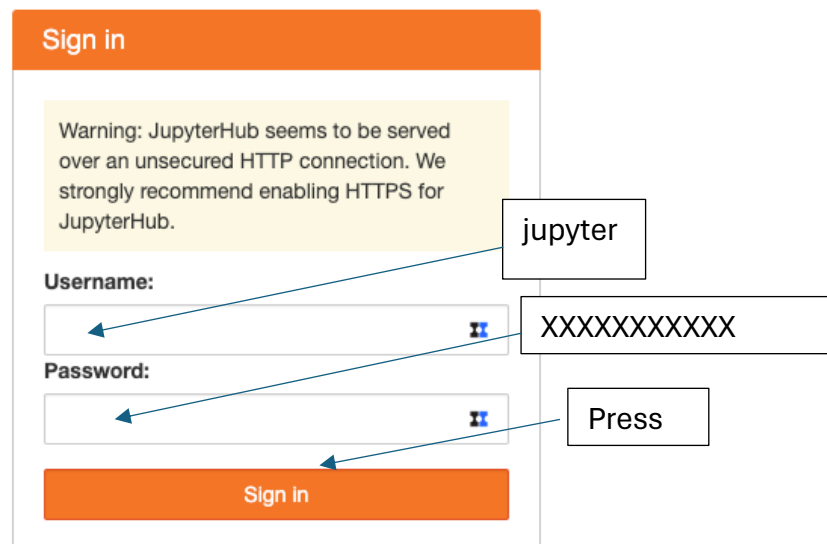


Creating User Account in the Servers of RAGE's Lab

1. Tasks to be performed on the Computing Servers

- Click on anyone of the link
 - <http://163.143.165.141:8000/>
 - <http://163.143.165.143:8000/>
 - <http://163.143.165.140:8000/>
 - <http://163.143.165.138:8000/>
 - <http://163.143.165.136:8000/>
- The below provided screen will open.
 - Type the word “jupyter” as the username.
 - Type the word “XXXXXXXXXX” as the password
 - Press the “Sign in” button



The image shows a web browser window displaying a JupyterHub sign-in page. The page has an orange header with the text "Sign in". Below the header, there is a yellow warning box that reads: "Warning: JupyterHub seems to be served over an unsecured HTTP connection. We strongly recommend enabling HTTPS for JupyterHub." Below the warning box, there are two input fields: "Username:" and "Password:". The "Username:" field contains the text "jupyter". The "Password:" field contains the text "XXXXXXXXXX". Below the input fields, there is an orange button labeled "Sign in". Three blue arrows point from external text boxes to the form elements: one from "jupyter" to the username field, one from "XXXXXXXXXX" to the password field, and one from "Press" to the "Sign in" button.

Sign in

Warning: JupyterHub seems to be served over an unsecured HTTP connection. We strongly recommend enabling HTTPS for JupyterHub.

Username:

jupyter

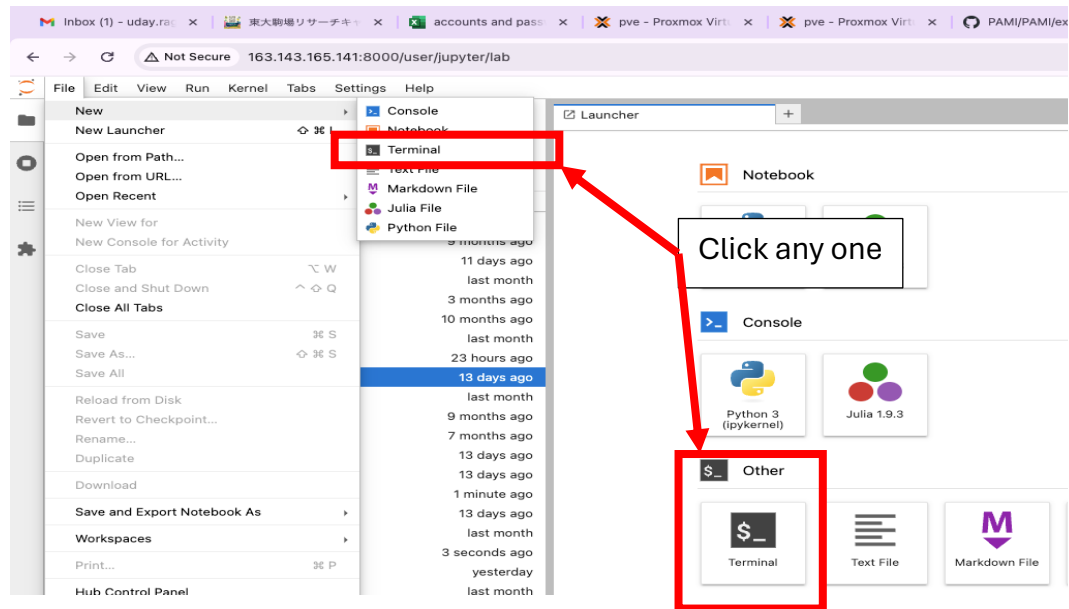
Password:

XXXXXXXXXX

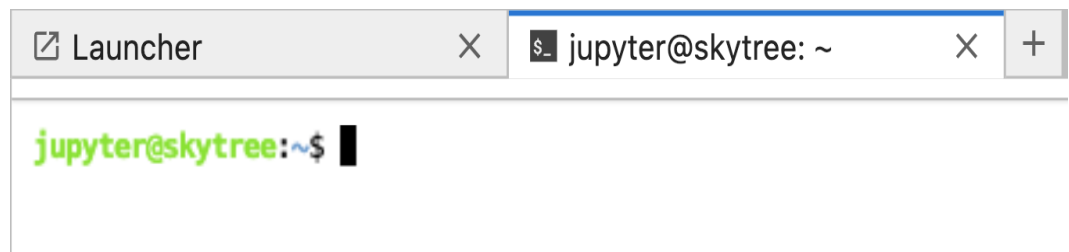
Press

Sign in

- The below shown screen will open. Click on “File -> New ->Terminal”



- This is open the “terminal” tab as shown below.



2. On the terminal, create your account by executing the following command:

```
sudo useradd -m -s /bin/bash userName
```

**Do not use capitals for the userName*

```
jupyter@skytree:~$ sudo useradd -m -s /bin/bash udayrage  
[sudo] password for jupyter:
```

3. Enter the sudo user password “XXXXXXXXXXXX”. Press Enter button.
4. Create the password for the newly created student account by typing the following command:

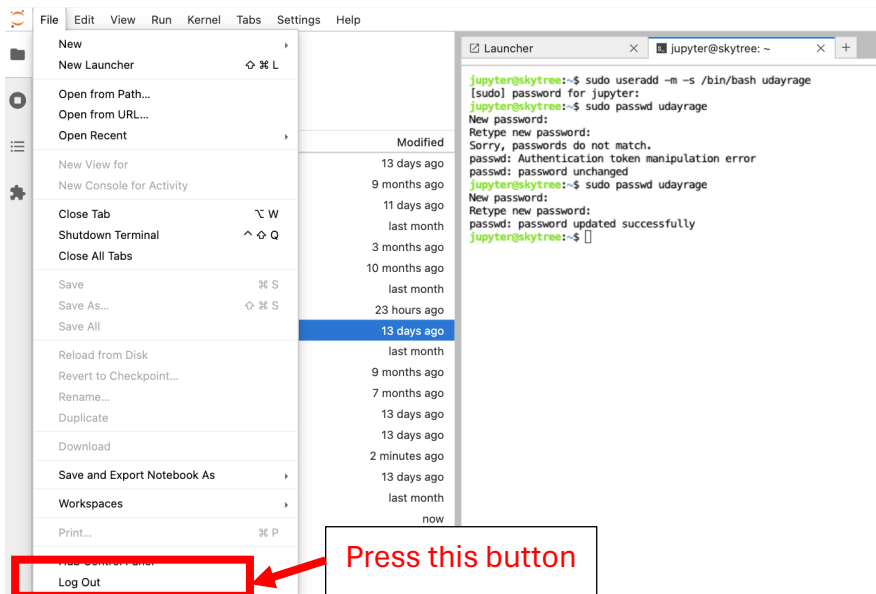
```
sudo passwd userName
```

```
jupyter@skytree:~$ sudo passwd udayrage  
New password:  
Retype new password:
```

5. Type your own secret password for the “new password”. Retype the same secret password once again. You should see the following successful message:

```
jupyter@skytree:~$ sudo passwd udayrage  
New password:  
Retype new password:  
passwd: password updated successfully
```

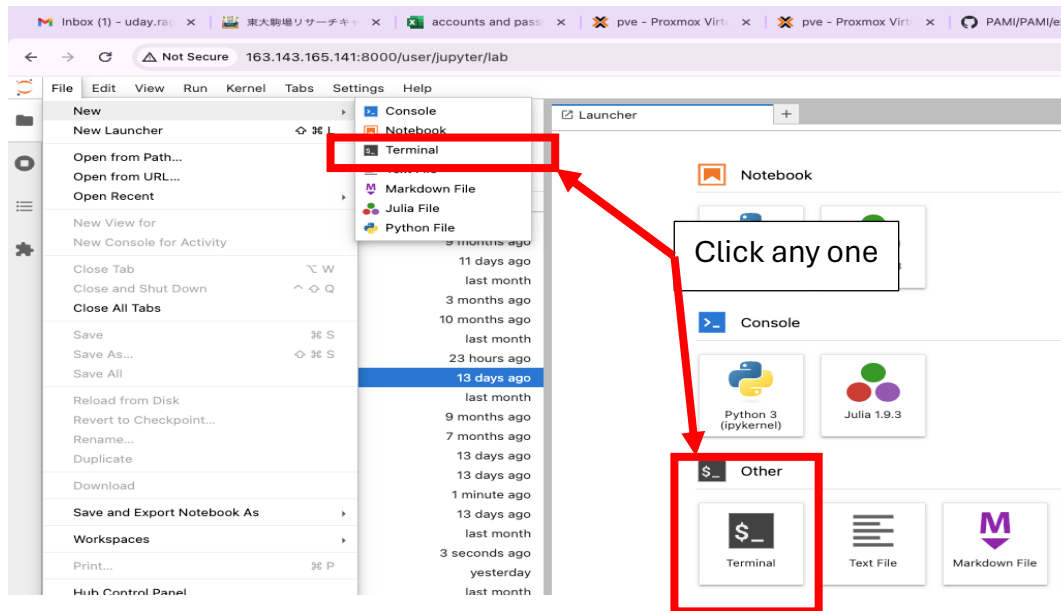
6. Logout from the sudo user account by pressing the “logout” button.



7. Login into the server by entering your newly created username and password

The screenshot shows the 'Sign in' form in JupyterLab. At the top, there is a warning message: 'Warning: JupyterHub seems to be served over an unsecured HTTP connection. We strongly recommend enabling HTTPS for JupyterHub.' Below the warning, there are two input fields: 'Username:' and 'Password:'. A red arrow points from the label 'userName' to the Username field. Another red arrow points from the label 'Your secret password' to the Password field. At the bottom, there is an orange 'Sign in' button. A red arrow points from the label 'Press' to this button.

8. Open “Terminal”



9. Create a directory to mount your home directory of the data server by executing the following command

```
mkdir remoteDir
```

```
udayrage@skytree:~$ mkdir remoteDir
```

Task 3: On the Data Server

- Click on the link: <http://163.143.165.145:8000/>
- The below provided screen will open.
 - Type the word “jupyter” as the username.
 - Type the word “XXXXXXXXXXXX” as the password
 - Press the “Sign in” button

Sign in

Warning: JupyterHub seems to be served over an unsecured HTTP connection. We strongly recommend enabling HTTPS for JupyterHub.

Username:

jupyter

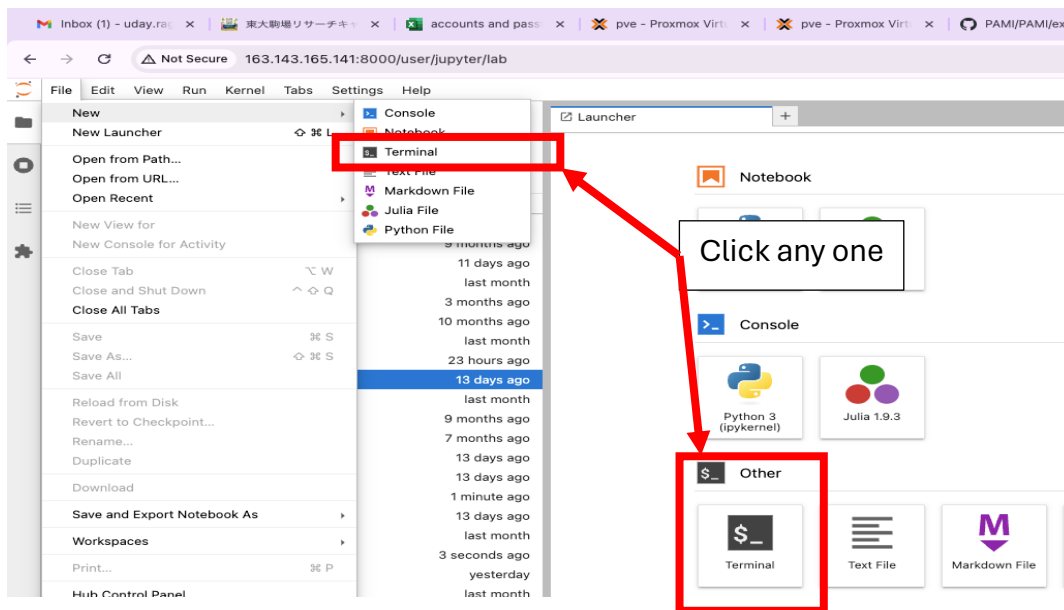
Password:

XXXXXXXXXXXX

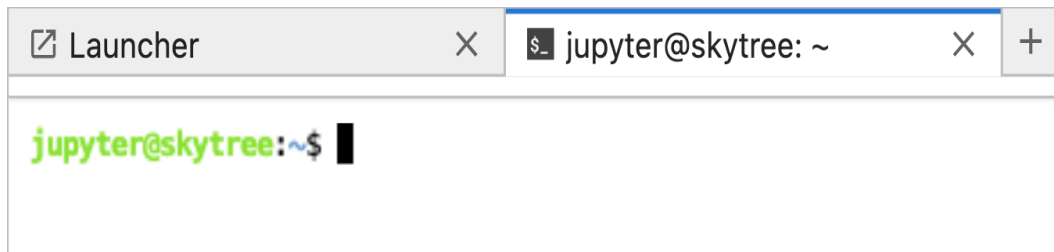
Sign in

Press

- The below shown screen will open. Click on “File -> New ->Terminal”



- This is open the “terminal” tab as shown below.



10. On the terminal, create your account by executing the following command:

```
sudo useradd -m -s /bin/bash userName
```

**Do not use capitals for the userName*

```
jupyter@skytree:~$ sudo useradd -m -s /bin/bash udayrage  
[sudo] password for jupyter:
```

11. Enter the sudo user password “XXXXXXXXXXXX”. Press Enter button.
12. Create the password for the newly created student account by typing the following command:

```
sudo passwd userName
```

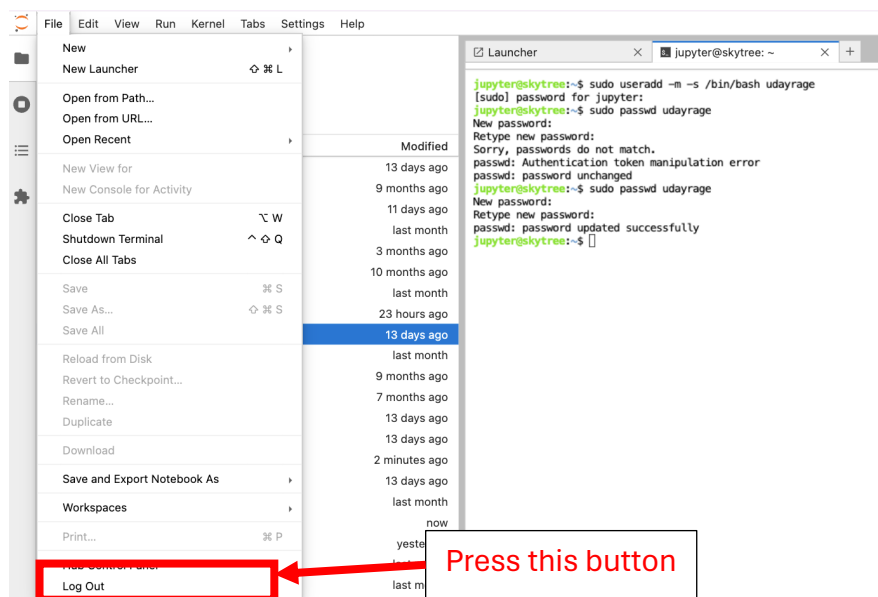
```
jupyter@skytree:~$ sudo passwd udayrage  
New password:  
Retype new password:
```

13. Type your own secret password for the “new password”.

Retype the same secret password once again. You should see the following successful message:

```
jupyter@skytree:~$ sudo passwd udayrage
New password:
Retype new password:
passwd: password updated successfully
```

14. Logout from the sudo user account by pressing the “logout” button.



15. Login into the server by entering your newly created username and password

Sign in

Warning: JupyterHub seems to be served over an unsecured HTTP connection. We strongly recommend enabling HTTPS for JupyterHub.

Username:

Password:

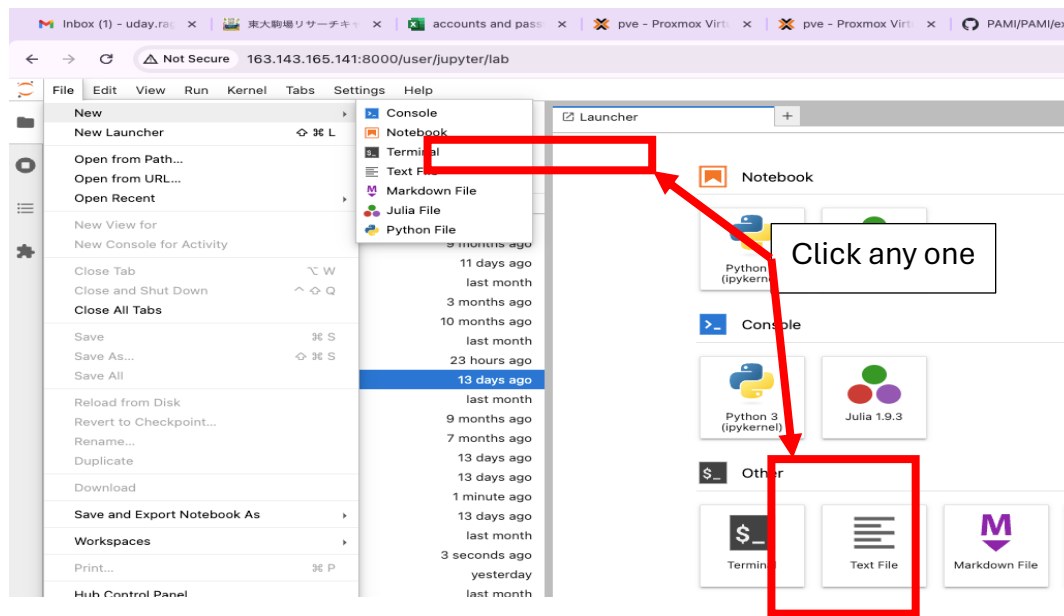
Sign in

userName

Your secret password

Press

16. Open “Terminal”



17. Create an empty file by executing the following command

`touch remoteFileInDataServer.txt`

```
udayrage@skytreet:~$ touch remoteFileInDataServer.txt
```

Task 4: On the Computing server

1. Create public and private keys by executing the following command

`ssh-keygen -t rsa`

```
udayrage@skytree:~$ ssh-keygen -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (/home/udayrage/.ssh/id_rsa):
Created directory '/home/udayrage/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/udayrage/.ssh/id_rsa
Your public key has been saved in /home/udayrage/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:uA5TvbTvxnhLWLn/Sk1Njq1DrGMBW8OKNSUMZEzjMI udayrage@skytree
The key's randomart image is:
+---[RSA 3072]---+
|      . 0==      |
|    E .o* .      |
|   .. .o. .      |
|  . 0. o= .      |
|   .o.S.o=B      |
|  ... .B=oB o    |
| o . ...=* B .   |
|  +  o o.= o    |
|   . o. o....    |
+---[SHA256]-----+
```

Simply press Enter button

2. Execute the following command on the terminal

```
sshfs -o allow_other,IdentityFile=~/.ssh/id_rsa
username@163.143.165.145:/home/userName
/home/userName/remoteDir/
```

Example:

```
sshfs -o allow_other,IdentityFile=~/.ssh/id_rsa
udayrage@163.143.165.145:/home/udayrage /home/udayrage/remoteDir/
```

```
udayrage@skytree:~$ sshfs -o allow_other,IdentityFile=~/.ssh/id_rsa udayrage@163.143.165.145:/home/udayrage /home/udayrage/remoteDir/  
udayrage@163.143.165.145's password:
```

3. Enter into remoteDir directory
 cd remoteDir
4. Typing the command “ls” should show the file
 “remoteFileInDataServer.txt”. It means your remote server
 directory has been successfully mounted.
5. Please store all of your files in this remoteDir directory.