

Pengenalan VMware Workstation dan Linux OS

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Teknologi Cloud Computing

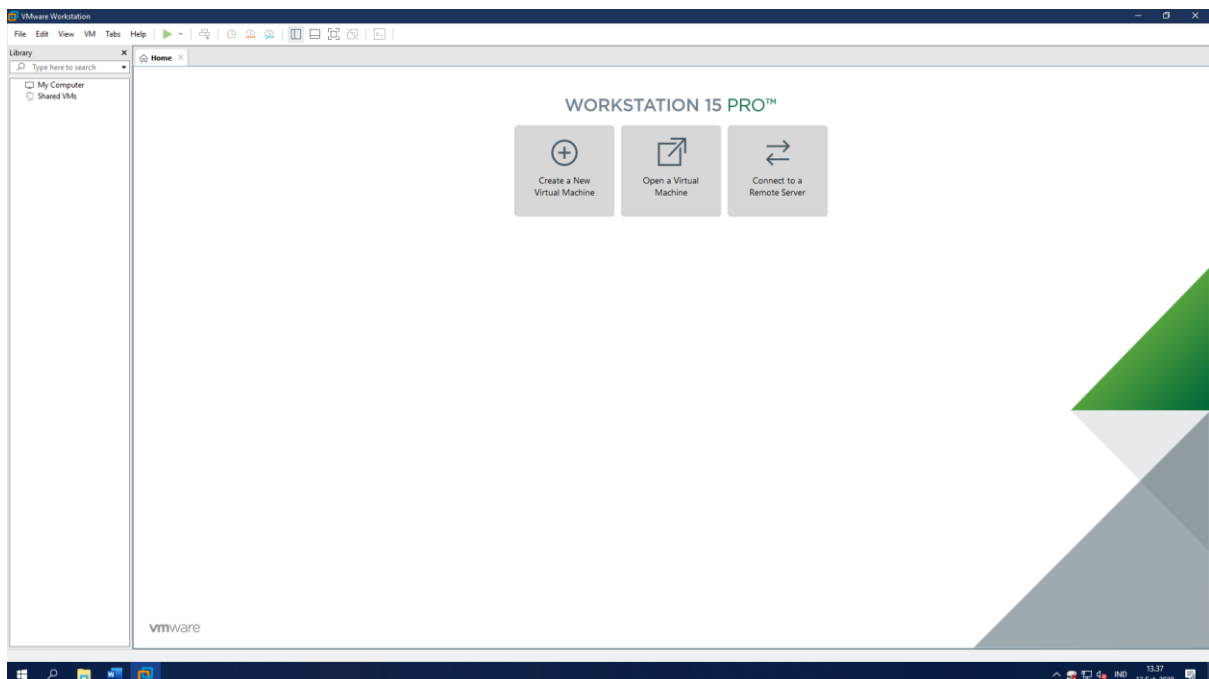
1. Pengenalan VMware Workstation

Virtual OS : Linux OS VM 1, Windows OS VM 2, Linux OS VM 3

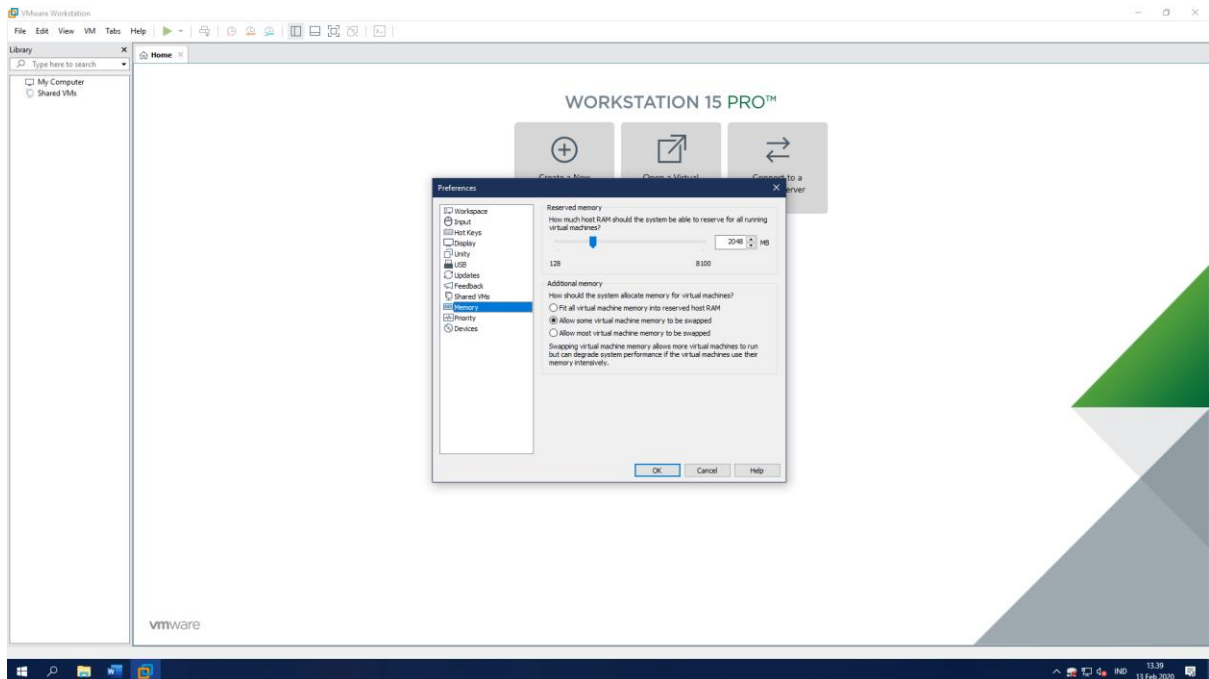
VMware Workstation

- Digunakan untuk virtualisasi sistem operasi.
- Virtualisasi “dalam bahasa komputasi virtualisasi merujuk pada kegiatan untuk menciptakan versi maya, (virtual) dari sesuatu, misalnya hardware, storage, dan resource dari komputer”

Tampilan awal VMware Workstation :

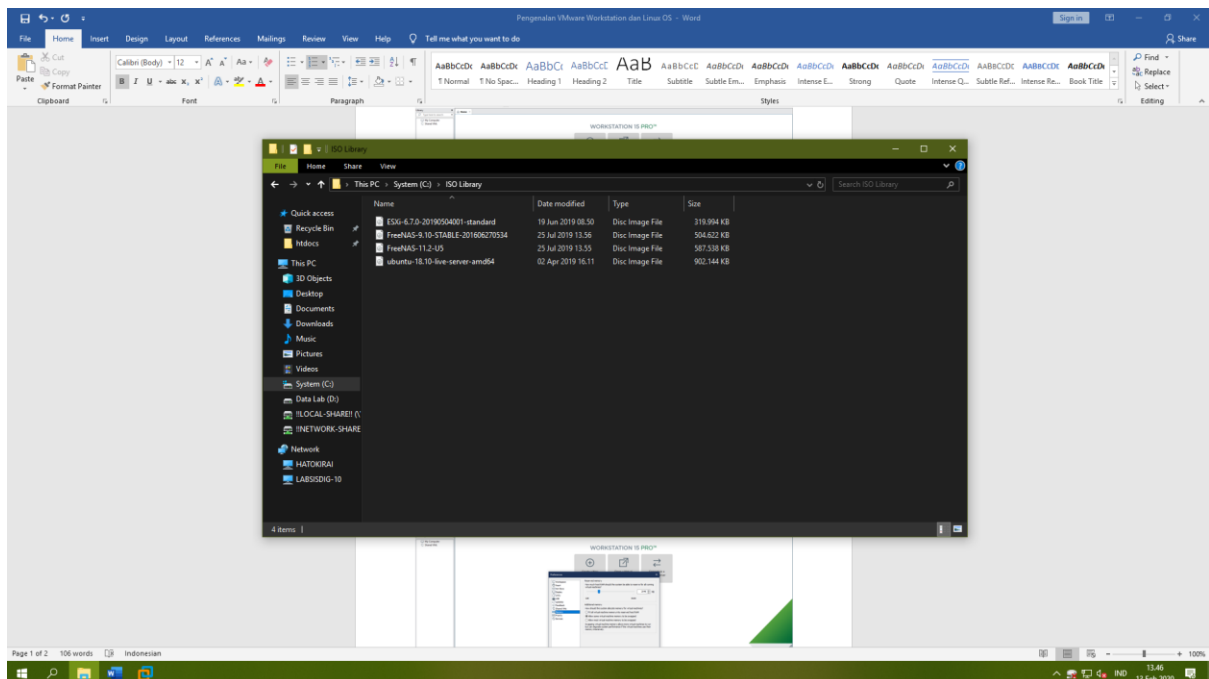


Memanfaatkan fasilitas swapping



Saat kita membuka XAMPP akan eror dan saat eror maka kita kembali ke VMware untuk memperbaiki XAMPP nya. Dan klik shared VMs klik change dan ganti disable di ganti menjadi enable.

2. Linux OS (Ubuntu)



Di cek dulu dalam folder C terus klik ISO library ada apa engga.

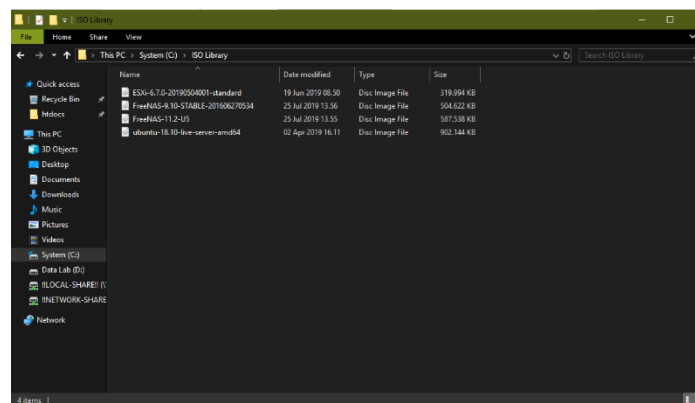
Setelah ada ISO nya kita lanjut pembuatan VM.

Langkah – langkah nya :

1. Linux OS (ubuntu)

Penjelasan Persiapan Ubuntu installer

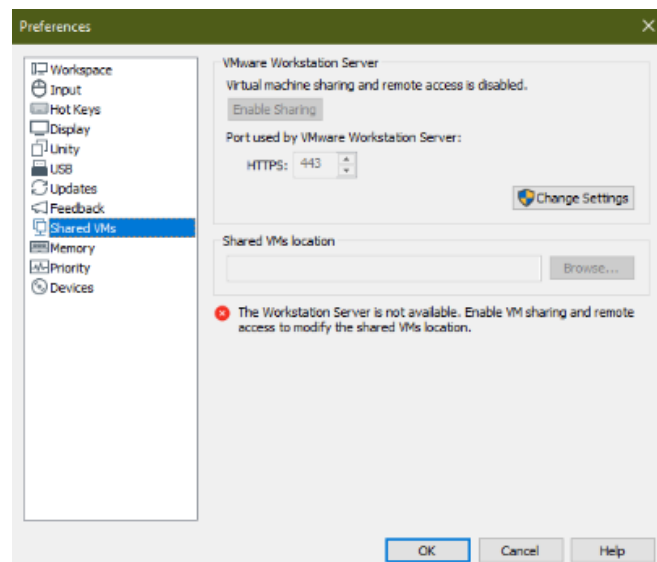
a. Siapkan Boxtable



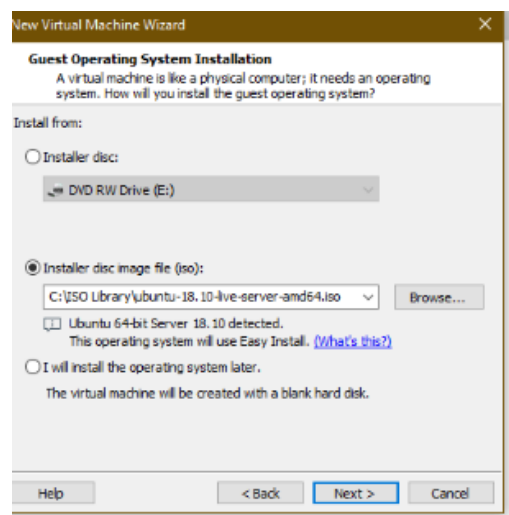
b. Pada vmware work, gunakan menu. Dan pilih custom



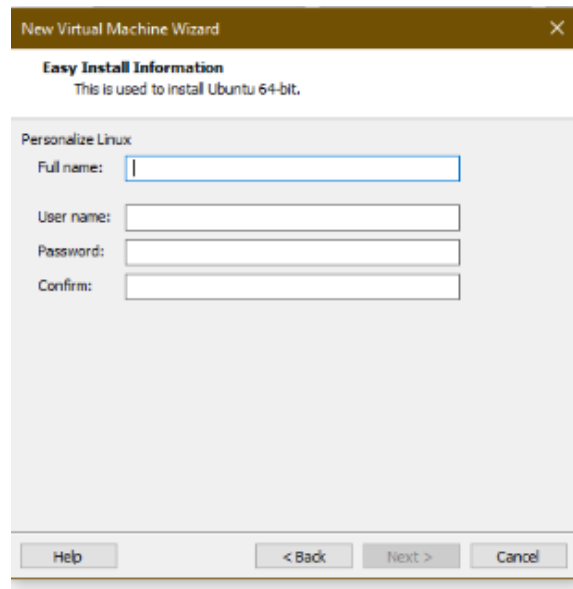
- c. Pilih kompatibilitas hardware tertinggi untuk sistem operasi VM modern (keluaran terbaru), menggunakan workstation 15.x



- d. pilih berkas iso sistem operasi untuk VM yang akan dibuat, informasi mengenai kompatibilitas easy instal akan muncul.



e. Memasukan Data



New Virtual Machine Wizard

Easy Install Information
This is used to install Ubuntu 64-bit.

Personalize Linux

Full name:

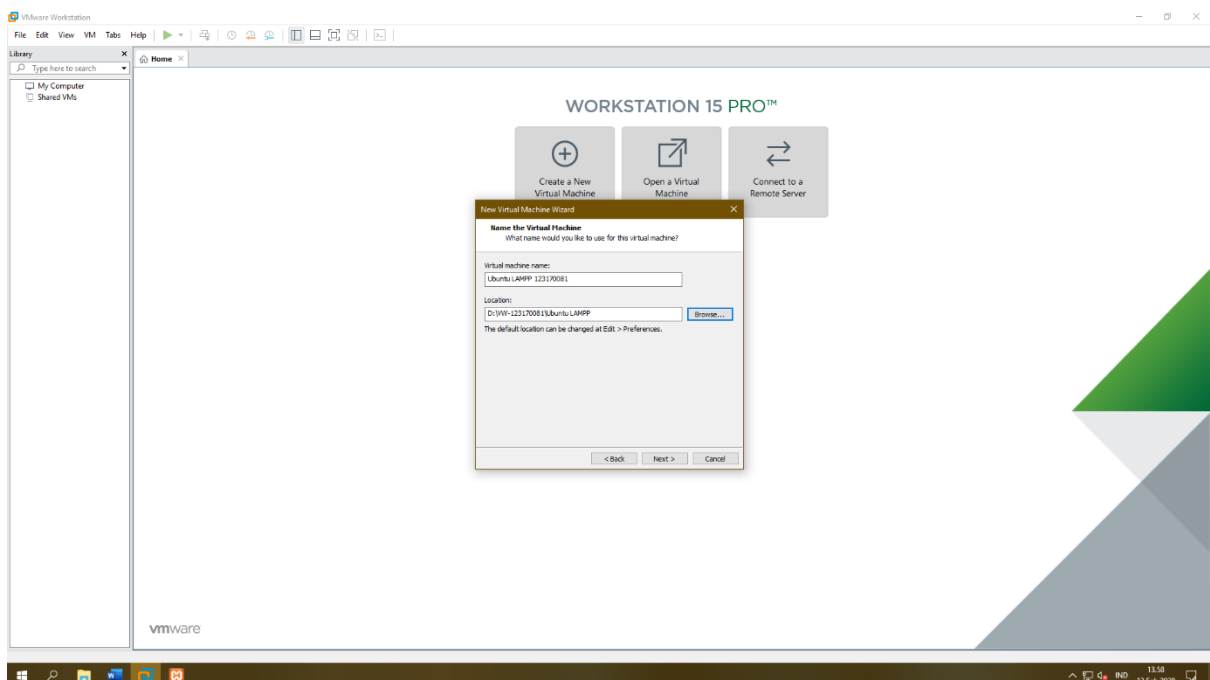
User name:

Password:

Confirm:

Help < Back Next > Cancel

f. Masukan nama dengan format, dan simpan di data D



VMware Workstation

File Edit View VM Tabs Help

Library

My Computer

Shared VMs

Home

WORKSTATION 15 PRO™

Create a New Virtual Machine

Open a Virtual Machine

Connect to a Remote Server

New Virtual Machine Wizard

Name the Virtual Machine
What name would you like to use for this virtual machine?

Virtual machine name:
Ubuntu LAPPP 123120081

Location:
D:\VM-123120081\Ubuntu LAPPP [Browse...](#)

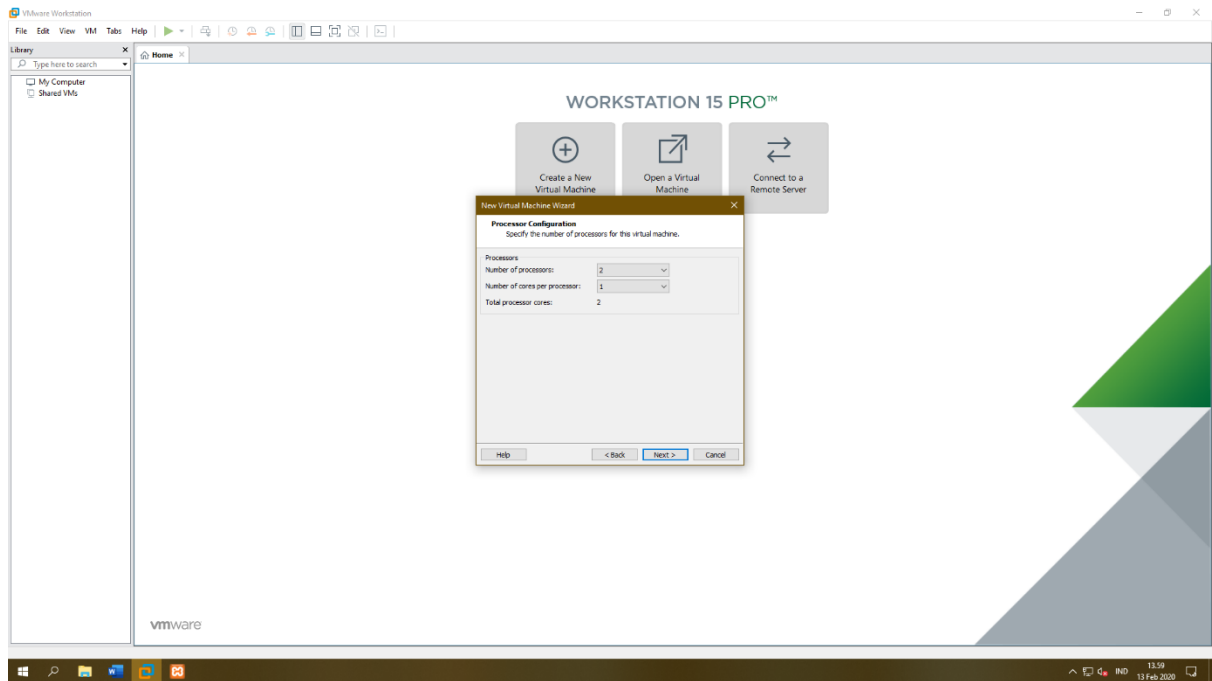
The default location can be changed at Edit > Preferences.

< Back Next > Cancel

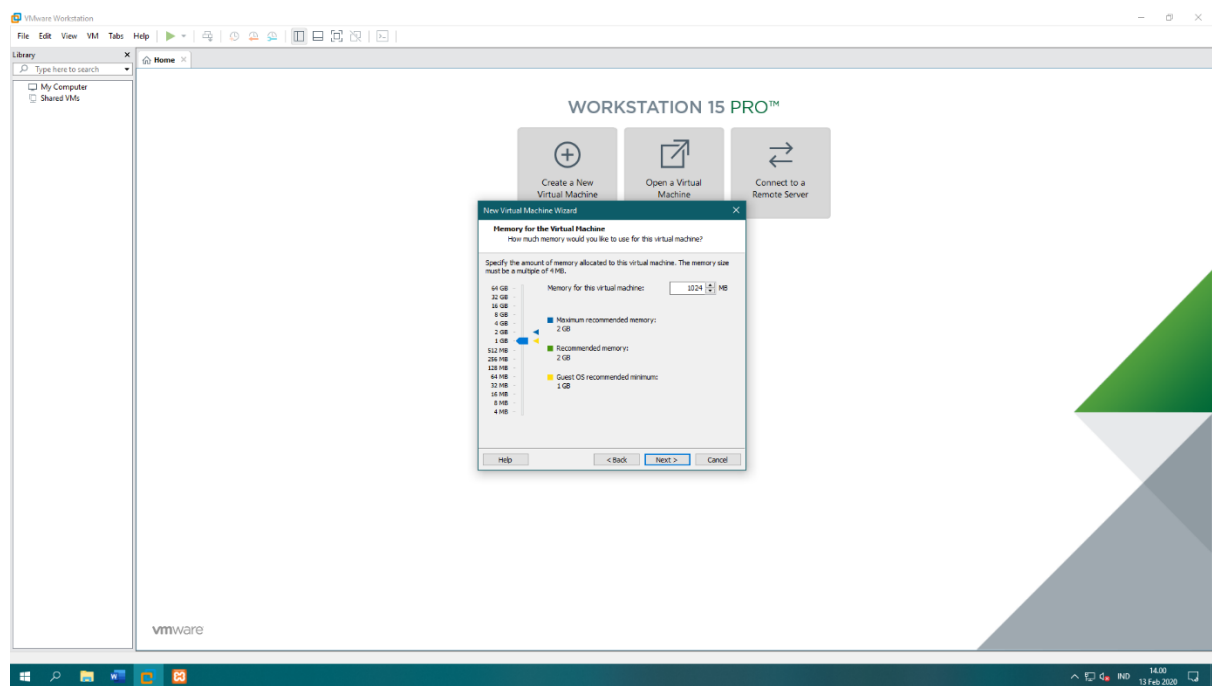
vmware

13:58 13 Feb 2020

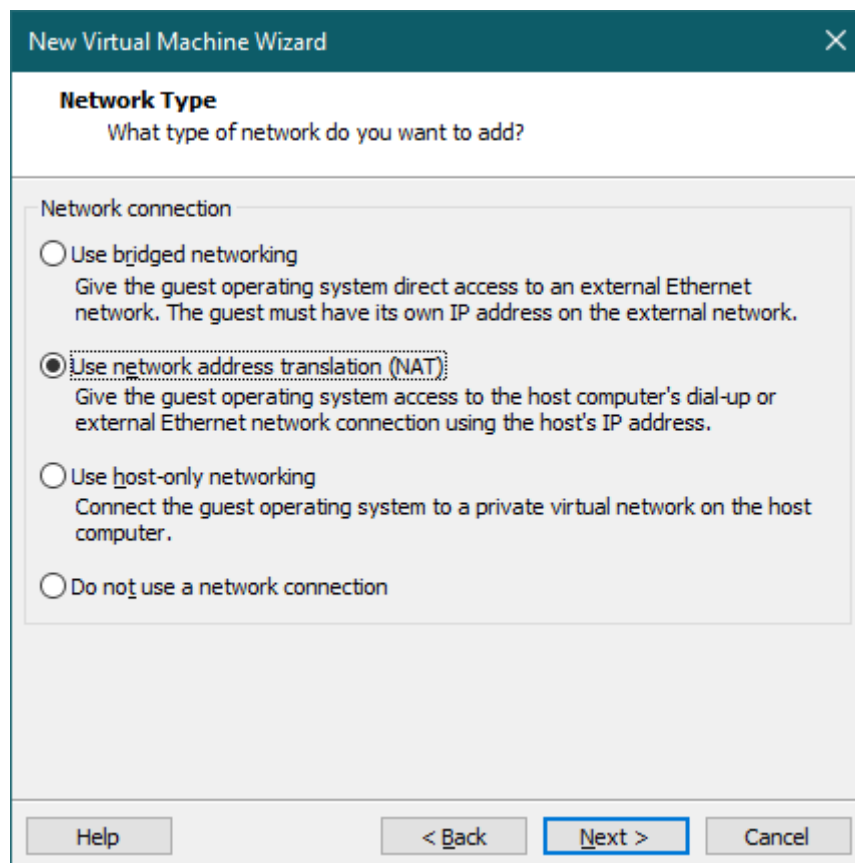
g. Memilih 2 processor dan 1 cores



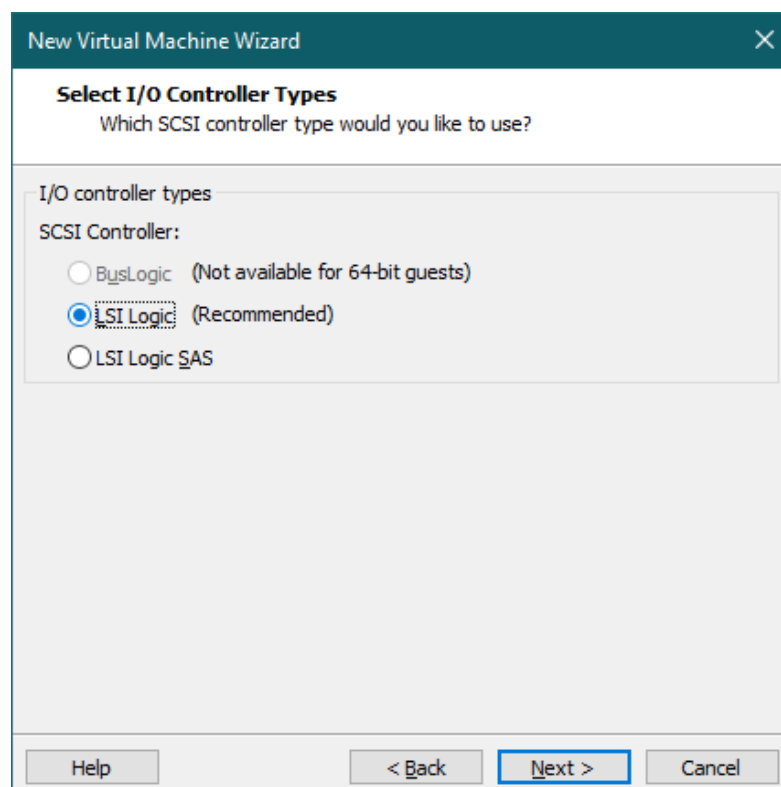
h. Memilih ram 1 gb, dengan cara menggeser, mengklik, dan mengisi langsung didalam kolom



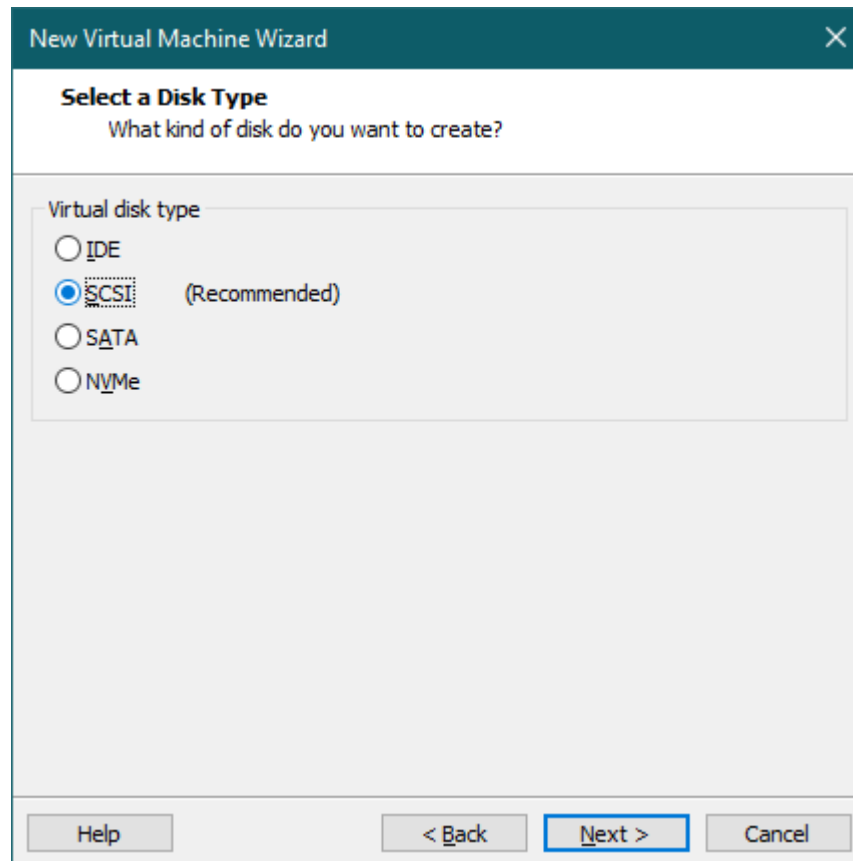
- i. Pilih network tipe NAT, karena tidak mudah diakses dari eksternal.



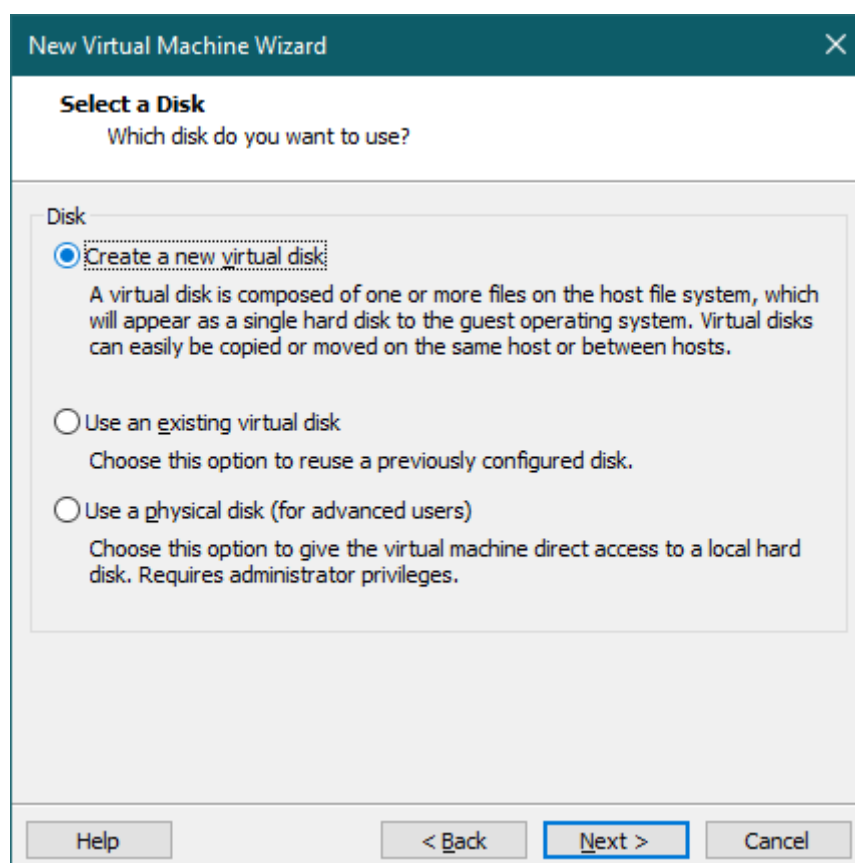
- j. Pilih controller tipe LSI LOGIC



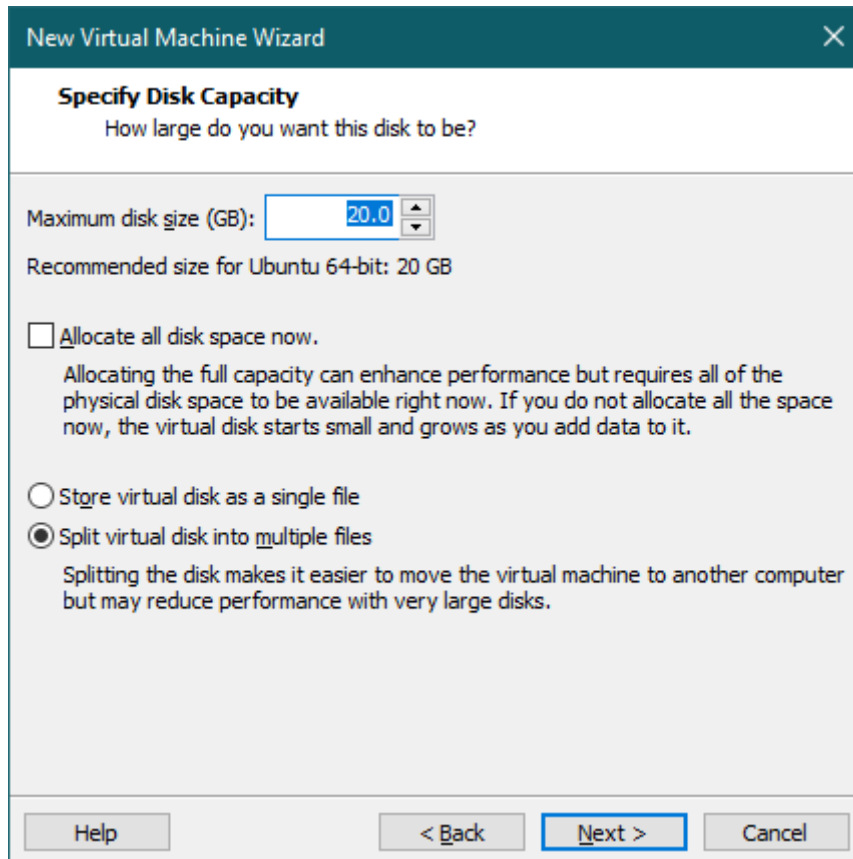
- k. Pilih SCSI Recommended



- l. Dikarenakan sebelumnya belum pernah memiliki virtual disk, maka pilih create a new virtual disk



- m. Gunakan ukuran default yang disarankan untuk ubuntu , yaitu 20 GB



The screenshot shows the 'Specify Disk Capacity' step of the 'New Virtual Machine Wizard'. The title bar says 'New Virtual Machine Wizard' with a close button. The main heading is 'Specify Disk Capacity' with the subtitle 'How large do you want this disk to be?'. There is a text input field for 'Maximum disk size (GB):' with the value '20.0' and a spinner control. Below it, it says 'Recommended size for Ubuntu 64-bit: 20 GB'. There are two radio button options: 'Allocate all disk space now.' (unchecked) and 'Split virtual disk into multiple files' (checked). The second option has a descriptive text: 'Splitting the disk makes it easier to move the virtual machine to another computer but may reduce performance with very large disks.' At the bottom, there are four buttons: 'Help', '< Back', 'Next >', and 'Cancel'.

New Virtual Machine Wizard

Specify Disk Capacity
How large do you want this disk to be?

Maximum disk size (GB):

Recommended size for Ubuntu 64-bit: 20 GB

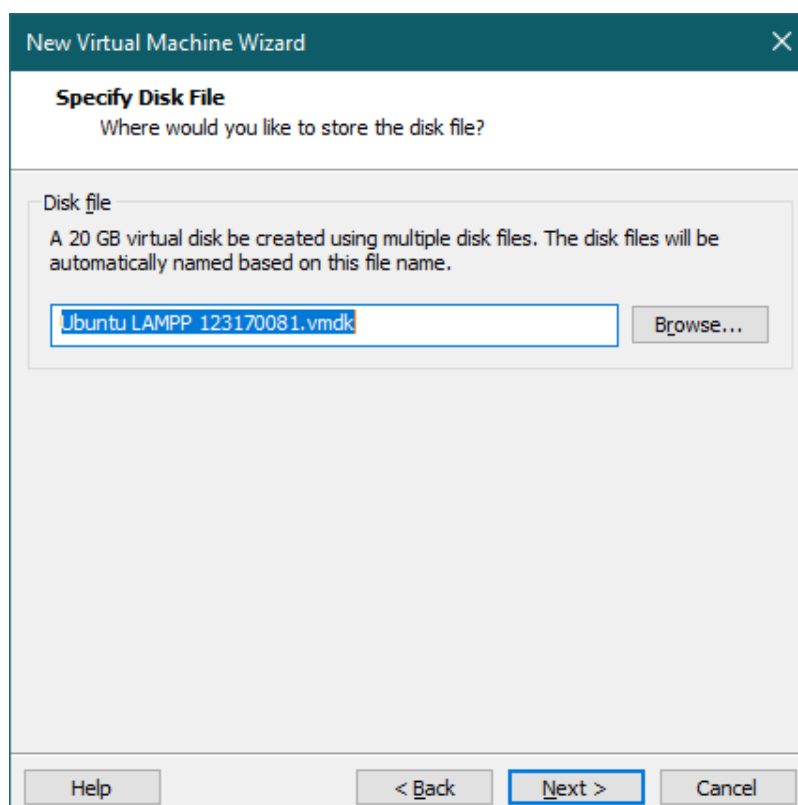
☐ Allocate all disk space now.
Allocating the full capacity can enhance performance but requires all of the physical disk space to be available right now. If you do not allocate all the space now, the virtual disk starts small and grows as you add data to it.

☐ Store virtual disk as a single file

☒ Split virtual disk into multiple files
Splitting the disk makes it easier to move the virtual machine to another computer but may reduce performance with very large disks.

Help < Back Next > Cancel

- n. Tampilan spesifikasi disk file



The screenshot shows the 'Specify Disk File' step of the 'New Virtual Machine Wizard'. The title bar says 'New Virtual Machine Wizard' with a close button. The main heading is 'Specify Disk File' with the subtitle 'Where would you like to store the disk file?'. There is a text input field for 'Disk file' with the value 'Ubuntu LAMPP 123170081.vmdk' and a 'Browse...' button. Below the input field, there is a descriptive text: 'A 20 GB virtual disk be created using multiple disk files. The disk files will be automatically named based on this file name.' At the bottom, there are four buttons: 'Help', '< Back', 'Next >', and 'Cancel'.

New Virtual Machine Wizard

Specify Disk File
Where would you like to store the disk file?

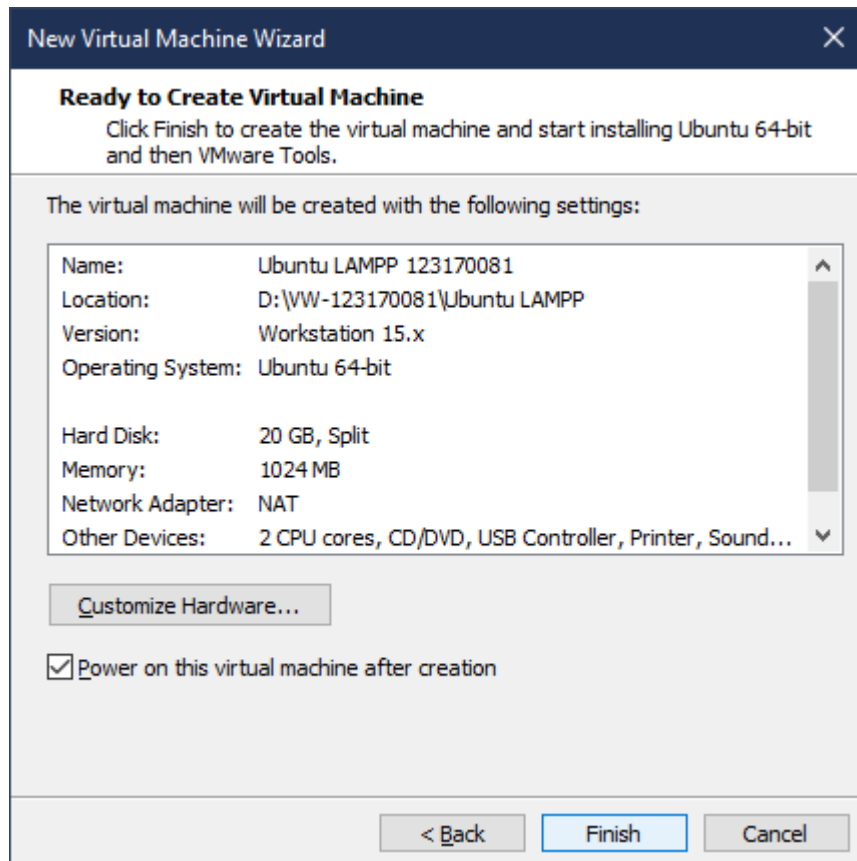
Disk file

A 20 GB virtual disk be created using multiple disk files. The disk files will be automatically named based on this file name.

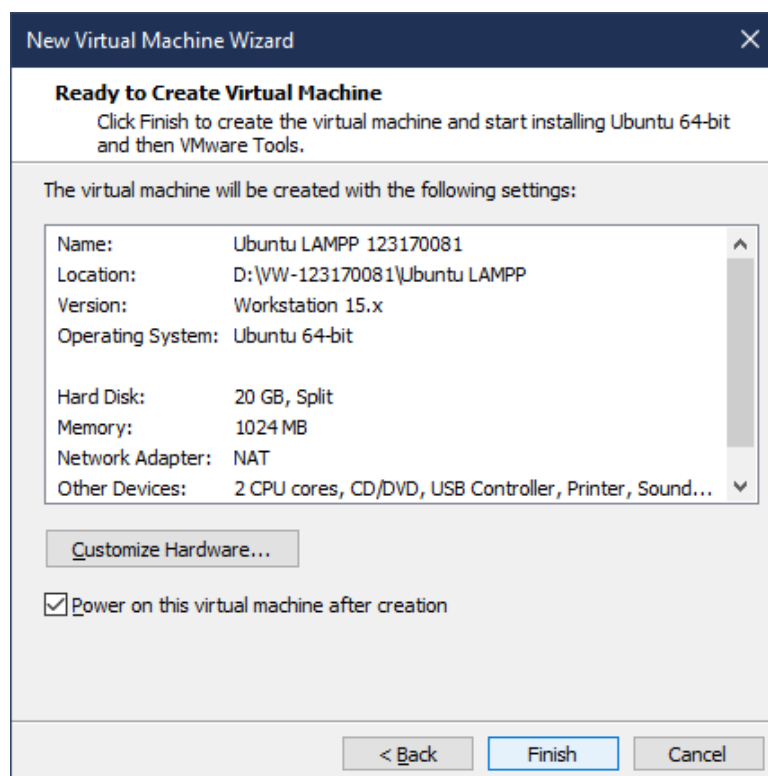
Browse...

Help < Back Next > Cancel

- o. Tampilan semua spesifikasi

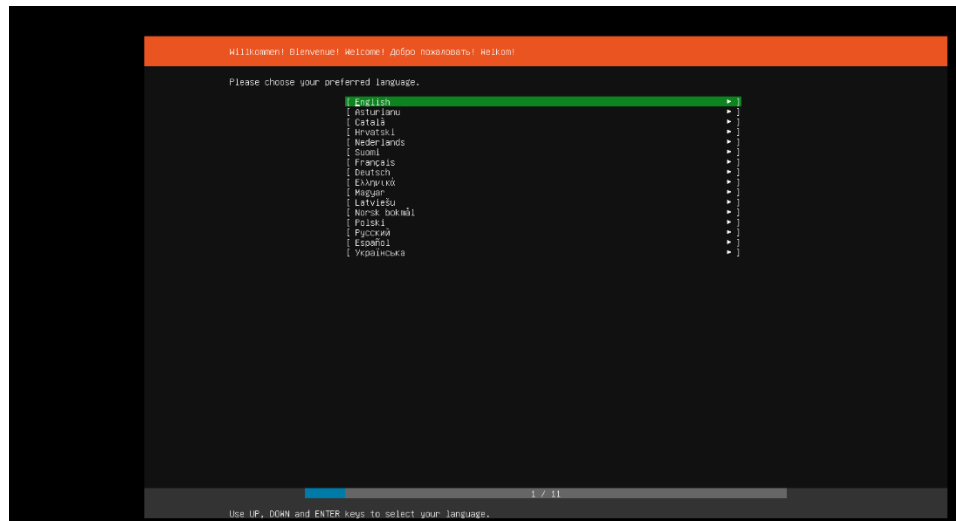


- p. Klik finish

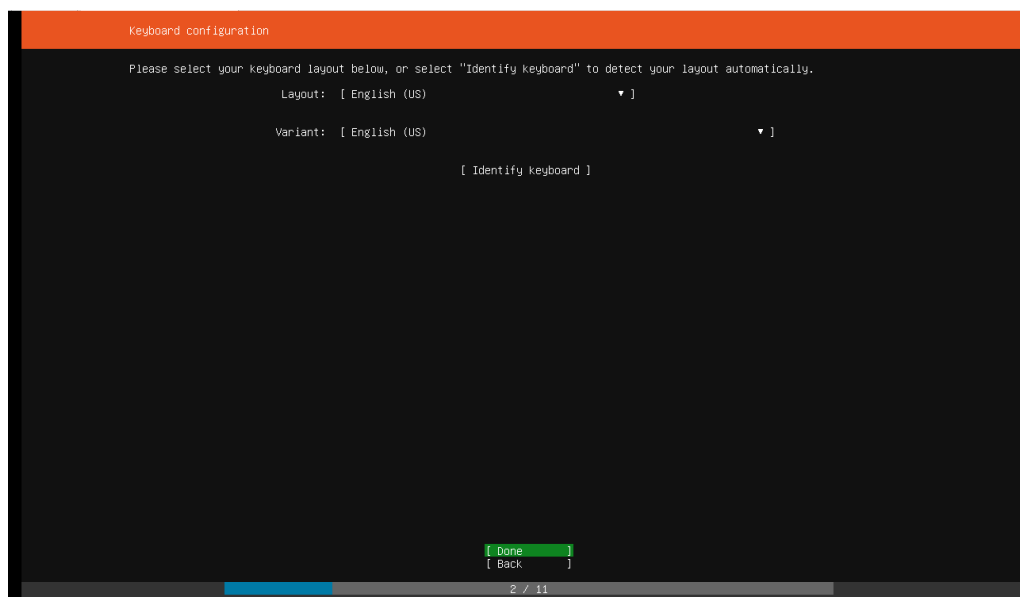


Instalasi Ubuntu Server

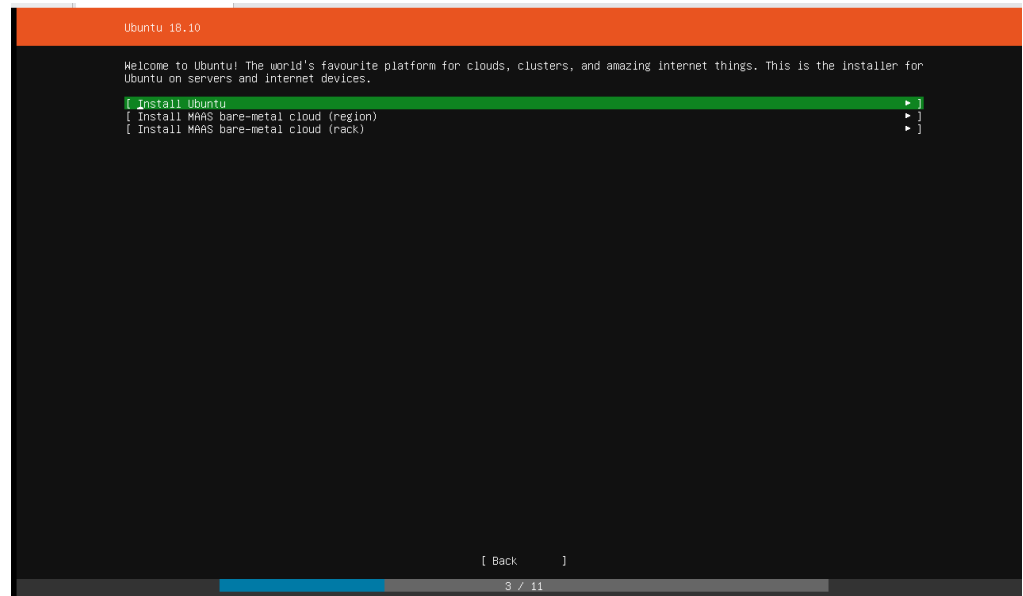
1. Pilih bahasa



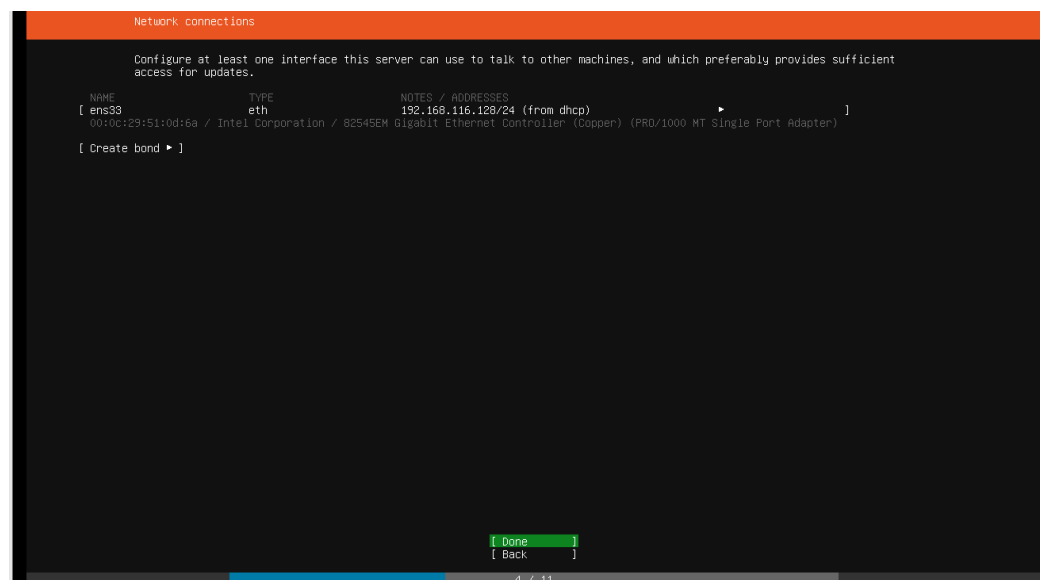
2. Pilih keyboard layout



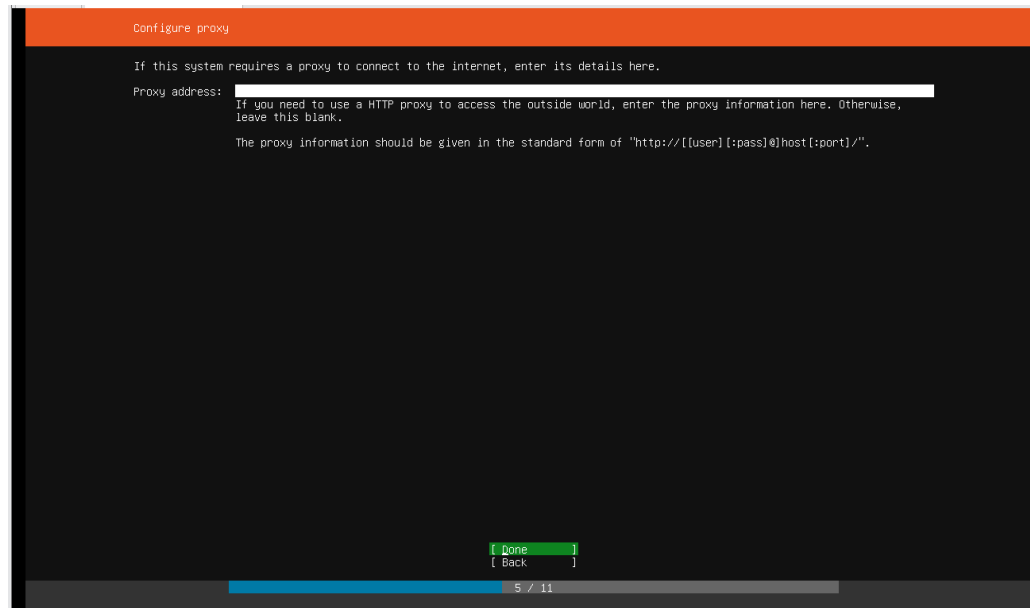
3. Pilih model ubuntu



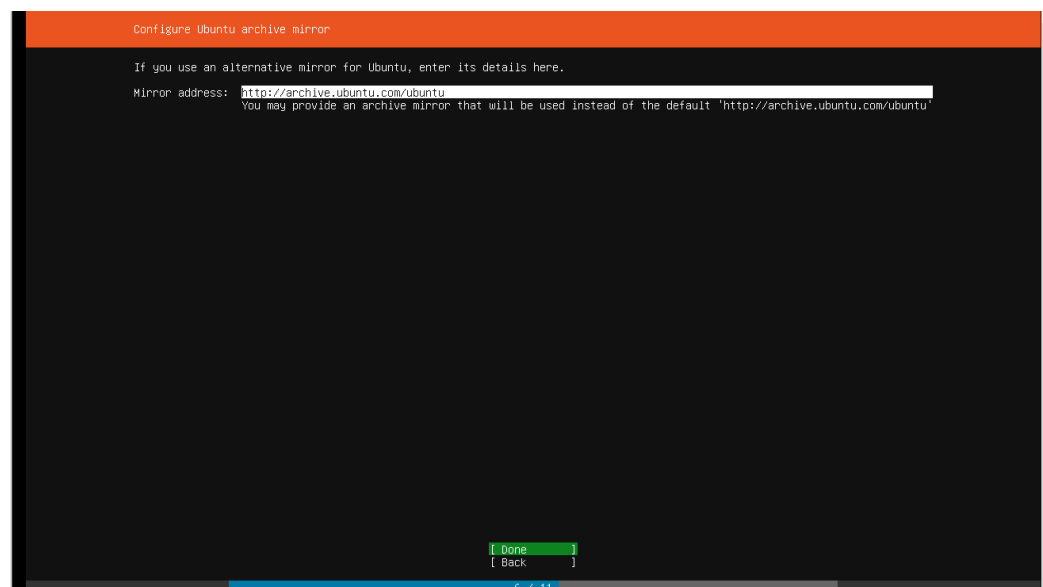
4. Lalu pilih konfigurasi jaringan, akan tampil IP dari mode NAT



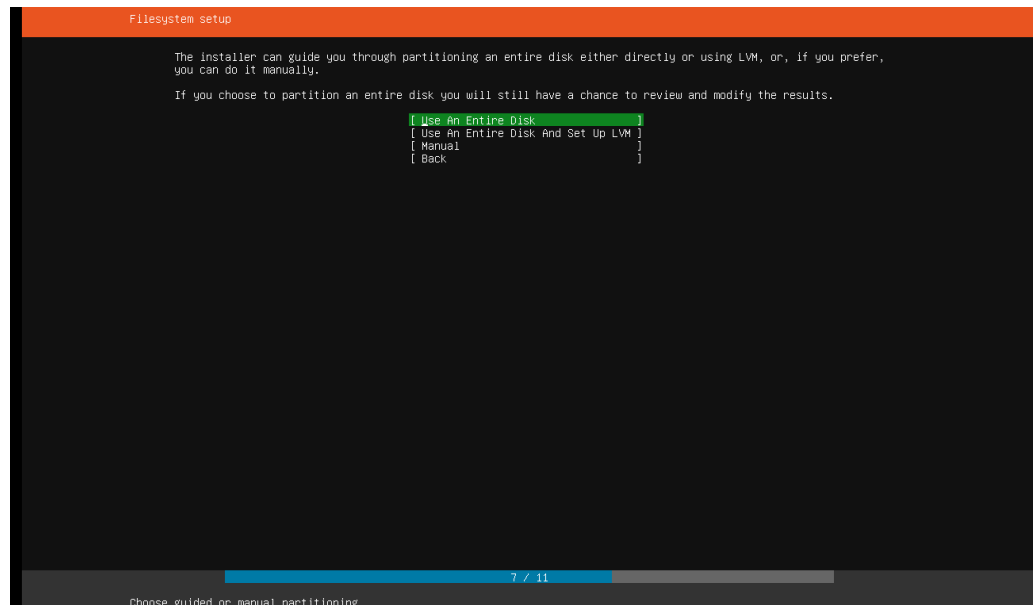
5. Pada menu proxy, dikosongkan saja



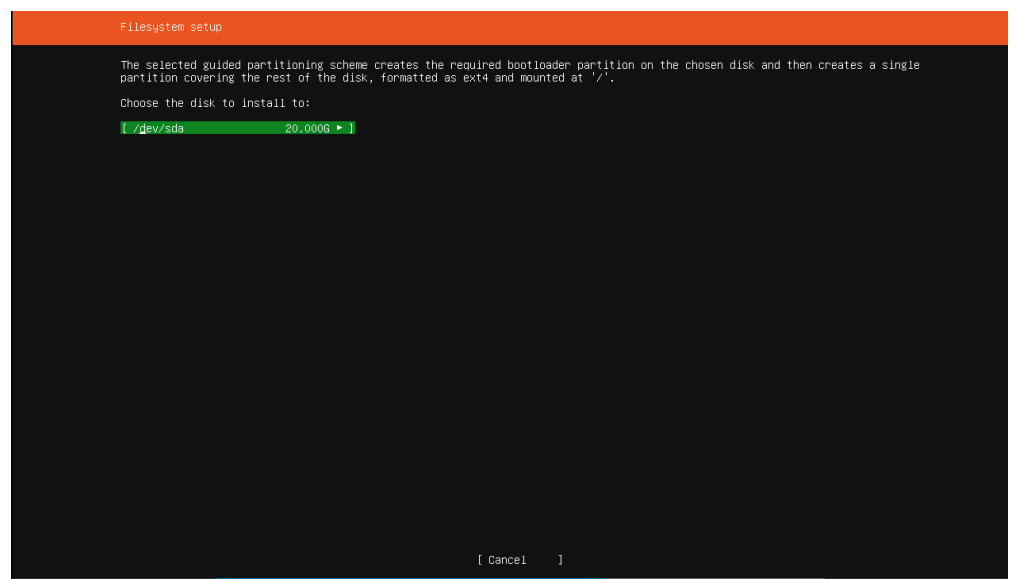
6. Mirror adress



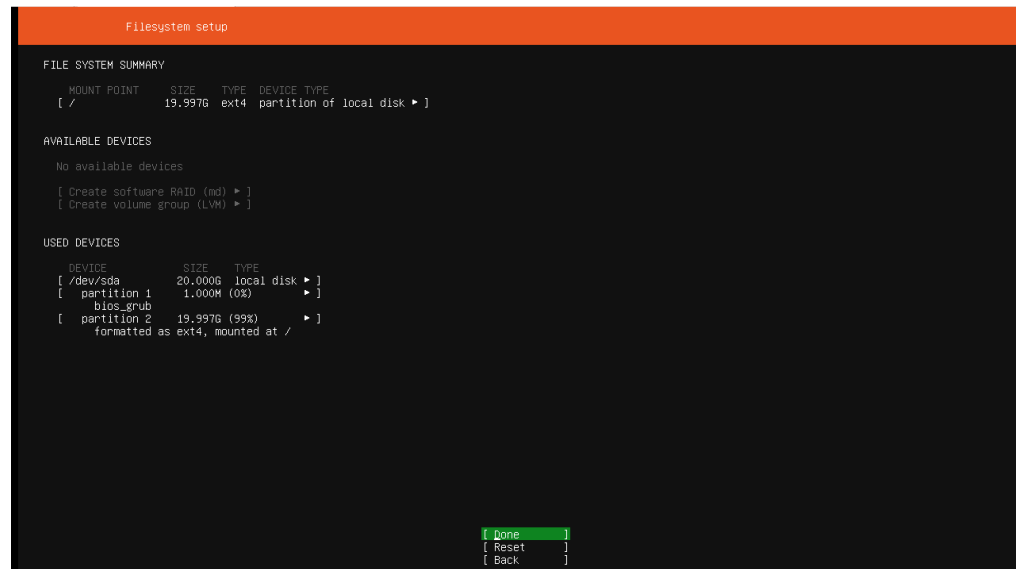
7. Gunakan Pengaturan Use An Entire Disk



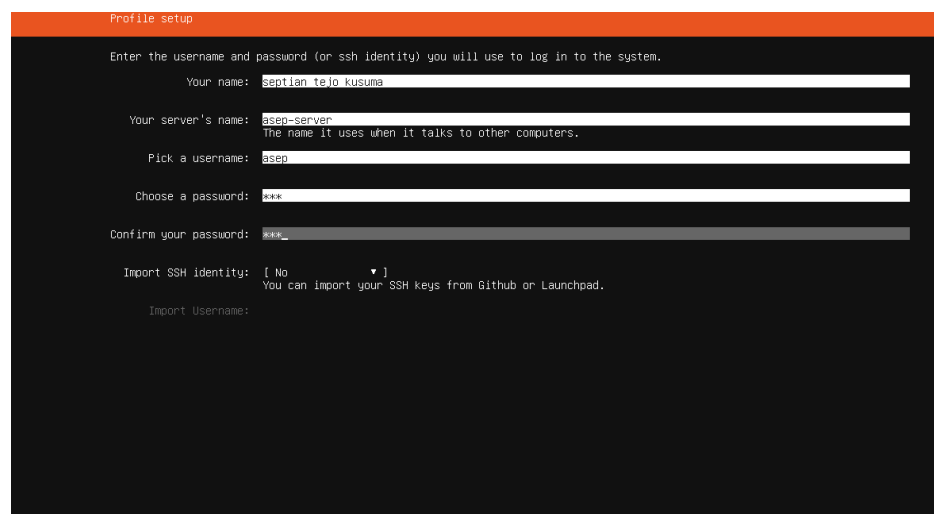
8. Pilih lokasi Harddisk yang dev/sda



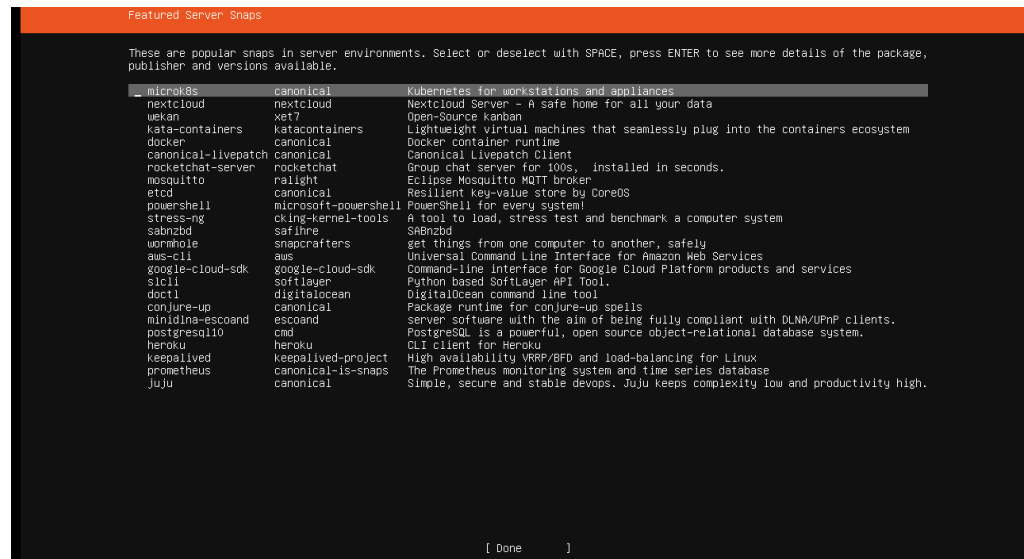
9. Konfirmasi Akhir



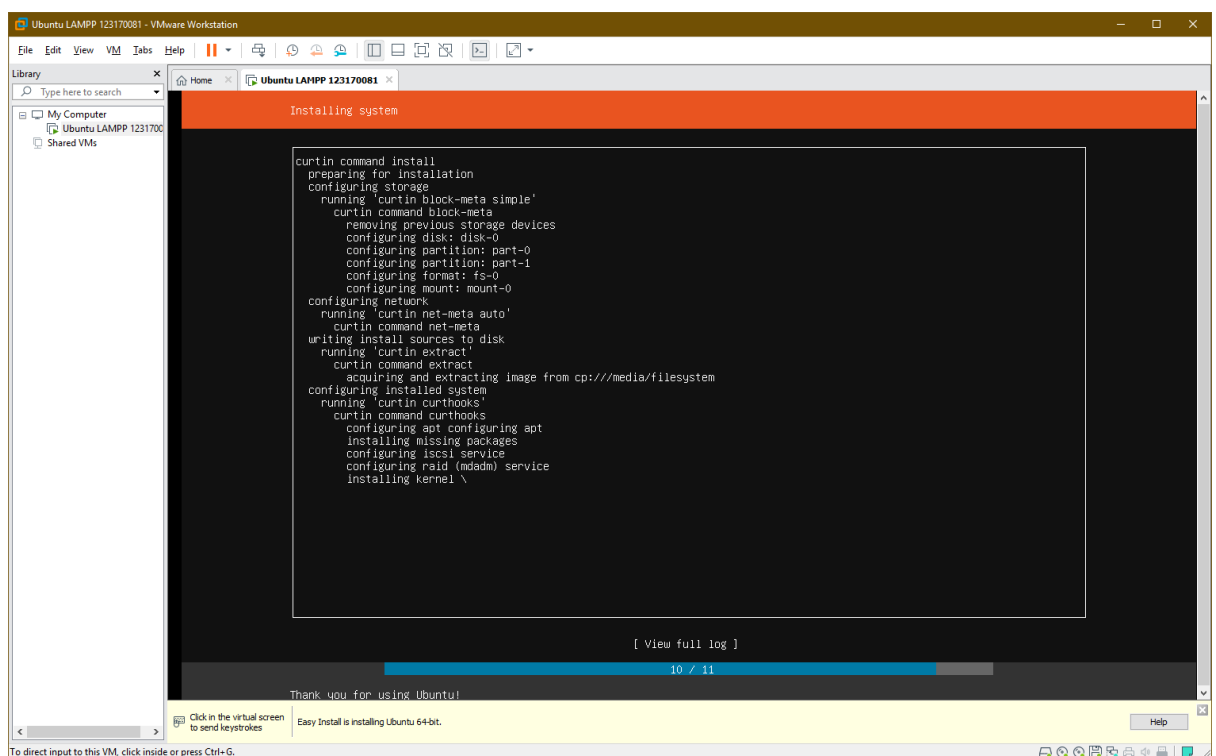
10. Isi data diri dan jangan sampai lupa



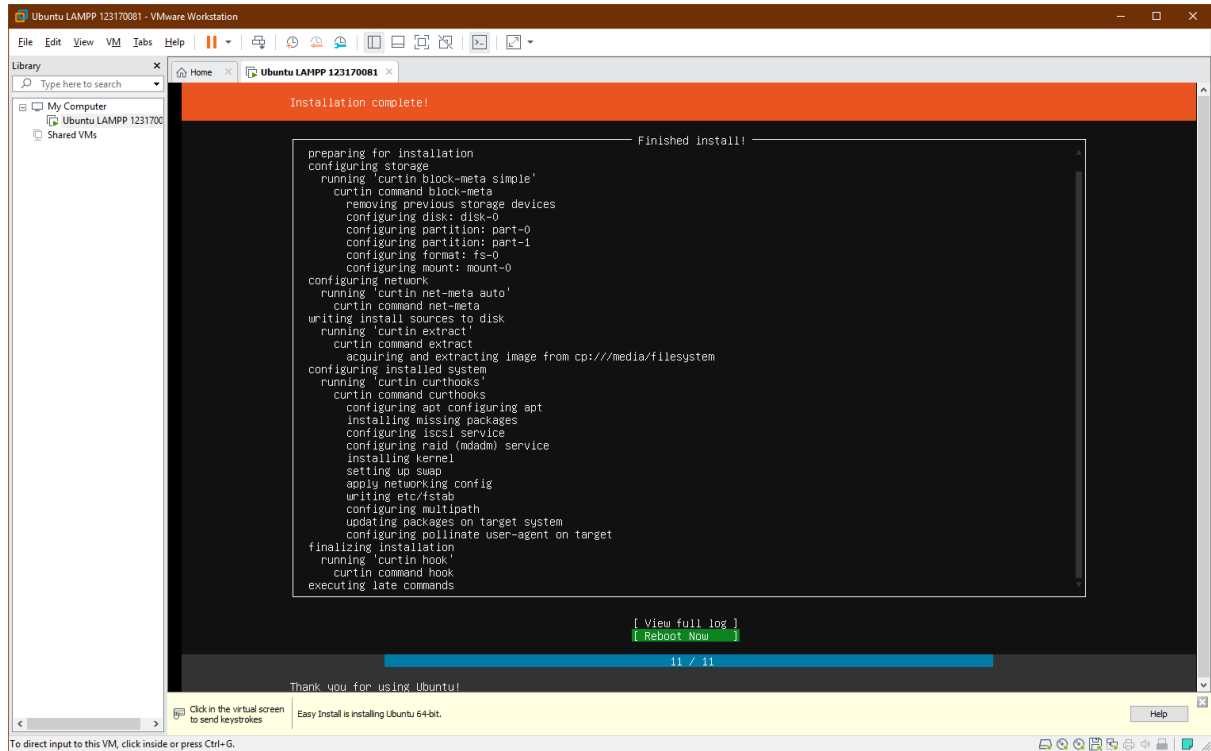
11. Featured server snaps



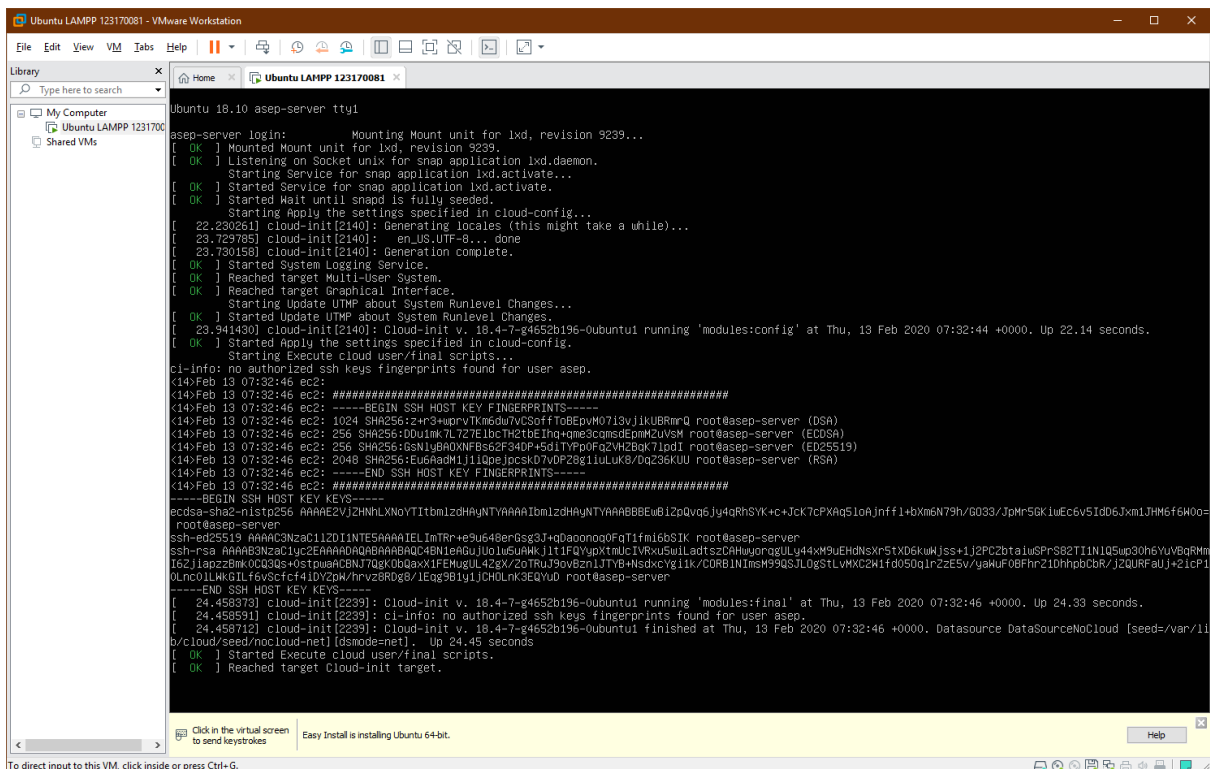
12. Proses Installing System



13. Ketika selesai, klik reboot now



14. Tanda selesai reboot



Perintah perintah :

- a. Sudo :
- b. Sudo su :
- c. Cd : change
- d. Mkdir :
- e. Is :
- f. Cp :
- g. Mv :
- h. Rm :
- i. Nano :
- j. Apt :
- k. Cat :
- l. Chown :
- m. Chmod :

Mencoba mengubah MOTD

1. Tulis ls

```
reza@reza-server:~$ login as: reza
reza@192.168.116.129's password:
Access Denied
reza@192.168.116.129's password:
Welcome to Ubuntu 18.10 (GNU/Linux 4.18.0-25-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

System information as of Thu Feb 13 07:51:26 UTC 2020

System load:  0.09               Processes:    165
Usage of /:   20.6% of 19.56GB    Users logged in: 1
Memory usage: 26%                IP address for ens33: 192.168.116.129
Swap usage:   0%

 * Multipass 1.0 is out! Get Ubuntu VMs on demand on your Linux, Windows or
  Mac. Supports cloud-init for fast, local, cloud devops simulation.
  https://multipass.run/

153 packages can be updated.
104 updates are security updates.

Your Ubuntu release is not supported anymore.
For upgrade information, please visit:
http://www.ubuntu.com/releases/endsolife

New release '19.10' available.
Run 'do-release-upgrade' to upgrade to it.

Password nya apa bang?
Last login: Thu Feb 13 07:46:55 2020
reza@reza-server:~$ ls
reza@reza-server:~$
```

Tidak tampil apa – apa

2. Ketik mkdir pertemuan-2

```
reza@reza-server:~$ login as: reza
reza@192.168.116.129's password:
Access Denied
reza@192.168.116.129's password:
Welcome to Ubuntu 18.10 (GNU/Linux 4.18.0-25-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

System information as of Thu Feb 13 07:51:26 UTC 2020

System load:  0.09               Processes:    165
Usage of /:   20.6% of 19.56GB    Users logged in: 1
Memory usage: 26%                IP address for ens33: 192.168.116.129
Swap usage:   0%

 * Multipass 1.0 is out! Get Ubuntu VMs on demand on your Linux, Windows or
  Mac. Supports cloud-init for fast, local, cloud devops simulation.
  https://multipass.run/

153 packages can be updated.
104 updates are security updates.

Your Ubuntu release is not supported anymore.
For upgrade information, please visit:
http://www.ubuntu.com/releases/endsolife

New release '19.10' available.
Run 'do-release-upgrade' to upgrade to it.

Password nya apa bang?
Last login: Thu Feb 13 07:46:55 2020
reza@reza-server:~$ ls
reza@reza-server:~$ mkdir pertemuan-1
reza@reza-server:~$ mkdir pertemuan-2
reza@reza-server:~$
```

Tidak tampil apa apa.

3. Ketik ls -l

```
reza@reza-server:~$ login as: reza
reza@192.168.116.129's password:
Access denied
reza@192.168.116.129's password:
Welcome to Ubuntu 18.10 (GNU/Linux 4.18.0-25-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Thu Feb 13 07:51:26 UTC 2020

System load:  0.09               Processes:    165
Usage of /:   20.4% of 19.5GB     Users logged in: 1
Memory usage: 26%                IP address for ens33: 192.168.116.129
Swap usage:   0%

 * Multipass 1.0 is out! Get Ubuntu VMs on demand on your Linux, Windows or
  Mac. Supports cloud-init for fast, local, cloud devops simulation.
  https://multipass.run/

153 packages can be updated.
104 updates are security updates.

Your Ubuntu release is not supported anymore.
For upgrade information, please visit:
http://www.ubuntu.com/releases/edo-life

New release '19.10' available.
Run 'do-release-upgrade' to upgrade to it.

Password nya apa bang?
Last login: Thu Feb 13 07:46:55 2020
reza@reza-server:~$ ls -l
reza@reza-server:~$ mkdir pertemuan-1
reza@reza-server:~$ mkdir pertemuan-2
reza@reza-server:~$ ls -l
total 8
drwxr-xr-x 2 reza reza 4096 Feb 13 07:56 pertemuan-1
drwxr-xr-x 2 reza reza 4096 Feb 13 07:56 pertemuan-2
reza@reza-server:~$
```

Tampil tulisan yang ditulis di mkdir.

4. Ketik cp -r pertemuan-2 pertemuan-1

```
reza@reza-server:~$ login as: reza
reza@192.168.116.129's password:
Access denied
reza@192.168.116.129's password:
Welcome to Ubuntu 18.10 (GNU/Linux 4.18.0-25-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Thu Feb 13 07:51:26 UTC 2020

System load:  0.09               Processes:    165
Usage of /:   20.4% of 19.5GB     Users logged in: 1
Memory usage: 26%                IP address for ens33: 192.168.116.129
Swap usage:   0%

 * Multipass 1.0 is out! Get Ubuntu VMs on demand on your Linux, Windows or
  Mac. Supports cloud-init for fast, local, cloud devops simulation.
  https://multipass.run/

153 packages can be updated.
104 updates are security updates.

Your Ubuntu release is not supported anymore.
For upgrade information, please visit:
http://www.ubuntu.com/releases/edo-life

New release '19.10' available.
Run 'do-release-upgrade' to upgrade to it.

Password nya apa bang?
Last login: Thu Feb 13 07:46:55 2020
reza@reza-server:~$ ls
reza@reza-server:~$ mkdir pertemuan-1
reza@reza-server:~$ mkdir pertemuan-2
reza@reza-server:~$ ls -l
total 8
drwxr-xr-x 2 reza reza 4096 Feb 13 07:56 pertemuan-1
drwxr-xr-x 2 reza reza 4096 Feb 13 07:56 pertemuan-2
reza@reza-server:~$ cp -r pertemuan-2 pertemuan-1
reza@reza-server:~$
```

Tidak tampil apa – apa.

5. Ketik Is

```

root@reza-server:~#
# login as: reza
reza@192.168.116.129's password:
Access denied
reza@192.168.116.129's password:
Welcome to Ubuntu 18.10 (GNU/Linux 4.18.0-25-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Thu Feb 13 07:15:12 UTC 2020

System load:  0.09           Processes:    165
Usage of /:   20.4k of 19.56GB   Users logged in:  1
Memory usage: 36%             IP address for ens3: 192.168.116.129
Swap usage:   0%

 * Multipass 1.0 is out! Get Ubuntu VMs on demand on your Linux, Windows or
  Mac. Supports cloud-init for fast, local, cloud device emulation.

  https://multipass.run/

183 packages can be updated.
104 updates are security updates.

Your Ubuntu release is not supported anymore.
For upgrade information, please visit:
https://www.ubuntu.com/releaseendoflife

New release '19.10' available.
Run 'do-release-upgrade' to upgrade to 19.

reza@reza-server:~#
Last login: Thu Feb 13 07:46:55 2020
reza@reza-server:~$ ls
reza@reza-server:~$ sshd portman-1
reza@reza-server:~$ mkdir portman-2
reza@reza-server:~$ ls -l
total 8
drwxrwxr-x 2 reza reza 4096 Feb 13 07:56 portman-1
drwxrwxr-x 2 reza reza 4096 Feb 13 07:56 portman-2
reza@reza-server:~$ cd ~ portman-2 portman-1
reza@reza-server:~$ ls
portman-1 portman-2
reza@reza-server:~$
```

Akan tampil tulisan pertemuan-1 pertemuan-2

6. Ketik mv pertemuan-2 “pertemuan 2 LAMPP”

```

root@reza-server:~#
root@reza-server:~# login as: reza
reza@192.168.116.129's password:
Access denied
reza@192.168.116.129's password:
Welcome to Ubuntu 18.10 (GNU/Linux 4.18.0-25-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Thu Feb 13 07:15:16 UTC 2020

System load: 0.09               Processes: 165
Usage of /: 24.4% of 19.54GB    Users logged in: 1
Memory usage: 26%              IP address for ens33: 192.168.116.129
Swap usage: 0%

 * Multipass 1.0 is out! Get Ubuntu VMs on demand on your Linux, Windows or
  Mac. Supports cloud-init for fast, local, cloud devops simulation.

  https://multipass.run/

103 packages can be updated.
106 updates are security updates.

Your Ubuntu release is not supported anymore.
For upgrade information, please visit:
http://www.ubuntu.com/releaseendoflife

New release '19.10' available.
Run 'do-release-upgrade' to upgrade to it.

reza@reza-server:~$
reza@reza-server:~$ ssh root@192.168.116.129
Last login: Thu Feb 13 07:46:15 2020
reza@reza-server:~$ ls
reza@reza-server:~$ mkdir portman-1
reza@reza-server:~$ mkdir portman-2
reza@reza-server:~$ ls -l
total 8
drwxrwxr-x 2 reza reza 4096 Feb 13 07:16 portman-1
drwxrwxr-x 2 reza reza 4096 Feb 13 07:16 portman-2
reza@reza-server:~$ cd -x portman-2 portman-1
reza@reza-server:~$ ls
portman-1 portman-2
reza@reza-server:~$ mv portman-2 "portman-2 LAN9P"
reza@reza-server:~$

```

7. Ketik Is

```

# reza@reza-server:~$
# login as: reza
# reza@192.168.116.129's password:
# Access denied
# reza@192.168.116.129's password:
Welcome to Ubuntu 18.10 (GNU/Linux 4.18.0-25-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/support

System information as of Thu Feb 13 07:51:26 UTC 2020

System load:  0.09                       Processes:    165
Usage of /:   21.4k of 19.5GkB           Users logged in: 1
Memory usage: 26%                        IP address for ens33: 192.168.116.129
Swap usage:   0%

 * Multipass 1.0 is out! Get Ubuntu VMs on demand on your Linux, Windows or Mac. Supports cloud-init for fast, local, cloud devops simulation.

https://multipass.run/

103 packages can be updated.
10 updates are security updates.

Your Ubuntu release is not supported anymore.
For upgrade information, please visit:
http://www.ubuntu.com/releases/endoflife

New release '19.10' available.
Run 'do-release-upgrade' to upgrade to it.


# reza@reza-server:~$
# reza@reza-server:~$ ssh bang
Last login: Thu Feb 13 07:46:55 2020
reza@reza-server:~$ ls
reza@reza-server:~$ mkdir portman-1
reza@reza-server:~$ mkdir portman-2
reza@reza-server:~$ ls -l
total 8
drwxr-xr-x 2 reza reza 4096 Feb 13 07:56 portman-1
drwxr-xr-x 2 reza reza 4096 Feb 13 07:56 portman-2
reza@reza-server:~$ cd ~
reza@reza-server:~$ mv portman-2 "portman 2 LANMP"
reza@reza-server:~$ ls
portman-1  portman 2 LANMP
reza@reza-server:~$
```

Tampil tulisan di saat masukin tulisan di mv pertemuan-2

8. ketik cd "pertemuan 2 (lalu tab dan enter)

```

root@vnc-session-1:~# ssh root@192.168.1.10
root@reza:~#
root@reza:~# login as: reza
reza@192.168.1.10:~$ ssh root@192.168.1.10
Access denied
reza@192.168.1.10:~$ ssh root@192.168.1.10
Welcome to Ubuntu 18.10 (GNU/Linux 4.18.0-25-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/support

System information as of Thu Feb 13 07:15:12 UTC 2020

System load: 0.09               Processes:            165
Usage of /:   70.4% of 19.5GB     Users logged in:      1
Memory usage: 26%                IP address for ens3: 192.168.1.129
Swap usage:   0%

 * Multipass 1.0 is out! Get Ubuntu VMs on demand on your Linux, Windows or Mac. Supports cloud-init for fast, local, cloud devops simulation.
https://multipass.run/

103 packages can be updated.
106 updates are security updates.

Your Ubuntu release is not supported anymore.
For upgrade information, please visit:
http://www.ubuntu.com/releases/endoflife

New release '18.10' available.
Run 'do-release-upgrade' to upgrade to it.


reza@reza:~$ ssh root@192.168.1.10
Last login: Thu Feb 13 07:44:12 2020
reza@reza-server:~$ ls
reza@reza-server:~$ mkdir portman-1
reza@reza-server:~$ cd portman-1
reza@reza-server:~$ ls -l
total 0
drwxr-xr-x 2 reza reza 4096 Feb 13 07:16 portman-1
reza@reza-server:~$ cd ..
reza@reza-server:~$ cp -r portman-2 portman-1
reza@reza-server:~$ ls
portman-1  portman-2
reza@reza-server:~$ mv portman-2 "portman 2 LANPP"
reza@reza-server:~$ ls
portman-1  "portman 2 LANPP"
reza@reza-server:~$ cd "portman 2 LANPP"/
reza@reza-server:~/portman 2 LANPP$
```

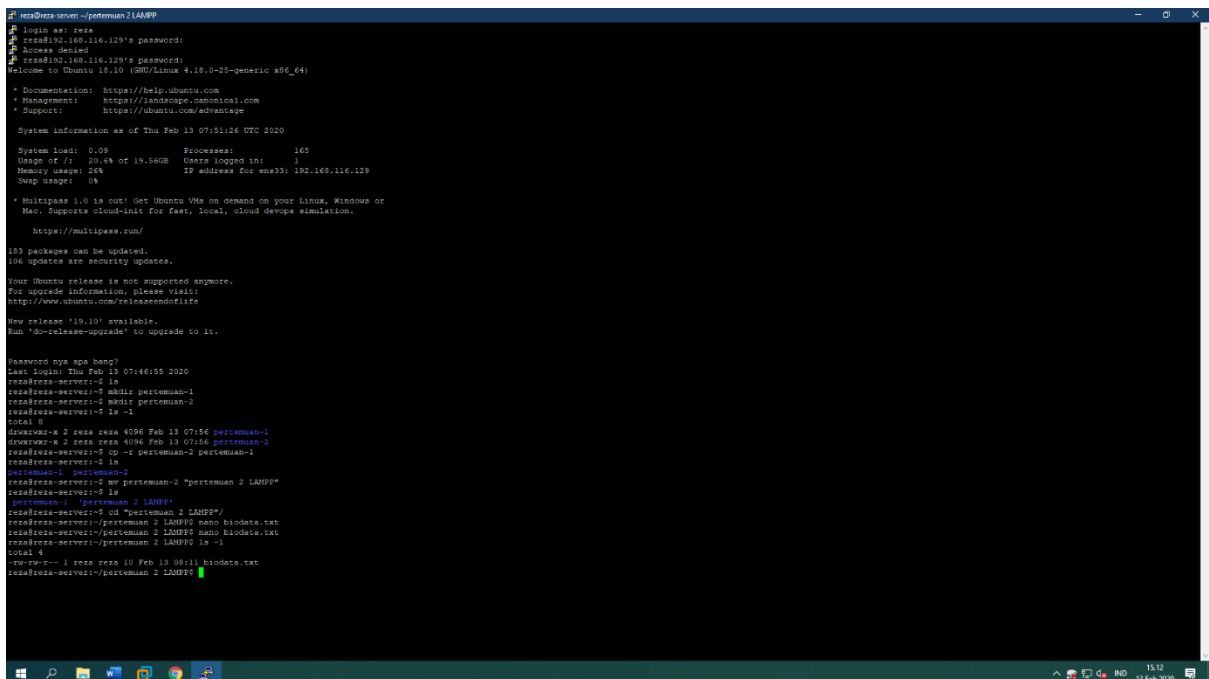
Menampilkan atau mengubah menjadi apa yang dimasukkan di mv.

9. Ketik nano biodata.txt



Akan masuk dalam halaman untuk mengisi biodata karna tadi di ketik biodata.

10. Ketik ls -l



Tampil total 4.

11. Ketik cat biodata.txt

```
reza@reza-server:~/pertemuan2/LAMP$
login as: reza
reza@192.168.116.129's password:
Access denied
reza@192.168.116.129's password:
Welcome to Ubuntu 18.10 (GNU/Linux 4.18.0-25-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Thu Feb 13 07:11:26 UTC 2020

System load:  0.09          Processes:    165
Usage of /:   20.6% of 19.5GB    Users logged in:  1
Memory usage: 50%             IP address for ens33: 192.168.116.129
Swap usage:   0%

 * Multipass 1.0 is out! Get Ubuntu VMs on demand on your Linux, Windows or
  Mac. Supports cloud-init for fast, local, cloud devops simulation.
  https://multipass.run/

153 packages can be updated.
106 updates are security updates.

Your Ubuntu release is not supported anymore.
For upgrade information, please visit:
http://www.ubuntu.com/releases/none/

New release "19.10" available.
Run "do-release-upgrade" to upgrade to it.

Password nya apa bang?
Last login: Thu Feb 13 07:46:55 2020
reza@reza-server:~$ ls
reza@reza-server:~$ mkdir pertemuan-1
reza@reza-server:~$ mkdir pertemuan-2
reza@reza-server:~$ ls -l
total 8
drwxr-xr-x 2 reza reza 4096 Feb 13 07:16 pertemuan-1
drwxr-xr-x 2 reza reza 4096 Feb 13 07:16 pertemuan-2
reza@reza-server:~$ cp -r pertemuan-2 pertemuan-1
reza@reza-server:~$ ls
pertemuan-1  pertemuan-2
reza@reza-server:~$ mv pertemuan-2 "pertemuan 2 LAMP"
reza@reza-server:~$ ls
pertemuan-1  'pertemuan 2 LAMP'
reza@reza-server:~$ cd 'pertemuan 2 LAMP'
reza@reza-server:~/pertemuan 2 LAMP$ nano biodata.txt
reza@reza-server:~/pertemuan 2 LAMP$ nano biodata.txt
reza@reza-server:~/pertemuan 2 LAMP$ ls -l
total 4
-rw-rw-r-- 1 reza reza 10 Feb 13 08:11 biodata.txt
reza@reza-server:~/pertemuan 2 LAMP$ cat biodata.txt
123170077
reza@reza-server:~/pertemuan 2 LAMP$
```

Tampil tulisan yang kita isi dalam halaman biodata tadi.

12. Ketik nano biodata.txt

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13. Ketik cat biodata.txt

```
reza@reza-server:~/pertemuan1$ LAMP
* Multipass 1.0 is out! Get Ubuntu VMs on demand on your Linux, Windows or
  Mac. Supports cloud-init for fast, local, cloud devops simulation.
  https://multipass.run/
  163 packages can be updated.
  104 updates are security updates.
  Your Ubuntu release is not supported anymore.
  For upgrade information, please visit:
  http://www.ubuntu.com/releaseendoflife
  New release '19.10' available.
  Run 'do-release-upgrade' to upgrade to it.

Password nya apa bang?
Last login: Thu Feb 13 07:46:55 2020
reza@reza-server:~$ ls
reza@reza-server:~$ cd /mnt/pertemuan-1
reza@reza-server:~$ ls
reza@reza-server:~$ ls -l
total 8
drwxr-xr-x 2 reza reza 4096 Feb 13 07:56 pertemuan-1
drwxr-xr-x 2 reza reza 4096 Feb 13 07:56 pertemuan-2
reza@reza-server:~$ cp -r /mnt/pertemuan-2 pertemuan-1
reza@reza-server:~$ ls
reza@reza-server:~$ cd /mnt/pertemuan-2
reza@reza-server:~/pertemuan-2$ ls
reza@reza-server:~/pertemuan-2$ cd "pertemuan 2 LAMP"
reza@reza-server:~/pertemuan 2 LAMP$ nano biodata.txt
reza@reza-server:~/pertemuan 2 LAMP$ cat biodata.txt
123170077
reza@reza-server:~/pertemuan 2 LAMP$ nano biodata.txt
123170077
reza@reza-server:~/pertemuan 2 LAMP$ cat biodata.txt
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reza@reza-server:~/pertemuan 2 LAMP$
```

Tampil sesuatu yang di tulis di halaman biodata tadi yaitu nomor 1-20.

14. Ketik tail biodata.txt

```
reza@reza-server:~/pertemuan2$ LAMP
New release '19.10' available.
Run 'do-release-upgrade' to upgrade to it.

Password nya apa bang?
Last login: Thu Feb 13 07:46:55 2020
reza@reza-server:~$ ls
reza@reza-server:~$ cd /mnt/pertemuan-1
reza@reza-server:~$ ls
reza@reza-server:~$ ls -l
total 8
drwxr-xr-x 2 reza reza 4096 Feb 13 07:56 pertemuan-1
drwxr-xr-x 2 reza reza 4096 Feb 13 07:56 pertemuan-2
reza@reza-server:~$ cp -r /mnt/pertemuan-2 pertemuan-1
reza@reza-server:~$ ls
reza@reza-server:~$ cd /mnt/pertemuan-2
reza@reza-server:~/pertemuan-2$ ls
reza@reza-server:~/pertemuan-2$ cd "pertemuan 2 LAMP"
reza@reza-server:~/pertemuan 2 LAMP$ nano biodata.txt
reza@reza-server:~/pertemuan 2 LAMP$ cat biodata.txt
123170077
reza@reza-server:~/pertemuan 2 LAMP$ nano biodata.txt
123170077
reza@reza-server:~/pertemuan 2 LAMP$ cat biodata.txt
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reza@reza-server:~/pertemuan 2 LAMP$ tail biodata.txt
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reza@reza-server:~/pertemuan 2 LAMP$
```

Menampilkan nomor 11-20. Jadi menampilkan beberapa data dari ekor atau dari bawah