

Ubuntu

ນາງນາງ : / စိုးသခ္ဓ

mkdir ชื่อ : ကရတဲ့ ပါဂဲလော်များ

clear : ကရစော်များ စော်ဆုံး

ls : ဥပါဂဲလော်

cd / .. : ပုံတော်ကဲ့

cd ชื่อ.. : ပါပ်ပါဂဲလော် ชื่อ

pwd : ပေါ်ကာတွန်းလုပ် ပါဂဲလော် ဦးများ

cd / .. / fn : ထုတေသနပါဂဲလော်

cd / .. / .. / .. : ထွန် ကဲပ် ၃ ရောက် ၁၀၁၀၀၀

vi abc.txt] → စာ I → သုတေသန Insert မေးလှာမြတ်စွာစွာ

စွဲပါဂဲလော်လုပ် /
လောကတော်ပေါ်အော်ပါဂဲလော်

→ ပေါ်နှင့် (ESC) → wq → သုပေတာ
save တော်ပေါ်အော်ခွဲခွဲ
q! → save မော်မော်

cp / . / abc.txt : copy ဖော်

cp . / abc.txt . / test_lv2 / test_lv3 /
ထုတေသန ↑ ၁၂၃

mv : ထုတေသန

mv . / abc.txt . / test_lv2 / test2_lv3 /
ထုတေသန စွဲပါဂဲလော် နှိပ်ပေးလော် Step

rm : လျော်ဖြူ (remove)

rm -r စွဲပါဂဲလော်

~ օ թ թ հ ա մ է

Ճ ծ մ ս ն դ յ

① Resource groups (password)

② վ ե ր ա Վ Մ

③ SSH key (namon.pem)

④ Ubu

```
namon@VMai: ~/codes
naruemon@NB0658:~$ ssh -i /home/narumon/download/namon.pem namon@20.222.96.92
Warning: Identity file /home/narumon/download/namon.pem not accessible: No such file or directory
namon@20.222.96.92's password:
Welcome to Ubuntu 20.04.5 LTS (GNU/Linux 5.15.0-1023-azure x86_64)

System information disabled due to load higher than 1.0
```

0 updates can be applied immediately.

The list of available updates is more than a week old.

To check for new updates run: sudo apt update

New release '22.04.1 LTS' available.

Run 'do-release-upgrade' to upgrade to it.

```
*****
* Welcome to the Ubuntu 20.04 Data Science Virtual Machine!
*
* You can access this DSVM, view the graphical desktop with
* X2Go, or run JupyterLab from a browser on your computer
* For more information, see the docs at https://aka.ms/dsvm/docs.
*****
```

Last login: Mon Jan 9 07:00:41 2023 from 202.12.97.186

To run a command as administrator (user "root"), use "sudo <command>".

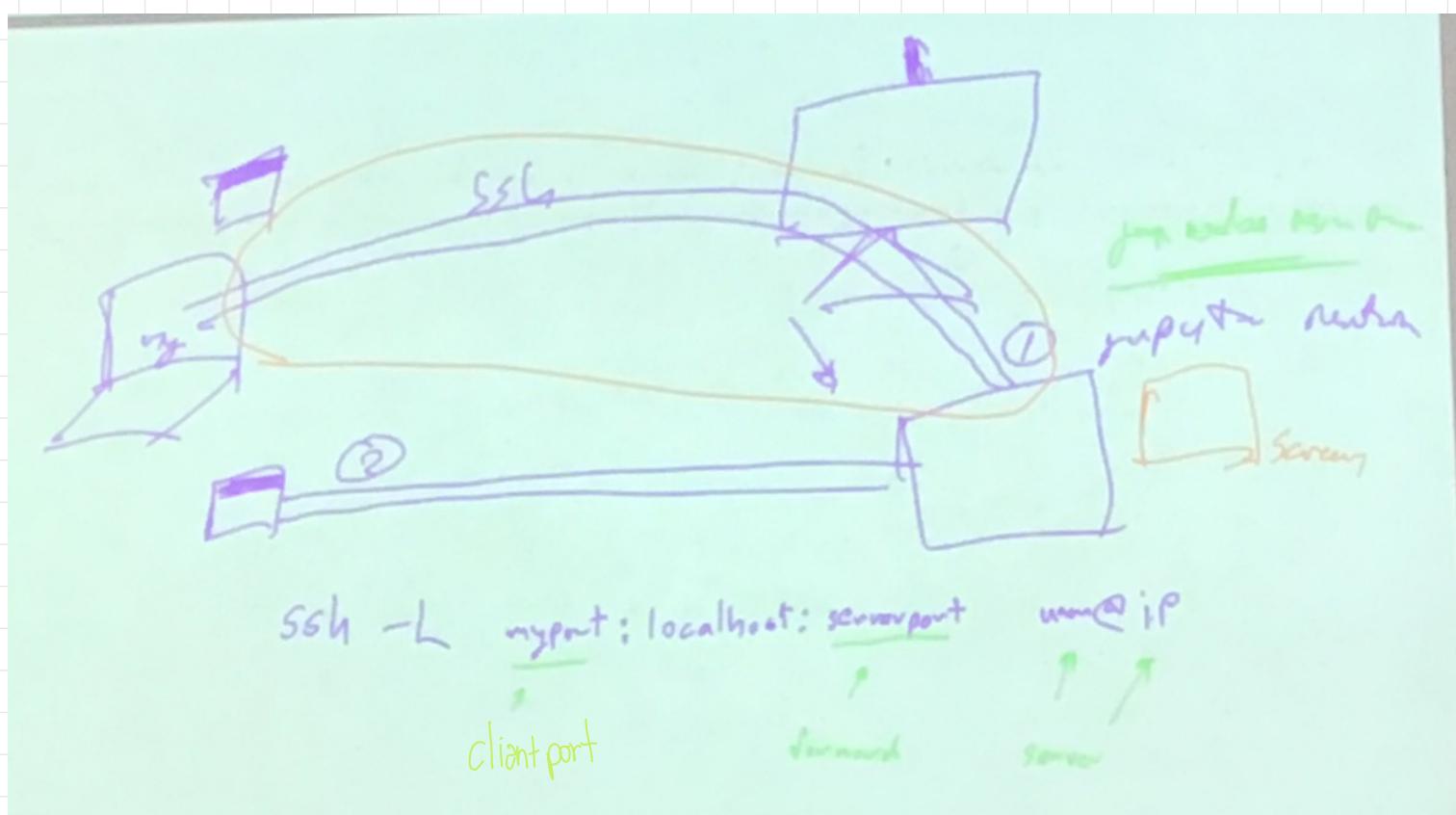
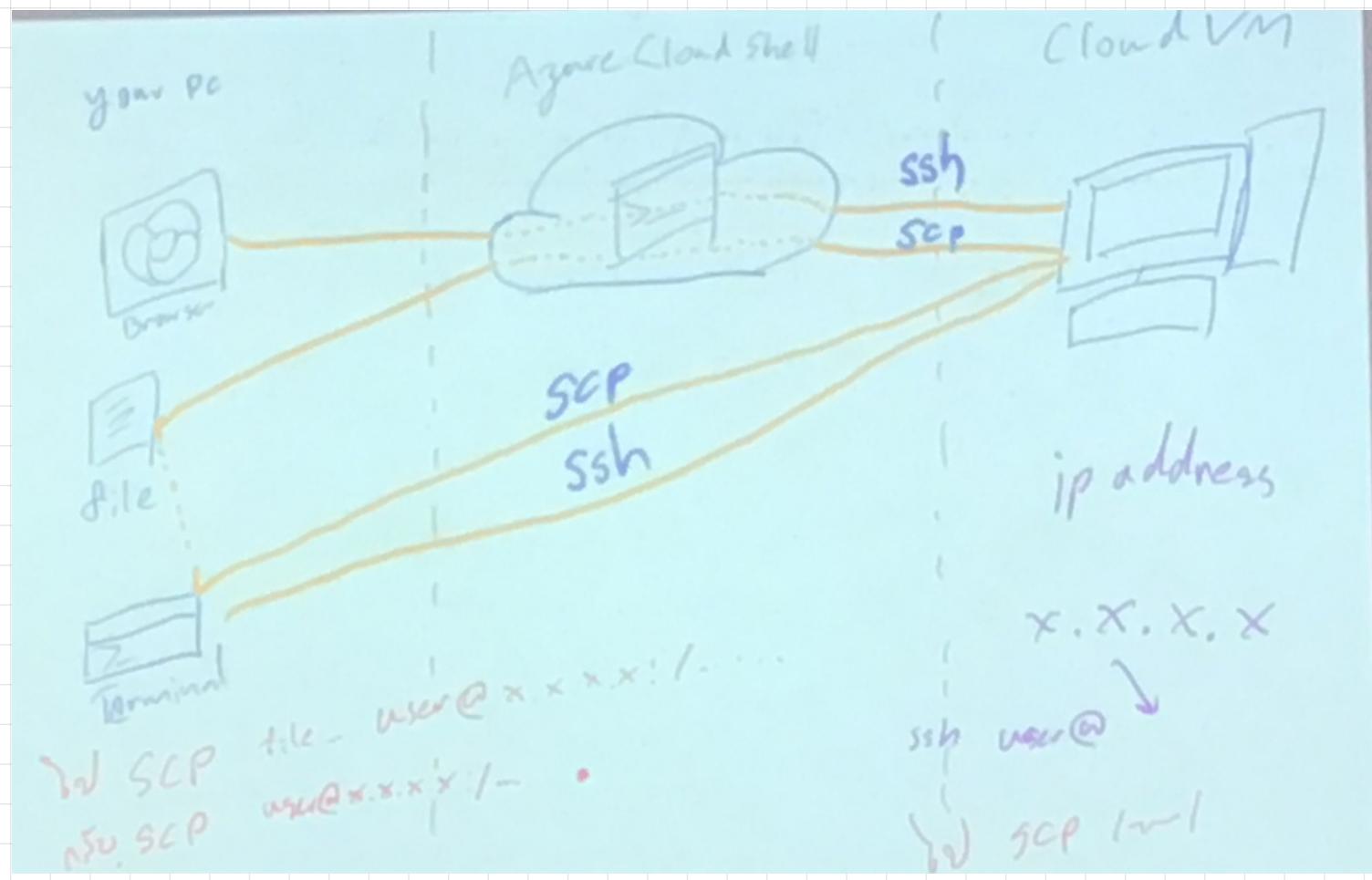
See "man sudo_root" for details.

```
namon@VMai:~$ ls
Desktop notebooks
namon@VMai:~$ mkdir codes
namon@VMai:~$ cd codes/
namon@VMai:~/codes$ ls
namon@VMai:~/codes$ vi test.py
namon@VMai:~/codes$ ls
test.py
namon@VMai:~/codes$ python test.py
naruemon
namon@VMai:~/codes$
```

Ճ ծ մ ս ն դ յ

run code Գ ւ ն ճ պ յ

Գ ւ ն ճ պ յ .
Ճ ծ մ ս ն դ յ | Ռ ո ւ ց ն ա ն ի լ ւ
print ('~')
Ի ՞ յ է ս ց → օ ն ց ի լ վ



คำสั่ง screen Screen ชี้ไปยังหน้าจอคอมพิวเตอร์แล้วต่อเนื่องกันๆ
 เครื่อง % screen -S ชื่อไฟล์ session ก็จะ

ctrl + a → D จับคู่จาก screen ไปยังปุ่ม

ผลที่ session เดิม % screen -R ชื่อไฟล์

ctrl + a k → y บันทึกจากไฟล์ และลบห้อง

jupyter notebook

ctrl + C → ยกเลิกการทำงาน

```
Commands: Use arrow keys to move, '?' for help, 'q' to quit, '<->' to go back.
Arrow keys: Up and Down to move. Right to follow a link; Left to go back.

Exiting via interrupt: 2
[I 07:58:34.086 NotebookApp] interrupted
Serving notebooks from local directory: /home/namon/codes
0 active kernels
Jupyter Notebook 6.5.2 is running at:
https://localhost:8888/?token=4b0d90160c17a722f701ea94fd12220bb64a08288576ad79
or https://127.0.0.1:8888/?token=4b0d90160c17a722f701ea94fd12220bb64a08288576ad79
Shutdown this notebook server (y/[n])? No answer for 5s: resuming operation...
```

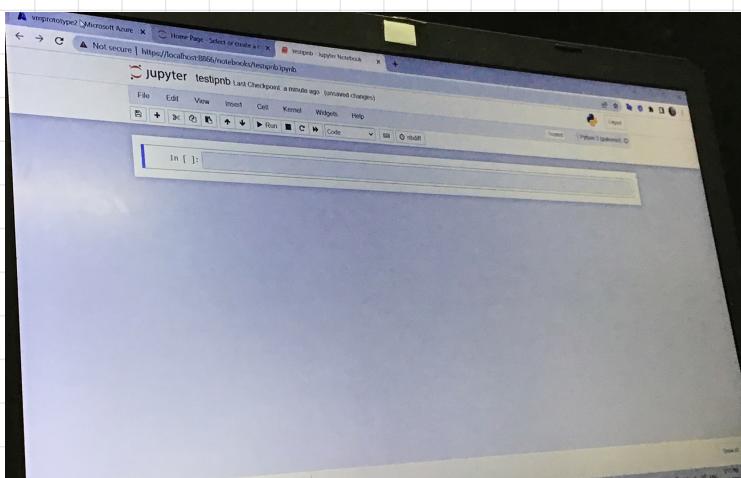
จัดการรันในเครื่องของผู้สอน

copy นะจํะ

ctrl + a → D

ssh -L 8866 % localhost :8888 -j /home/namon นำร่อง

บน link นี้ copy มาใช้ใน web จนถึงขณะนี้ jupyter



```
Terminal Shell Edit View Window Help
nayoo_ai -> tohn@vmaiprotoype: ~/codes - ssh -L 8888:localhost:8888 -i ~/Downloads/vmkey.pem tohn@4.193.105.208 -S 21
      type: ~/codes - ssh -L 8888:localhost:8888 -i ~/Downloads/vmkey.pem tohn@4.193.105.208
      To run a command as administrator (user "root"), use "sudo <command>".
      See "man sudo_root" for details.

      tohn@vmaiprotoype: ~
      tohn@vmaiprotoype: ~$ ls
      Desktop codes notanode
      tohn@vmaiprotoype: ~$ cd codes/
      tohn@vmaiprotoype: ~/codes$ ls
      test.py testipynb.ipynb
      tohn@vmaiprotoype: ~/codes$ screen -S abcd
      [detached from 57402.abcd]
      tohn@vmaiprotoype: ~/codes$ screen -S abcd
      [detached from 57477.abcd]
      tohn@vmaiprotoype: ~/codes$ screen -R
      57402.abcd 57477.abcd ipynb
      tohn@vmaiprotoype: ~/codes$ screen -R 57402.abcd
      [detached from 57402.abcd]
      tohn@vmaiprotoype: ~/codes$ screen -R 57477.abcd
      [screen is terminating]
      tohn@vmaiprotoype: ~/codes$ screen -R
      abcd ipynb
      tohn@vmaiprotoype: ~/codes$ screen -R
```

Virtual environment anaconda (cond.io)

```
namon@VMai:~$ python
Python 3.8.15 (default, Nov 24 2022, 15:19:38)
[GCC 11.2.0] :: Anaconda, Inc. on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> exit()
namon@VMai:~$ conda create --name ai_prototype_ven python=3.7
```

๑๖๙

ଶ୍ରୀମତୀ ପାତ୍ନୀ କୁମାରୀ

conda activate tensorflow TensorFlow

pip install pandas : តើតែង pandas

ការដំឡើង ver 9 នៃ pip install keras == 2.3.1

Conda deactivate នៅក្នុង ai_prototype_env និង

Conda env list នៅក្នុង Conda ត្រូវបានដោះស្រាយ

```
(py38_default) namon@VMai:~$ conda deactivate
(py38_default) namon@VMai:~$ conda env list
# conda environments:
#
base          /anaconda
ai_prototype_env  /anaconda/envs/ai_prototype_env
azureml_py310_sdkv2  /anaconda/envs/azureml_py310_sdkv2
azureml_py38    /anaconda/envs/azureml_py38
azureml_py38_PT_and_TF  /anaconda/envs/azureml_py38_PT_and_TF
py38_default   * /anaconda/envs/py38_default

(py38_default) namon@VMai:~$ conda activate ai_prototype_env
EnvironmentNameNotFound: Could not find conda environment: ai_prototype_env
You can list all discoverable environments with `conda info --envs`.

(py38_default) namon@VMai:~$ conda activate ai_prototype_env
(ai_prototype_env) namon@VMai:~$ =
```

លើកបង្កើត linux create user linuxize.com

```
zlib           1.2.13      1000000000
(ai_prototype_env) namon@Mai:~$ conda deactivate
(py38_default) namon@Mai:~$ sudo useradd propro
(py38_default) namon@Mai:~$ sudo passwd propro
New password:
Retype new password:
passwd: password updated successfully
(py38_default) namon@Mai:~$ =
```

រាយការណ៍នៃការបង្កើត user នៅក្នុង VM

```
(py38_default) muchmore@muchmore:~$ ssh -i /home/jittakorn/download/Vnkey.pem propro@20.222.210.61
Warning: Identity file /home/jittakorn/download/Vnkey.pem not accessible: No such file or directory.
propro@20.222.210.61's password:
Welcome to Ubuntu 20.04.5 LTS (GNU/Linux 5.15.0-1023-azure x86_64)

System information as of Tue Jan 10 04:28:52 UTC 2023

System load: 0.57      Processes:          161
Usage of /: 52.2K of 145.19GB  Users logged in: 1
Memory usage: 63%        IPv4 address for docker0: 172.17.0.1
Swap usage: 0%          IPv4 address for eth0: 10.0.0.4

1 device has a firmware upgrade available.
Run 'fwupdmgr get-upgrades' for more information.

100 updates can be applied immediately.
64 of these updates are standard security updates.
To see these additional updates run: apt list --upgradeable

New release '22.04.1 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

The programs included with the Ubuntu system are free software;
any copyright notices in the source code or binary files
are the sole responsibility of their original authors.
```

ចូល log in ទៅកីឡា
ssh user @ នៃ VM នាម

```
(py38_default) muchmore@muchmore:~$ ssh propro@20.222.210.61
propro@20.222.210.61's password:
```

htop នៅក្នុង Passanger នៃ user

```
dd2@VmforAi:~/codes/AIprototype2022$  
remote: Support for password authentication was removed on August 13, 2021.  
remote: Please see https://docs.github.com/en/get-started/getting-started-with-git/about-remote-repositories#cloning-without-  
d modes of authentication.  
fatal: Authentication failed for 'https://github.com/naruemonssp/AIprototype2022/'  
dd2@VmforAi:~/codes/AIprototype2022$ git push  
Username for 'https://github.com': naruemonssp  
Password for 'https://naruemonssp@github.com':  
Everything up-to-date  
dd2@VmforAi:~/codes/AIprototype2022$ vi test2.txt  
dd2@VmforAi:~/codes/AIprototype2022$ git add test2.txt  
dd2@VmforAi:~/codes/AIprototype2022$ git commit -m "create file"  
[main 8b3dcea] create file  
1 file changed, 1 insertion(+)  
create mode 100644 test2.txt  
dd2@VmforAi:~/codes/AIprototype2022$ git push  
Username for 'https://github.com': naruemonssp  
Password for 'https://naruemonssp@github.com':  
Enumerating objects: 4, done.  
Counting objects: 100% (4/4), done.  
Delta compression using up to 2 threads  
Compressing objects: 100% (2/2), done.  
Writing objects: 100% (3/3), 267 bytes | 267.00 KiB/s, done.  
Total 3 (delta 1), reused 0 (delta 0)  
remote: Resolving deltas: 100% (1/1), completed with 1 local object.  
To https://github.com/naruemonssp/AIprototype2022  
 2e64f34..8b3dcea main -> main  
dd2@VmforAi:~/codes/AIprototype2022$
```

git pull ទូទាត់នូវកិច្ចការណ៍នៃកិច្ចការណ៍របស់ខ្លួន (ក្នុងការងារ)

ផ្តល់នូវកិច្ចការណ៍នៃកិច្ចការណ៍របស់ខ្លួន

```
dd2@VmforAi:~/codes/AIprototype2022$ vi test.py  
dd2@VmforAi:~/codes/AIprototype2022$ git add .  
Nothing specified, nothing added.  
Maybe you wanted to say 'git add .'?  
dd2@VmforAi:~/codes/AIprototype2022$ git add test.py  
dd2@VmforAi:~/codes/AIprototype2022$ git commit -m "naruemon"  
[main 17fc33f] naruemon  
1 file changed, 2 insertions(+)  
dd2@VmforAi:~/codes/AIprototype2022$ git push  
Username for 'https://github.com': naruemonssp  
Password for 'https://naruemonssp@github.com':  
Enumerating objects: 5, done.  
Counting objects: 100% (5/5), done.  
Delta compression using up to 2 threads  
Compressing objects: 100% (2/2), done.  
Writing objects: 100% (3/3), 290 bytes | 290.00 KiB/s, done.  
Total 3 (delta 1), reused 0 (delta 0)  
remote: Resolving deltas: 100% (1/1), completed with 1 local object.  
To https://github.com/naruemonssp/AIprototype2022  
 8b3dcea..17fc33f main -> main  
dd2@VmforAi:~/codes/AIprototype2022$
```

Darrenmon@NB0658:~/codes/AIprotoype6\$
git config --global user.name "Your Name"
to set your account's default identity.
Omit -global to set the identity only in this repository.
fatal: empty ident name (for <naruemon@NB0658.localdomain>) not allowed
naruemon@NB0658:~/codes/AIprotoype6\$ git config -global user.email "naruemon_ssp@kkumail.com"
naruemon@NB0658:~/codes/AIprotoype6\$ git config -global user.name "naruemonssp"
naruemon@NB0658:~/codes/AIprotoype6\$ git commit -m "readme"
On branch main
Your branch is up to date with 'origin/main'.
Changes not staged for commit:
(use "git add <file>..." to update what will be committed)
(use "git restore <file>..." to discard changes in working directory)
modified: README.md
no changes added to commit (use "git add" and/or "git commit -a")
naruemon@NB0658:~/codes/AIprotoype6\$ git add README.md
Nothing specified, nothing added.
Maybe you wanted to say "git add ."?
naruemon@NB0658:~/codes/AIprotoype6\$ git add README.md
naruemon@NB0658:~/codes/AIprotoype6\$ git commit -m "readme"
error: pathspec 'im' did not match any file(s) known to git
error: pathspec 'readme' did not match any file(s) known to git
naruemon@NB0658:~/codes/AIprotoype6\$ git commit -m "readme"
[main 717b7fd] readme
1 file changed, 7 insertions(+)
naruemon@NB0658:~/codes/AIprotoype6\$ git push
Username for 'https://github.com': naruemonssp
Password for 'https://naruemonssp@github.com':
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 6 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 358 bytes | 358.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/naruemonssp/AIprotoype6
 ee1ec09..717b7fd main -> main
naruemon@NB0658:~/codes/AIprotoype6\$