Task 0 –
Run PYTHON on an Android Device Using Jupyter Notebook
(Python, Jupyter notebook installations for Windows)

Video link for reference: link

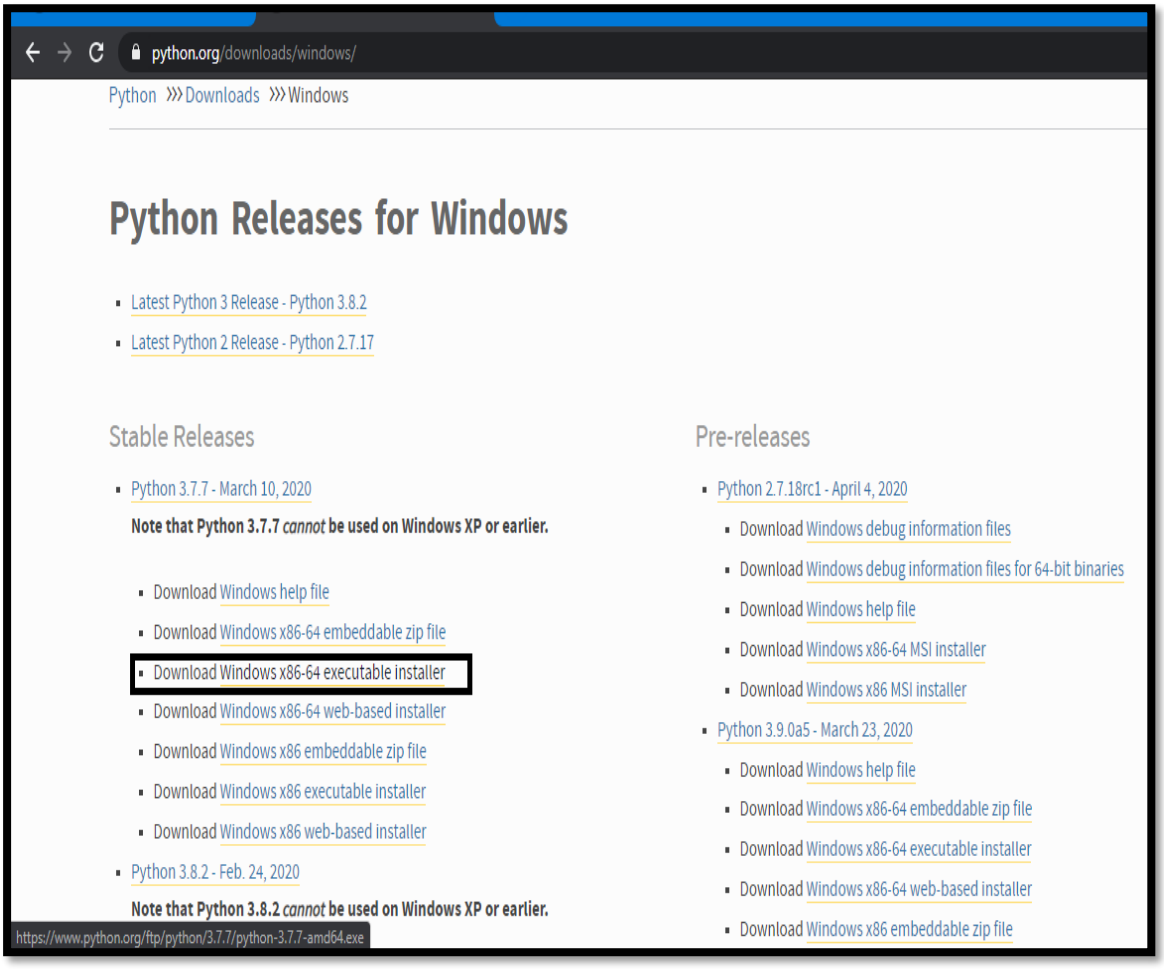
This document contains instructions to install following software on Windows OS

- Python 3
- Jupyter notebook

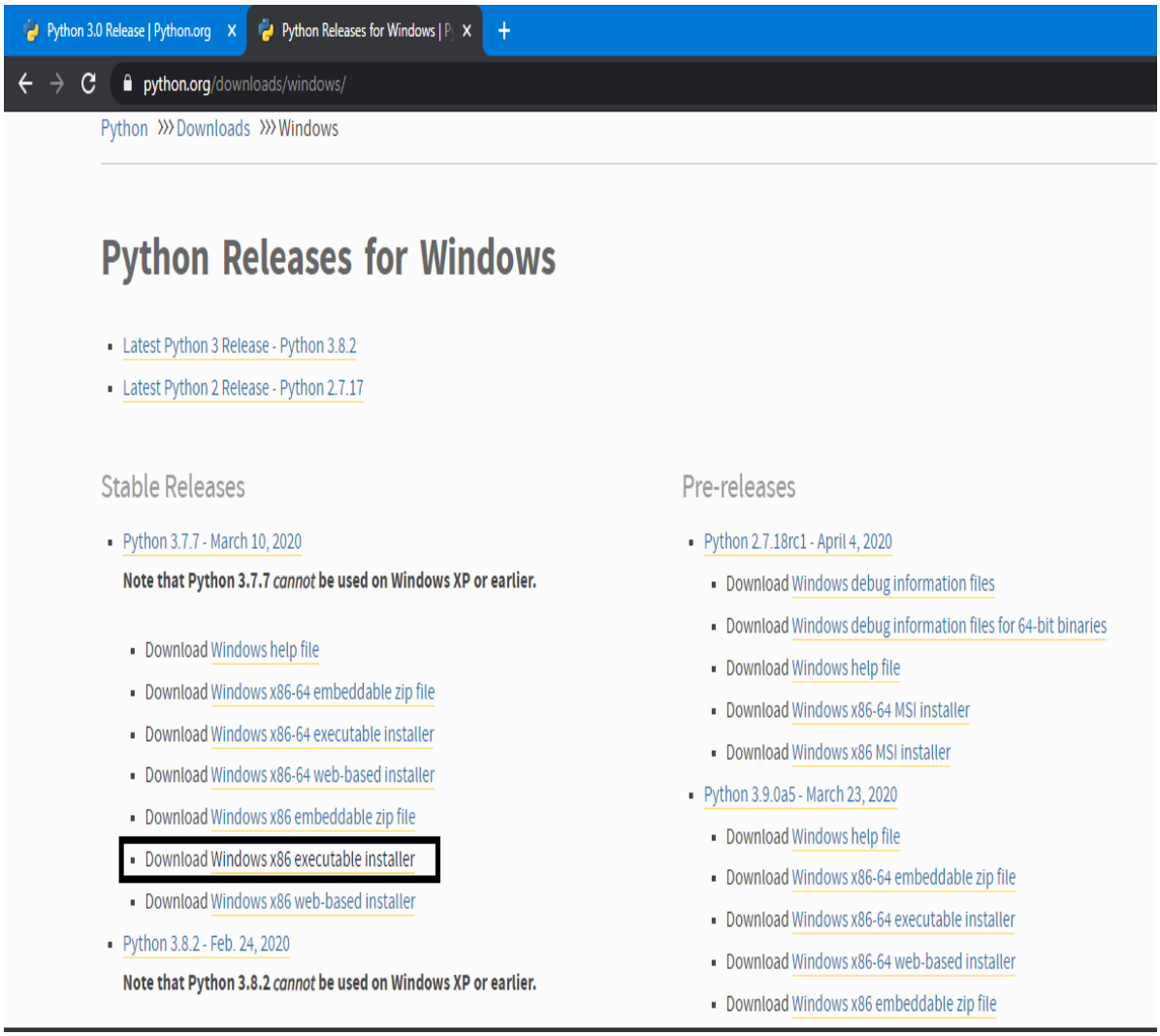
The installation of these software's has been tested on Windows 10 64-bit OS.

1. Instruction to install Python 3 on Windows OS:

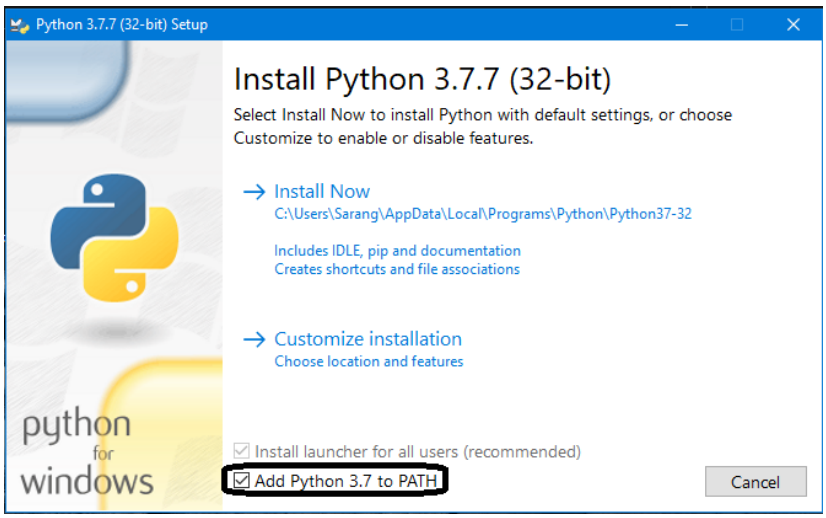
1. Download the latest version of python 3 for Windows here.
2. For ***64-bit OS*** click on Download Windows x86-64 executable installer.

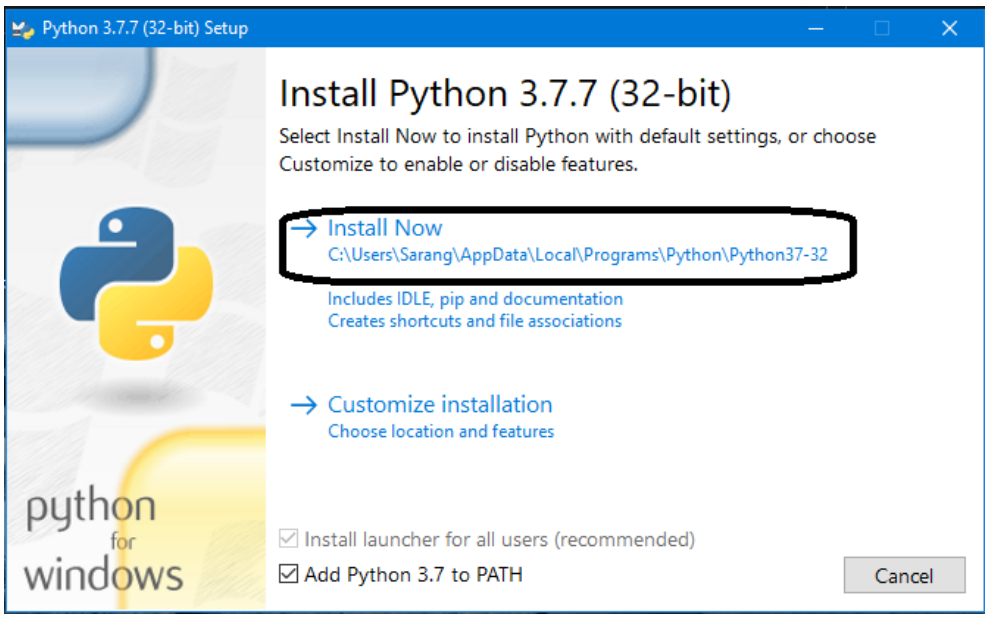


3. For ***32-bit OS*** click on the *Download Windows x86 executable installer.*

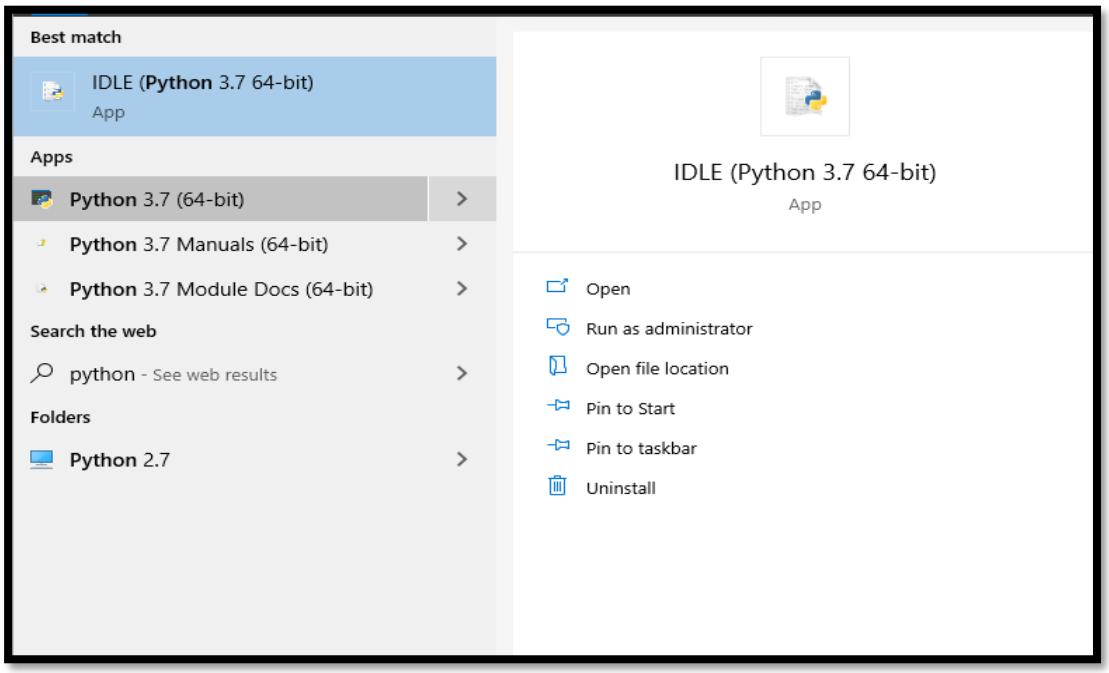


4. Run the installer and click on Install now.
   Make sure that the Add Python 3.7 to path is checked.

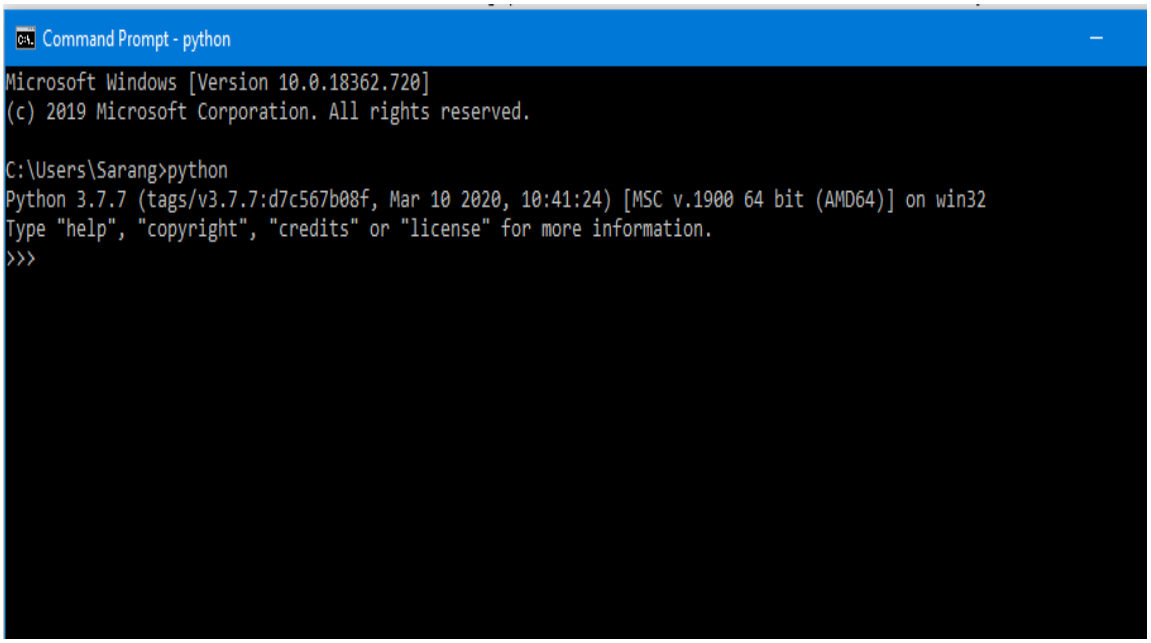




5. To check whether the installation has been successful, type python in the start menu. If you get the following, the installation has been successful.



6. Open command prompt and type python.
If you get the following, then python has been successfully added to the path variable.



7. Type quit( ), to quit python idle.

2. Instructions to install Jupyter Notebook:

1. Open command prompt and type **pip install jupyter**

```
C:\Users\Sarang>pip install jupyter
Collecting jupyter
  Downloading https://files.pythonhosted.org/packages/83/df/0f5dd132200728a86190397e1ea87cd76244e42d39ec5e88efd25b2abd7e
/jupyter-1.0.0-py2.py3-none-any.whl
Collecting qtconsole (from jupyter)
  Downloading https://files.pythonhosted.org/packages/31/ab/269bc5300d4369a4679cf676c4705aabf2071c2f2d3a211205aca86a1fd6
/qtconsole-4.7.3-py2.py3-none-any.whl (117kB)
    |████████████████████████████████| 122kB 242kB/s
Collecting ipywidgets (from jupyter)
  Downloading https://files.pythonhosted.org/packages/56/a0/dbcf5881bb2f51e8db678211907f16ea0a182b232c591a6d6f276985ca95
/ipywidgets-7.5.1-py2.py3-none-any.whl (121kB)
    |████████████████████████████████| 122kB 504kB/s
Collecting notebook (from jupyter)
  Downloading https://files.pythonhosted.org/packages/b1/f1/0a67f09ef53a342403ffa66646ee39273e0ac79ffa5de5dbe2f3e28b5bdf
/notebook-6.0.3-py3-none-any.whl (9.7MB)
    |████████████████████████████████| 9.7MB 547kB/s
```

2. This will install the Jupyter notebook. (it will take some time so please be patient)
   After installation, cmd will look something like this ->

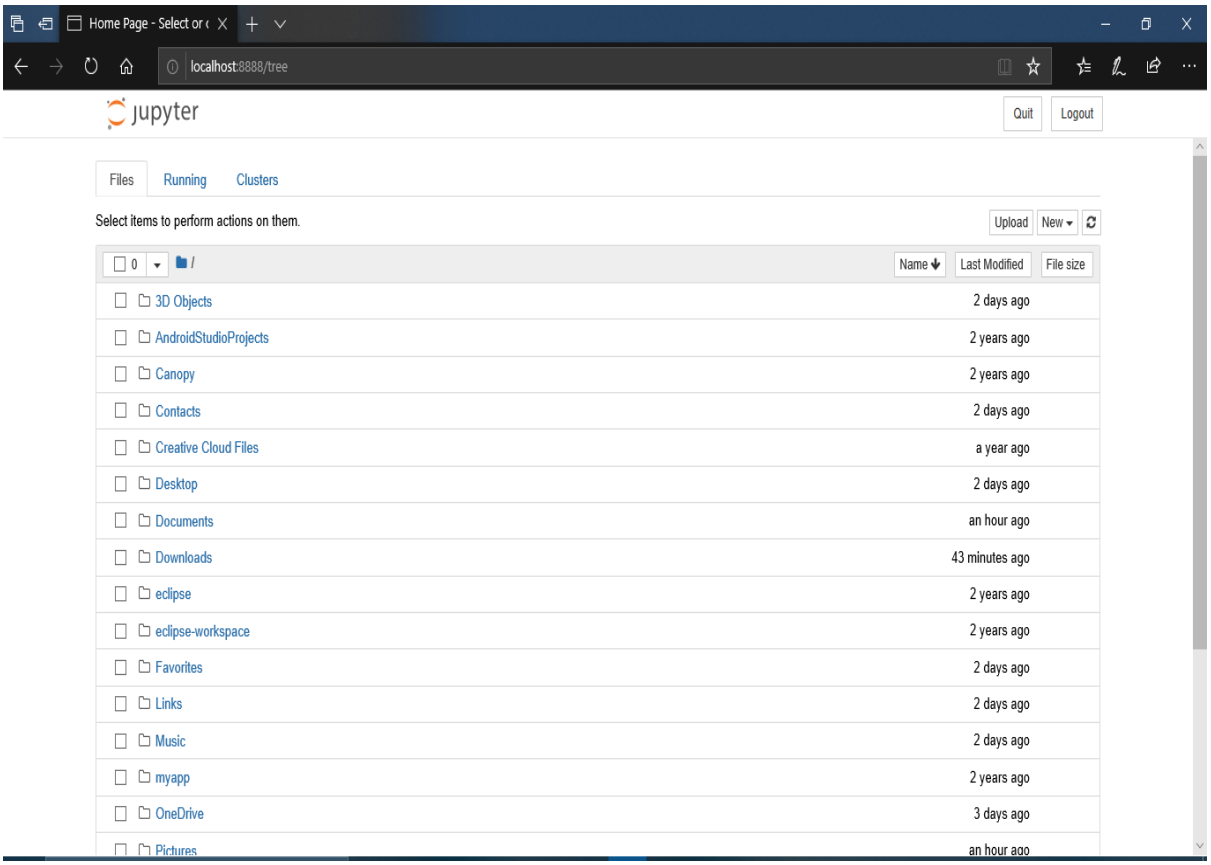
```
Collecting zipp>=0.5 (from importlib-metadata; python_version < "3.8"->jsonschema!=2.5.0,>=2.4->nbformat>=4.2.0->ipywidg
ets->jupyter)
  Downloading https://files.pythonhosted.org/packages/b2/34/bfcb43cc0ba81f527bc4f40ef41ba2ff4080e047acb0586b56b3d017ace4
/zipp-3.1.0-py3-none-any.whl
Installing collected packages: six, python-dateutil, pyzmq, pywin32, ipython-genutils, decorator, traitlets, jupyter-cor
e, tornado, jupyter-client, qtpy, pygments, colorama, pickleshare, parso, jedi, backcall, wcwidth, prompt-toolkit, ipyth
on, ipykernel, qtconsole, prometheus-client, Send2Trash, pywinpty, terminado, zipp, importlib-metadata, attrs, pyrsisten
t, jsonschema, nbformat, MarkupSafe, jinja2, mistune, webencodings, bleach, entrypoints, defusedxml, testpath, pandocfil
ters, nbconvert, notebook, widgetsnbextension, ipywidgets, jupyter-console, jupyter
  Running setup.py install for backcall ... done
  Running setup.py install for prometheus-client ... done
  Running setup.py install for pyrsistent ... done
  Running setup.py install for pandocfilters ... done
Successfully installed MarkupSafe-1.1.1 Send2Trash-1.5.0 attrs-19.3.0 backcall-0.1.0 bleach-3.1.4 colorama-0.4.3 decorat
or-4.4.2 defusedxml-0.6.0 entrypoints-0.3 importlib-metadata-1.6.0 ipykernel-5.2.1 ipython-7.13.0 ipython-genutils-0.2.0
 ipywidgets-7.5.1 jedi-0.17.0 jinja2-2.11.2 jsonschema-3.2.0 jupyter-1.0.0 jupyter-client-6.1.3 jupyter-console-6.1.0 ju
pyter-core-4.6.3 mistune-0.8.4 nbconvert-5.6.1 nbformat-5.0.6 notebook-6.0.3 pandocfilters-1.4.2 parso-0.7.0 pickleshare
-0.7.5 prometheus-client-0.7.1 prompt-toolkit-3.0.5 pygments-2.6.1 pyrsistent-0.16.0 python-dateutil-2.8.1 pywin32-227 p
ywinpty-0.5.7 pyzmq-19.0.0 qtconsole-4.7.3 qtpy-1.9.0 six-1.14.0 terminado-0.8.3 testpath-0.4.4 tornado-6.0.4 traitlets-
4.3.3 wcwidth-0.1.9 webencodings-0.5.1 widgetsnbextension-3.5.1 zipp-3.1.0
WARNING: You are using pip version 19.2.3, however version 20.0.2 is available.
You should consider upgrading via the 'python -m pip install --upgrade pip' command.

C:\Users\Sarang>
```

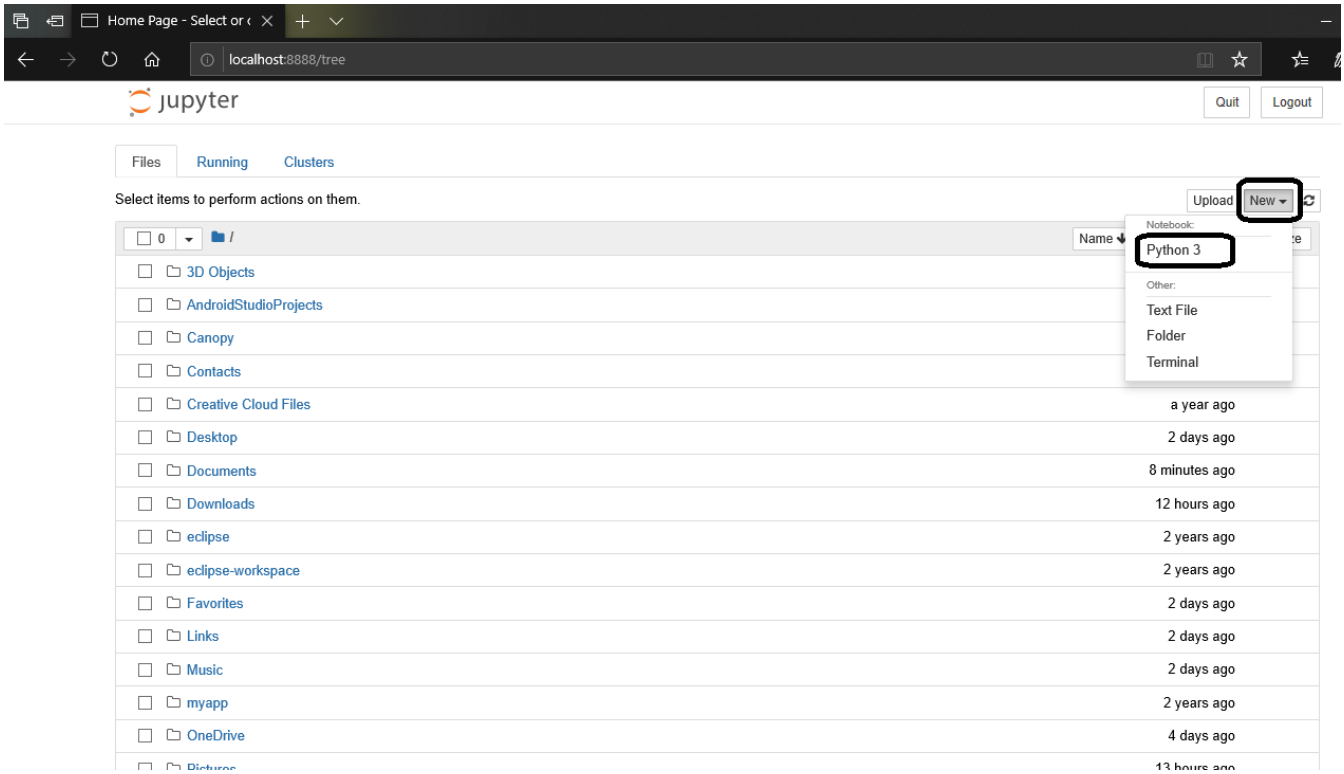
3. Now type **jupyter notebook** in cmd to open jupyter notebook

```
C:\Users\Sarang>jupyter notebook
[I 12:26:01.818 NotebookApp] Serving notebooks from local directory: C:\Users\Sarang
[I 12:26:01.818 NotebookApp] The Jupyter Notebook is running at:
[I 12:26:01.818 NotebookApp] http://localhost:8888/?token=a4b56a75a4d40d2b4ed9afa89e231b3feaf3a29f62290f51
[I 12:26:01.818 NotebookApp]  or http://127.0.0.1:8888/?token=a4b56a75a4d40d2b4ed9afa89e231b3feaf3a29f62290f51
[I 12:26:01.818 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
```

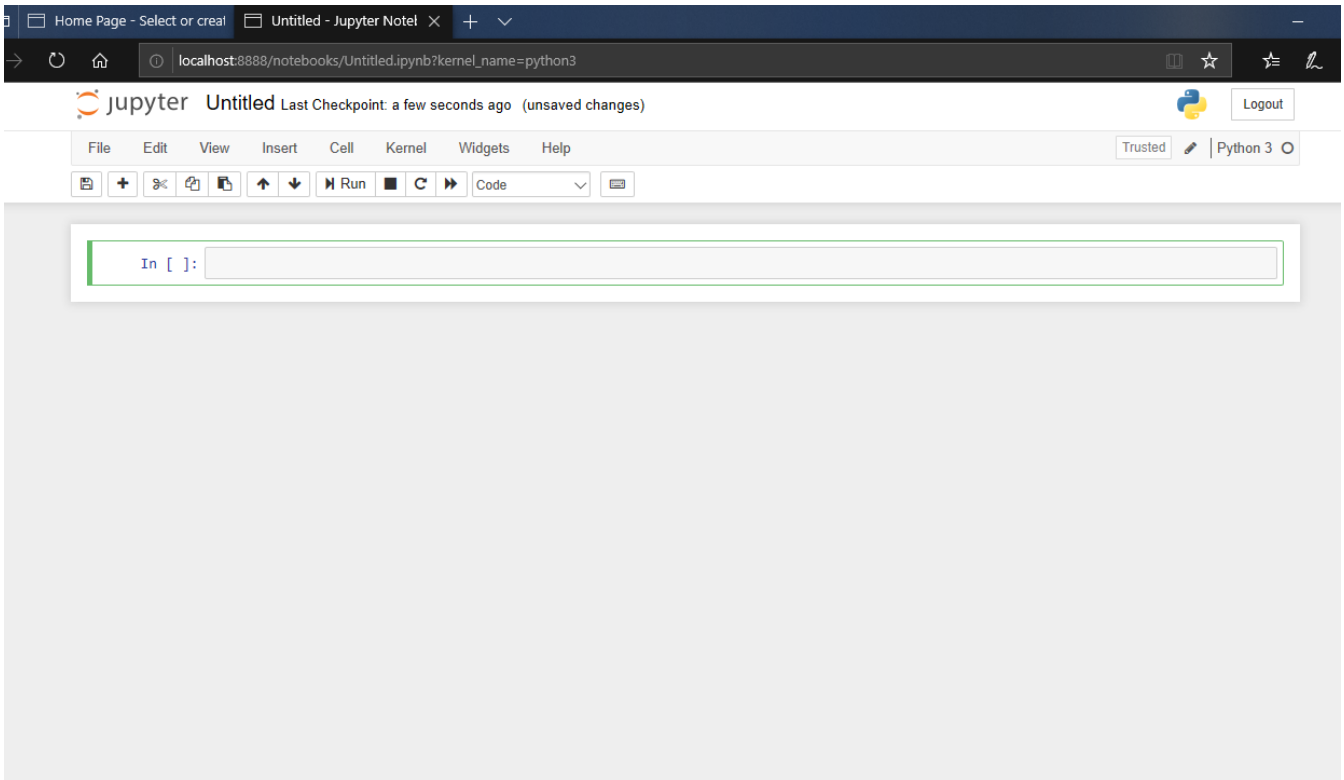
This will open a tab in your browser like this ->



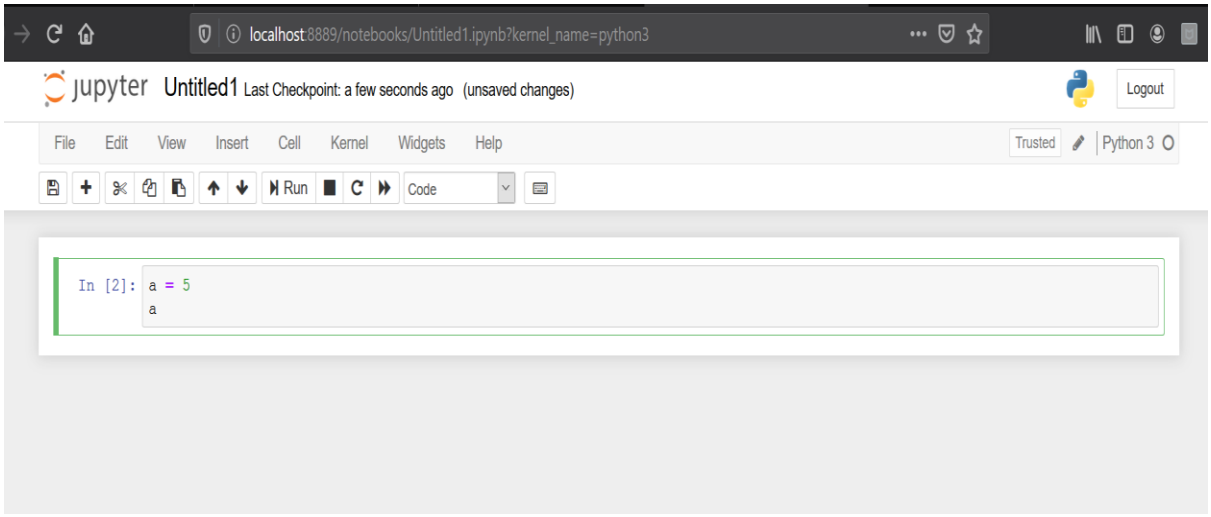
4. Click on new button and then python 3, to open a new note book.



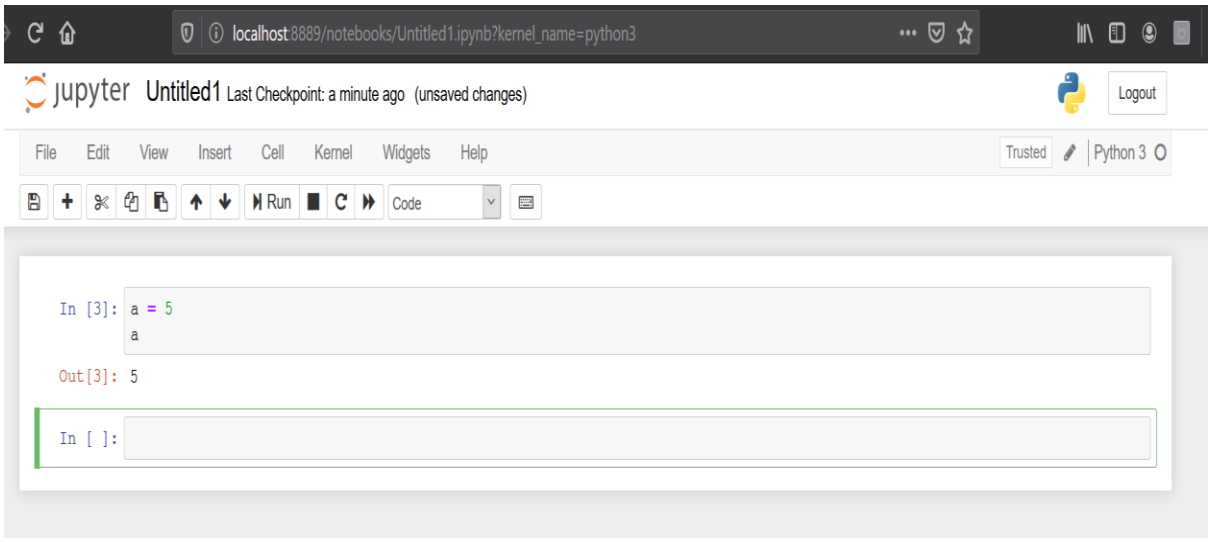
5. The new notebook will look something like this:



6. Now to test the notebook, enter ‘a = 5’ and ‘a’ in next line, as show below



7. Now run the code by pressing **shift + enter**. The output will be look like this



8. Close the browser and use ctrl + c in cmd to close the notebook

For Successful completion of Task 0, sent the output image as shown in above figure to your mentor.

Refer Video link for detail function of Jupyter NoteBook: https://youtu.be/jZ952vChhuI