

Lab 1:

VMware Instructions:

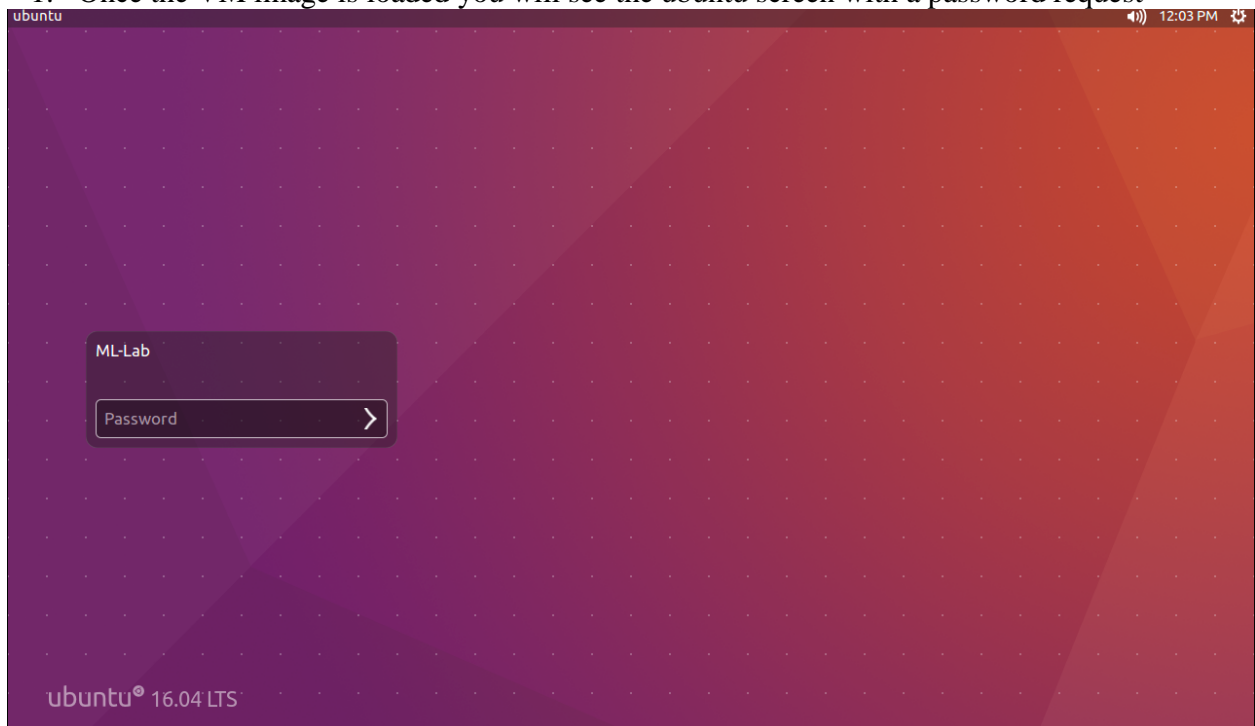
To open the VM image you will need VM player (Free) (<http://www.vmware.com>) or VM workstation or you can copy it to your ESXi.

You can also use Virtual Box (Free) (<https://www.virtualbox.org>)

! This VM image is just for testing purposes it is not hardened and not meant to go into production or face the Internet !

The instructions will not cover how to get load the VMware image but instead focus on what to do after you have it loaded

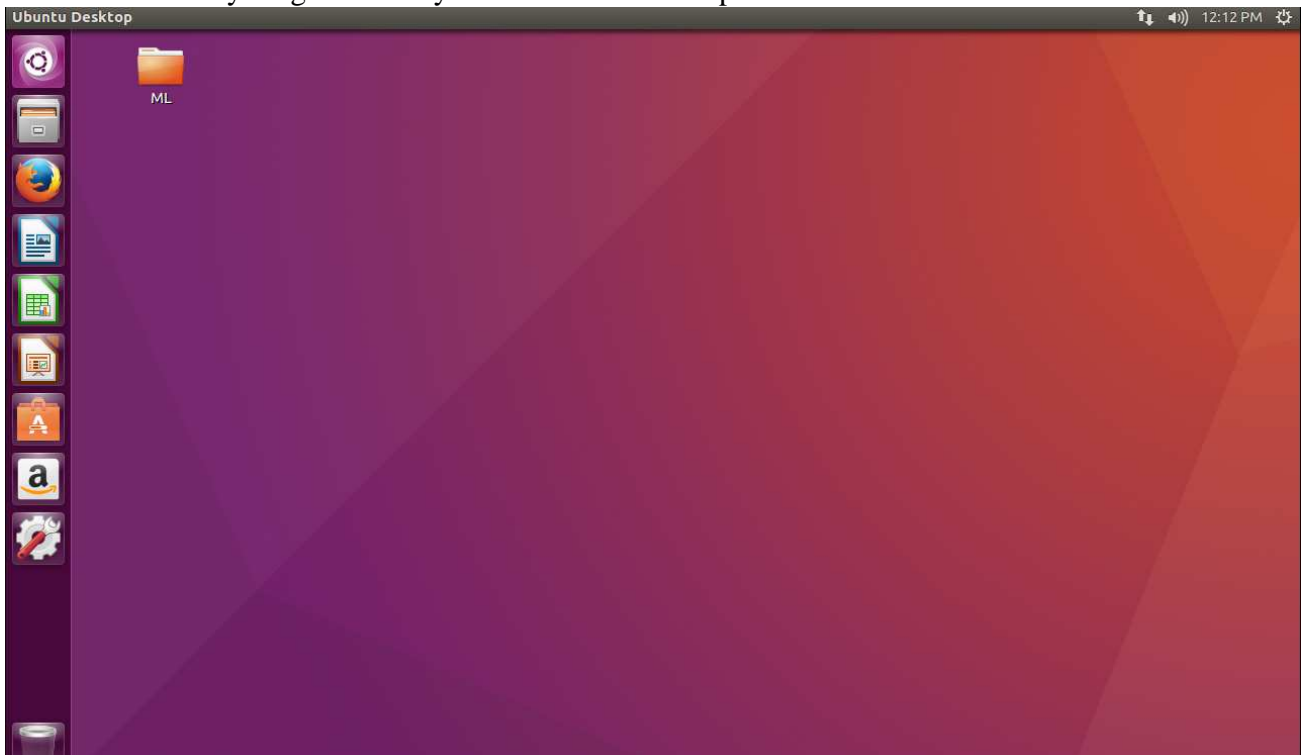
1. Once the VM image is loaded you will see the ubuntu screen with a password request



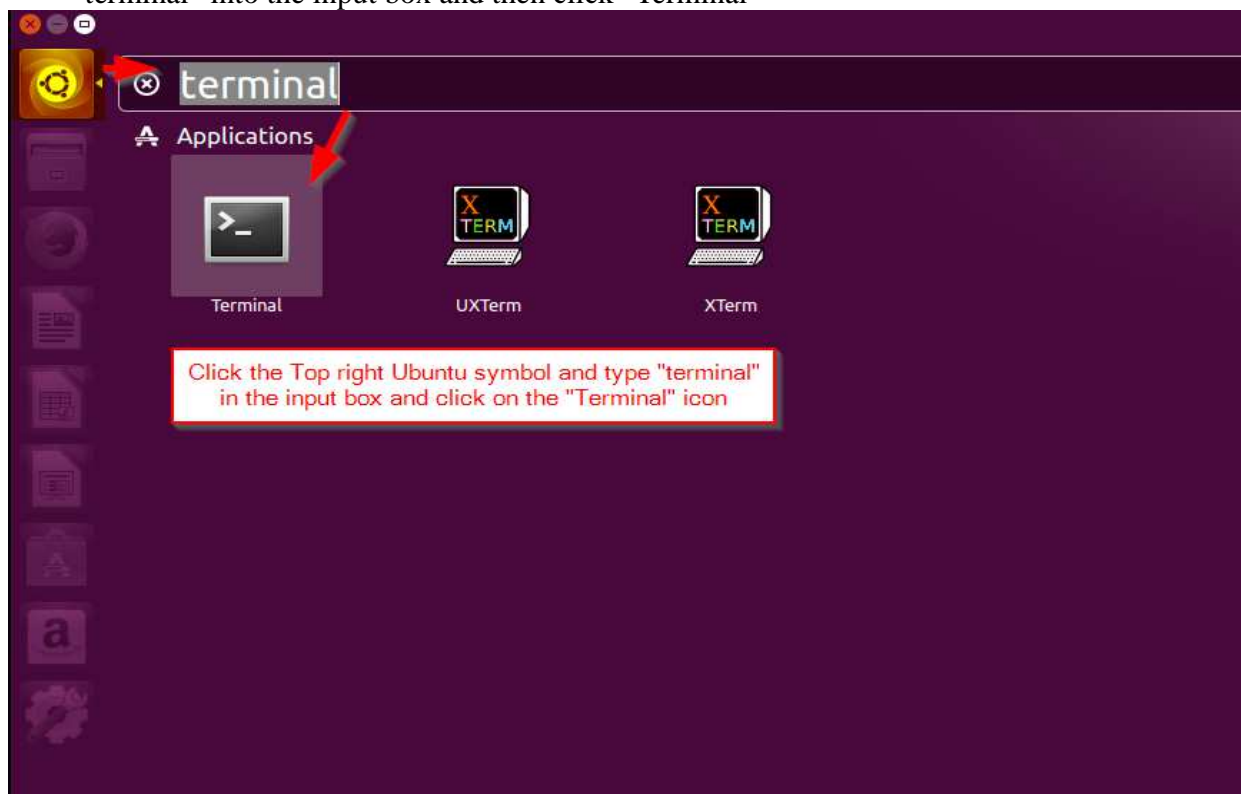
2. Enter in the password field → Password

(Remember this VM image is just for testing purposes it is not hardened and not meant to go into production or face the Internet)

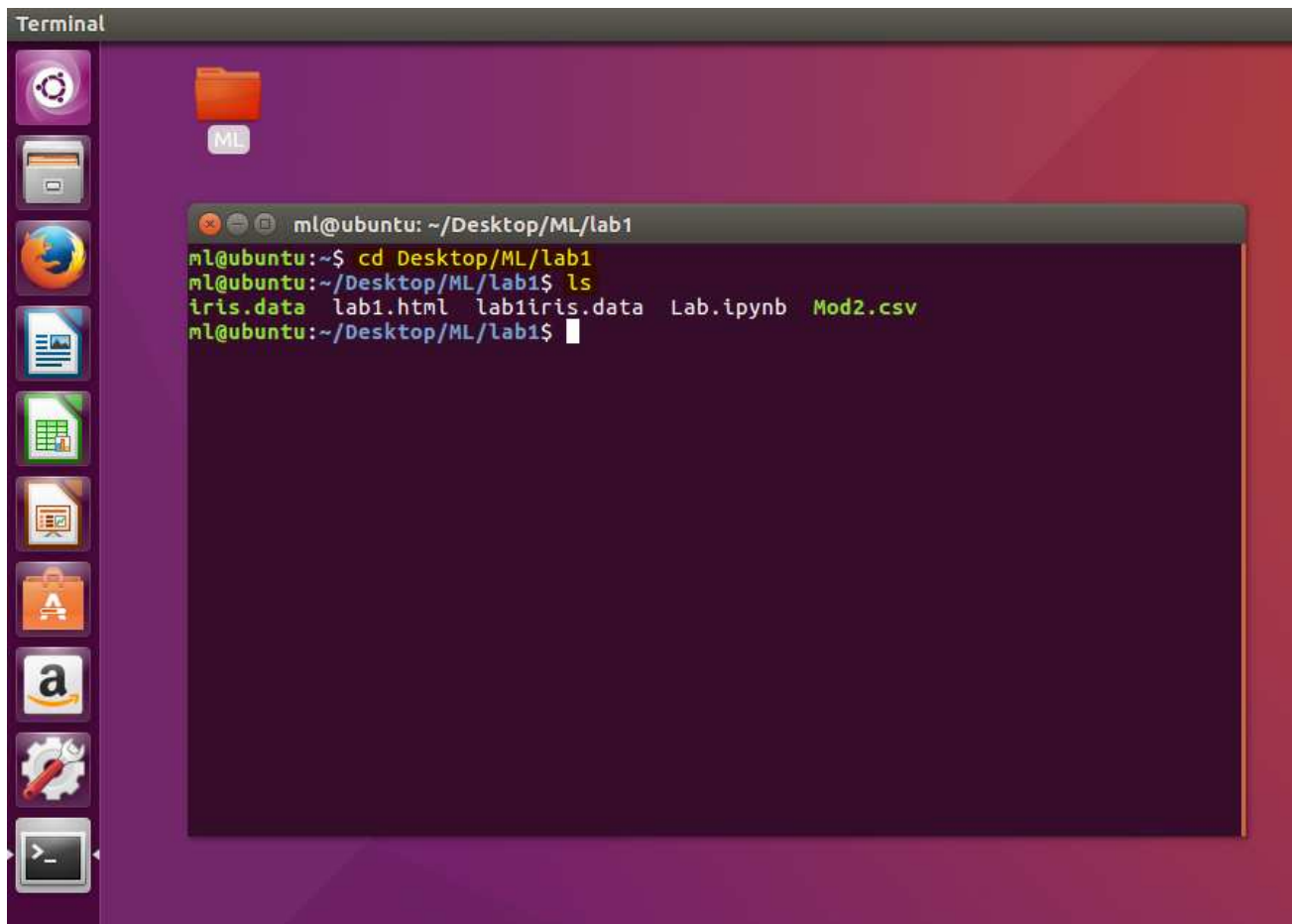
3. Once everything is loaded you will see the desktop with a ML folder



4. The next step is to click the “Ubuntu” symbol on the top right hand corner and type in “terminal” into the input box and then click “Terminal”



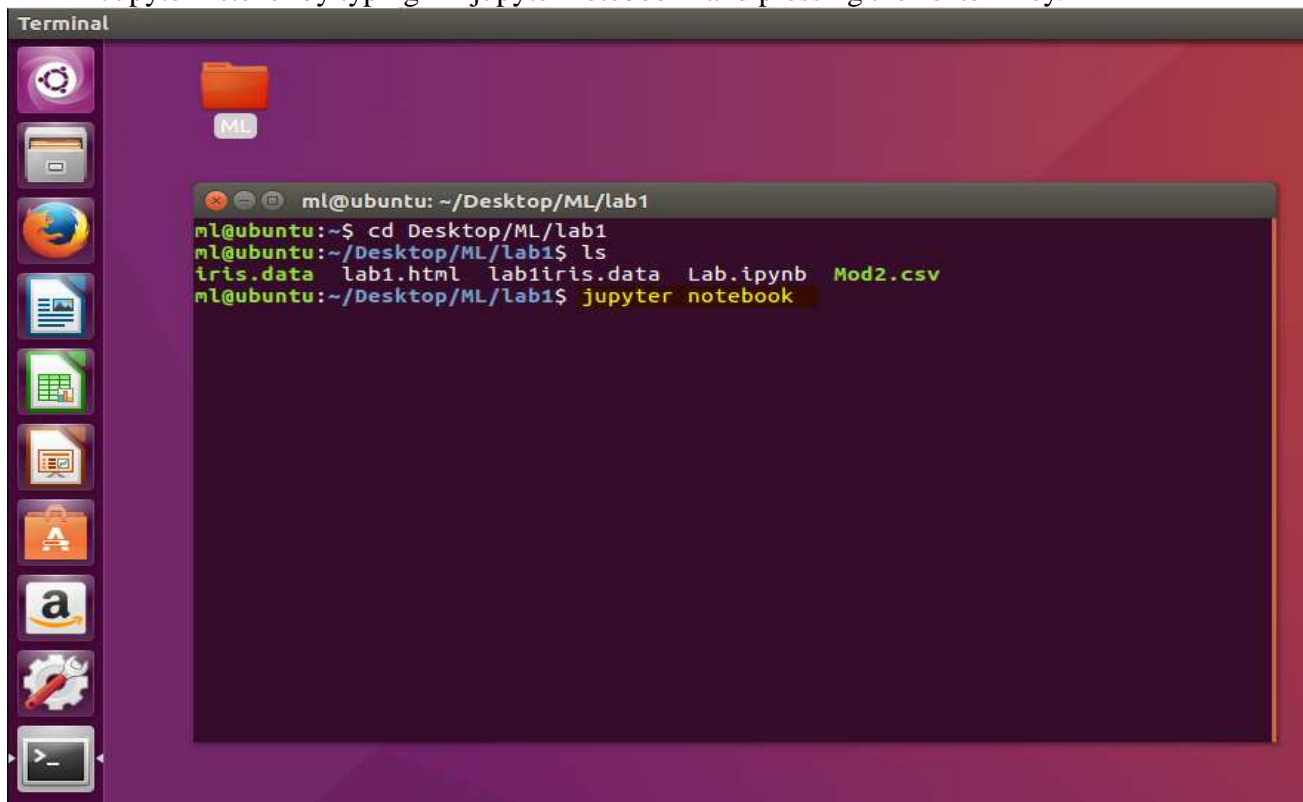
5. A terminal will popup and inside that terminal we are going to navigate to the “ML” folder on the desktop by typing the command “cd Desktop/ML/lab1” and pressing the “enter” key. Then type “ls” and pressing “enter” key. Your results should mirror what is in the screenshot below



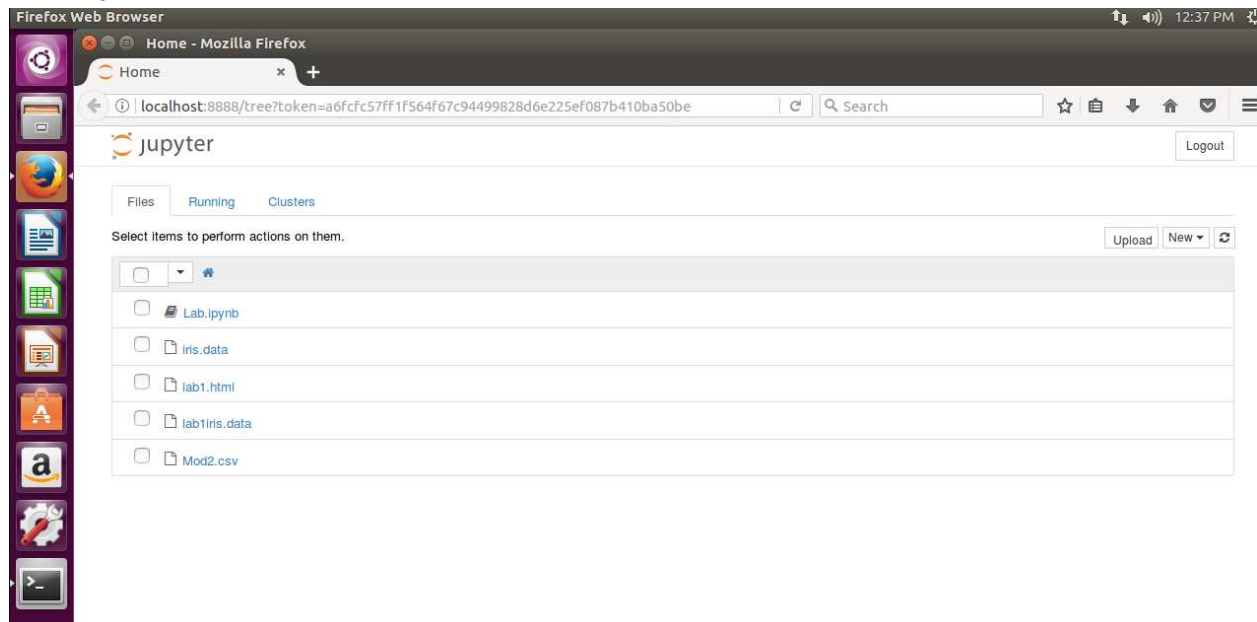
The screenshot shows a Linux desktop environment with a purple background. On the left side, there is a vertical dock containing several application icons: a terminal, a file manager, a web browser, a document viewer, a spreadsheet, a presentation, a shopping bag, an Amazon logo, a settings gear, and a terminal icon. In the center of the desktop, there is a file manager window showing a folder named "ML". To the right of the file manager, a terminal window is open. The terminal window has a title bar that reads "Terminal" and a command prompt that shows the user is in the directory ~/Desktop/ML/lab1. The terminal output shows the following commands and results:

```
ml@ubuntu: ~/Desktop/ML/lab1
ml@ubuntu:~$ cd Desktop/ML/lab1
ml@ubuntu:~/Desktop/ML/lab1$ ls
iris.data  lab1.html  lab1iris.data  Lab.ipynb  Mod2.csv
ml@ubuntu:~/Desktop/ML/lab1$
```

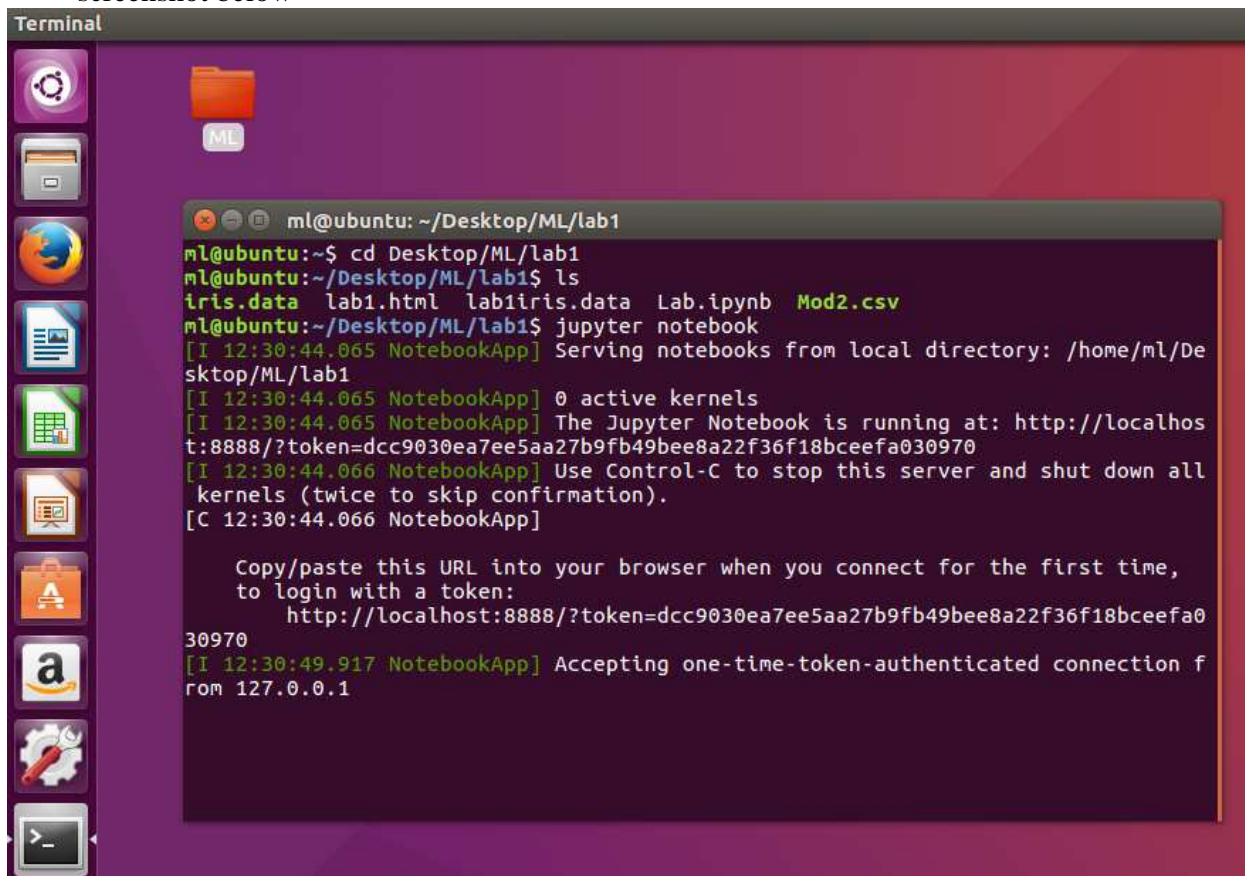
6. Once you confirmed that the previous screenshot matches your screen you now will start the Jupyter listener by typing in “jupyter notebook” and pressing the “enter” key.



7. A firefox window should popup and Jupyter should be loaded as shown below if so skip to step 10



8. If firefox did not load and / or nothing loaded go back to your “terminal” by clicking the blackbox with the >_ on the left side of the screen you should have something similar to the screenshot below



```
Terminal
ml@ubuntu: ~/Desktop/ML/lab1
ml@ubuntu:~$ cd Desktop/ML/lab1
ml@ubuntu:~/Desktop/ML/lab1$ ls
iris.data  lab1.html  lab1iris.data  Lab.ipynb  Mod2.csv
ml@ubuntu:~/Desktop/ML/lab1$ jupyter notebook
[I 12:30:44.065 NotebookApp] Serving notebooks from local directory: /home/ml/Desktop/ML/lab1
[I 12:30:44.065 NotebookApp] 0 active kernels
[I 12:30:44.065 NotebookApp] The Jupyter Notebook is running at: http://localhost:8888/?token=dcc9030ea7ee5aa27b9fb49bee8a22f36f18bceefa030970
[I 12:30:44.066 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 12:30:44.066 NotebookApp]

Copy/paste this URL into your browser when you connect for the first time,
to login with a token:
    http://localhost:8888/?token=dcc9030ea7ee5aa27b9fb49bee8a22f36f18bceefa030970
[I 12:30:49.917 NotebookApp] Accepting one-time-token-authenticated connection from 127.0.0.1
```

9. Simply copy / paste the URL starting with the “http://localhost:8888/?token=<random>”(The token= is random so it will not match what you have on your screen) and paste that URL into Firefox which can be started by clicking the Firefox symbol on the left pane.
10. With Jupyter loaded on your screen you can now follow along the instructions for the lab1 provided on (www.MLresearchLab.com) and start from step 22

If you encounter problems with these steps or with the lab please do not hesitate to contact us at “Info@MLresearchLab.com” or twitter ML Research Lab @ML_Research_Lab