need to use PIP(Python installation of Packages) command These pip.exe will be present in the script directory under the path where python.exe(python software)was installed under any path we will be able to use these command as we have added the path during installation.

To install one of the package name numpy(Numerical Python) for multidimensaional arrays use the command

c:> pip install numpy

To install one of the package like pandas for Data analysis

c:> pip install pandas

To install one of the package xlrd for Microsoft Excel spread sheet

c:> pip install xlrd

To install one of the package matplotlib for 2D graphics

c:> pip install matplotlib

**Getting Help**

To check which are the various packages that are available and we have successfully installed then go to python prompt and type

help('modules') --- This command will take some time to display the results

To Get help on any topics we can type help to go to help utility

help() ---it will go to help prompt

help> topics ---type topics to get all the modules available

help> FUNCTIONS --type the topic named which you wanted to learn help> print

To Get the Documentation help

Go to the IDLE window Select Help->Python docs

under which you can check for

Python tutorial

Python Language reference

Python standard library

#For detail explanation of Installation from Python.org link , and it explains about different versions, different OS .

#So first read entirely and then start installation.

<https://docs.python.org/3/using/windows.html#launcher>

**Intergrated Developement environment**

There are lot of IDE's available to be used for python project development and for various purpose like Anaconda IDE which is used majorly for Data science and analysis. This IDE comes with Jupyter notebook , spyder IDE ,many preinstalled packages and python software

For installing Anaconda based on your Operating system go to this folder, download and install, while installing ensure to check the adding path variable if it is for the time installation then start the jupyter notebook and spyder start

it uses conda which packagemangement as that of pip for installation

<https://docs.anaconda.com/anaconda/install/windows/>

If you need to install only jupyter notebook which is basically used by most of the beginers for learning purpose then use this link and follow the instructions

<https://jupyter.org/install>

If you wanted install an IDE like Pycharm which has lot of features for project developement you can use the link and select either profesional or comunity which ever is free. follow the instructions to install

<https://www.jetbrains.com/pycharm/download/#section=windows>

There are other IDE's like sublimetext , ATOM etc , which also can be installed and used.

For jupyter notebook files , to open them we need to go to the jupyter.exe path and start the server

if we wanted the files to be opened by double clicking on it then we can

execute

pip install nbopen

then execute by using the command

python -m nbopen.install\_win         #to run nbopen.install in windows module

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this will make the file to get linked with the jupyter notebook application and we can directly double click and open

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If you are upgrading any 3.x.y to 3.x.z (patch) Python version, just go to Python downloads page get the latest version and start the installation. Since you already have Python installed on your machine installer will prompt you for "Upgrade Now". Click on that button and it will replace the existing version with a new one. You also will have to restart a computer after installation.

If you are upgrading from 3.x to 3.y (minor) then you will be prompted with "Install Now". In this case, you are not upgrading, but you are installing a new version of Python. You can have more than one version installed on your machine. They will be located in different directories. When you have more than one Python version on your machine you will need to use py lanucher to launch a specific version of Python

For instance:

py -3.7

or

py -3.8

Make sure you have py launcher installed on your machine. It will be installed automatically if you are using default settings of windows installer. You can always check it if you click on "Customize installation" link on the installation window.

<https://stackoverflow.com/questions/45137395/how-do-i-upgrade-the-python-installation-in-windows-10#:~:text=x.z%20(patch)%20Python%20version%2C,version%20with%20a%20new%20one>.

**Online Compilers - optional**

https://www.onlinegdb.com/online\_python\_compiler

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https://www.jdoodle.com/python3-programming-online/

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https://replit.com/languages/online-python-compiler

print("Hello")

Hello

print(2**+**3)

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