**First:**

To create user

Go to admin user… create user using the following command.

Open terminal

Enter bash

Type this….

**sudo useradd –m name or regno**

Note: first it will ask for root password

**sudo passwd name or regno**

**sudo usermod –aG sudo name or regno**

after this log out and log in using your name or regno

**Second: -** DS Lab Instruction for first lab:

1. Login to student

2. Open Terminal and enter **bash**

3. Find the version of python

**python –version** (work with python 3…if not installed try to install))

**4. To download & install latest version of packages**

**sudo apt-get install python3-pip**

**sudo apt-get update**

**pip3 install pandas**

**pip3 install numpy**

**sudo apt-get install python3-matplotlib**

**python3 -m pip install openpyxl**

**How to check packages are installed or not ?**

**1) To check latest version of python3**

**# python3**

**2) To check list of packages installed**

**# pip3 list**

**3) To check whether pandas is installed or not**

**# pip3 list | grep pandas**

**4) To check whether numpy is installed or not**

**# pip3 list | grep numpy**

**5) To check whether matplotlib is installed or not**

**# pip3 list | grep matplotlib**

8. Execution - Use command:

In prompt type:

**$ gedit prog1.py**

Type your code and save it. Then

**$ python3 prog1.py** and check your output