

# Notes

This tutorial will help you to setup python and install jupyter notebook ( Web based application to create and share document that contains live code or explanatory texts).

Please follow steps with respect to your operating system.

## **Queries:**

In case you find any difficulty please reach me out at [muhammad.sohaib@persontyle.com](mailto:muhammad.sohaib@persontyle.com) or skype ([muhammad.sohaib@outlook.com](mailto:muhammad.sohaib@outlook.com))

\$ sign shows that the line contains a terminal code.

**Virtual Environments:** We make virtual environments just to keep dependencies required by different projects in separate places by creating virtual python environments for them.

**Pip** is a package management system used to install and manage software packages written in Python.

## **Operating System: Ubuntu 14.04**

### **Open terminal**

```
$ sudo apt-get install git  
$ sudo apt-get install python-setuptools  
$ sudo easy_install virtualenv
```

### **Create a new folder with name virtual\_environments in documents folder and go the folder directory**

```
$ cd Documents/virtual_environments  
$ virtualenv --no-site-packages dih_learn
```

Just make sure it installs setuptools, pip, wheel. "dih\_learn" is the name of the virtual environment you just created.

```
$ source dih_learn/bin/activate
```

### **Install the packages**

```
$ pip install ipython notebook[all]
```

Make sure all the related packages have been installed successfully. If you find any error while installation of package google it and install the dependencies required for the installation, most likely the dependencies would be the packages of ubuntu.

You can check the installed version using the command below:

```
$ pip freeze
```

It displays all the package in the virtual environment

### **How to open Jupyter Notebook**

Create a directory for your codes and write this command in terminal:

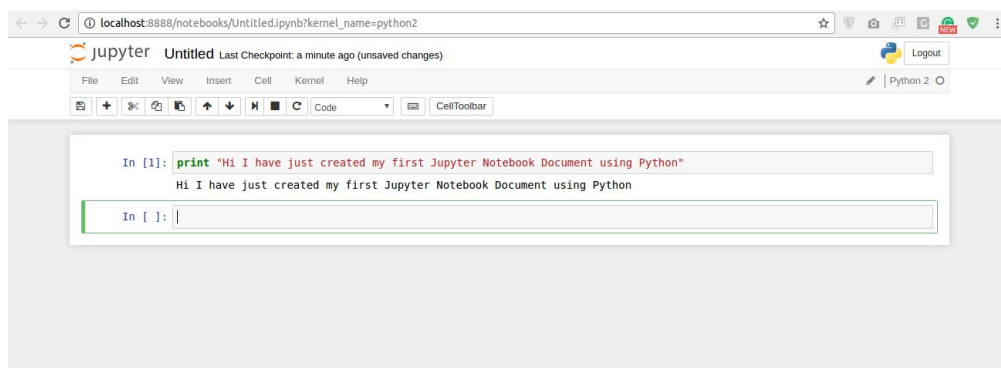
```
$ ipython notebook
```

It will open Jupyter notebook in your default browser if not open any browser and hit the url: <http://localhost:8888/tree>

### **Creating your first Document**



Create your first document by clicking python 2 in the dropdown.



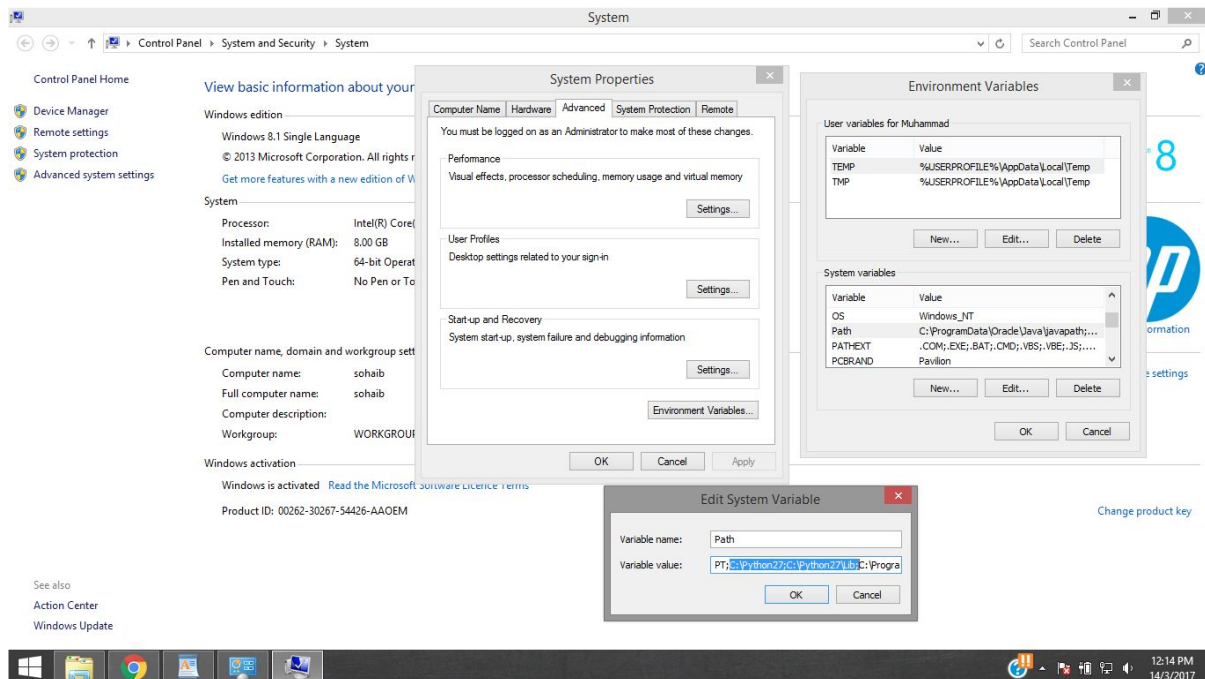
For deactivating the virtual environment use this command:

**\$ deactivate**

## Operating System: Windows

### Steps:

1. Download python and install it from [Python 2.7](#)
2. Go to my computer and set the environment for the PATH variable in System variables and add **C:\Python27;C:\Python27\Lib;C:\Python27\Scripts**



3. Download get\_pip.py file from attachment and save it to desktop or any location you prefer.
4. Open cmd and write **python /location/of/get-pip.py**

```
Command Prompt - python get_pip.py

1 File(s)          0 bytes
16 Dir(s)  198,216,384,512 bytes free

C:\Users\Muhammad>cd Desktop
C:\Users\Muhammad\Desktop>dir
Volume in drive C is Windows
Volume Serial Number is C044-52C4

Directory of C:\Users\Muhammad\Desktop

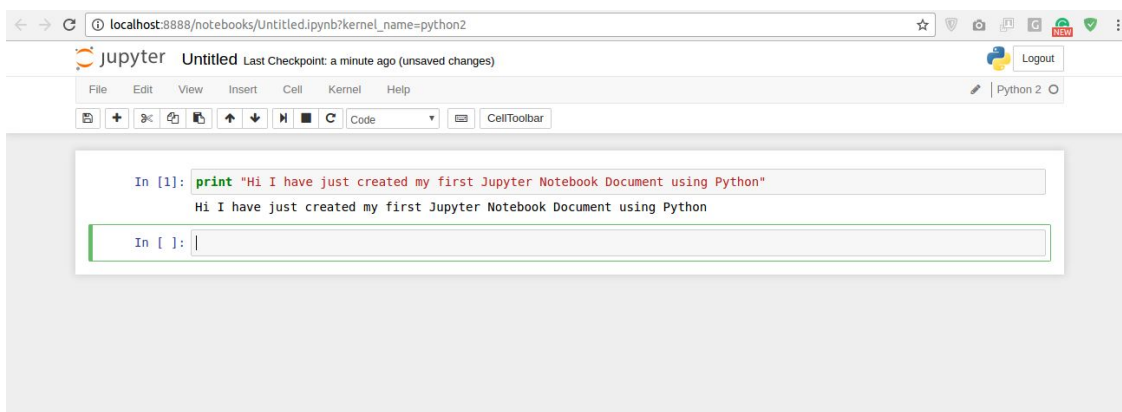
14/03/2017  12:09 PM    <DIR>          .
14/03/2017  12:09 PM    <DIR>          ..
18/01/2017  12:36 AM             27,447 Data Engineering(Quater1 Learning Path).d
ocx
06/03/2017  05:16 PM             864,839 DataEngineering.pptx
14/03/2017  12:09 PM             1,615,469 get_pip.py
02/02/2017  11:19 AM              82,851 IMG-20170202-WA0025.jpg
05/03/2017  12:56 AM             539,692 MILU5.docx
02/01/2017  10:53 PM    <DIR>          NFS MW
                    5 File(s)          3,130,298 bytes
                    3 Dir(s)  198,216,380,416 bytes free

C:\Users\Muhammad\Desktop>python get_pip.py
```

5. Write **pip install virtualenv** in cmd. It will install virtual environment.
6. Create a new folder in documents with name **virtual\_environments** and write:- **virtualenv dih\_learn** in cmd. "Dih\_learn" is the name of the environment you are creating.
7. Write **dih\_learn\Scripts\activate** to activate the environment.
8. Make sure you have Visual C++ 9.0 if you don't have download it from here [Visual C++ 9.0](#).
9. Install Jupyter Notebook with command **pip install ipython notebook** make sure all related packages have been installed successfully.
10. Test your jupyter notebook just create a directory where you want to put your codes and go into the directory from cmd and write **ipython notebook**. It will open in your default browser if not then open your browser and hit url <http://localhost:8888/tree>



11. Create your first document by clicking python 2 in the dropdown.



12. If you want to deactivate your environment write **deactivate** in cmd.

All set here you go.