

LAPORAN PRAKTIKUM VIRTUALISASI KOMPUTER

KONFIGURASI VM PADA KVM DI UBUNTU SERVER 22.04



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DIII TEKNOLOGI KOMPUTER

**INSTITUT TEKNOLOGI DEL
FAKULTAS VOKASI**

Judul Praktikum

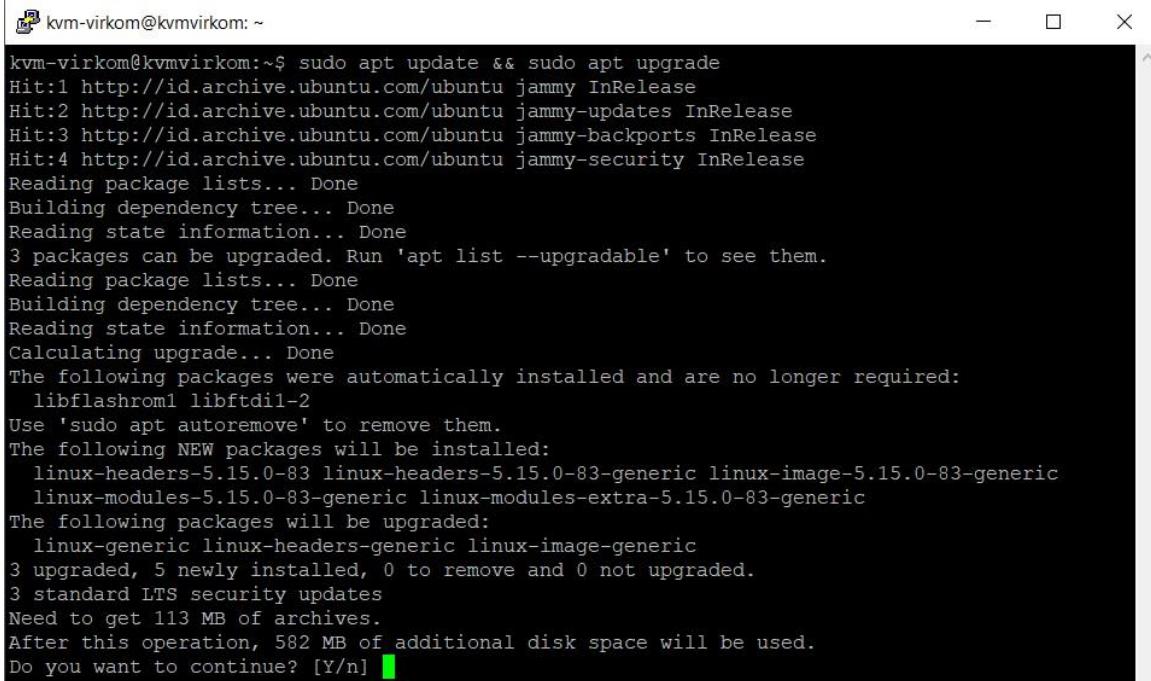
Minggu/Sesi	:	II/3
Kode Mata Kuliah	:	1032101
Nama Mata Kuliah	:	VIRTUALISASI KOMPUTER
Setoran	:	Jawaban dalam bentuk <i>softcopy</i>
Batas Waktu Setoran	:	<i>24 September 2024 jam 17:00</i>
Tujuan	:	1. Mahasiswa mampu melakukan konfigurasi VM pada KVM di Ubuntu Server 22.04

Petunjuk

Praktikum

1. Setelah instalasi KVM sudah dilakukan, Anda akan melakukan konfigurasi *virtual machine* pada KVM Hypervisor. Sebelum itu, Anda terlebih dahulu untuk selalu melakukan update pada system operasi dengan mengetikkan *command* berikut.

```
sudo apt update && sudo apt upgrade
```



```
kvm-virkom@kvmvirkom: ~$ sudo apt update && sudo apt upgrade
Hit:1 http://id.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://id.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://id.archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:4 http://id.archive.ubuntu.com/ubuntu jammy-security InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
3 packages can be upgraded. Run 'apt list --upgradable' to see them.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following packages were automatically installed and are no longer required:
  libflashrom1 libftdi1-2
Use 'sudo apt autoremove' to remove them.
The following NEW packages will be installed:
  linux-headers-5.15.0-83 linux-headers-5.15.0-83-generic linux-image-5.15.0-83-generic
    linux-modules-5.15.0-83-generic linux-modules-extra-5.15.0-83-generic
The following packages will be upgraded:
  linux-generic linux-headers-generic linux-image-generic
3 upgraded, 5 newly installed, 0 to remove and 0 not upgraded.
3 standard LTS security updates
Need to get 113 MB of archives.
After this operation, 582 MB of additional disk space will be used.
Do you want to continue? [Y/n] █
```

2. Kemudian Anda bisa menginstal utility yang berfungsi untuk membuat *virtual machine* dengan *command* terminal dengan *command* berikut.

```
sudo apt install virtinst
```

```
kvm-virkom@kvmvirkom: ~$ sudo apt install virtinst
[sudo] password for kvm-virkom:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libflashrom1 libftdi1-2
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  gir1.2-freedesktop gir1.2-libosinfo-1.0 i965-va-driver intel-media-va-driver libburn4
  libgovirt-common libgovirt2 libgtk-vnc-2.0-0 libgvnc-1.0-0 libigdgmm12 libisoburn1
  libisofs6 libjte2 libosinfo-1.0-0 libphodav-2.0-0 libphodav-2.0-common librest-0.7-0
  libsoup-gnome2.4-1 libspice-client-glib-2.0-8 libspice-client-gtk-3.0-5 libusbredirhost1
  libva-x11-2 libvba2 libvirt-glib-1.0-0 libvirt-glib-1.0-data mesa-va-drivers osinfo-db
  python3-libvirt python3-libxml2 spice-client-glib-usb-acl-helper va-driver-all
  virt-viewer xorriso
Suggested packages:
  i965-va-driver-shaders libosinfo-110n gstreamer1.0-libav gstreamer1.0-plugins-bad
  python3-argcomplete xorriso-tcltk jigit cdck
The following NEW packages will be installed:
  gir1.2-freedesktop gir1.2-libosinfo-1.0 i965-va-driver intel-media-va-driver libburn4
  libgovirt-common libgovirt2 libgtk-vnc-2.0-0 libgvnc-1.0-0 libigdgmm12 libisoburn1
  libisofs6 libjte2 libosinfo-1.0-0 libphodav-2.0-0 libphodav-2.0-common librest-0.7-0
  libsoup-gnome2.4-1 libspice-client-glib-2.0-8 libspice-client-gtk-3.0-5 libusbredirhost1
  libva-x11-2 libvba2 libvirt-glib-1.0-0 libvirt-glib-1.0-data mesa-va-drivers osinfo-db
  python3-libvirt python3-libxml2 spice-client-glib-usb-acl-helper va-driver-all
  virt-viewer virtinst xorriso
0 upgraded, 34 newly installed, 0 to remove and 0 not upgraded.
Need to get 10.0 MB of archives.
After this operation, 42.3 MB of additional disk space will be used.
Do you want to continue? [Y/n] █
```

3. Lalu, kita download lagi file iso CentOS 7 pada Ubuntu Server untuk OS *virtual machine* di KVMnya dengan menggunakan *command* berikut.

```
wget
https://archive.kernel.org/centos-vault/7.3.1611/isos/x86_64/CentOS-
7-x86_64-Minimal-1611.iso
```

```
kvm-virkom@kvmvirkom: ~$ wget https://archive.kernel.org/centos-vault/7.3.1611/isos/x86_64/Cen
tos-7-x86_64-Minimal-1611.iso
--2023-09-05 14:12:48-- https://archive.kernel.org/centos-vault/7.3.1611/isos/x86_64/CentOS-
7-x86_64-Minimal-1611.iso
Resolving archive.kernel.org (archive.kernel.org)... 199.204.44.194
Connecting to archive.kernel.org (archive.kernel.org)|199.204.44.194|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 713031680 (680M) [application/octet-stream]
Saving to: 'CentOS-7-x86_64-Minimal-1611.iso'

CentOS-7-x86_64-Minimal 100%[=====] 680.00M 1.05MB/s    in 26m 10s

2023-09-05 14:39:00 (444 KB/s) - 'CentOS-7-x86_64-Minimal-1611.iso' saved [713031680/713031680]

kvm-virkom@kvmvirkom: ~$ █
```

4. Opsi lain, jika Anda sudah memiliki file .iso CentOS 7 adalah Anda dapat memindahkan file .iso tersebut melalui aplikasi WinSCP dan letakkan pada path folder yang Anda inginkan dan Anda dapat menyesuaikan letak file .iso ketika instalasi guest OS tersebut pada langkah.
5. Setelah filenya sudah terdownload, maka jalankan *command* berikut agar folder lokasi CentOS nya dapat diakses.

```
sudo chmod +x /home/kvm-virkom/
```

```
kvm-virkom@kvmvirkom: ~  
kvm-virkom@kvmvirkom:~$ sudo chmod +x /home/kvm-virkom/  
kvm-virkom@kvmvirkom:~$ █
```

6. Selanjutnya untuk menjalankan instalasi VM CentOS pada KVM, dapat dilakukan dengan menggunakan *command* berikut.

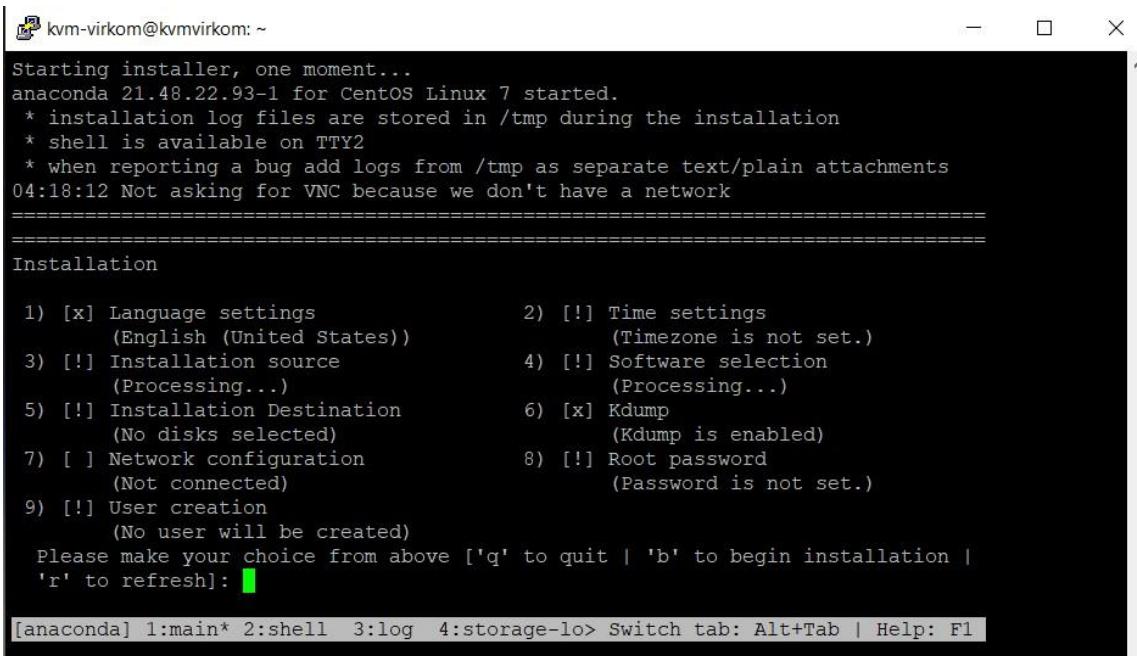
```
sudo virt-install --name=centos_virkom_1 --ram=1024 --vcpus=1 --location=/home/kvm-virkom/CentOS-7-x86_64-Minimal-1611.iso --network bridge=virbr0 --nographics --disk path=/var/lib/libvirt/images/centos_virkom_1.img,size=8 --extraargs=console=ttyS0
```

```
kvm-virkom@kvmvirkom: ~  
kvm-virkom@kvmvirkom:~$ sudo virt-install --name=centos_virkom_1 --ram=1024 --vcpus=1 --location=/home/kvm-virkom/CentOS-7-x86_64-Minimal-1611.iso --network bridge=virbr0 --nographics --disk path=/var/lib/libvirt/images/centos_virkom_1.img,size=8 --extra-args=console=ttyS0  
  
Starting install...  
Retrieving 'vmlinuz' | 0 B 00:00:00 ...  
Retrieving 'initrd.img' | 0 B 00:00:00 ...  
Allocating 'centos_virkom_1.img' | 0 B 00:00:00 ...  
Creating domain... | 0 B 00:00:00  
Running text console command: virsh --connect qemu:///system console centos_virkom_1  
Connected to domain 'centos_virkom_1'  
Escape character is ^] (Ctrl+] )  
[ 0.607699] Freeing SMP alternatives: 28k freed  
[ 0.635970] ACPI: Core revision 20130517  
[ 0.638018] ACPI: All ACPI Tables successfully acquired  
[ 0.639957] ftrace: allocating 25811 entries in 101 pages  
[ 0.806549] smpboot: Max logical packages: 1  
[ 0.807927] smpboot: APIC(0) Converting physical 0 to logical package 0  
[ 0.810691] Enabling x2apic  
[ 0.811612] Enabled x2apic  
[ 0.813218] Switched APIC routing to physical x2apic.  
[ 0.818789] ..TIMER: vector=0x30 apic1=0 pin1=2 apic2=-1 pin2=-1  
[ 0.820708] smpboot: CPU0: AMD Ryzen 7 4800H with Radeon Graphics (fam: 17, model: 60, stepping: 01)
```

Keterangan:

- a. **--name** : Nama untuk *virtual machine*
- b. **--ram** : Ukuran RAM untuk *virtual machine*
- c. **--vcpus** : Jumlah virtual CPU untuk *virtual machine*
- d. **--location** : Lokasi dari file ISO yang akan digunakan sebagai sumber instalasi *virtual machine*
- e. **--network** : Menentukan jaringan mana yang Anda gunakan untuk *virtual machine*
- f. **--nographic** : Menjalankan instalasi dalam mode CLI atau tanpa grafis
- g. **--disk** : Lokasi penyimpanan dari *virtual machine*
- h. **size** : Ukuran penyimpanan dari *virtual machine*

7. Tunggu proses persiapan instalasi hingga menampilkan tampilan seperti ini.



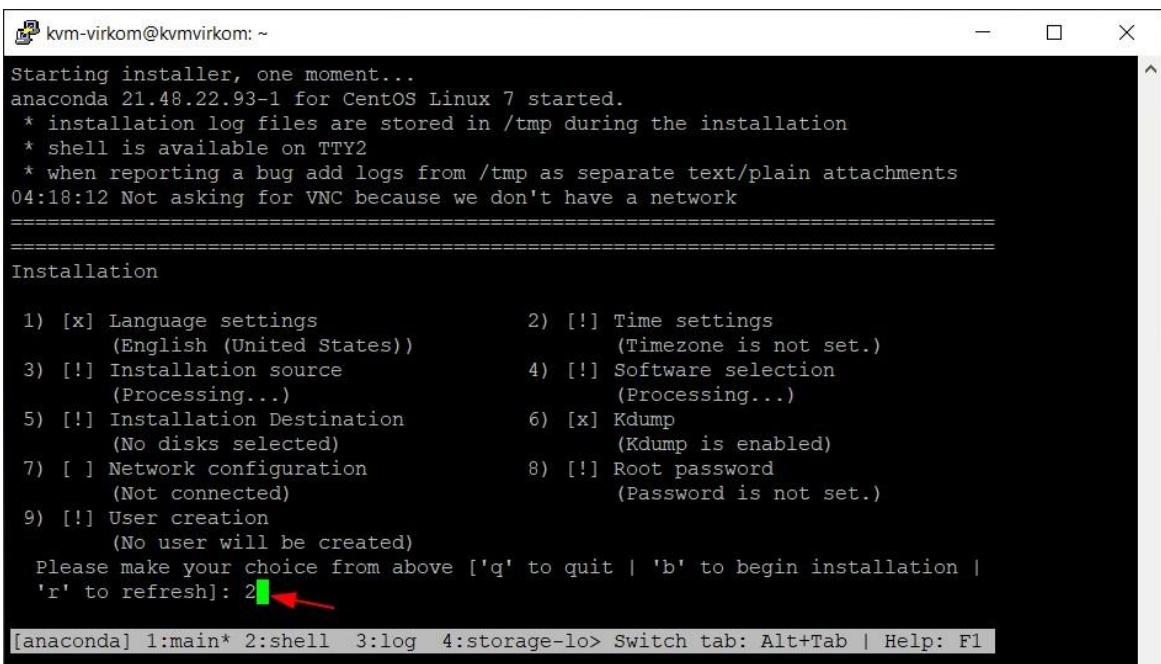
```
kvm-virkom@kvmvirkom: ~
Starting installer, one moment...
anaconda 21.48.22.93-1 for CentOS Linux 7 started.
* installation log files are stored in /tmp during the installation
* shell is available on TTY2
* when reporting a bug add logs from /tmp as separate text/plain attachments
04:18:12 Not asking for VNC because we don't have a network
=====
=====
Installation

1) [x] Language settings           2) [!] Time settings
      (English (United States))   (Timezone is not set.)
3) [!] Installation source        4) [!] Software selection
      (Processing...)
5) [!] Installation Destination   6) [x] Kdump
      (No disks selected)         (Kdump is enabled)
7) [ ] Network configuration      8) [!] Root password
      (Not connected)             (Password is not set.)
9) [!] User creation
      (No user will be created)

Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 2
```

[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1

8. Apabila kota diberi tanda **x** artinya sudah dikonfigurasi namun apabila terdapat tanda **!** artinya belum dikonfigurasi.
9. Anda mulai konfigurasi pada nomor 2, yaitu **Time settings**, ketikkan angka **2** pada terminal dan tekan Enter.



```
kvm-virkom@kvmvirkom: ~
Starting installer, one moment...
anaconda 21.48.22.93-1 for CentOS Linux 7 started.
* installation log files are stored in /tmp during the installation
* shell is available on TTY2
* when reporting a bug add logs from /tmp as separate text/plain attachments
04:18:12 Not asking for VNC because we don't have a network
=====
=====
Installation

1) [x] Language settings           2) [!] Time settings
      (English (United States))   (Timezone is not set.)
3) [!] Installation source        4) [!] Software selection
      (Processing...)
5) [!] Installation Destination   6) [x] Kdump
      (No disks selected)         (Kdump is enabled)
7) [ ] Network configuration      8) [!] Root password
      (Not connected)             (Password is not set.)
9) [!] User creation
      (No user will be created)

Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 2
```

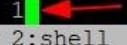
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1

10. Kemudian ketikkan angka **1** untuk **Set timezone**, lalu Enter.

```
=====
Time settings

Timezone: not set

NTP servers: not configured

1) Set timezone
2) Configure NTP servers
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 1 
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

11. Pilih **Asia** dengan mengetikkan angka **5**, lalu Enter.

```
=====
Timezone settings

Available regions
 1) Africa           6) Atlantic          10) Pacific
 2) America          7) Australia         11) US
 3) Antarctica       8) Europe            12) Etc
 4) Arctic            9) Indian
 5) Asia

Please select the timezone.
Use numbers or type names directly [b to region list, q to quit]: 5 
```

12. Kemudian pilih **Jakarta** dengan mengetikkan angka **30**, lalu Enter.

```

=====
Timezone settings

Available timezones in region Asia
 1) Aden           28) Hovd          54) Pontianak
 2) Almaty         29) Irkutsk       55) Pyongyang
 3) Amman          30) Jakarta        56) Qatar
 4) Anadyr         31) Jayapura      57) Qyzylorda
 5) Aqtau          32) Jerusalem     58) Riyadh
 6) Aqtobe         33) Kabul          59) Sakhalin
 7) Ashgabat      34) Kamchatka    60) Samarkand
 8) Baghdad         35) Karachi        61) Seoul
 9) Bahrain        36) Kathmandu     62) Shanghai
10) Baku           37) Khandyga     63) Singapore
11) Bangkok        38) Kolkata        64) Srednekolymsk
12) Barnaul        39) Krasnoyarsk   65) Taipei
13) Beirut          40) Kuala_Lumpur  66) Tashkent
14) Bishkek        41) Kuching        67) Tbilisi
15) Brunei         42) Kuwait         68) Tehran
16) Chita          43) Macau          69) Thimphu
17) Choibalsan     44) Magadan       70) Tokyo
18) Colombo        45) Makassar      71) Tomsk
19) Damascus        46) Manila         72) Ulaanbaatar
20) Dhaka          47) Muscat         73) Urumqi
21) Dili            48) Nicosia       74) Ust-Nera
22) Dubai           49) Novokuznetsk  75) Vientiane
Press ENTER to continue
23) Dushanbe       50) Novosibirsk   76) Vladivostok
24) Gaza            51) Omsk          77) Yakutsk
25) Hebron          52) Oral           78) Yangon
26) Ho_Chi_Minh    53) Phnom_Penh   79) Yekaterinburg
27) Hong_Kong      80) Yerevan       80) Yerevan

Please select the timezone.
Use numbers or type names directly [b to region list, q to quit]: 30
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1

```



13. Jika bagian **Time settings** sudah Anda konfigurasi, maka Anda akan kembali kedalam menu utama.

```

=====
Installation

1) [x] Language settings          2) [x] Time settings
   (English (United States))      (Asia/Jakarta timezone)
3) [x] Installation source       4) [!] Software selection
   (Local media)                  (Minimal Install)
5) [!] Installation Destination  6) [x] Kdump
   (No disks selected)           (Kdump is enabled)
7) [ ] Network configuration     8) [!] Root password
   (Not connected)                (Password is not set.)
9) [!] User creation
   (No user will be created)

Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]:
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1

```

14. Terlihat bahwa nomor 4 belum dikonfigurasi, maka Anda masuk kedalam nomor 4 untuk mengkonfigurasi **Software selection**.

```
=====
Installation

1) [x] Language settings           2) [x] Time settings
       (English (United States))   (Asia/Jakarta timezone)
3) [x] Installation source        4) [!] Software selection
       (Local media)             (Minimal Install)
5) [!] Installation Destination   6) [x] Kdump
       (No disks selected)       (Kdump is enabled)
7) [ ] Network configuration      8) [!] Root password
       (Not connected)          (Password is not set.)
9) [!] User creation
       (No user will be created)

Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 4 →
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

15. Lalu ketikkan huruf **c** untuk melanjutkan karena sudah terpilih **Minimal Install**.

```
=====
Base environment
Software selection

Base environment

1) [x] Minimal Install
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: c →
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

16. Lalu, jika tampilannya terdapat tulisan (**Processing...**) seperti pada gambar dibawah ini, Anda bisa mengetikkan huruf **r** untuk melihat perubahan yang terbaru.

```
=====
Installation

1) [x] Language settings           2) [x] Time settings
       (English (United States))   (Asia/Jakarta timezone)
3) [!] Installation source        4) [!] Software selection
       (Processing...)            (Processing...)
5) [!] Installation Destination   6) [x] Kdump
       (No disks selected)       (Kdump is enabled)
7) [ ] Network configuration      8) [!] Root password
       (Not connected)          (Password is not set.)
9) [!] User creation
       (No user will be created)

Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: r →
=====
```

17. Namun jika tidak, Anda bisa melanjutkan konfigurasi pada nomor yang masih belum dikonfigurasi, yaitu pada nomor 5. Anda ketikkan angka **5** untuk mengkonfigurasi **Installation Destination**.

18. Lalu ketikkan huruf **c** untuk melanjutkan karena sudah terpilih otomatis **8192 MiB (vda)**. Lalu pilihlah **continue** terus sampai ke tampilan pilihan **Installation**.

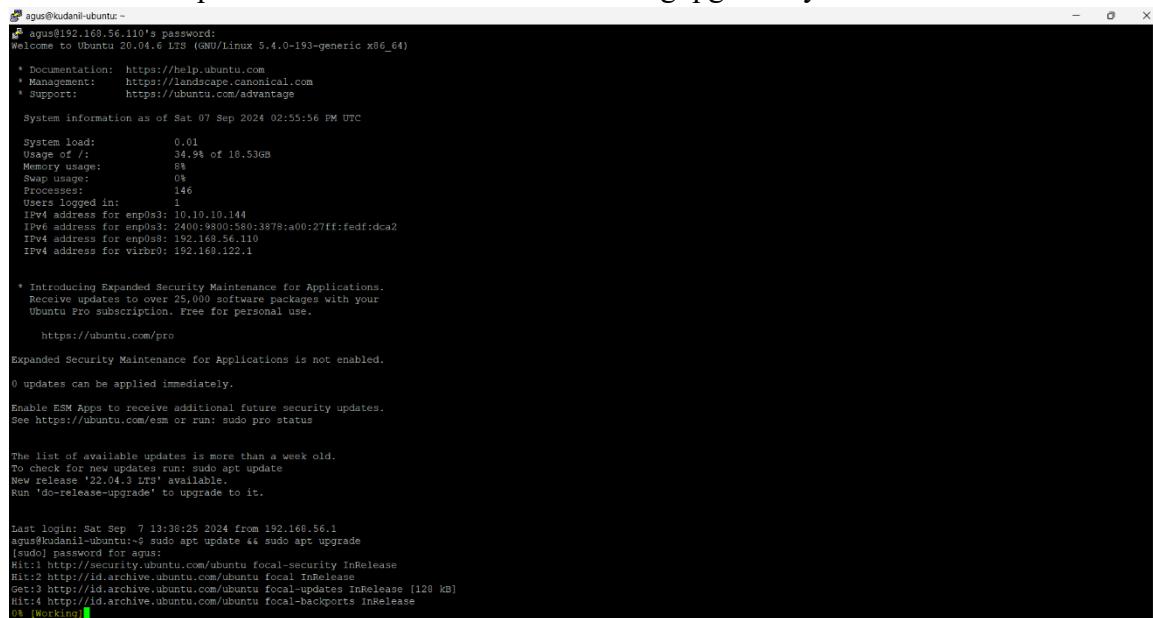
19. Kemudian konfigurasi nomor 7, bagian **Network configuration** dengan mengetikkan angka **7**.

20. Lalu pilih bagian **Configure device eth0**.

21. Kemudian pilih **Connect automatically after reboot**, lalu **continue**.
22. Kemudian konfigurasi bagian **Root password**, dengan mengetikkan angka **8**.
23. Lalu ketikkan password yang Anda inginkan dan konfirmasi password, kemudian ketikkan **yes** untuk konfirmasi.
24. Opsi nomor 9 diabaikan saja karena bersifat tidak wajib dikonfigurasi. Sehingga ketika Anda login Anda dapat menggunakan username default CentOS 7, yaitu: **root** dan password sesuai dengan yang Anda setting pada nomor **8**.
25. Setelah semua sudah dikonfigurasi, maka Anda bisa memulai instalasi CentOS dengan mengetikkan huruf **b**.
26. Tunggu proses instalasinya selesai, jangan diganggu selama instalasi.
27. Apabila berhasil instalasi, maka **centos_virkom_1** akan otomatis berjalan dan Anda bisa login sesuai dengan username **root** dan password yang sudah Anda setting sebelumnya.
28. Untuk keluar dari VM, Anda bisa menekan **Ctrl +]**.
29. Silahkan eksplorasi dan pelajari **virsh command** untuk memahami konsep guest kvm.
30. Selesai!

Langkah-Langkah

1. Kita lakukan update untuk Ubuntu Server dan mengupgrade nya



```

agu@kudanil-ubuntu:~ agus@192.160.56.110's password:
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.4.0-193-generic x86_64)

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

System information as of Sat 07 Sep 2024 02:55:56 PM UTC

System load:          0.01
Usage of /:            34.9% of 18.53GB
Memory usage:          8%
Swap usage:            0%
Processes:             146
Users logged in:       1
IPv4 address for enp0s3: 16.10.10.144
IPv6 address for enp0s3: 2400:3800:1:500:27ff:fedf:dcfa:1
IPv4 address for enp0s8: 192.168.56.110
IPv4 address for virbr0: 192.168.122.1

* Introducing Expanded Security Maintenance for Applications.
  Receive updates to over 25,000 software packages with your
  Ubuntu Pro subscription. Free for personal use.

  https://ubuntu.com/pro

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update
New release '22.04.3 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Sat Sep  7 13:38:25 2024 from 192.168.56.1
agus@kudanil-ubuntu:~$ sudo apt update && sudo apt upgrade
[sudo] password for agus:
Hit:1 http://security.ubuntu.com/ubuntu focal-security InRelease
Hit:2 http://archive.ubuntu.com/ubuntu focal InRelease
Get:3 http://id.archive.ubuntu.com/ubuntu focal-updates InRelease [128 kB]
Hit:4 http://id.archive.ubuntu.com/ubuntu focal-backports InRelease
0% [Working]

```

- Kemudian, kita install virtual machine nya. Jika ada konfirmasi untuk menginstallnya, ketik **Y** dan tekan **Enter**.

```

agus@kudanil-ubuntu:~$ agus@kudanil-ubuntu:~$ 
E: Release file for http://id.archive.ubuntu.com/ubuntu/dists/focal-updates/InRelease is not valid yet (invalid for another 1h 5min 56s). Updates for this repository will not be applied
.
agus@kudanil-ubuntu:~$ sudo apt update && sudo apt upgrade
Hit:1 http://id.archive.ubuntu.com/ubuntu focal-security InRelease
Hit:2 http://security.ubuntu.com/ubuntu focal-security InRelease
Hit:3 http://id.archive.ubuntu.com/ubuntu focal-backports InRelease
Get:4 http://id.archive.ubuntu.com/ubuntu focal-updates InRelease [128 kB]
Reading package lists... Done
E: Release file for http://id.archive.ubuntu.com/ubuntu/dists/focal-updates/InRelease is not valid yet (invalid for another 1h 5min 36s). Updates for this repository will not be applied
.
agus@kudanil-ubuntu:~$ sudo apt update && sudo apt upgrade
Hit:1 http://id.archive.ubuntu.com/ubuntu focal-security InRelease
Hit:2 http://security.ubuntu.com/ubuntu focal-security InRelease
Hit:3 http://id.archive.ubuntu.com/ubuntu focal-backports InRelease
Get:4 http://id.archive.ubuntu.com/ubuntu focal-updates InRelease [128 kB]
Reading package lists... Done
E: Release file for http://id.archive.ubuntu.com/ubuntu/dists/focal-updates/InRelease is not valid yet (invalid for another 1h 5min 6s). Updates for this repository will not be applied
.
agus@kudanil-ubuntu:~$ sudo apt install virtinst
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
genisoimage girl1.2-freedesktop girl1.2-libosinfo-1.0 i965-v4-driver intel-media-va-driver
libdrm-amdgpu libdrm-intel libdrm-nouveau2 libdrm-radeon libgvirt-common libgvirt2
libgvt-vnc-2.0-0 libgvnc-1.0-0 libigdgmm11 libl1vml2 libosinfo-1.0-0 libphodav-2.0-0
libphodav-2.0-common libpulse-mainloop-glib libspice-client-glib-2.0-8
libspice-client-gtk-3.0-5 libusbredirhost1 libvba-x11-2 libv2a libvirt-glib-1.0-0
libxml2-xcb libxcb-dri2-0 libxcb-dri3-0 libxcb-present0 libxcb-sync1 libxcb-xfixes0
libxsmfencel mesa-va-drivers osinfo-db python3-libvirt python3-libxml2
spice-client-glib-usb-acl-helper va-driver-all virt-viewer
Suggested packages:
wodim cdrkit-doc i965-v4-driver-shaders libosinfo-110n gstreamer1.0-libav
gstreamer1.0-plugins-bad
The following NEW packages will be installed:
genisoimage girl1.2-freedesktop girl1.2-libosinfo-1.0 i965-v4-driver intel-media-va-driver
libdrm-amdgpu libdrm-intel libdrm-nouveau2 libdrm-radeon libgvirt-common libgvirt2
libgvt-vnc-2.0-0 libgvnc-1.0-0 libigdgmm11 libl1vml2 libosinfo-1.0-0 libphodav-2.0-0
libphodav-2.0-common libpulse-mainloop-glib libspice-client-glib-2.0-8
libspice-client-gtk-3.0-5 libusbredirhost1 libvba-x11-2 libv2a libvirt-glib-1.0-0
libxml2-xcb libxcb-dri2-0 libxcb-dri3-0 libxcb-present0 libxcb-sync1 libxcb-xfixes0
libxsmfencel mesa-va-drivers osinfo-db python3-libvirt python3-libxml2
spice-client-glib-usb-acl-helper va-driver-all virt-viewer virtinst
0 upgraded, 40 newly installed, 0 to remove and 47 not upgraded.
Need to get 26.7 MB of additional disk space will be used.
After this operation, 158 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y

```

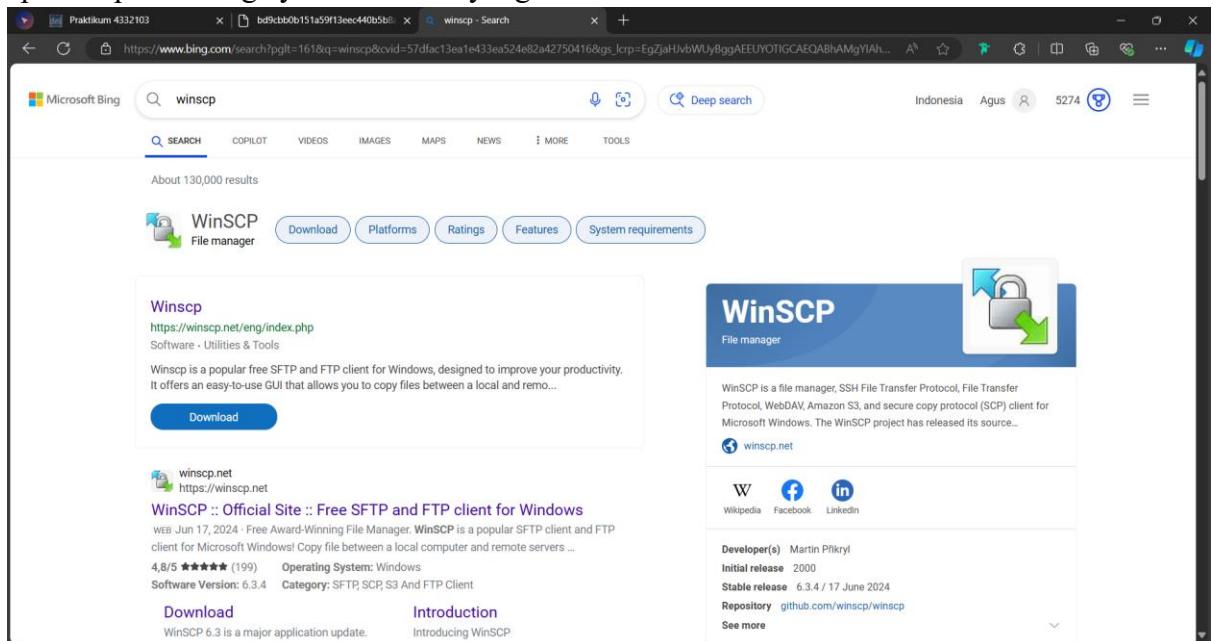
- Kemudian, tunggu hingga penginstallan nya selesai

```

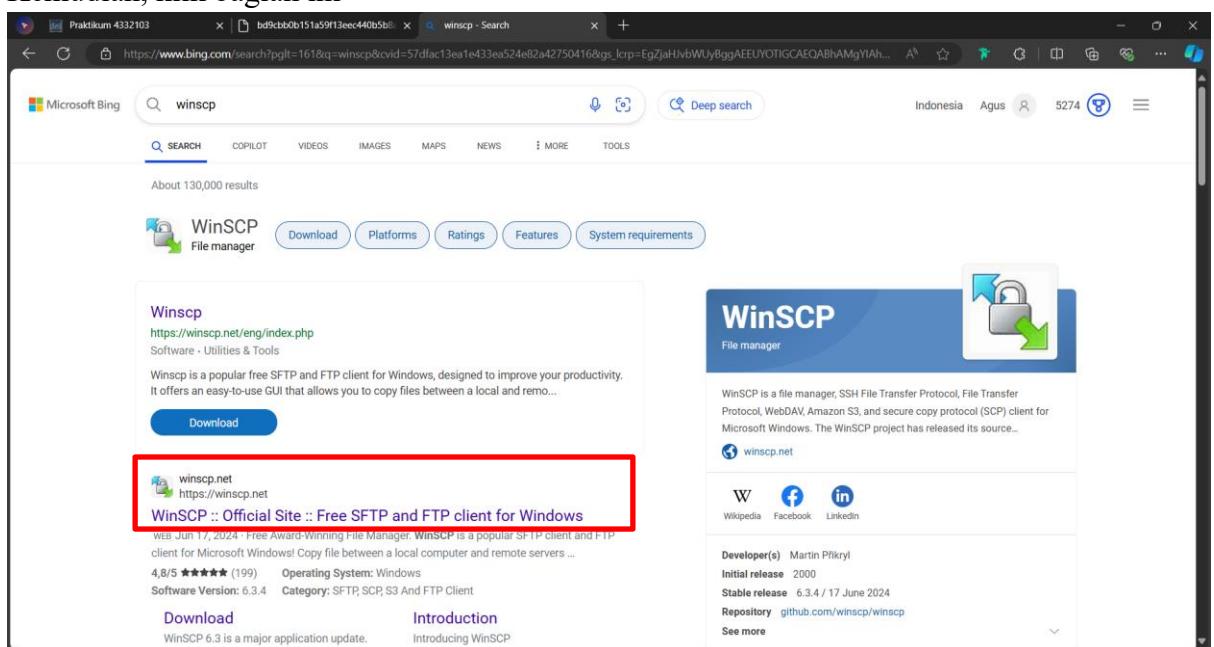
agus@kudanil-ubuntu:~$ agus@kudanil-ubuntu:~$ 
Hit:3 http://id.archive.ubuntu.com/ubuntu focal-backports InRelease [128 kB]
Reading package lists... Done
E: Release file for http://id.archive.ubuntu.com/ubuntu/dists/focal-updates/InRelease is not valid yet (invalid for another 1h 5min 6s). Updates for this repository will not be applied
.
agus@kudanil-ubuntu:~$ sudo apt install virtinst
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
genisoimage girl1.2-freedesktop girl1.2-libosinfo-1.0 i965-v4-driver intel-media-va-driver
libdrm-amdgpu libdrm-intel libdrm-nouveau2 libdrm-radeon libgvirt-common libgvirt2
libgvt-vnc-2.0-0 libgvnc-1.0-0 libigdgmm11 libl1vml2 libosinfo-1.0-0 libphodav-2.0-0
libphodav-2.0-common libpulse-mainloop-glib libspice-client-glib-2.0-8
libspice-client-gtk-3.0-5 libusbredirhost1 libvba-x11-2 libv2a libvirt-glib-1.0-0
libxml2-xcb libxcb-dri2-0 libxcb-dri3-0 libxcb-present0 libxcb-sync1 libxcb-xfixes0
libxsmfencel mesa-va-drivers osinfo-db python3-libvirt python3-libxml2
spice-client-glib-usb-acl-helper va-driver-all virt-viewer virtinst
Suggested packages:
wodim cdrkit-doc i965-v4-driver-shaders libosinfo-110n gstreamer1.0-libav
gstreamer1.0-plugins-bad
The following NEW packages will be installed:
genisoimage girl1.2-freedesktop girl1.2-libosinfo-1.0 i965-v4-driver intel-media-va-driver
libdrm-amdgpu libdrm-intel libdrm-nouveau2 libdrm-radeon libgvirt-common libgvirt2
libgvt-vnc-2.0-0 libgvnc-1.0-0 libigdgmm11 libl1vml2 libosinfo-1.0-0 libphodav-2.0-0
libphodav-2.0-common libpulse-mainloop-glib libspice-client-glib-2.0-8
libspice-client-gtk-3.0-5 libusbredirhost1 libvba-x11-2 libv2a libvirt-glib-1.0-0
libxml2-xcb libxcb-dri2-0 libxcb-dri3-0 libxcb-present0 libxcb-sync1 libxcb-xfixes0
libxsmfencel mesa-va-drivers osinfo-db python3-libvirt python3-libxml2
spice-client-glib-usb-acl-helper va-driver-all virt-viewer virtinst
0 upgraded, 40 newly installed, 0 to remove and 47 not upgraded.
Need to get 26.7 MB of additional disk space will be used.
After this operation, 158 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://id.archive.ubuntu.com/ubuntu focal/main amd64 genisoimage amd64 9:1.1.11-3.lubuntu [330 kB]
Get:2 http://id.archive.ubuntu.com/ubuntu focal-updates/main amd64 girl1.2-freedesktop amd64 1.64.1-1-ubuntu20.04.1 [19.2 kB]
Get:3 http://id.archive.ubuntu.com/ubuntu focal/universe amd64 libvba2 amd64 2.7.0-2 [53.5 kB]
Get:4 http://id.archive.ubuntu.com/ubuntu focal/universe amd64 libigdgmm1 amd64 20.1.1+ds1-1 [111 kB]
Get:5 http://id.archive.ubuntu.com/ubuntu focal/universe amd64 intel-media-va-driver amd64 20.1.1+dfsg1-1 [1,764 kB]
Get:6 http://id.archive.ubuntu.com/ubuntu focal-updates/main amd64 libdrm-amdgpu amd64 2.4.107-8ubuntu1-20.04.2 [18.6 kB]
Get:7 http://id.archive.ubuntu.com/ubuntu focal/universe amd64 libdrm-intel amd64 2.4.107-8ubuntu1-20.04.2 [60.3 kB]
Get:8 http://id.archive.ubuntu.com/ubuntu focal/universe amd64 libdrm-nouveau amd64 2.4.107-8ubuntu1-20.04.2 [16.6 kB]
Get:9 http://id.archive.ubuntu.com/ubuntu focal-updates/main amd64 libdrm-radeon amd64 2.4.107-8ubuntu1-20.04.2 [19.7 kB]
Get:10 http://id.archive.ubuntu.com/ubuntu focal/universe amd64 libgvirt-common all 0.3.4-3.1 [14.2 kB]
Get:11 http://id.archive.ubuntu.com/ubuntu focal/universe amd64 libgvirt2 amd64 0.3.4-3.1 [36.4 kB]
Get:12 http://id.archive.ubuntu.com/ubuntu focal/universe amd64 libgvnc-1.0-0 amd64 1.0.0-1build1 [56.4 kB]
Get:13 http://id.archive.ubuntu.com/ubuntu focal/universe amd64 libgvt-vnc-2.0-0 amd64 1.0.0-1build1 [25.9 kB]
Get:14 http://id.archive.ubuntu.com/ubuntu focal-updates/main amd64 libl1vml2 amd64 1:12.0.0-3ubuntul-20.04.5 [18.8 MB]
26% |4 libl1vml2 3,088 KB/18.8 MB 21%

```

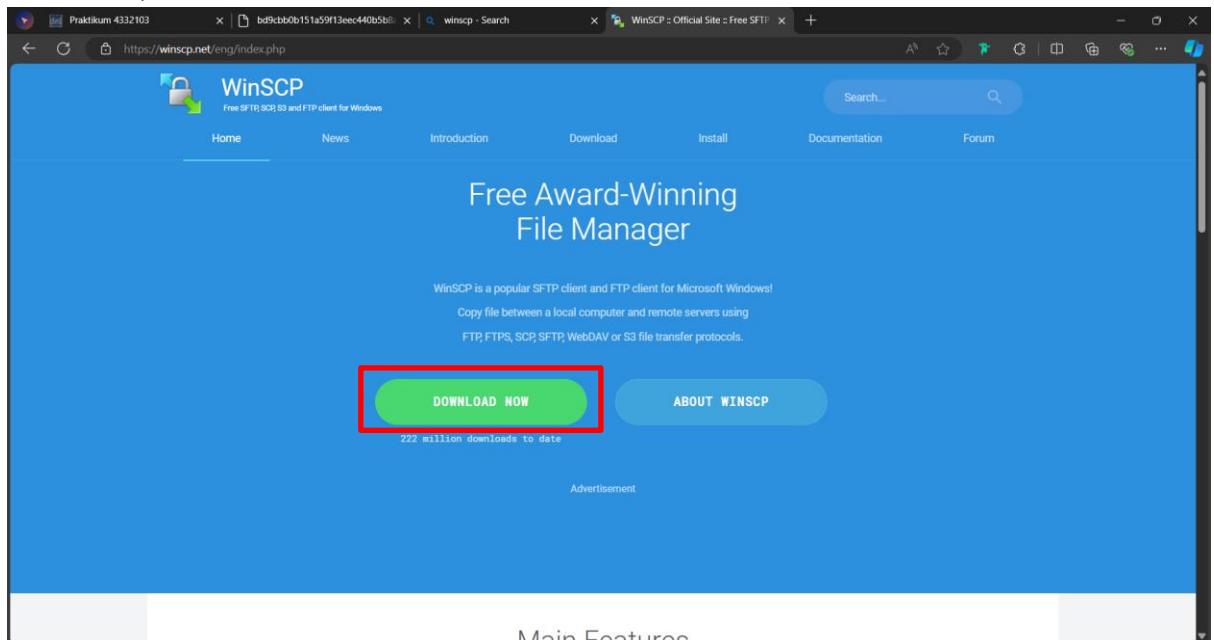
- Kemudian, kita akan memasukkan file ISO Image File kedalam Ubuntu Server dengan cara menginstall melalui *command* atau bisa langsung menginstallnya dengan aplikasi pihak ketiga yaitu WinSCP yang bisa diunduh di Internet.



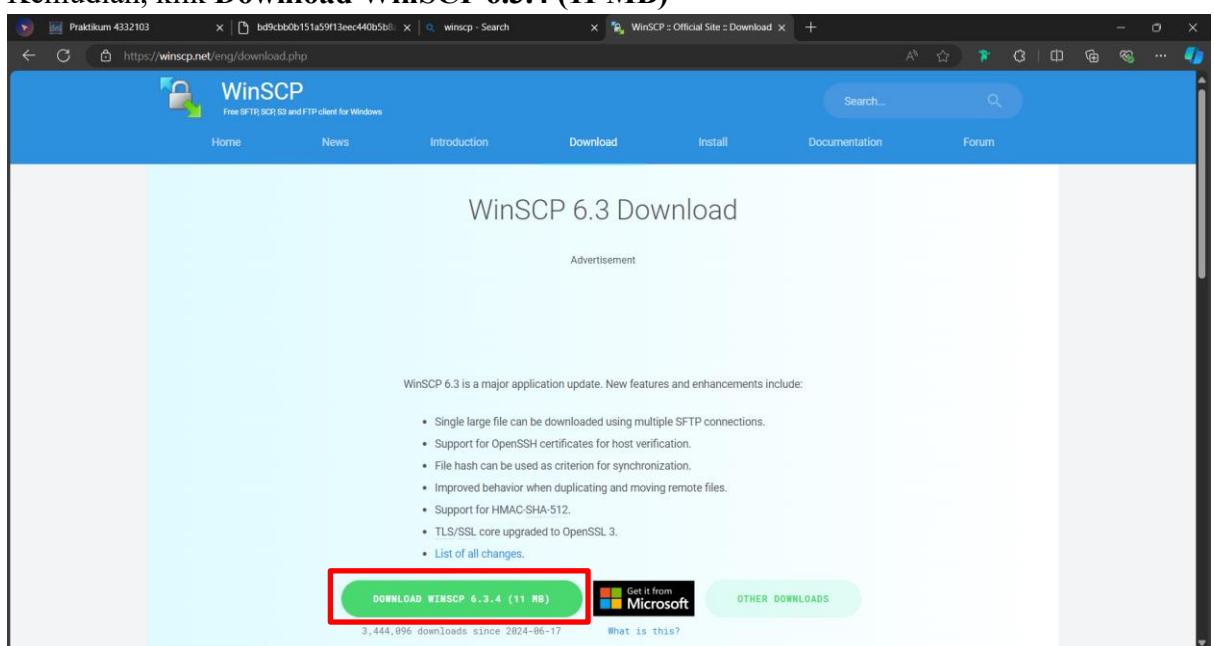
- Kemudian, klik bagian ini



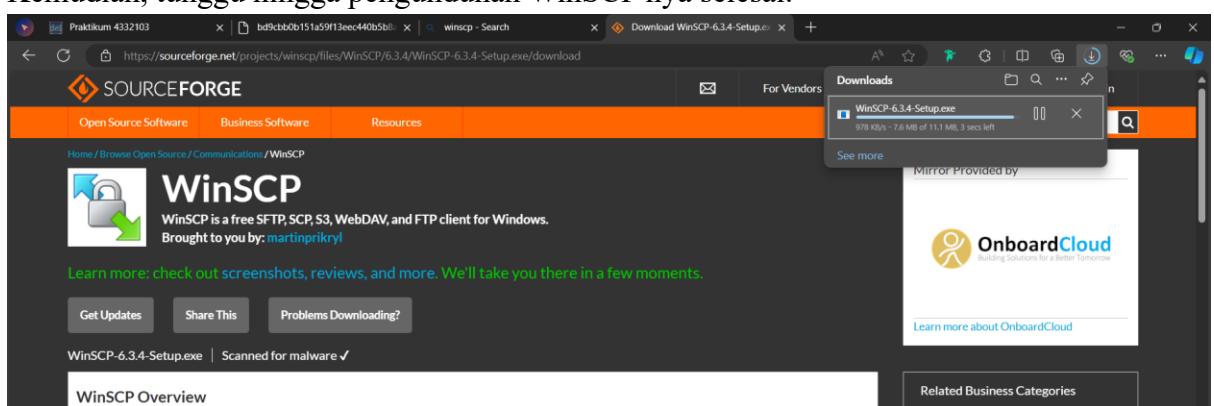
6. Kemudian, klik **Download Now**



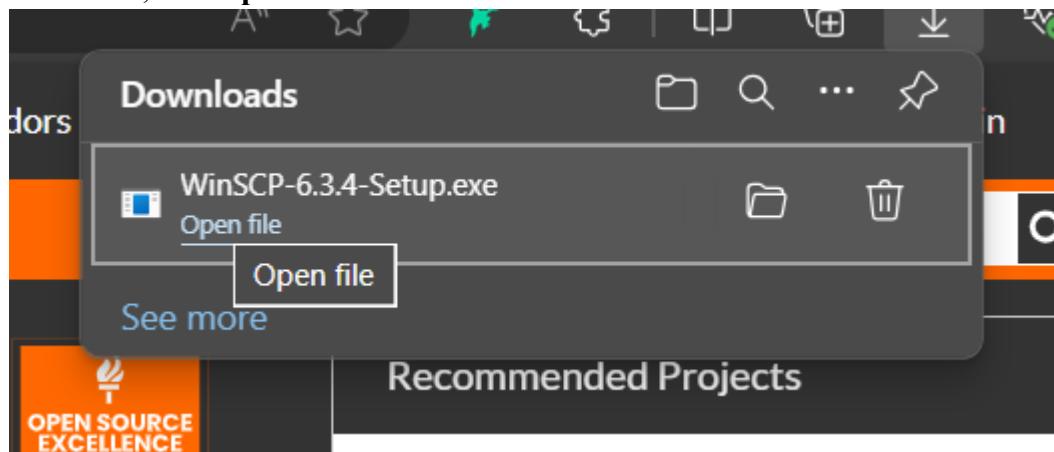
7. Kemudian, klik **Download WinSCP 6.3.4 (11 MB)**



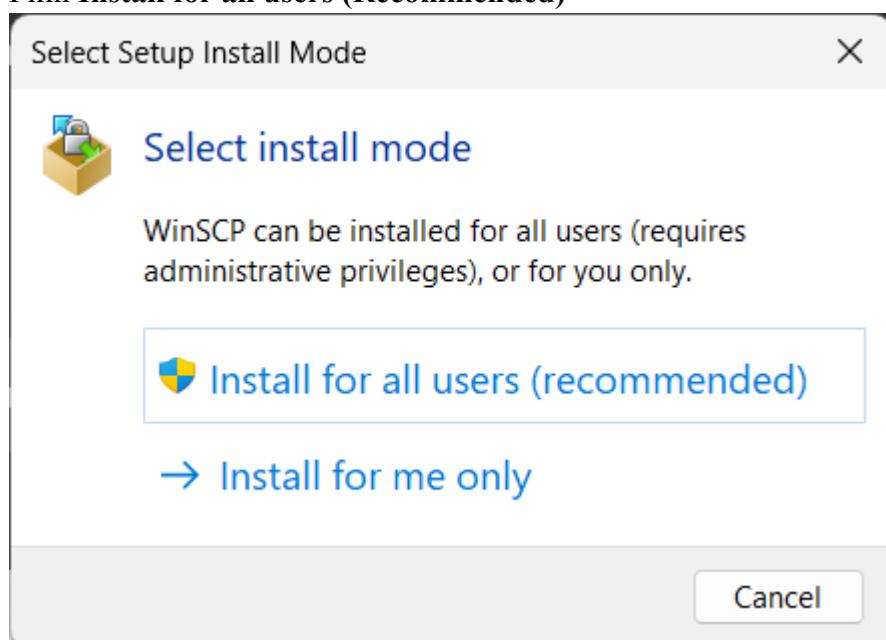
8. Kemudian, tunggu hingga pengunduhan WinSCP nya selesai.



9. Kemudian, klik **Open File**

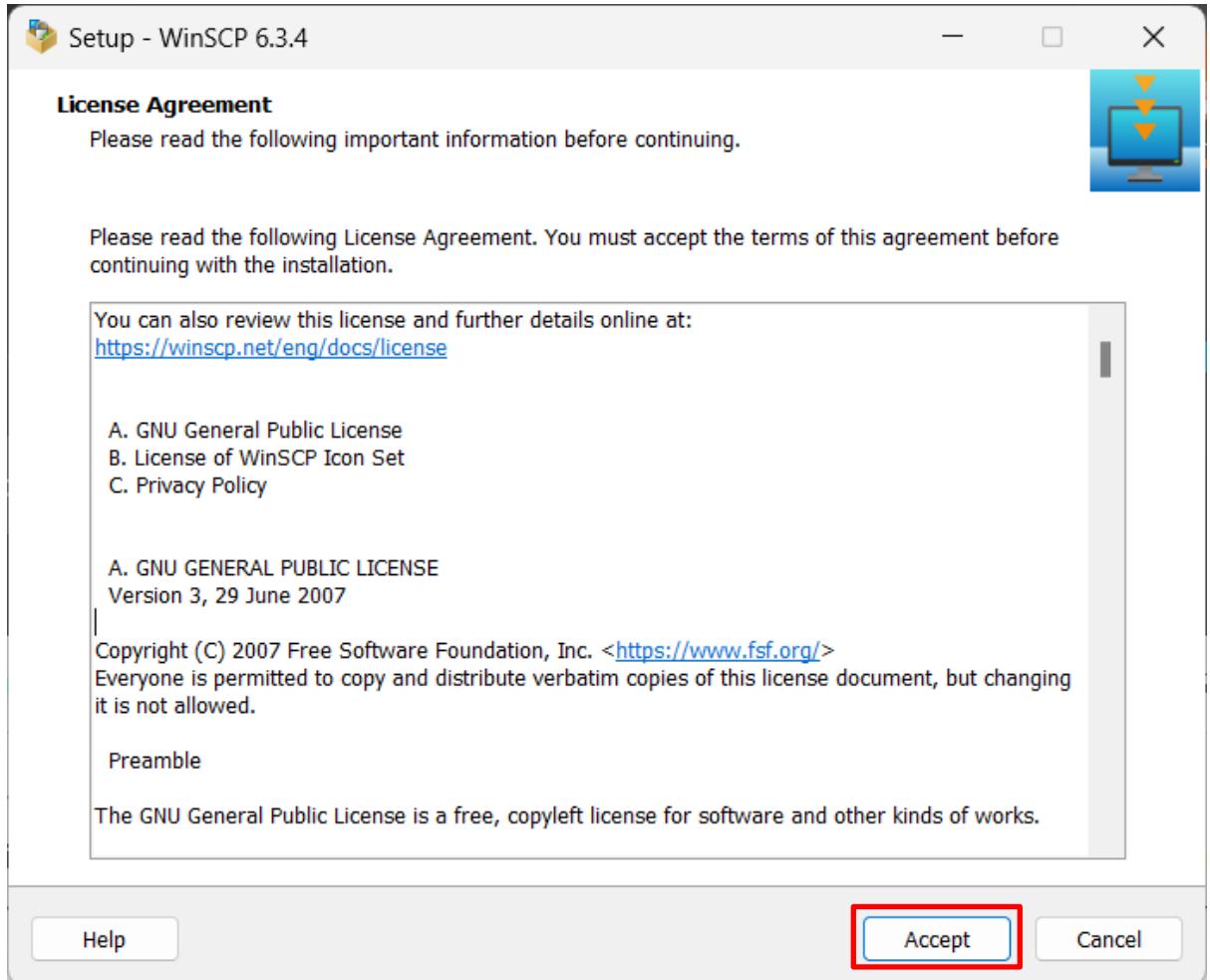


10. Pilih **Install for all users (Recommended)**

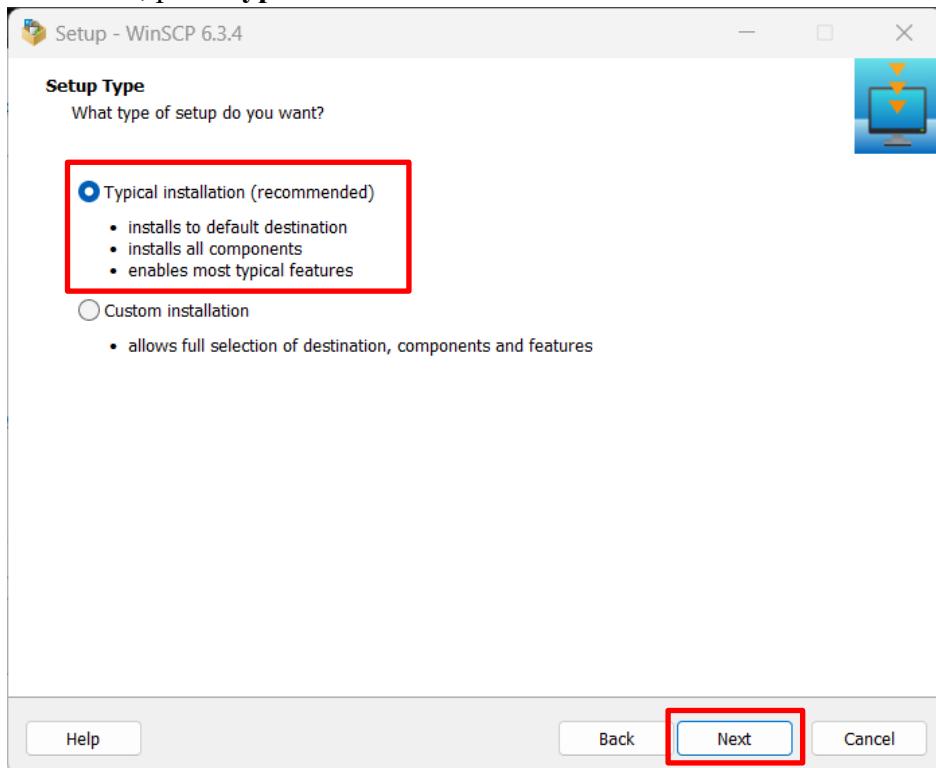


11. Apabila ada pop-up dari UAC (*User Account Control*) , klik **Yes**

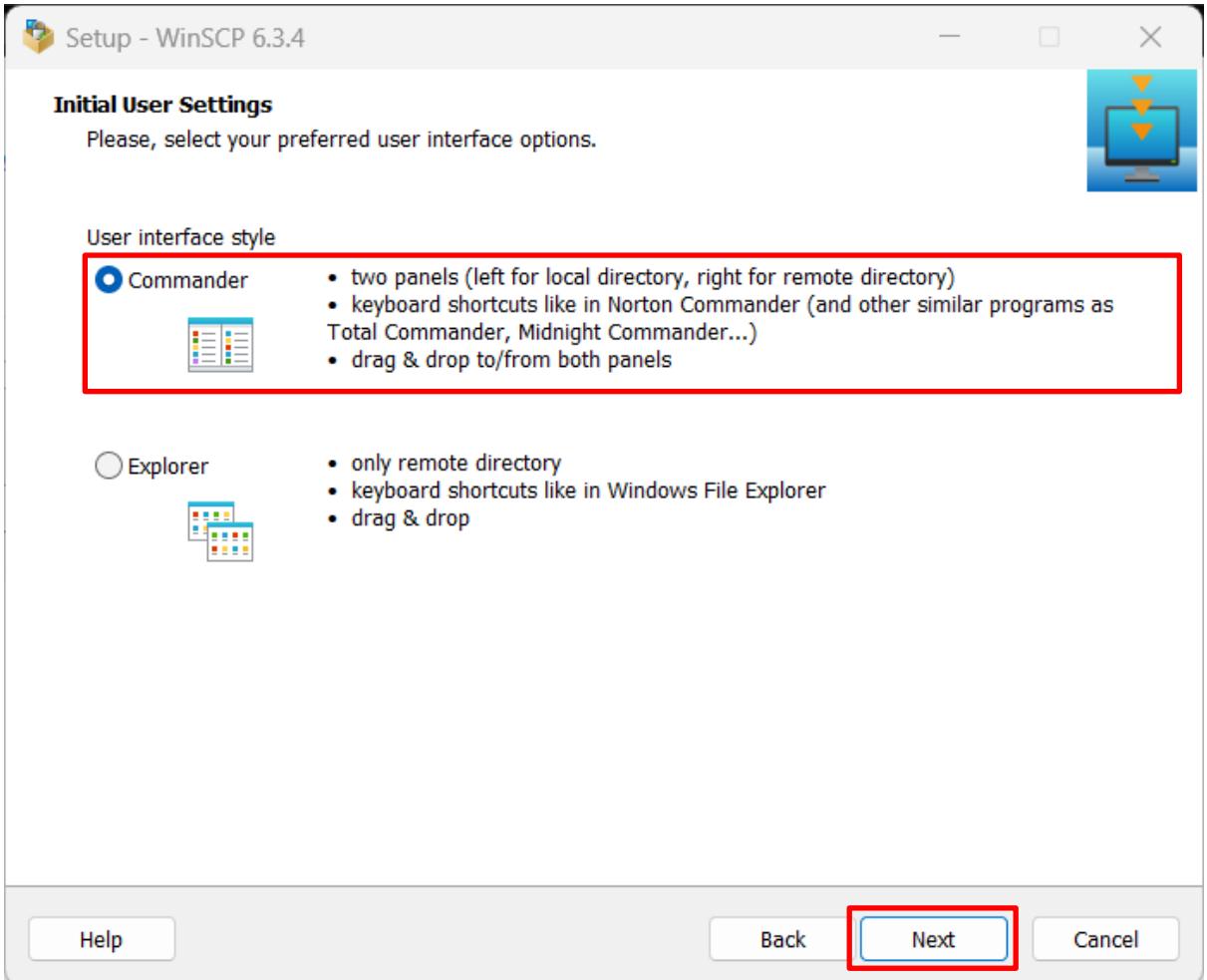
12. Kemudian, pilih **Accept**



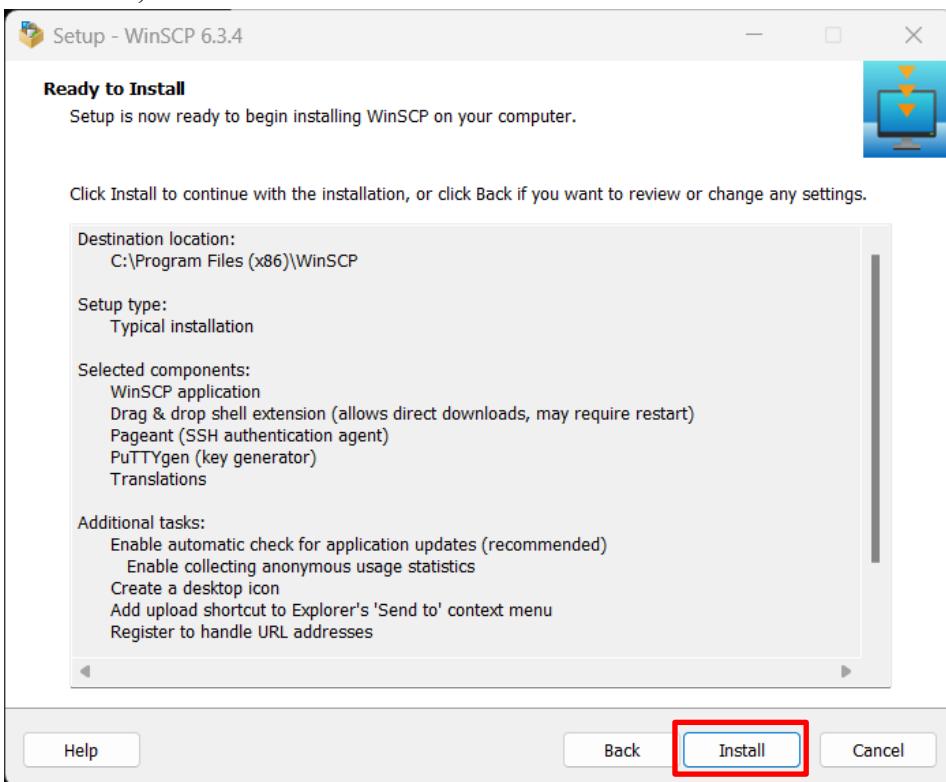
13. Kemudian, pilih **Typical Installation** dan klik **Next**



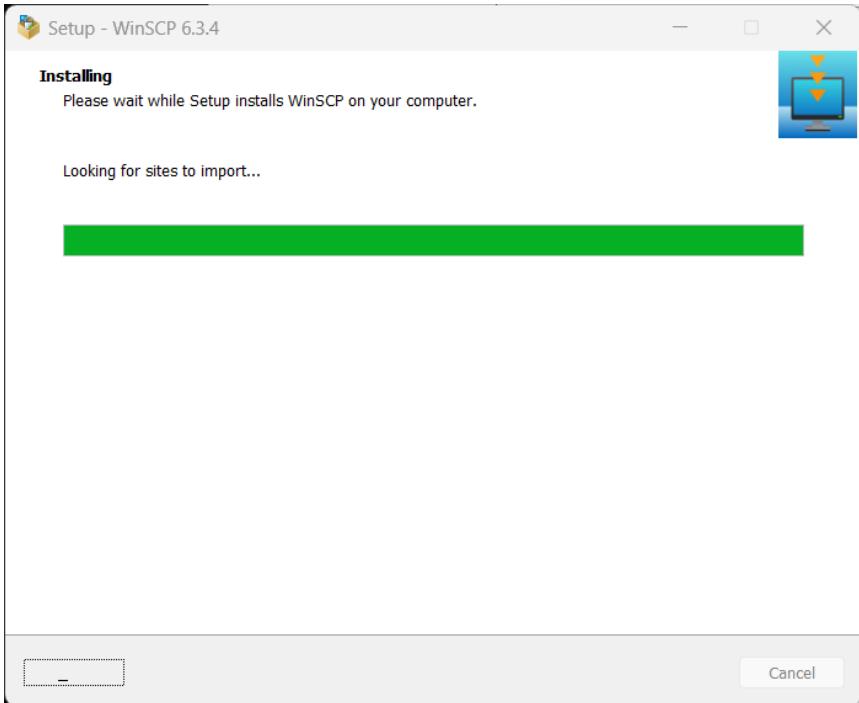
14. Kemudian pilih **Commander**, dan klik **Next**



15. Kemudian, klik **Install**



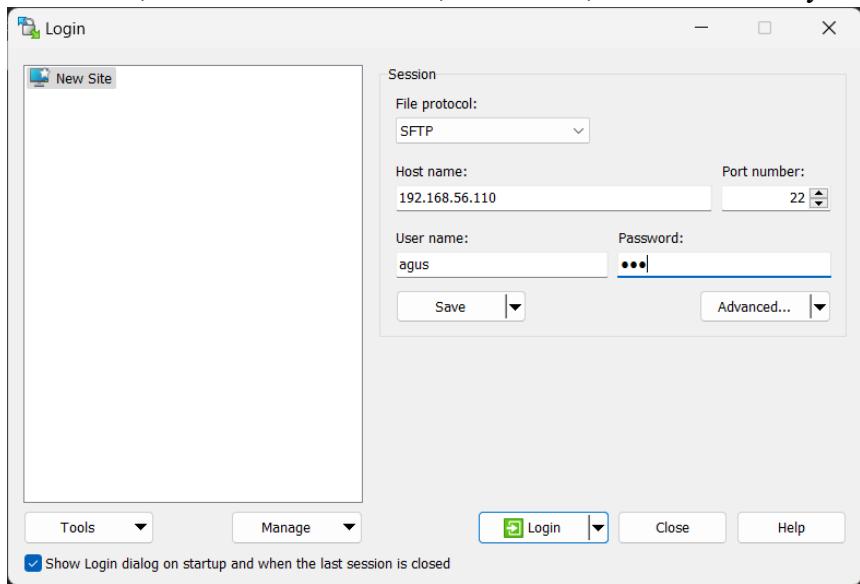
16. Kemudian, tunggu hingga penginstallan nya selesai



17. Kemudian, klik **Finish**

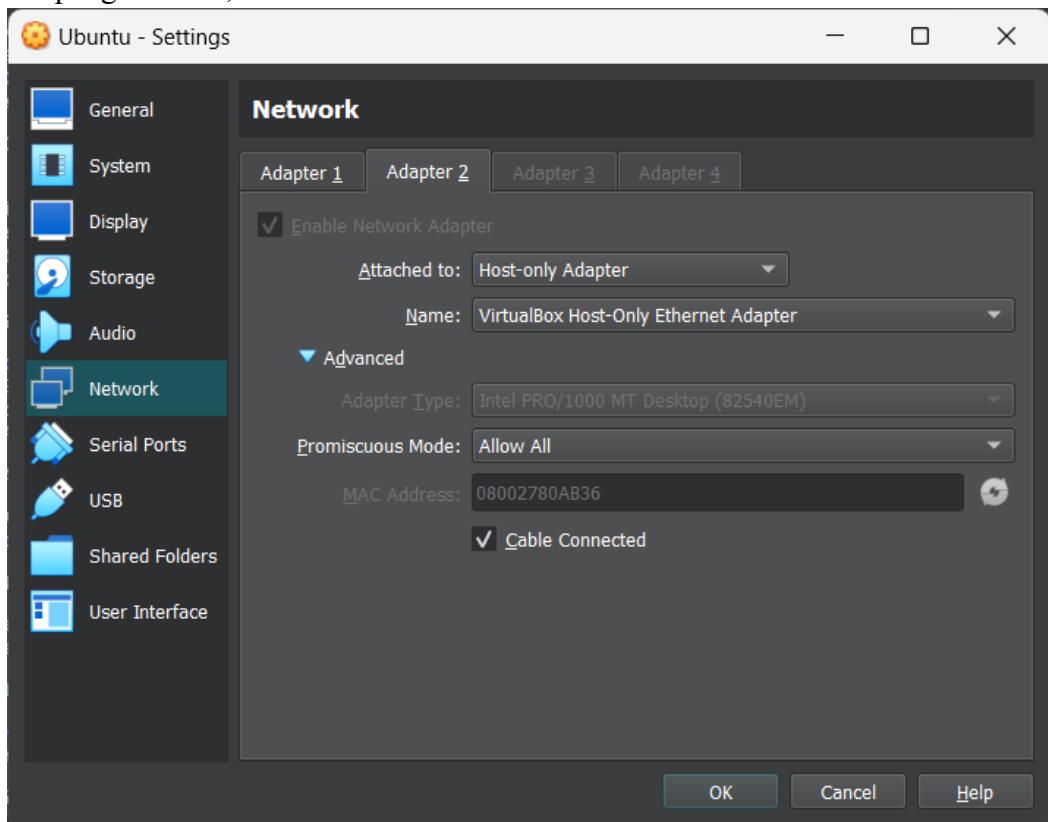


18. Kemudian, masukkan Host Name, *Username*, dan *Password* nya.

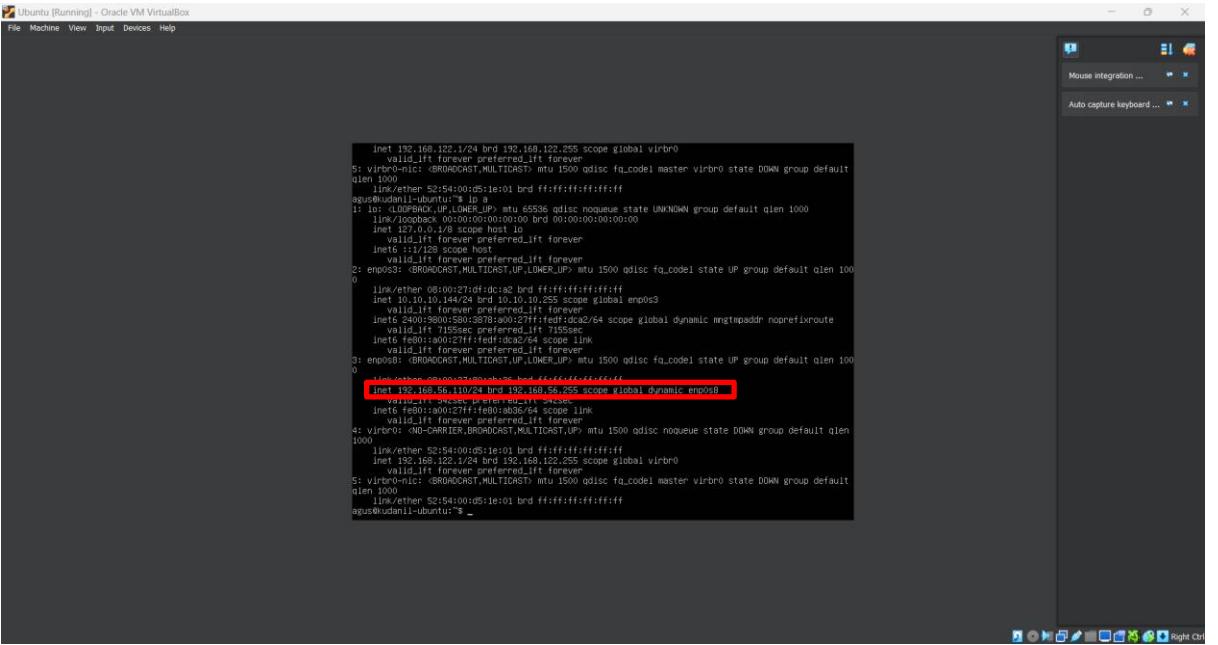


Tip:

1. Untuk mendapatkan IP Address, pastikan adapter 2 pada VM sudah dipasang. Disarankan dipasang pada saat penginstallan karna apabila tidak diinstal pada saat penginstallan, maka IP Address tersebut tidak muncul.



2. Untuk melihat IP Address, bisa mengetik perintah yang ada di *command* ini. Dan yang dikotaki warna merah merupakan IP Address pada adapter VirtualBox.



```

Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

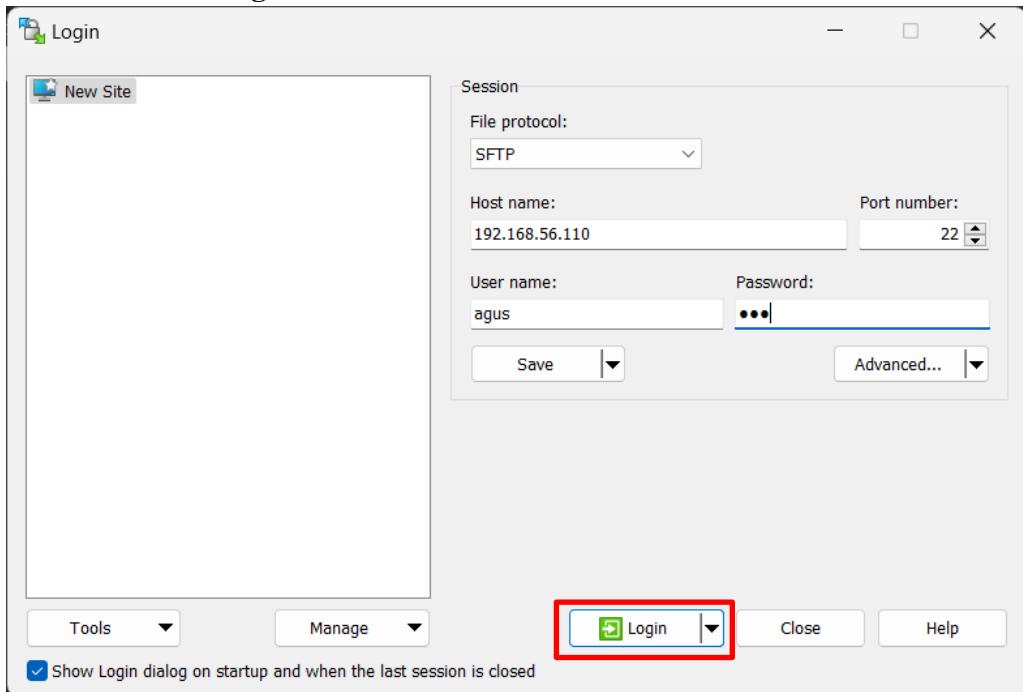
Mouse integration ...
Auto capture keyboard ...

inet 192.168.122.1/24 brd 192.168.122.255 scope global virbr0
    valid_lft forever preferred_lft forever
s: virbr0-nic: <NO-CARRIER,BROADCAST,MULTICAST> mtu 1500 qdisc fq_codel master virbr0 state DOWN group default
    link/ether 52:54:00:0d:be:01 brd ff:ff:ff:ff:ff:ff
ague@ubuntu:~$ ip
i: 1: lo <LOOPBACK,NO-CARRIER,BROADCAST,MULTICAST> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback brd 0.0.0.0
    inet 127.0.0.1/8 brd 0.0.0.0 scope host lo
        valid_lft forever preferred_lft forever
        link-layer brd 0.0.0.0
        valid_lft forever preferred_lft forever
i: ens3: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:00:0d:c2 brd ff:ff:ff:ff:ff:ff
    inet 10.10.10.144/24 brd 10.10.10.255 scope global enp0s3
        valid_lft forever preferred_lft forever
        link-layer brd ff:ff:ff:ff:ff:ff
        valid_lft 7158sec preferred_lft 7158sec
        inet6 fe80::800:27ff:fedc:c2ad/64 scope link
            valid_lft forever preferred_lft forever
i: ens3: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 52:54:00:0d:be:01 brd ff:ff:ff:ff:ff:ff
    valid_lft forever preferred_lft forever
s: virbr0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default
    link/ether 52:54:00:0d:be:01 brd ff:ff:ff:ff:ff:ff
    valid_lft forever preferred_lft forever
s: virbr0-nic: <NO-CARRIER,BROADCAST,MULTICAST> mtu 1500 qdisc fq_codel master virbr0 state DOWN group default
    link/ether 52:54:00:0d:be:01 brd ff:ff:ff:ff:ff:ff
ague@ubuntu:~$ 

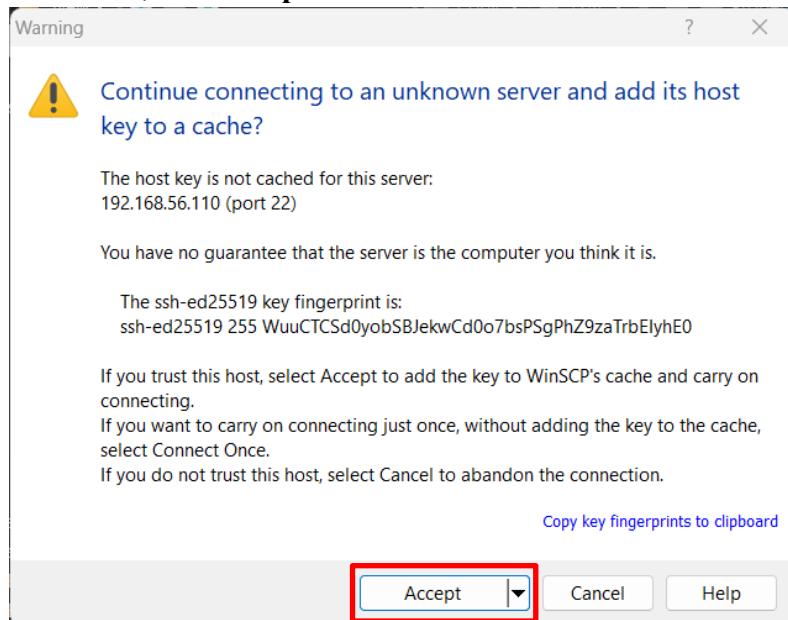
```

Lanjutan dari Nomor 18

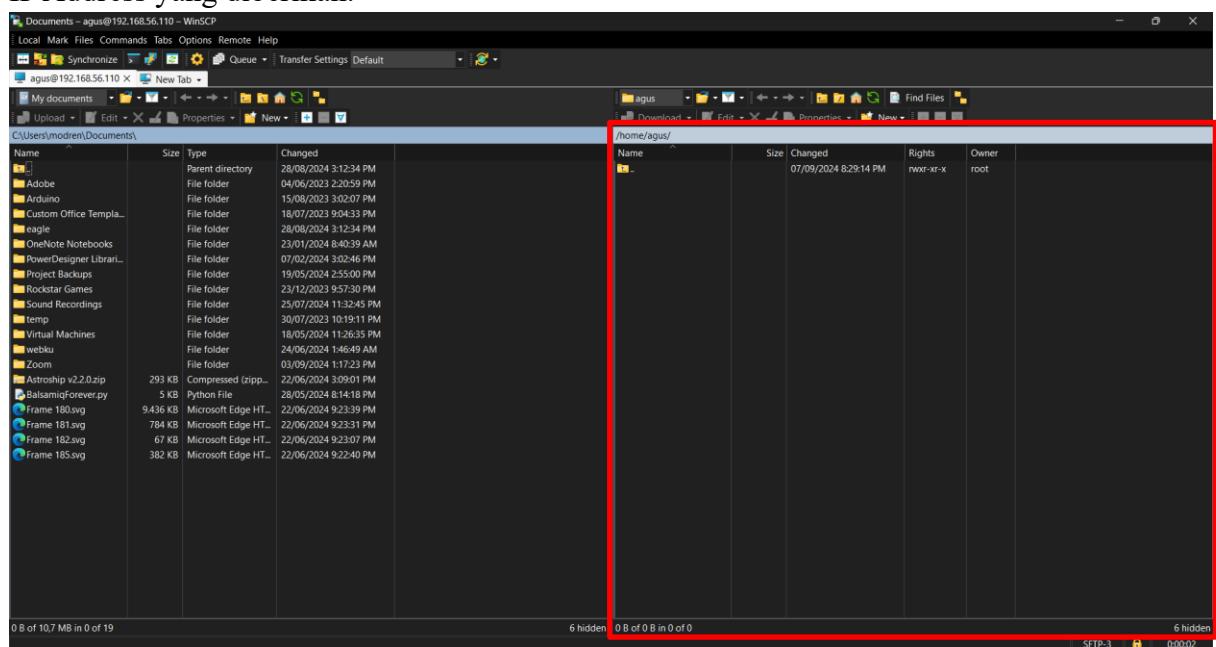
19. Kemudian, klik **Login**



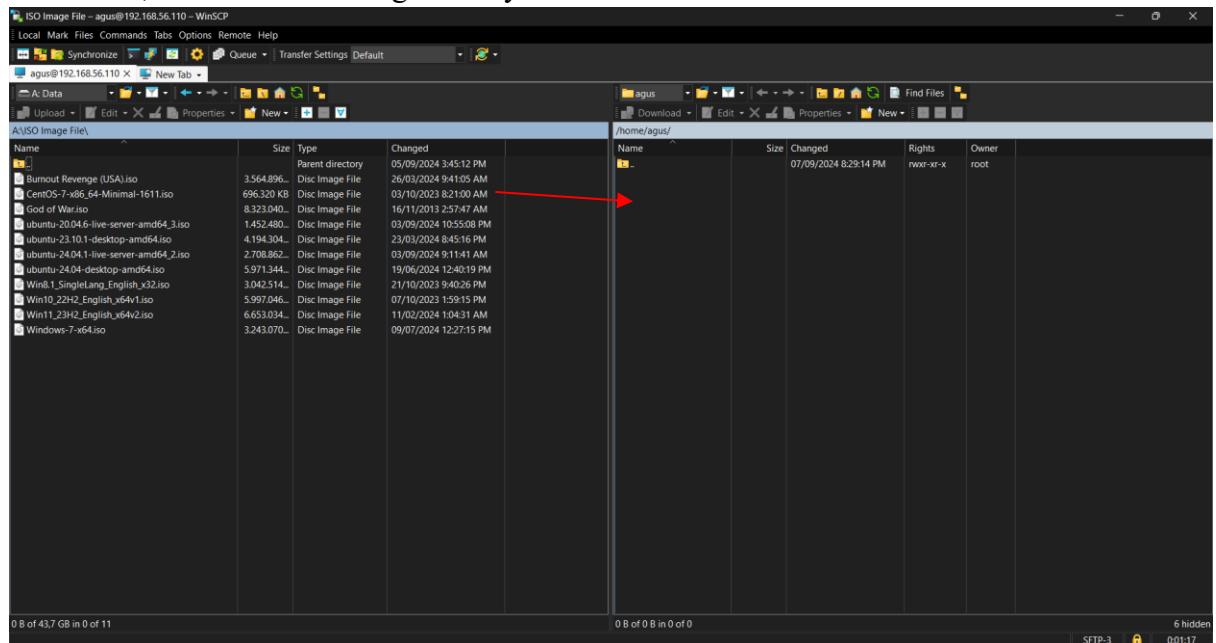
20. Kemudian, klik Accept



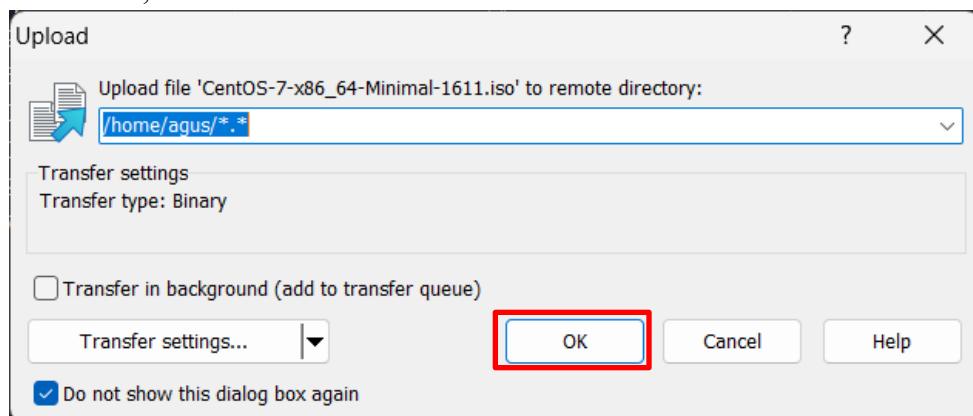
21. Dan sekarang kita sudah terhubung dengan OS Ubuntu Server yang ada di VM dengan IP Address yang diberikan.



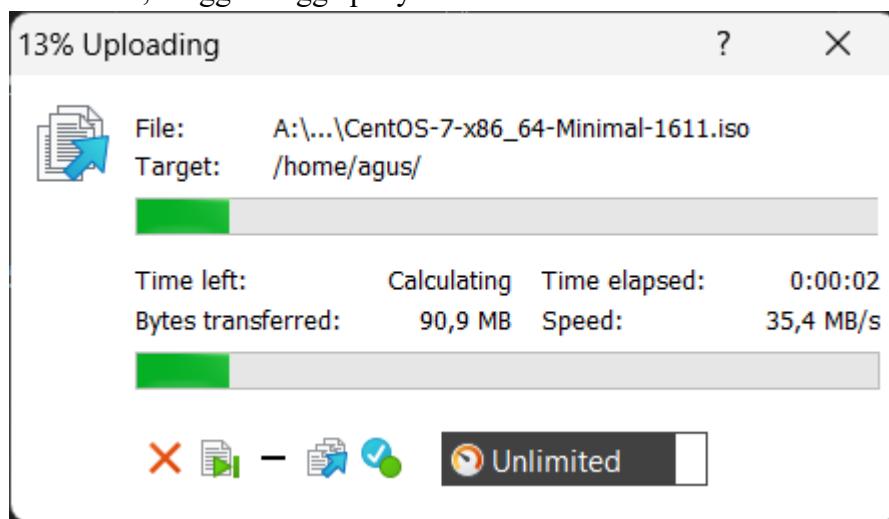
22. Kemudian, kita salin ISO Image File nya ke Ubuntu Server



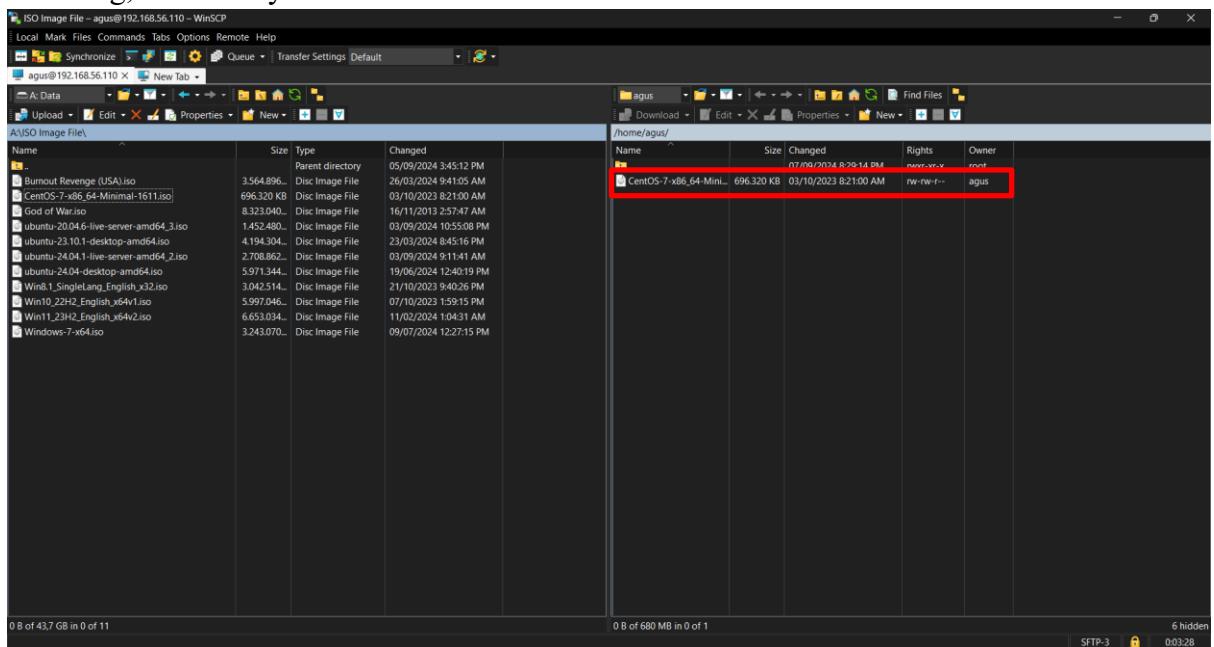
23. Kemudian, klik OK



24. Kemudian, tunggu hingga penyalinan selesai



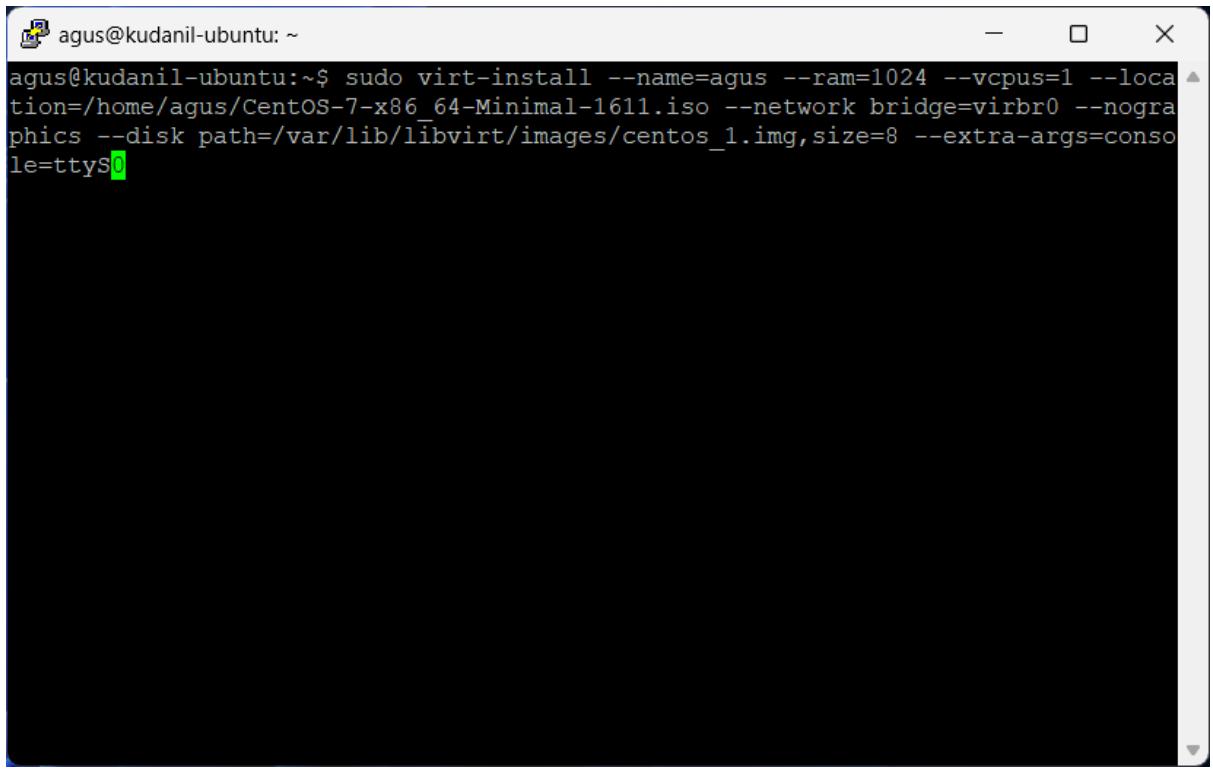
25. Sekarang, file ISO nya sudah ada di Ubuntu Server



26. Kemudian, kita akan mengetik perintah yang ada Digambar agar Lokasi CentOS nya bisa diakses.

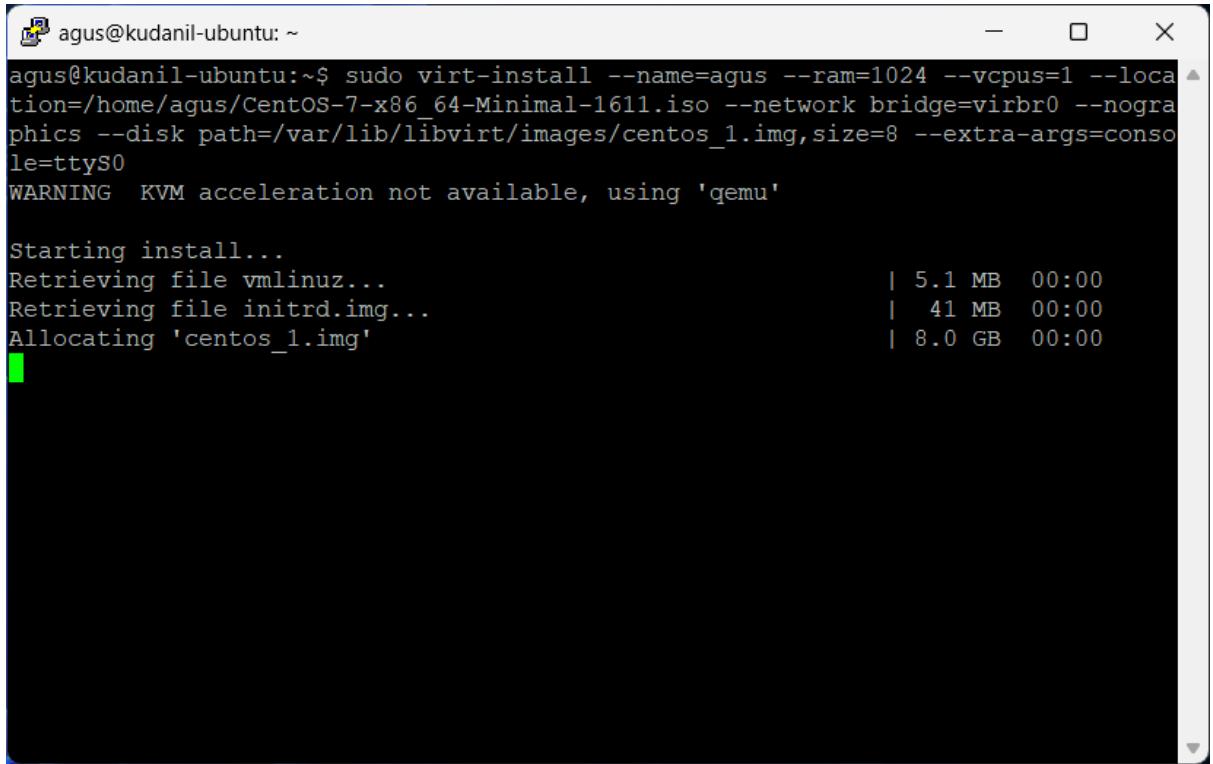
```
link/ether 08:00:27:df:dc:a2 brd ff:ff:ff:ff:ff:ff
inet 10.10.10.144/24 brd 10.10.10.255 scope global enp0s3
    valid_lft forever preferred_lft forever
inet6 2400:9800:580:3878:a00:27ff:fedf:dca2/64 scope global dynamic mngtmpad
    valid_lft 6967sec preferred_lft 6967sec
inet6 fe80::a00:27ff:fedf:dca2/64 scope link
    valid_lft forever preferred_lft forever
3: enp0s8: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP qlen 1000
    link/ether 08:00:27:80:ab:36 brd ff:ff:ff:ff:ff:ff
    inet 192.168.56.110/24 brd 192.168.56.255 scope global dynamic enp0s8
        valid_lft 571sec preferred_lft 571sec
    inet6 fe80::a00:27ff:fe80:ab36/64 scope link
        valid_lft forever preferred_lft forever
4: virbr0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN qlen 1000
    link/ether 52:54:00:d5:1e:01 brd ff:ff:ff:ff:ff:ff
    inet 192.168.122.1/24 brd 192.168.122.255 scope global virbr0
        valid_lft forever preferred_lft forever
5: virbr0-nic: <BROADCAST,MULTICAST> mtu 1500 qdisc fq_codel master virbr0 state default qlen 1000
    link/ether 52:54:00:d5:1e:01 brd ff:ff:ff:ff:ff:ff
agus@kudanil-ubuntu:~$ sudo chmod +x /home/agus/
```

27. Kemudian, ketik *command* yang ada pada gambar dan tekan **Enter**



```
agus@kudanil-ubuntu:~$ sudo virt-install --name=agus --ram=1024 --vcpus=1 --location=/home/agus/CentOS-7-x86_64-Minimal-1611.iso --network bridge=virbr0 --nographics --disk path=/var/lib/libvirt/images/centos_1.img,size=8 --extra-args=console=ttyS0
```

28. Kemudian, tunggu sampai penginstallan nya selesai



```
agus@kudanil-ubuntu:~$ sudo virt-install --name=agus --ram=1024 --vcpus=1 --location=/home/agus/CentOS-7-x86_64-Minimal-1611.iso --network bridge=virbr0 --nographics --disk path=/var/lib/libvirt/images/centos_1.img,size=8 --extra-args=console=ttyS0
WARNING  KVM acceleration not available, using 'qemu'

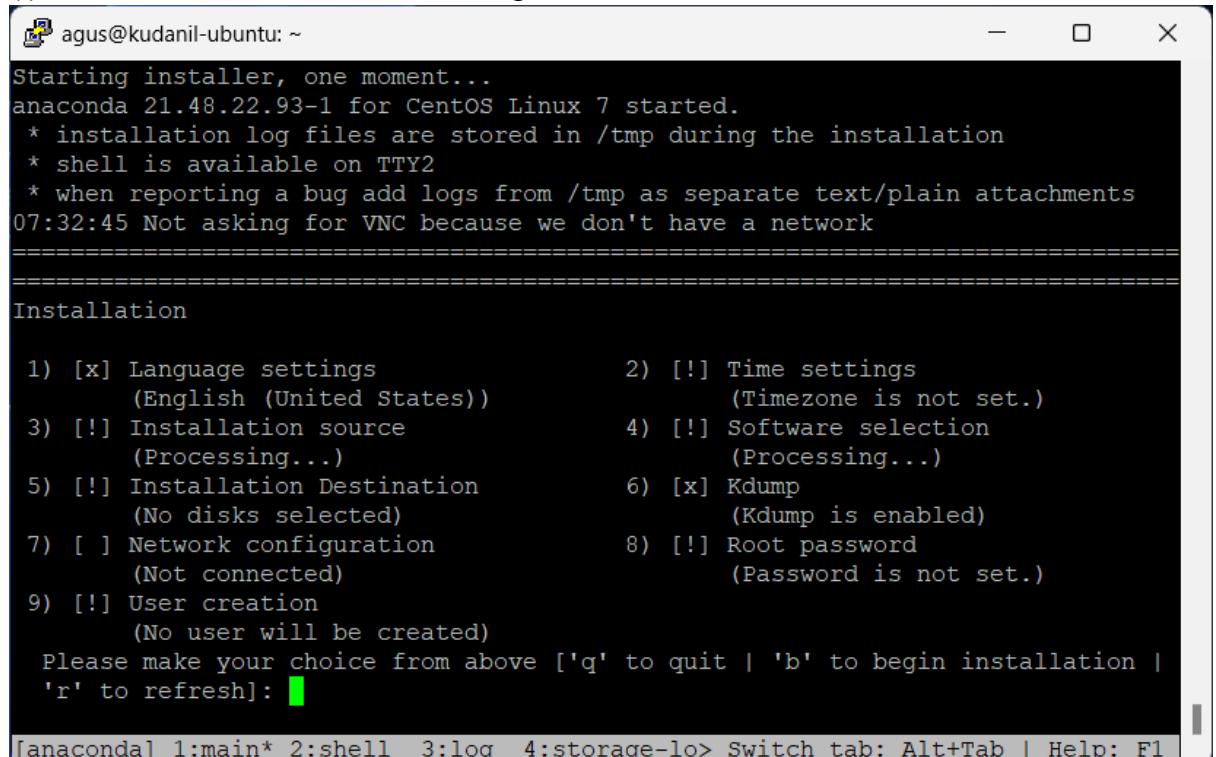
Starting install...
Retrieving file vmlinuz... | 5.1 MB  00:00
Retrieving file initrd.img... | 41 MB   00:00
Allocating 'centos_1.img'    | 8.0 GB   00:00
```

29. Setelah selesai instalasi, maka akan menunjukkan tampilan seperti ini:

Keterangan penanda:

(x) : Menandakan bahwa sudah dikonfigurasi sebelumnya

(!) : Menandakan bahwa belum dikonfigurasi

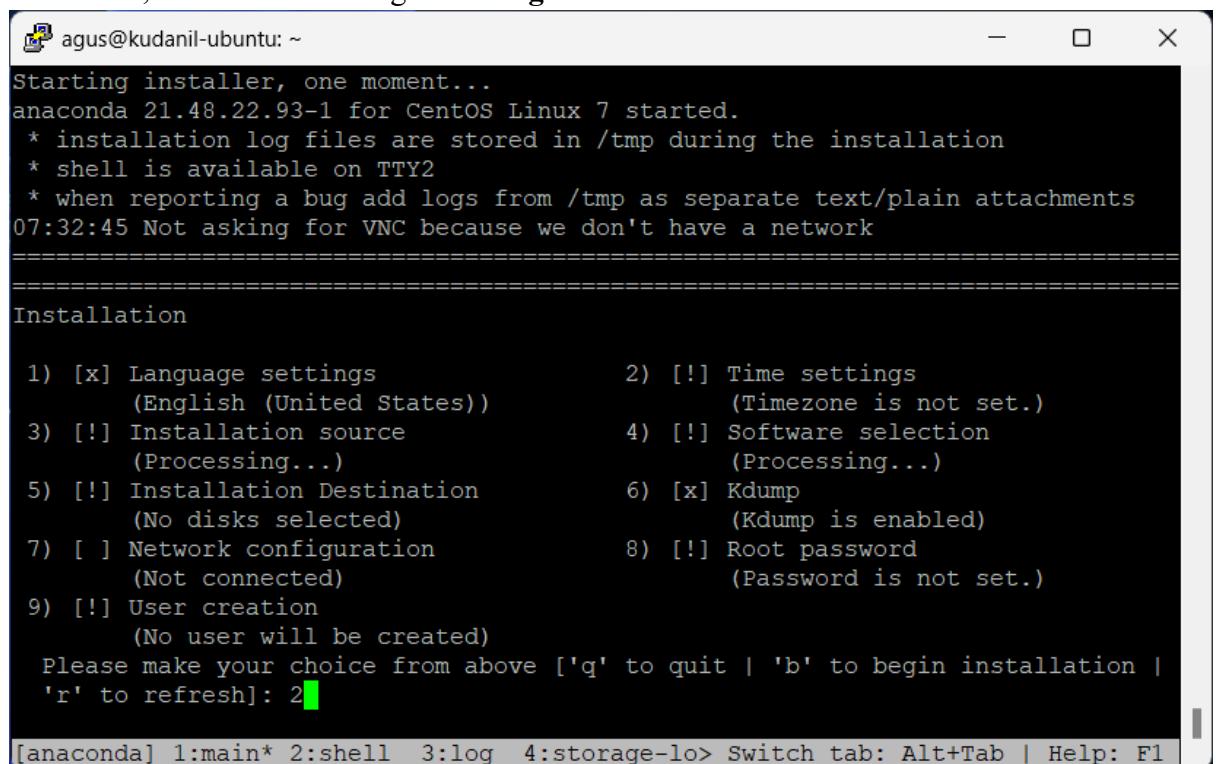


```
agus@kudanil-ubuntu: ~
Starting installer, one moment...
anaconda 21.48.22.93-1 for CentOS Linux 7 started.
* installation log files are stored in /tmp during the installation
* shell is available on TTY2
* when reporting a bug add logs from /tmp as separate text/plain attachments
07:32:45 Not asking for VNC because we don't have a network
=====
=====
Installation

1) [x] Language settings
      (English (United States))
3) [!] Installation source
      (Processing...)
5) [!] Installation Destination
      (No disks selected)
7) [ ] Network configuration
      (Not connected)
9) [!] User creation
      (No user will be created)
Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 2

[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

30. Kemudian, ketik **2** untuk mengubah **Pengaturan Waktu**



```
agus@kudanil-ubuntu: ~
Starting installer, one moment...
anaconda 21.48.22.93-1 for CentOS Linux 7 started.
* installation log files are stored in /tmp during the installation
* shell is available on TTY2
* when reporting a bug add logs from /tmp as separate text/plain attachments
07:32:45 Not asking for VNC because we don't have a network
=====
=====
Installation

1) [x] Language settings
      (English (United States))
3) [!] Installation source
      (Processing...)
5) [!] Installation Destination
      (No disks selected)
7) [ ] Network configuration
      (Not connected)
9) [!] User creation
      (No user will be created)
Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 2

[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

31. Kemudian, ketik **1** untuk mengatur **Zona Waktu**

```
agus@kudanil-ubuntu: ~
Starting installer, one moment...
anaconda 21.48.22.93-1 for CentOS Linux 7 started.
* installation log files are stored in /tmp during the installation
* shell is available on TTY2
* when reporting a bug add logs from /tmp as separate text/plain attachments
07:32:45 Not asking for VNC because we don't have a network
=====
=====
Installation

1) [x] Language settings
      (English (United States))
3) [!] Installation source
      (Processing...)
5) [!] Installation Destination
      (No disks selected)
7) [ ] Network configuration
      (Not connected)
9) [!] User creation
      (No user will be created)
2) [!] Time settings
      (Timezone is not set.)
4) [!] Software selection
      (Processing...)
6) [x] Kdump
      (Kdump is enabled)
8) [!] Root password
      (Password is not set.)

Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 2

[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

32. Kemudian, Pilih **Asia** dengan mengetik nomor **5** dan tekan **Enter**

```
agus@kudanil-ubuntu: ~
=====
Time settings

Timezone: not set

NTP servers:not configured

1) Set timezone
2) Configure NTP servers
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 1
=====

Timezone settings

Available regions
1) Africa
2) America
3) Antarctica
4) Arctic
5) Asia
6) Atlantic
7) Australia
8) Europe
9) Indian
10) Pacific
11) US
12) Etc

Please select the timezone.
Use numbers or type names directly [b to region list, q to quit]: 5
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

33. Kemudian pilih **Jakarta** dengan mengetik angka **30** dan tekan **Enter**

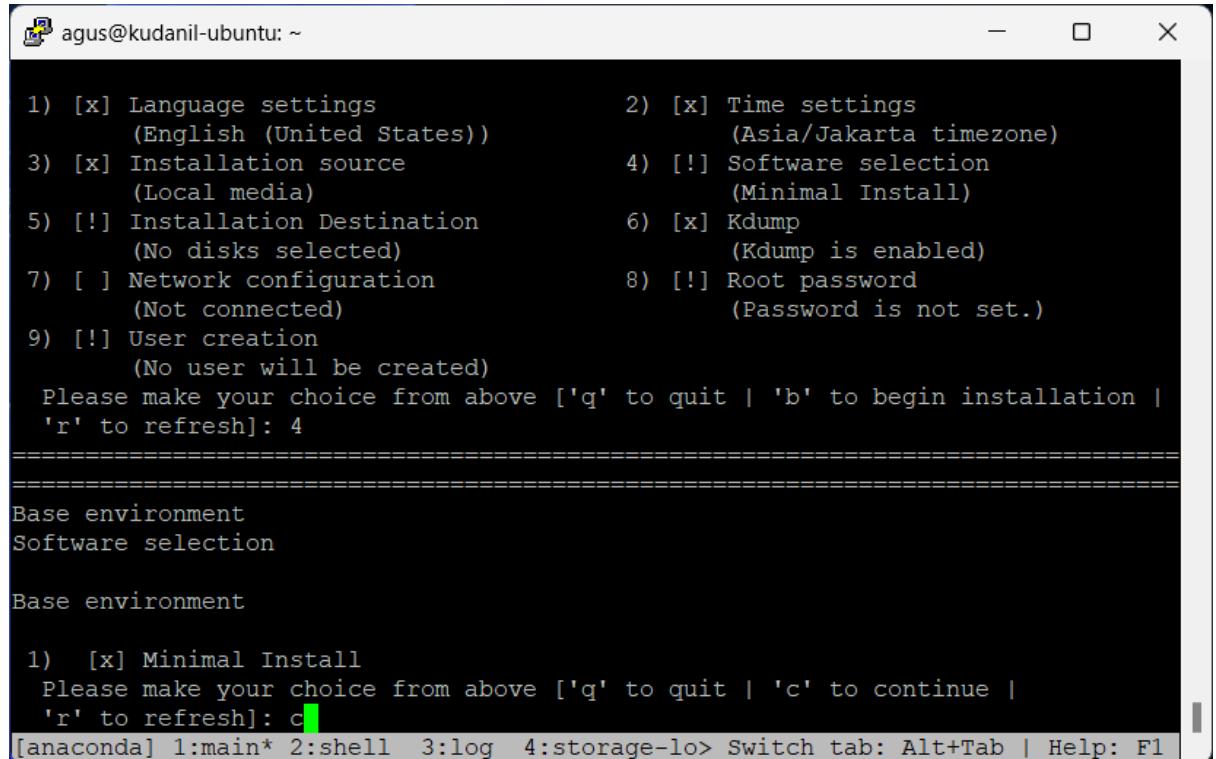
```
agus@kudanil-ubuntu: ~
7) Ashgabat          34) Kamchatka        60) Samarkand
8) Baghdad           35) Karachi           61) Seoul
9) Bahrain           36) Kathmandu         62) Shanghai
10) Baku              37) Khandyga         63) Singapore
11) Bangkok           38) Kolkata            64) Srednekolymsk
12) Barnaul           39) Krasnoyarsk       65) Taipei
13) Beirut             40) Kuala_Lumpur     66) Tashkent
14) Bishkek            41) Kuching           67) Tbilisi
15) Brunei            42) Kuwait            68) Tehran
16) Chita              43) Macau             69) Thimphu
17) Choibalsan         44) Magadan          70) Tokyo
18) Colombo            45) Makassar          71) Tomsk
19) Damascus           46) Manila            72) Ulaanbaatar
20) Dhaka              47) Muscat            73) Urumqi
21) Dili               48) Nicosia           74) Ust-Nera
22) Dubai              49) Novokuznetsk     75) Vientiane
Press ENTER to continue
23) Dushanbe           50) Novosibirsk       76) Vladivostok
24) Gaza                51) Omsk              77) Yakutsk
25) Hebron             52) Oral               78) Yangon
26) Ho_Chi_Minh        53) Phnom_Penh       79) Yekaterinburg
27) Hong_Kong          80) Yerevan
Please select the timezone.
Use numbers or type names directly [b to region list, q to quit]: 30
```

34. Kemudian, kita akan masuk bagian nomor 4 yaitu **Software Selection** dengan mengetik nomor **4** dan tekan **Enter**

```
agus@kudanil-ubuntu: ~
23) Dushanbe           50) Novosibirsk       76) Vladivostok
24) Gaza                51) Omsk              77) Yakutsk
25) Hebron             52) Oral               78) Yangon
26) Ho_Chi_Minh        53) Phnom_Penh       79) Yekaterinburg
27) Hong_Kong          80) Yerevan
Please select the timezone.
Use numbers or type names directly [b to region list, q to quit]: 30
=====
=====
Installation

1) [x] Language settings
      (English (United States))
3) [x] Installation source
      (Local media)
5) [!] Installation Destination
      (No disks selected)
7) [ ] Network configuration
      (Not connected)
9) [!] User creation
      (No user will be created)
Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 4
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

35. Kemudian, ketik C untuk melanjutkan



```
agus@kudanil-ubuntu: ~

1) [x] Language settings
   (English (United States))
2) [x] Time settings
   (Asia/Jakarta timezone)
3) [x] Installation source
   (Local media)
4) [!] Software selection
   (Minimal Install)
5) [!] Installation Destination
   (No disks selected)
6) [x] Kdump
   (Kdump is enabled)
7) [ ] Network configuration
   (Not connected)
8) [!] Root password
   (Password is not set.)
9) [!] User creation
   (No user will be created)

Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 4

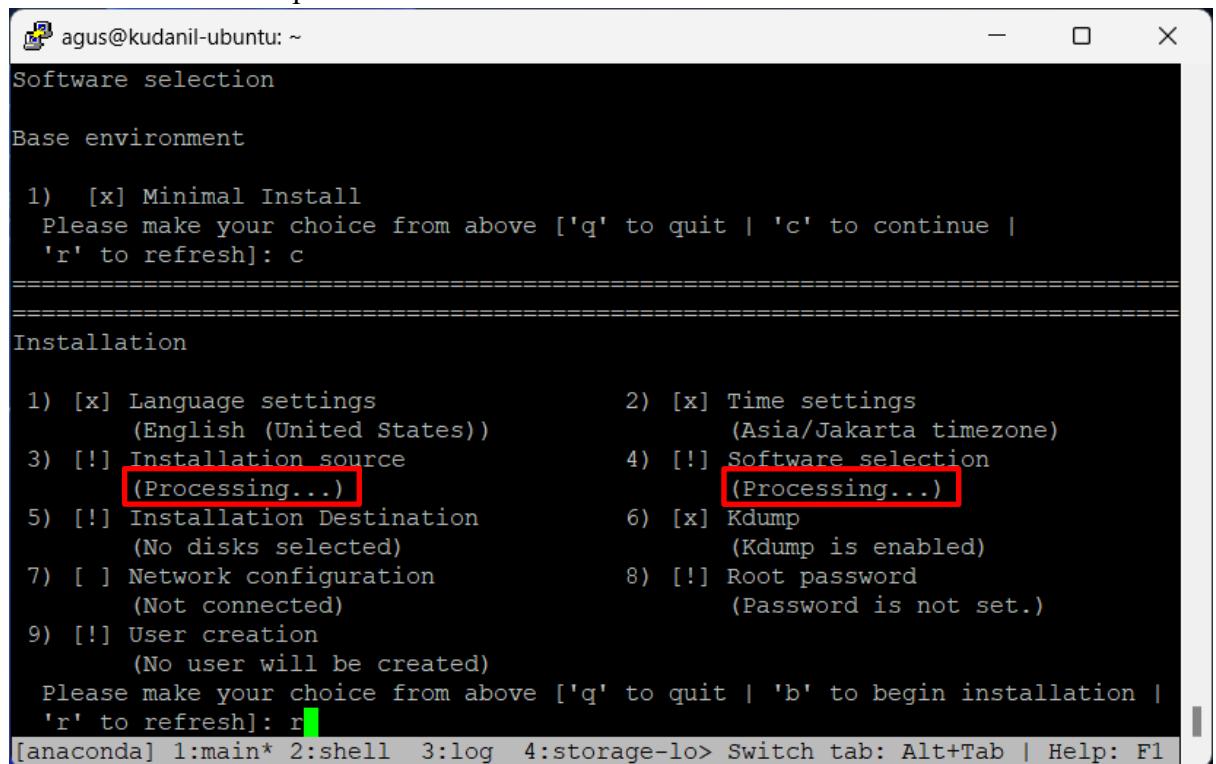
=====
Base environment
Software selection

Base environment

1) [x] Minimal Install
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: c

[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

36. Jika anda melihat **Processing**, anda dapat melihat proses tersebut dengan mengetik huruf **r** untuk melihat perubahan dan tekan **Enter**



```
agus@kudanil-ubuntu: ~

Software selection

Base environment

1) [x] Minimal Install
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: c

=====
Installations

1) [x] Language settings
   (English (United States))
2) [x] Time settings
   (Asia/Jakarta timezone)
3) [!] Installation source
   (Processing...)
4) [!] Software selection
   (Processing...)
5) [!] Installation Destination
   (No disks selected)
6) [x] Kdump
   (Kdump is enabled)
7) [ ] Network configuration
   (Not connected)
8) [!] Root password
   (Password is not set.)
9) [!] User creation
   (No user will be created)

Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: r

[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

37. Berikut gambarnya ketika sudah dilakukan **refresh** yang mana sudah berubah tanda jadi (x)

The screenshot shows the Anaconda installation interface on a Windows host. The terminal window title is 'agus@kudanil-ubuntu: ~'. The menu options are:

- (No disks selected)
- 7) [] Network configuration (Not connected)
- 8) [!] Root password (Kdump is enabled)
(Password is not set.)
- 9) [!] User creation (No user will be created)

Please make your choice from above ['q' to quit | 'b' to begin installation | 'r' to refresh]: r

=====

Installation

- 1) [x] Language settings (English (United States))
- 2) [x] Time settings (Asia/Jakarta timezone)
- 3) [x] Installation source (Local media)
- 4) [x] Software selection (Minimal Install)
- 5) [!] Installation Destination (No disks selected)
- 6) [x] Kdump (Kdump is enabled)
- 7) [] Network configuration (Not connected)
- 8) [!] Root password (Password is not set.)
- 9) [!] User creation (No user will be created)

Please make your choice from above ['q' to quit | 'b' to begin installation | 'r' to refresh]:

[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1

38. Lalu, kita konfigurasi pada bagian nomor 5 yaitu **Installationn Destination** dengan mengetik nomor **5** dan tekan **Enter**

The screenshot shows the Anaconda installation interface on a Windows host. The terminal window title is 'agus@kudanil-ubuntu: ~'. The menu options are:

- (No disks selected)
- 7) [] Network configuration (Not connected)
- 8) [!] Root password (Kdump is enabled)
(Password is not set.)
- 9) [!] User creation (No user will be created)

Please make your choice from above ['q' to quit | 'b' to begin installation | 'r' to refresh]: r

=====

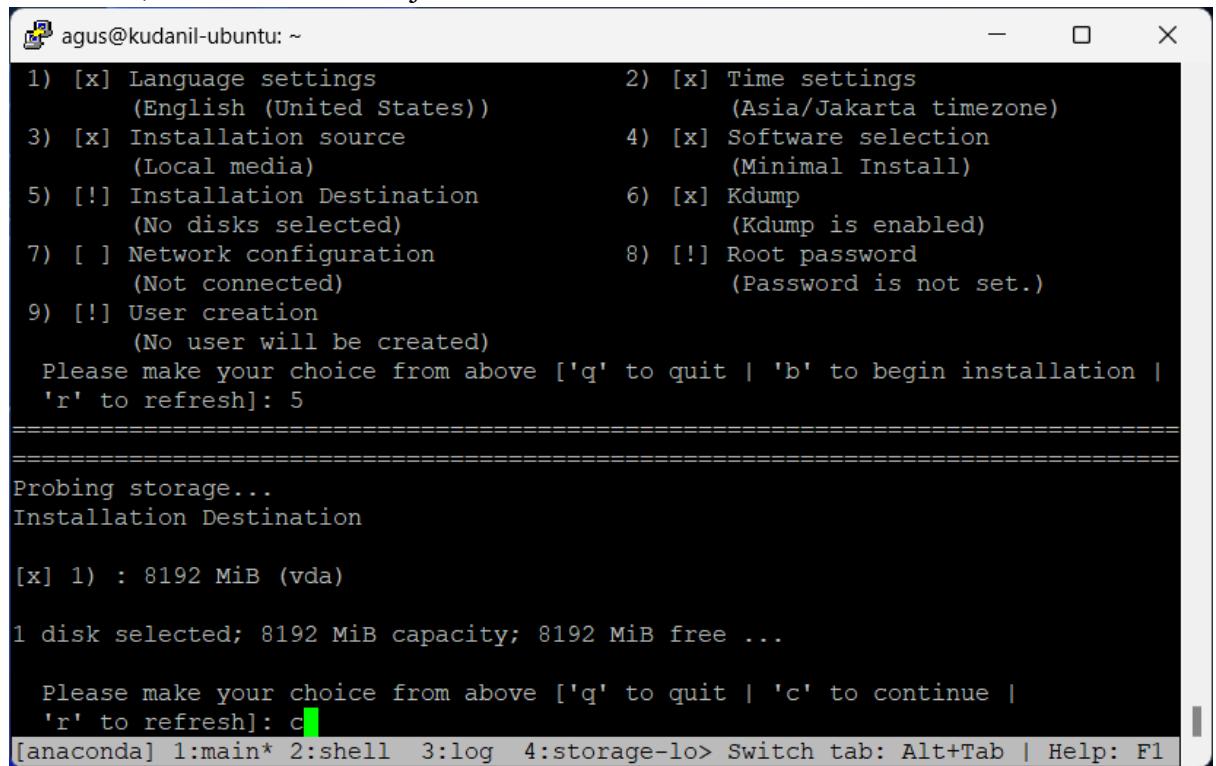
Installation

- 1) [x] Language settings (English (United States))
- 2) [x] Time settings (Asia/Jakarta timezone)
- 3) [x] Installation source (Local media)
- 4) [x] Software selection (Minimal Install)
- 5) [x] Installation Destination (No disks selected)
- 6) [x] Kdump (Kdump is enabled)
- 7) [] Network configuration (Not connected)
- 8) [!] Root password (Password is not set.)
- 9) [!] User creation (No user will be created)

Please make your choice from above ['q' to quit | 'b' to begin installation | 'r' to refresh]: 5

[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1

39. Kemudian, ketik **c** untuk melanjutkan



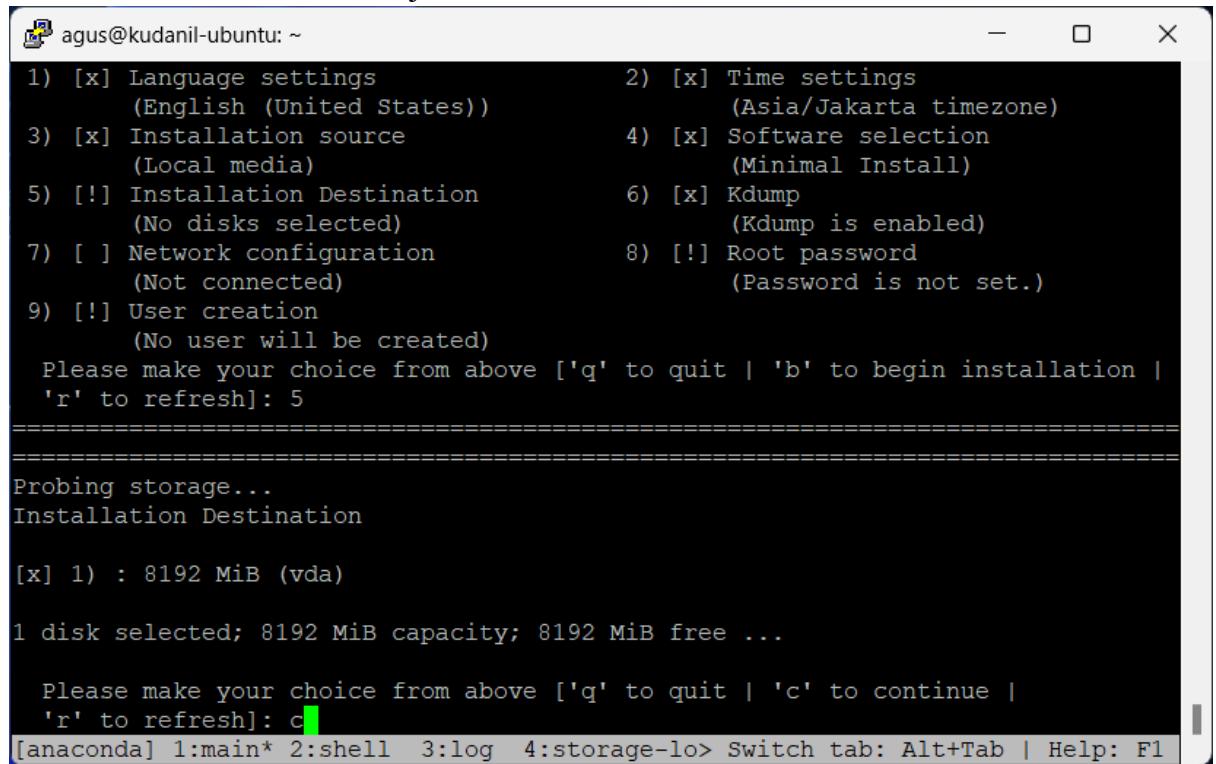
```
agus@kudanil-ubuntu: ~
1) [x] Language settings
   (English (United States))
3) [x] Installation source
   (Local media)
5) [!] Installation Destination
   (No disks selected)
7) [ ] Network configuration
   (Not connected)
9) [!] User creation
   (No user will be created)
Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 5
=====
=====
Probing storage...
Installation Destination

[x] 1) : 8192 MiB (vda)

1 disk selected; 8192 MiB capacity; 8192 MiB free ...

Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: c
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

40. Kemudian, ketik **c** untuk melanjutkan



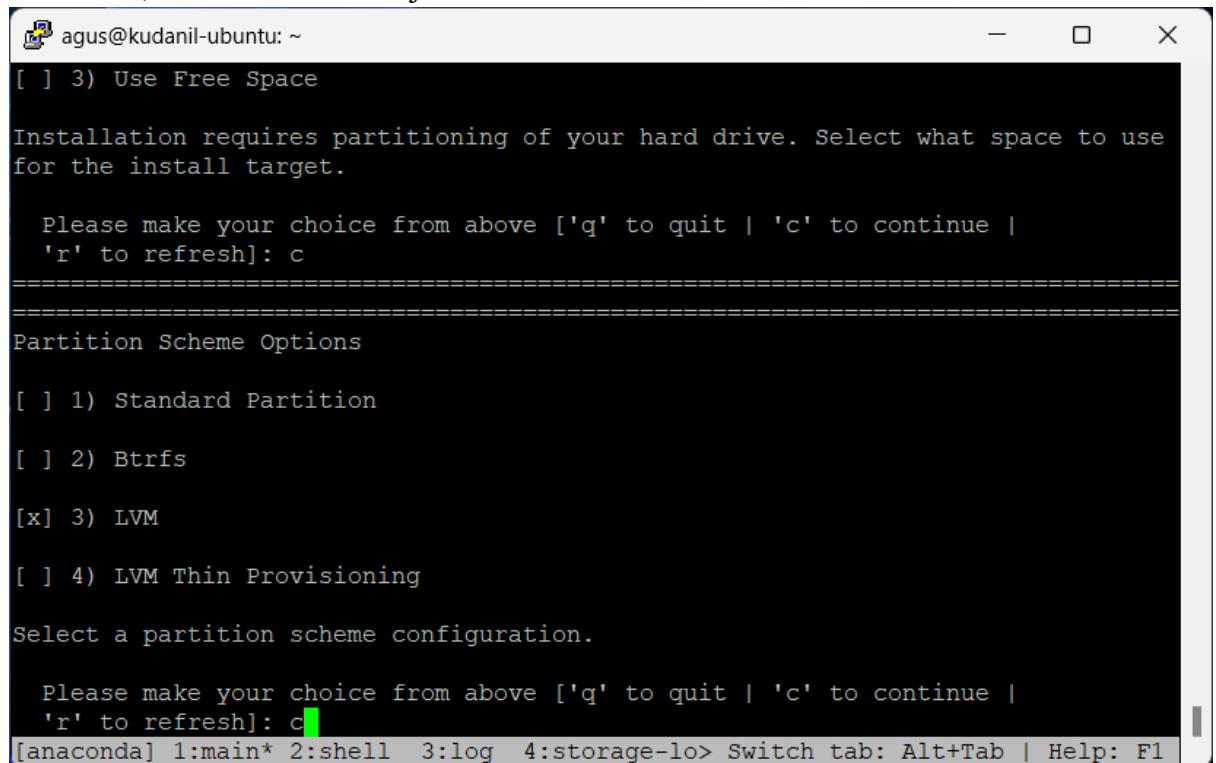
```
agus@kudanil-ubuntu: ~
1) [x] Language settings
   (English (United States))
3) [x] Installation source
   (Local media)
5) [!] Installation Destination
   (No disks selected)
7) [ ] Network configuration
   (Not connected)
9) [!] User creation
   (No user will be created)
Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 5
=====
=====
Probing storage...
Installation Destination

[x] 1) : 8192 MiB (vda)

1 disk selected; 8192 MiB capacity; 8192 MiB free ...

Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: c
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

41. Kemudian, ketik **c** untuk melanjutkan



```
agus@kudanil-ubuntu: ~
[ ] 3) Use Free Space

Installation requires partitioning of your hard drive. Select what space to use
for the install target.

Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: c
=====
=====

Partition Scheme Options

[ ] 1) Standard Partition

[ ] 2) Btrfs

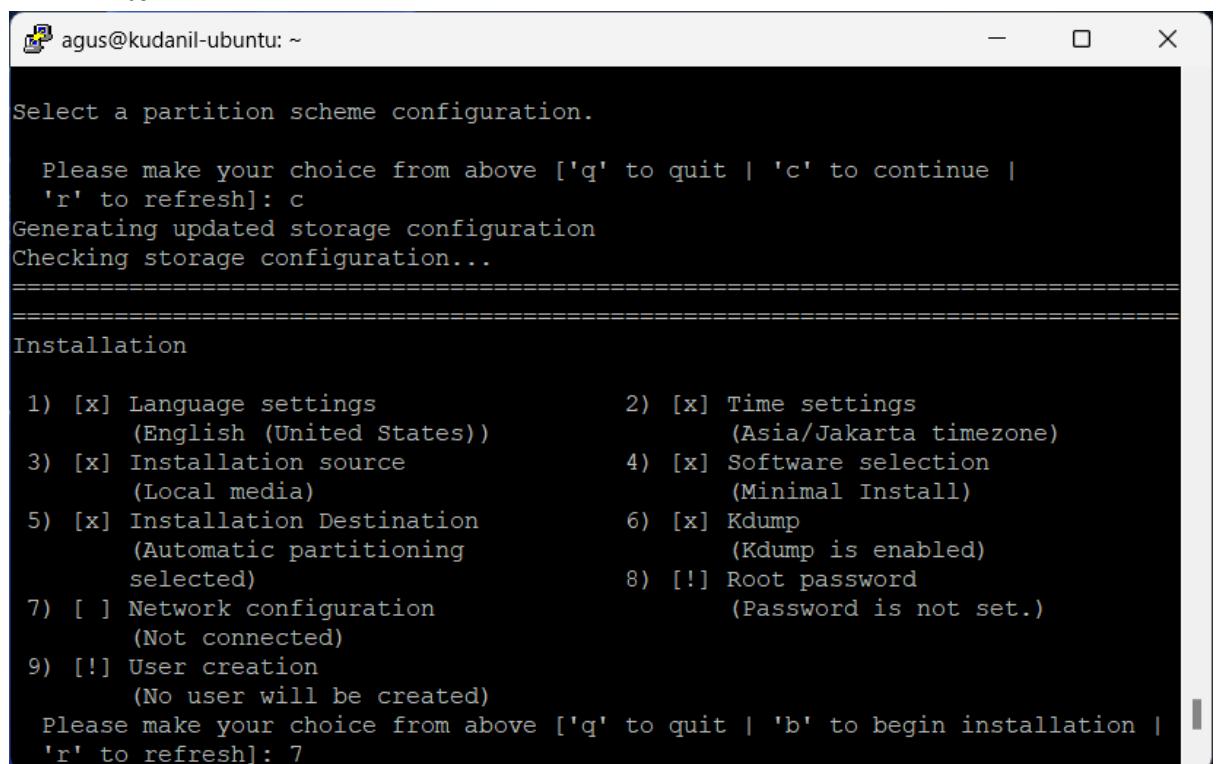
[x] 3) LVM

[ ] 4) LVM Thin Provisioning

Select a partition scheme configuration.

Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: c
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

42. Kemudian, kita siapkan untuk **Network Configuration** dengan mengetik nomor **7** dan tekan **Enter**



```
agus@kudanil-ubuntu: ~

Select a partition scheme configuration.

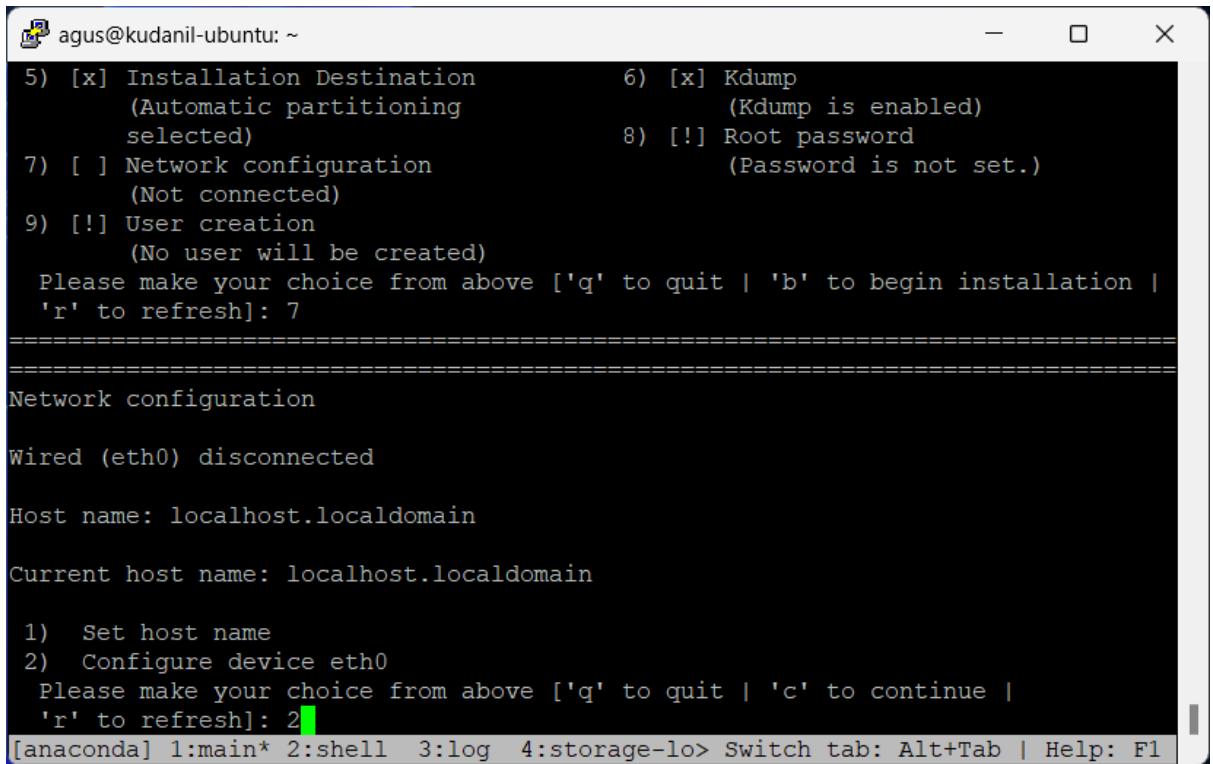
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: c
Generating updated storage configuration
Checking storage configuration...
=====
=====

Installation

1) [x] Language settings
   (English (United States))
2) [x] Time settings
   (Asia/Jakarta timezone)
3) [x] Installation source
   (Local media)
4) [x] Software selection
   (Minimal Install)
5) [x] Installation Destination
   (Automatic partitioning
selected)
6) [x] Kdump
   (Kdump is enabled)
7) [ ] Network configuration
   (Not connected)
8) [!] Root password
   (Password is not set.)
9) [!] User creation
   (No user will be created)

Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 7
```

43. Lalu, pilih bagian nomor **2** yaitu **Configurw device eth0** dengan mengetik nomor **2** dan tekan **Enter**



```
agus@kudanil-ubuntu: ~
5) [x] Installation Destination
       (Automatic partitioning
       selected)
6) [x] Kdump
       (Kdump is enabled)
7) [ ] Network configuration
       (Not connected)
8) [!] Root password
       (Password is not set.)
9) [!] User creation
       (No user will be created)
Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 7
=====
=====
Network configuration

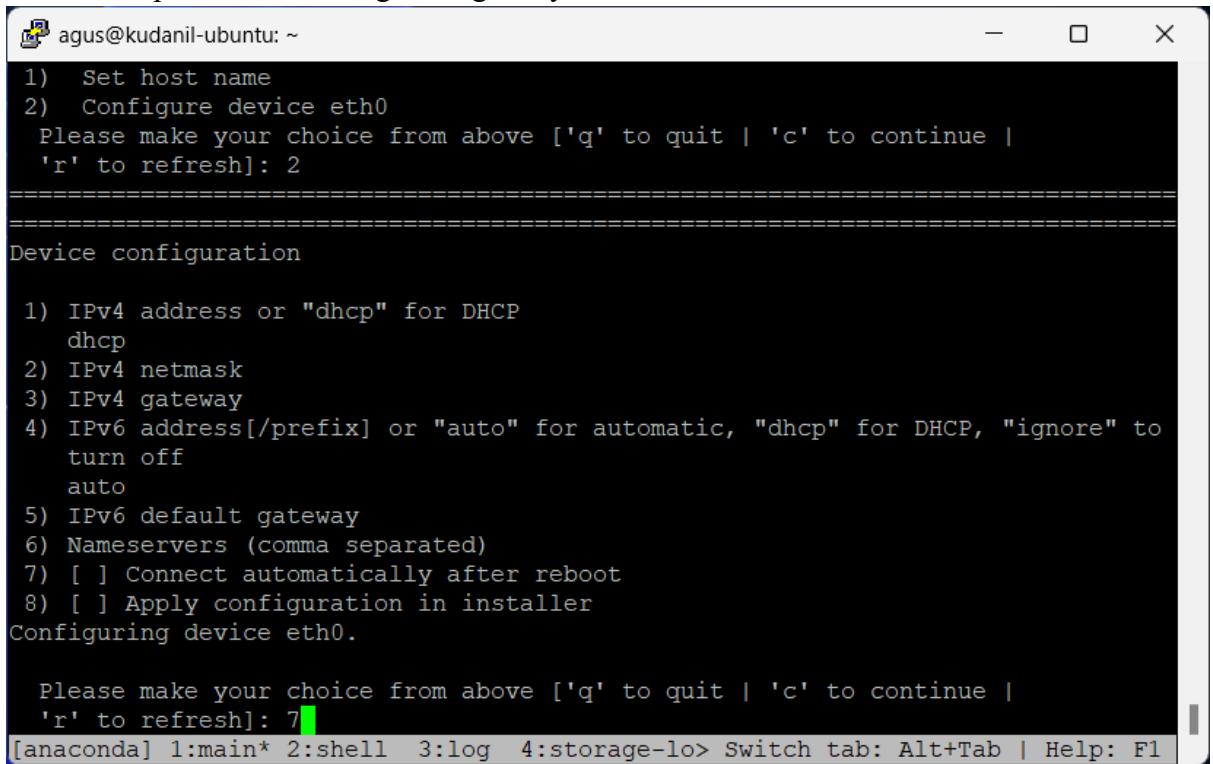
Wired (eth0) disconnected

Host name: localhost.localdomain

Current host name: localhost.localdomain

1) Set host name
2) Configure device eth0
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 2
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

44. Kemudian, pilih 7 untuk menghubungkannya otomatis setelah reboot dan tekan **Enter**.



```
agus@kudanil-ubuntu: ~
1) Set host name
2) Configure device eth0
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 2
=====
=====
Device configuration

1) IPv4 address or "dhcp" for DHCP
   dhcp
2) IPv4 netmask
3) IPv4 gateway
4) IPv6 address[/prefix] or "auto" for automatic, "dhcp" for DHCP, "ignore" to
   turn off
   auto
5) IPv6 default gateway
6) Nameservers (comma separated)
7) [ ] Connect automatically after reboot
8) [ ] Apply configuration in installer
Configuring device eth0.

Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 7
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

45. Kemudian, ketik C untuk melanjutkan

```
agus@kudanil-ubuntu: ~
Configuring device eth0.

Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 7
=====
=====
Device configuration

1) IPv4 address or "dhcp" for DHCP
   dhcp
2) IPv4 netmask
3) IPv4 gateway
4) IPv6 address[/prefix] or "auto" for automatic, "dhcp" for DHCP, "ignore" to
   turn off
   auto
5) IPv6 default gateway
6) Nameservers (comma separated)
7) [x] Connect automatically after reboot
8) [ ] Apply configuration in installer
Configuring device eth0.

Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: c
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

46. Kemudian, kita ketik c untuk melanjutkan

```
agus@kudanil-ubuntu: ~
7) [x] Connect automatically after reboot
8) [ ] Apply configuration in installer
Configuring device eth0.

Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: c
=====
=====
Network configuration

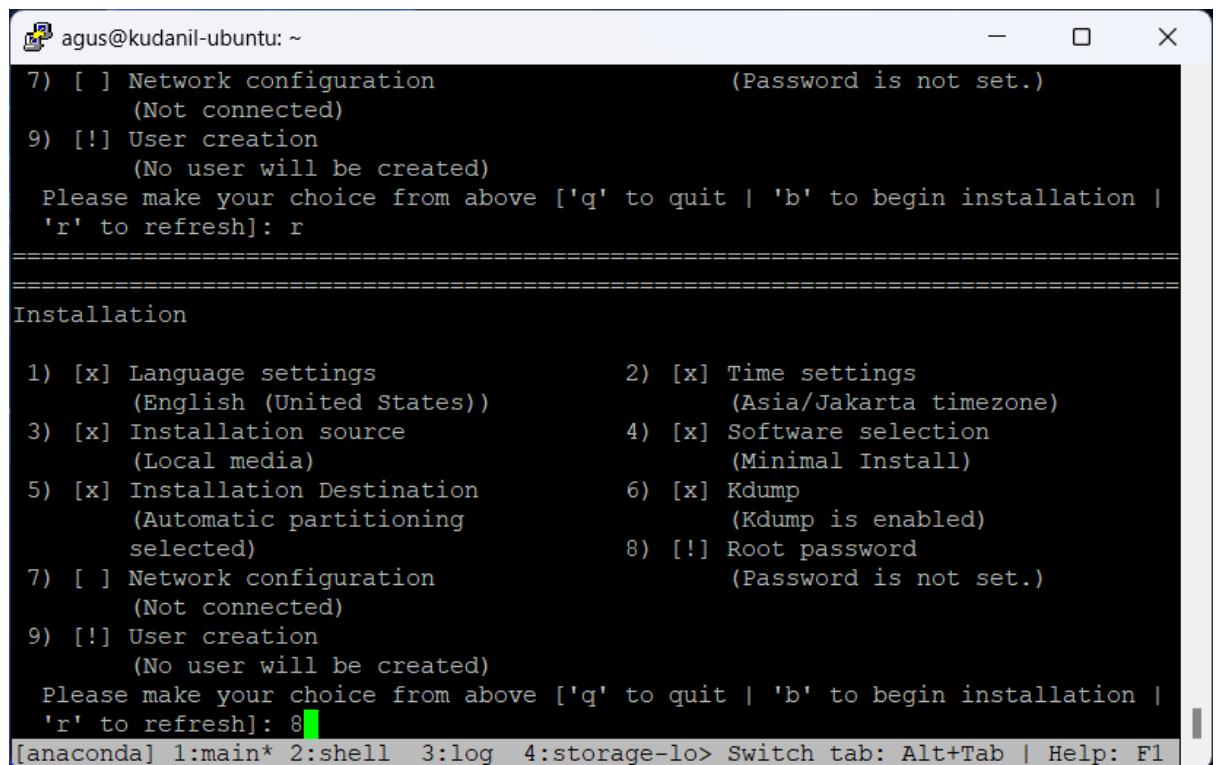
Wired (eth0) disconnected

Host name: localhost.localdomain

Current host name: localhost.localdomain

1) Set host name
2) Configure device eth0
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: Please make your choice from above ['q' to quit | 'c' to co
ntinue |
'r' to refresh]: c
=====
```

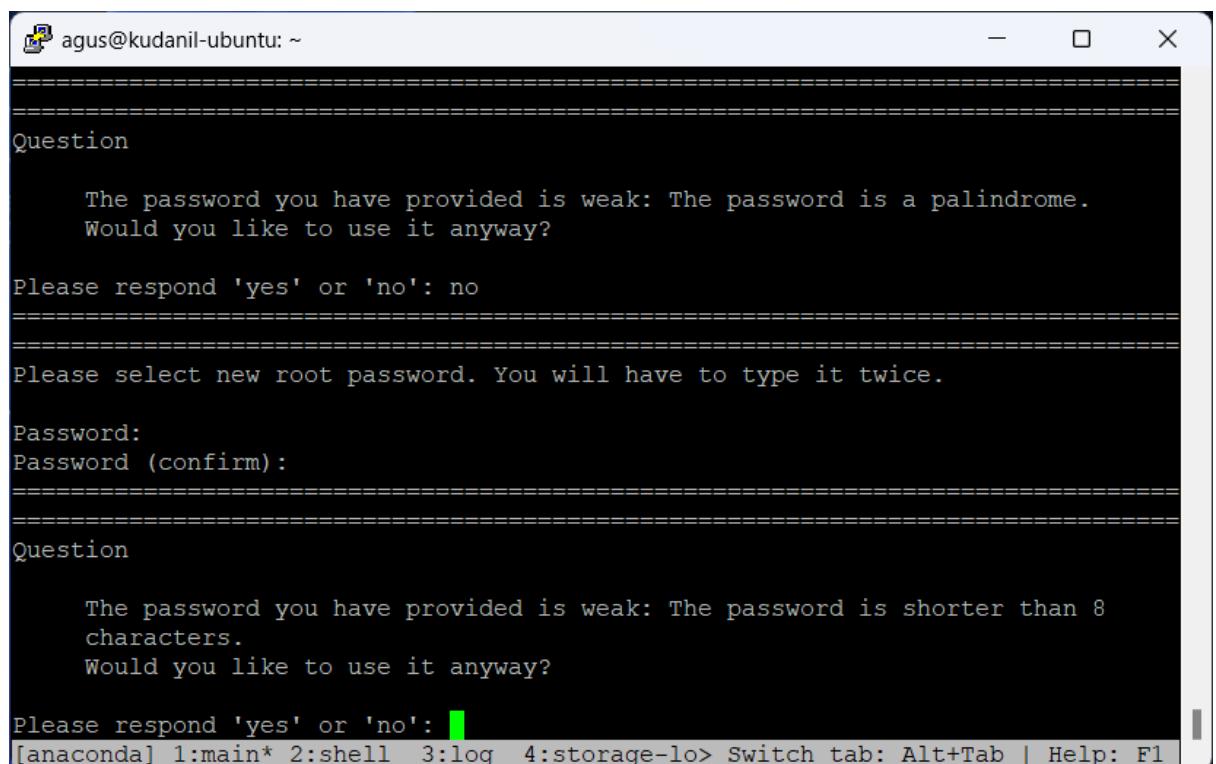
47. Kemudian, kita lakukan konfigurasi untuk **Root Password** dengan mengetik angka **8** dan tekan **Enter**



```
agus@kudanil-ubuntu: ~
7) [ ] Network configuration (Not connected)
9) [!] User creation (No user will be created)
Please make your choice from above ['q' to quit | 'b' to begin installation | 'r' to refresh]: r
=====
=====
Installation

1) [x] Language settings (English (United States))
3) [x] Installation source (Local media)
5) [x] Installation Destination (Automatic partitioning selected)
7) [ ] Network configuration (Not connected)
9) [!] User creation (No user will be created)
Please make your choice from above ['q' to quit | 'b' to begin installation | 'r' to refresh]: 8
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

48. Kemudian, kita buat password untuk **Root** dan membuat password lagi untuk konfirmasi.



```
agus@kudanil-ubuntu: ~
=====
=====
Question

The password you have provided is weak: The password is a palindrome.
Would you like to use it anyway?

Please respond 'yes' or 'no': no
=====
=====
Please select new root password. You will have to type it twice.

Password:
Password (confirm):
=====
=====
Question

The password you have provided is weak: The password is shorter than 8 characters.
Would you like to use it anyway?

Please respond 'yes' or 'no': 
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

49. Kemudian, kita ketik **Yes** untuk menggunakan password **root** yang sudah dibuat atau **No** untuk membuat password baru. Dan tekan **Enter**

```
agus@kudanil-ubuntu: ~
=====
Question

The password you have provided is weak: The password is a palindrome.
Would you like to use it anyway?

Please respond 'yes' or 'no': no
=====

Please select new root password. You will have to type it twice.

Password:
Password (confirm):
=====

Question

The password you have provided is weak: The password is shorter than 8
characters.
Would you like to use it anyway?

Please respond 'yes' or 'no': yes
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

50. Kemudian, kita ketik angka **9** untuk melakukan **User Creation** dan tekan **Enter**

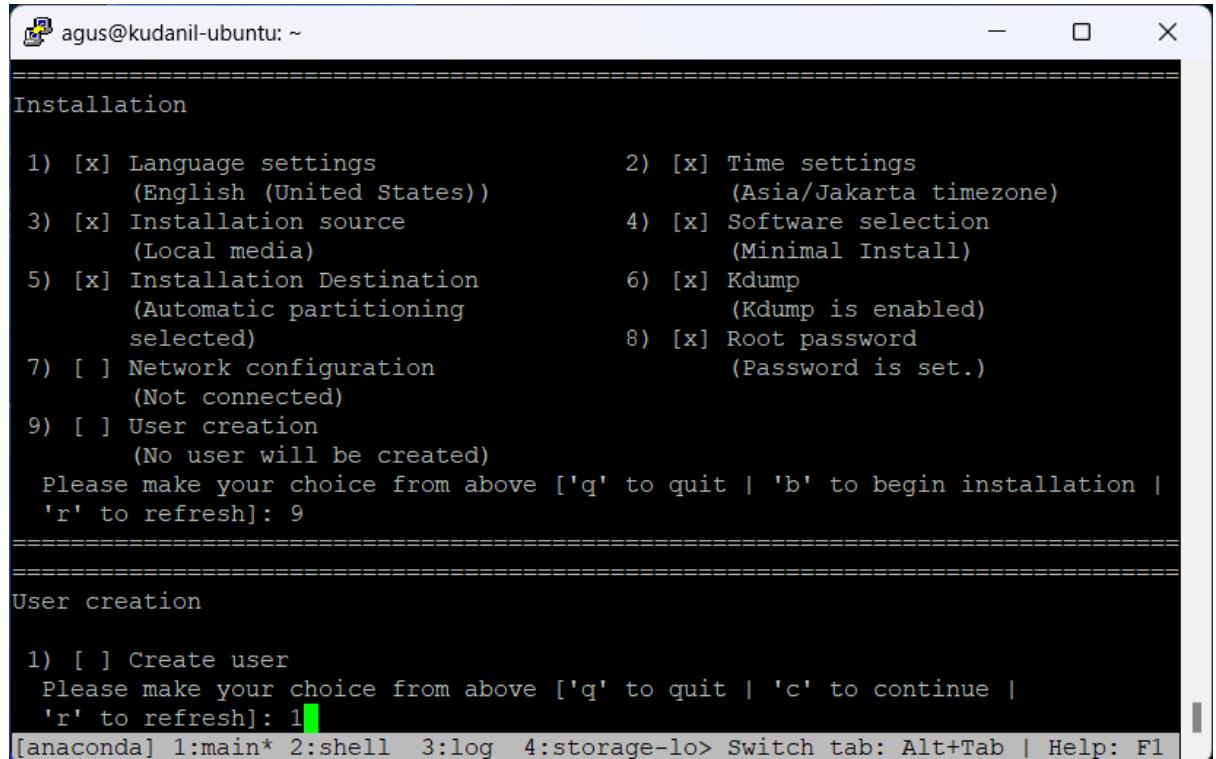
```
agus@kudanil-ubuntu: ~
=====
The password you have provided is weak: The password is shorter than 8
characters.
Would you like to use it anyway?

Please respond 'yes' or 'no': yes
=====

Installation

1) [x] Language settings
       (English (United States))
3) [x] Installation source
       (Local media)
5) [x] Installation Destination
       (Automatic partitioning
       selected)
7) [ ] Network configuration
       (Not connected)
9) [ ] User creation
       (No user will be created)
Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 9
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

51. Kemudian, ketik 1 untuk melakukan **Create User** dan tekan **Enter**



```
agus@kudanil-ubuntu: ~
=====
Installation

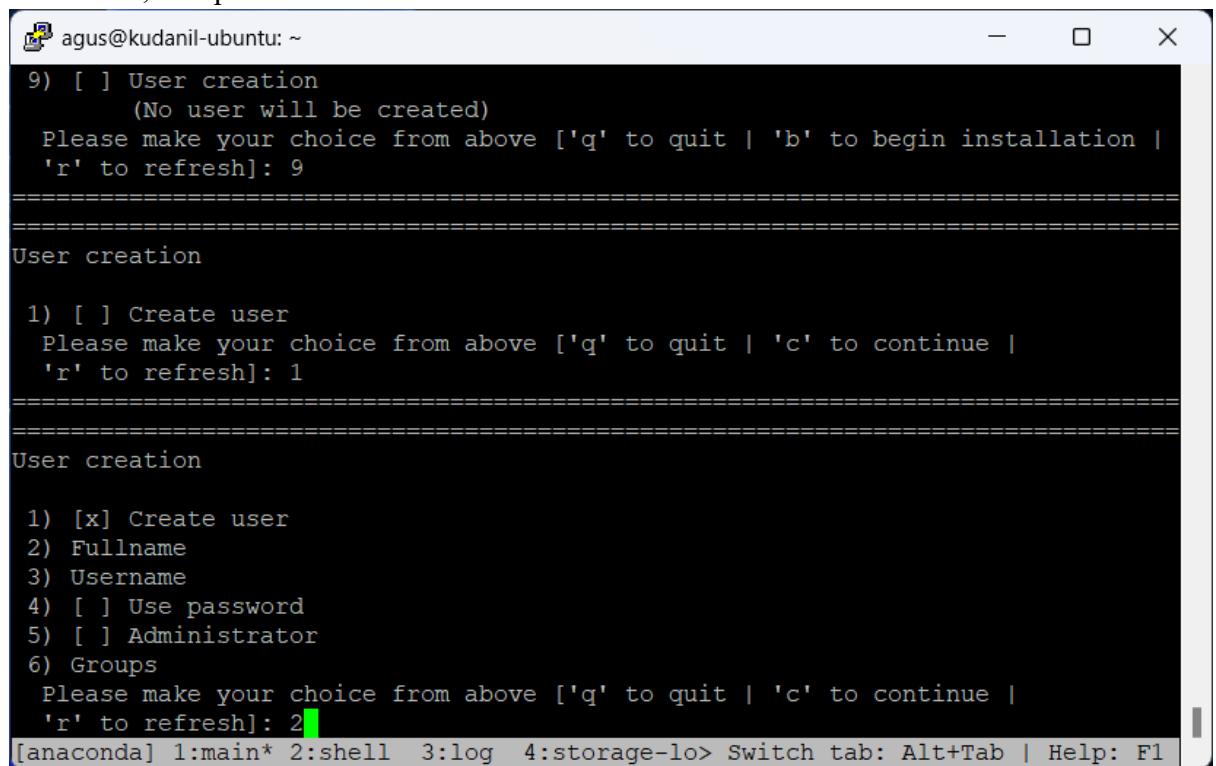
1) [x] Language settings
      (English (United States))
3) [x] Installation source
      (Local media)
5) [x] Installation Destination
      (Automatic partitioning
      selected)
7) [ ] Network configuration
      (Not connected)
9) [ ] User creation
      (No user will be created)

Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 9
=====

User creation

1) [ ] Create user
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 1
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

52. Kemudian, kita pilih nomor 2 untuk membuat **Fullname** dan tekan **Enter**.



```
agus@kudanil-ubuntu: ~
9) [ ] User creation
      (No user will be created)

Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: 9
=====

User creation

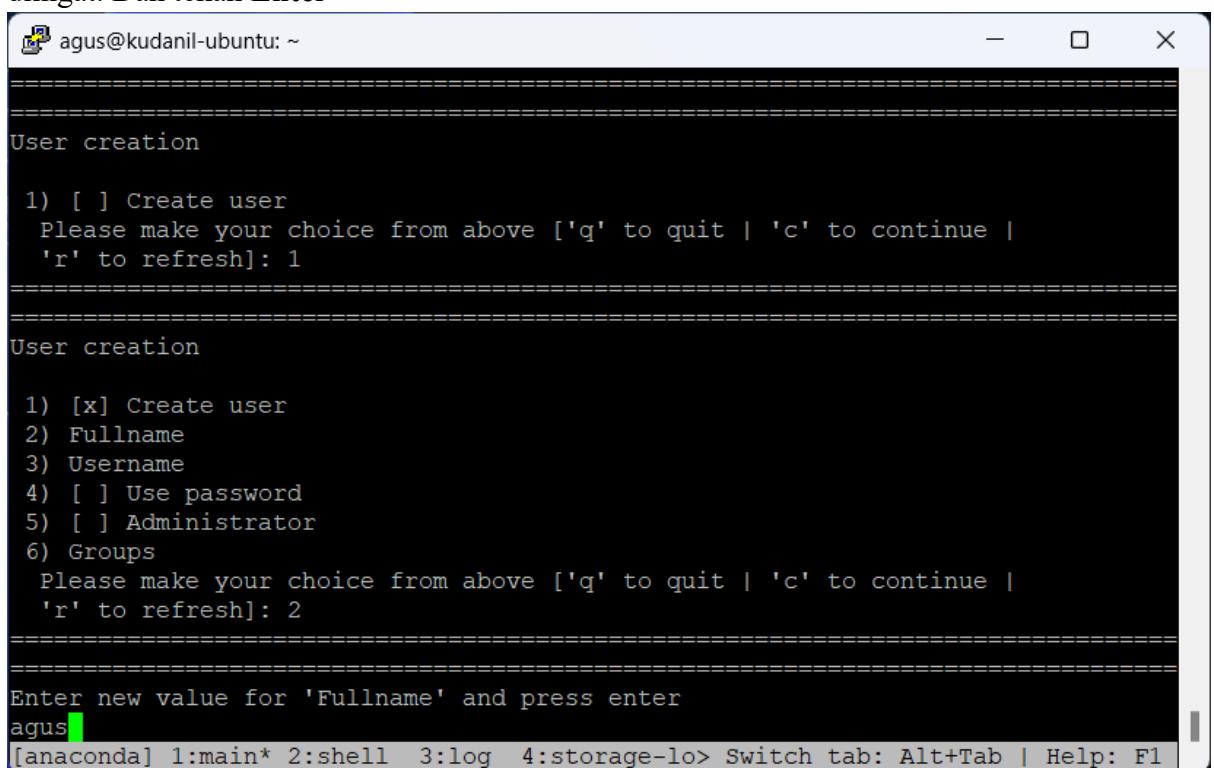
1) [ ] Create user
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 1
=====

User creation

1) [x] Create user
2) Fullname
3) Username
4) [ ] Use password
5) [ ] Administrator
6) Groups

Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 2
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

53. Isi nama pada bagian **Fullscreen**. Penamaan nya bebas tetapi yang mudah untuk diingat. Dan tekan **Enter**



```
agus@kudanil-ubuntu: ~
=====
User creation

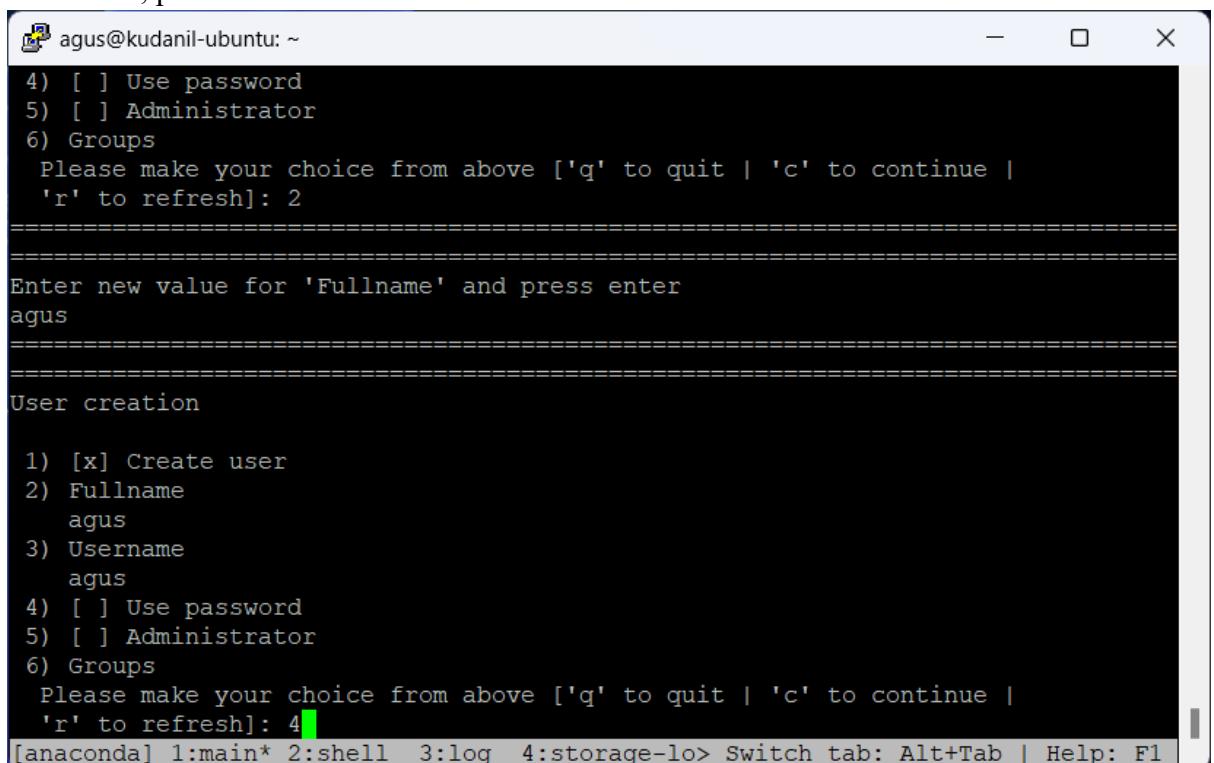
1) [ ] Create user
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 1
=====

User creation

1) [x] Create user
2) Fullname
3) Username
4) [ ] Use password
5) [ ] Administrator
6) Groups
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 2
=====

Enter new value for 'Fullscreen' and press enter
agus
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

54. Kemudian, pilih nomor 4 untuk membuat **Password** dan tekan **Enter**.



```
agus@kudanil-ubuntu: ~
=====
4) [ ] Use password
5) [ ] Administrator
6) Groups
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 2
=====

Enter new value for 'Fullscreen' and press enter
agus
=====

User creation

1) [x] Create user
2) Fullname
agus
3) Username
agus
4) [ ] Use password
5) [ ] Administrator
6) Groups
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 4
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

55. Kemudian, ketik nomor 5 untuk membuat **Password** dan tekan **Enter**.

```
agus@kudanil-ubuntu: ~
5) Password
6) [x] Administrator
7) Groups
    wheel
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: r
=====
=====
User creation
    agus
3) Username
    agus
4) [x] Use password
5) Password
6) [x] Administrator
7) Groups
    wheel
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 5
=====
=====
Password:
Password (confirm):
=====
```

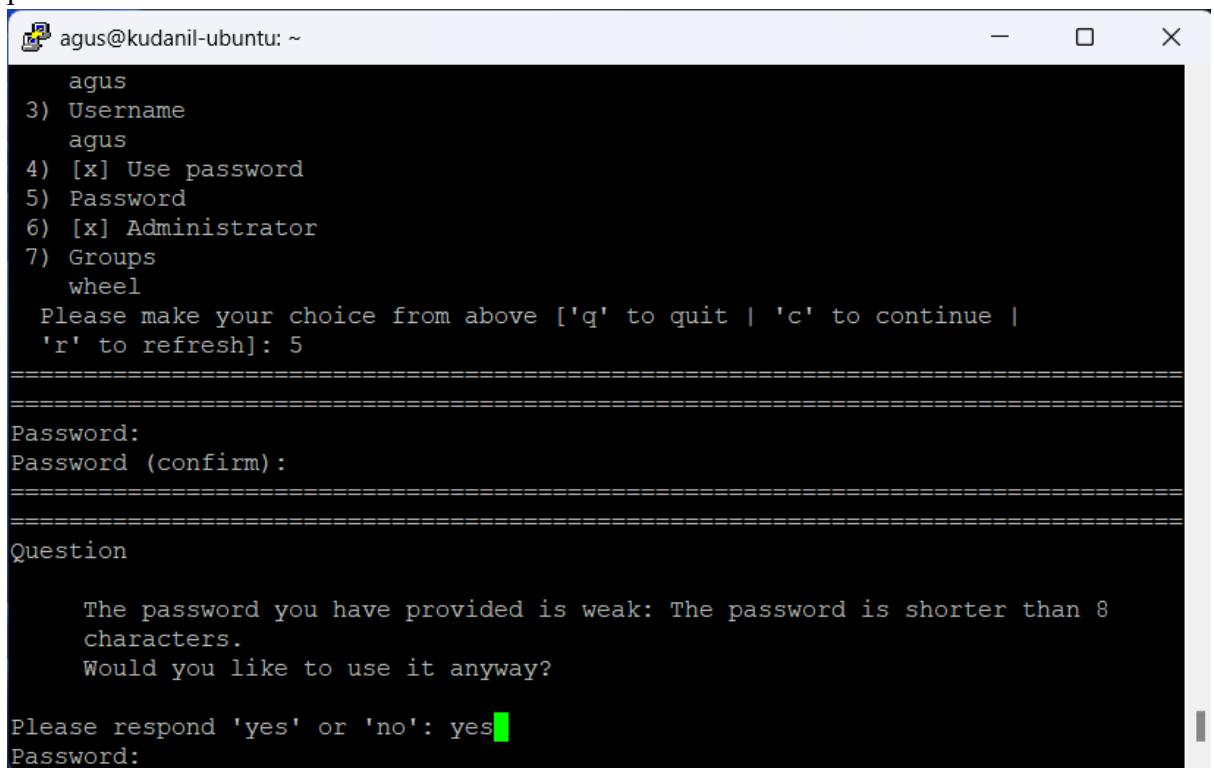
56. Kemudian, ketik **Password** dan **Confirm Password**. Buatkan password yang mudah untuk diingat.

```
agus@kudanil-ubuntu: ~
2) Fullname
    agus
3) Username
    agus
4) [x] Use password
5) Password
6) [x] Administrator
7) Groups
    wheel
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 5
=====
=====
Password (confirm):
=====
=====
Question

The password you have provided is weak: The password is shorter than 8
characters.
Would you like to use it anyway?

Please respond 'yes' or 'no': [REDACTED]
Password:
```

57. Ketik **Yes** untuk melanjutkan atau bisa ketik **No** untuk mengulangi pembuatan password.

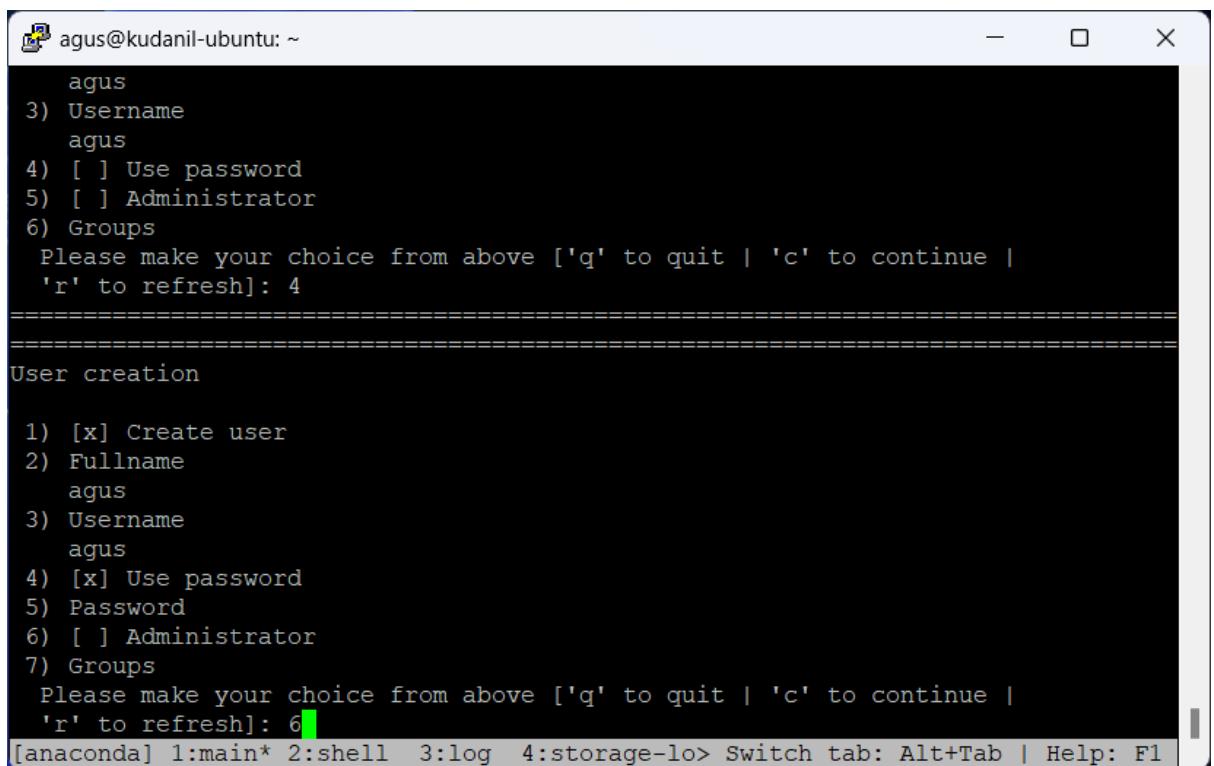


```
agus@kudanil-ubuntu: ~
agus
3) Username
agus
4) [x] Use password
5) Password
6) [x] Administrator
7) Groups
wheel
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 5
=====
=====
Password:
Password (confirm):
=====
=====
Question

The password you have provided is weak: The password is shorter than 8
characters.
Would you like to use it anyway?

Please respond 'yes' or 'no': yes
Password:
```

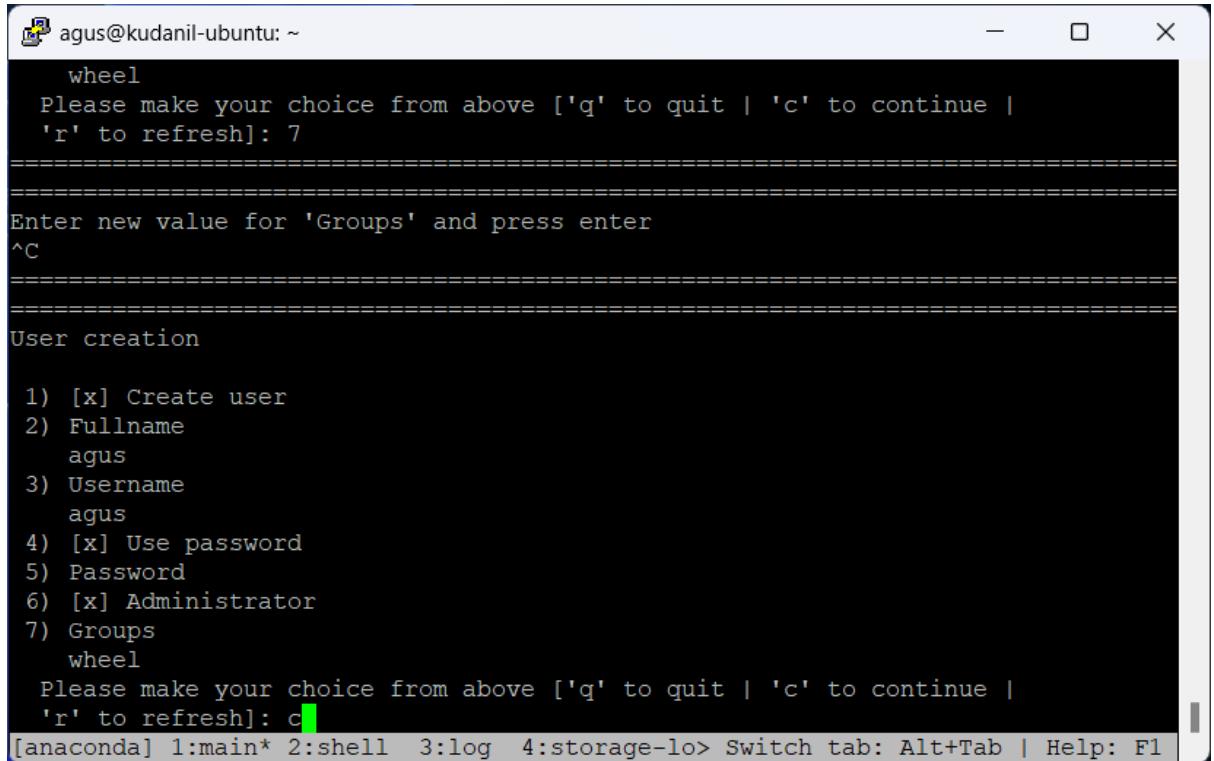
58. Kemudian, pilih nomor 6 untuk membuat user tersebut jadi **Administrator** dan tekan **Enter**.



```
agus@kudanil-ubuntu: ~
agus
3) Username
agus
4) [ ] Use password
5) [ ] Administrator
6) Groups
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 4
=====
=====
User creation

1) [x] Create user
2) Fullname
agus
3) Username
agus
4) [x] Use password
5) Password
6) [ ] Administrator
7) Groups
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 6
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

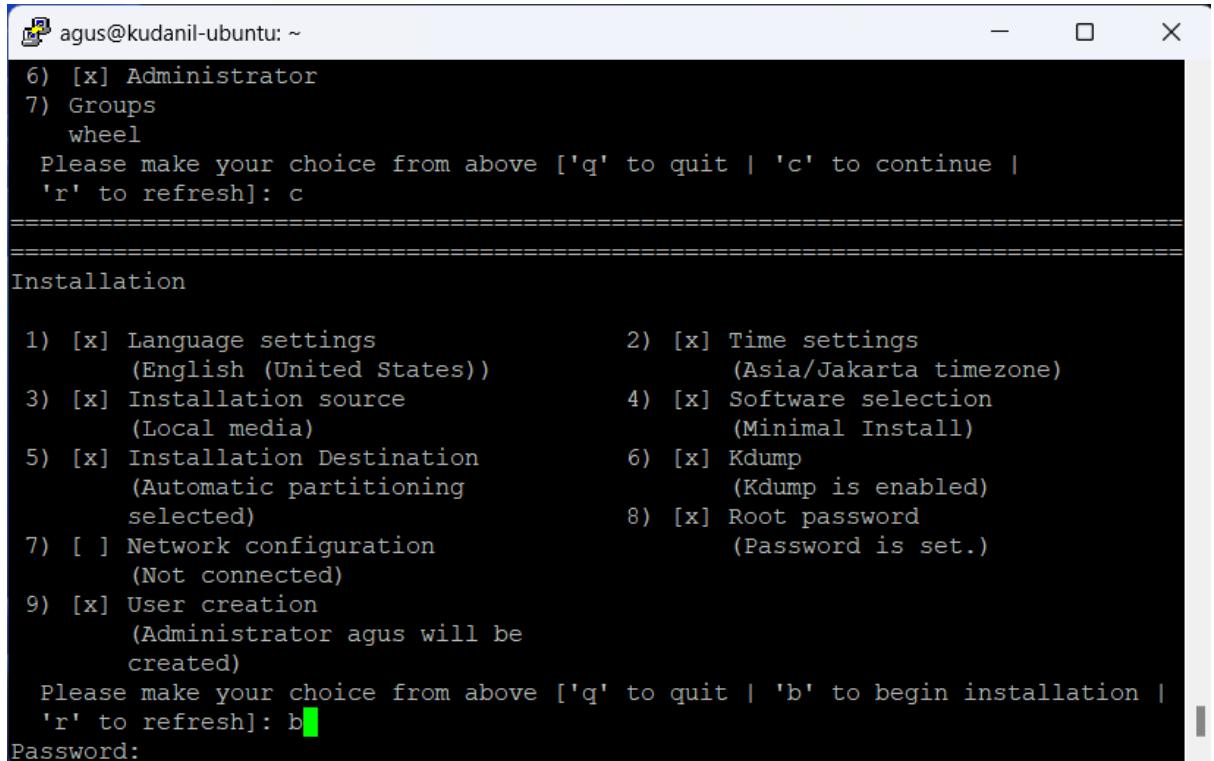
59. Kemudian, ketik **c** untuk **Continue**



```
agus@kudanil-ubuntu: ~
wheel
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: 7
=====
=====
Enter new value for 'Groups' and press enter
^C
=====
=====
User creation

1) [x] Create user
2) Fullname
    agus
3) Username
    agus
4) [x] Use password
5) Password
6) [x] Administrator
7) Groups
    wheel
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: c
[anaconda] 1:main* 2:shell 3:log 4:storage-lo> Switch tab: Alt+Tab | Help: F1
```

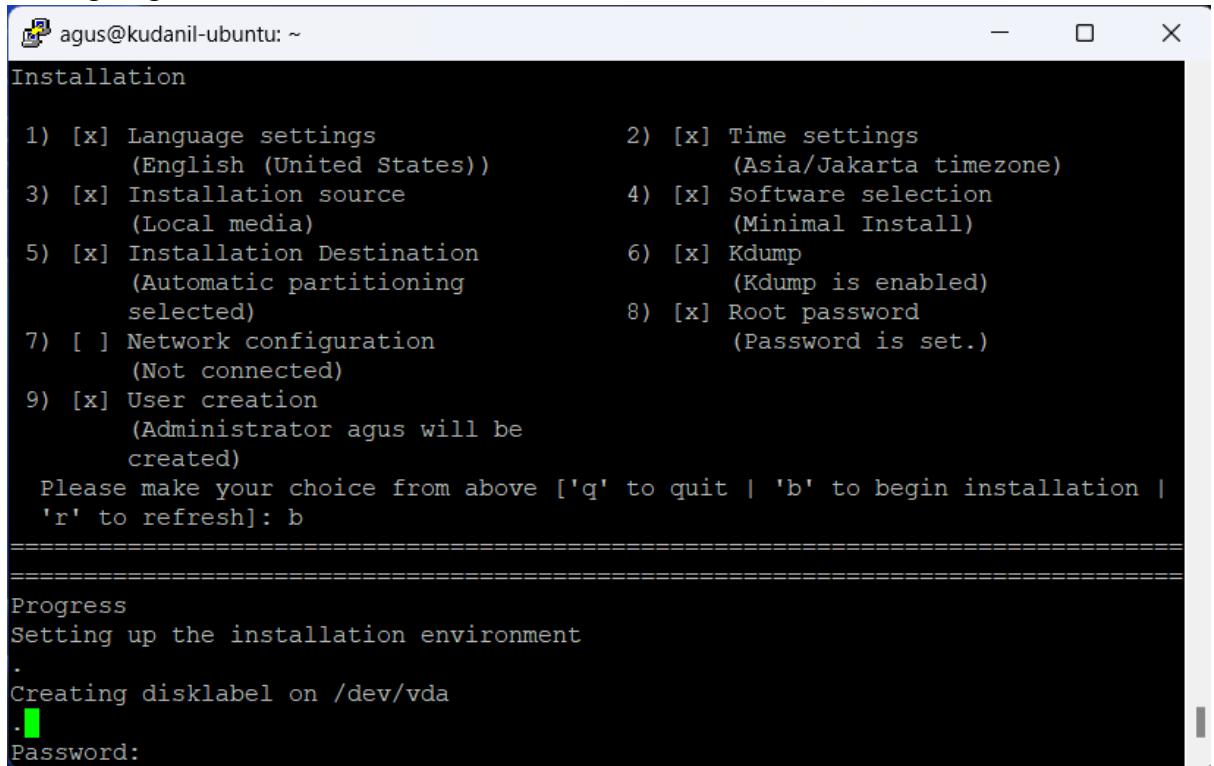
60. Kemudian, kita ketik **b** untuk **memulai instalasi** dan tekan **Enter**.



```
agus@kudanil-ubuntu: ~
6) [x] Administrator
7) Groups
    wheel
Please make your choice from above ['q' to quit | 'c' to continue |
'r' to refresh]: c
=====
=====
Installation

1) [x] Language settings
    (English (United States))
3) [x] Installation source
    (Local media)
5) [x] Installation Destination
    (Automatic partitioning
    selected)
7) [ ] Network configuration
    (Not connected)
9) [x] User creation
    (Administrator agus will be
    created)
Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: b
Password:
```

61. Tunggu proses instalasi sampai selesai dan **jangan diganggu** selama instalasi berlangsung

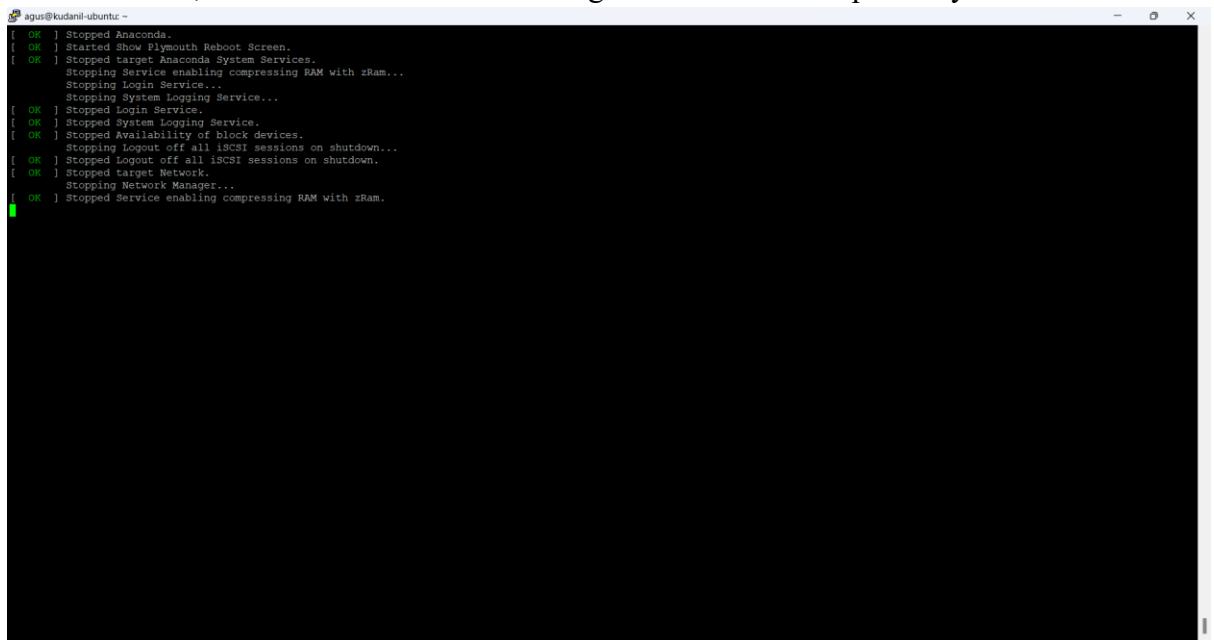


```
agus@kudanil-ubuntu: ~
Installation

1) [x] Language settings
      (English (United States))
2) [x] Time settings
      (Asia/Jakarta timezone)
3) [x] Installation source
      (Local media)
4) [x] Software selection
      (Minimal Install)
5) [x] Installation Destination
      (Automatic partitioning
      selected)
6) [x] Kdump
      (Kdump is enabled)
7) [ ] Network configuration
      (Not connected)
8) [x] Root password
      (Password is set.)

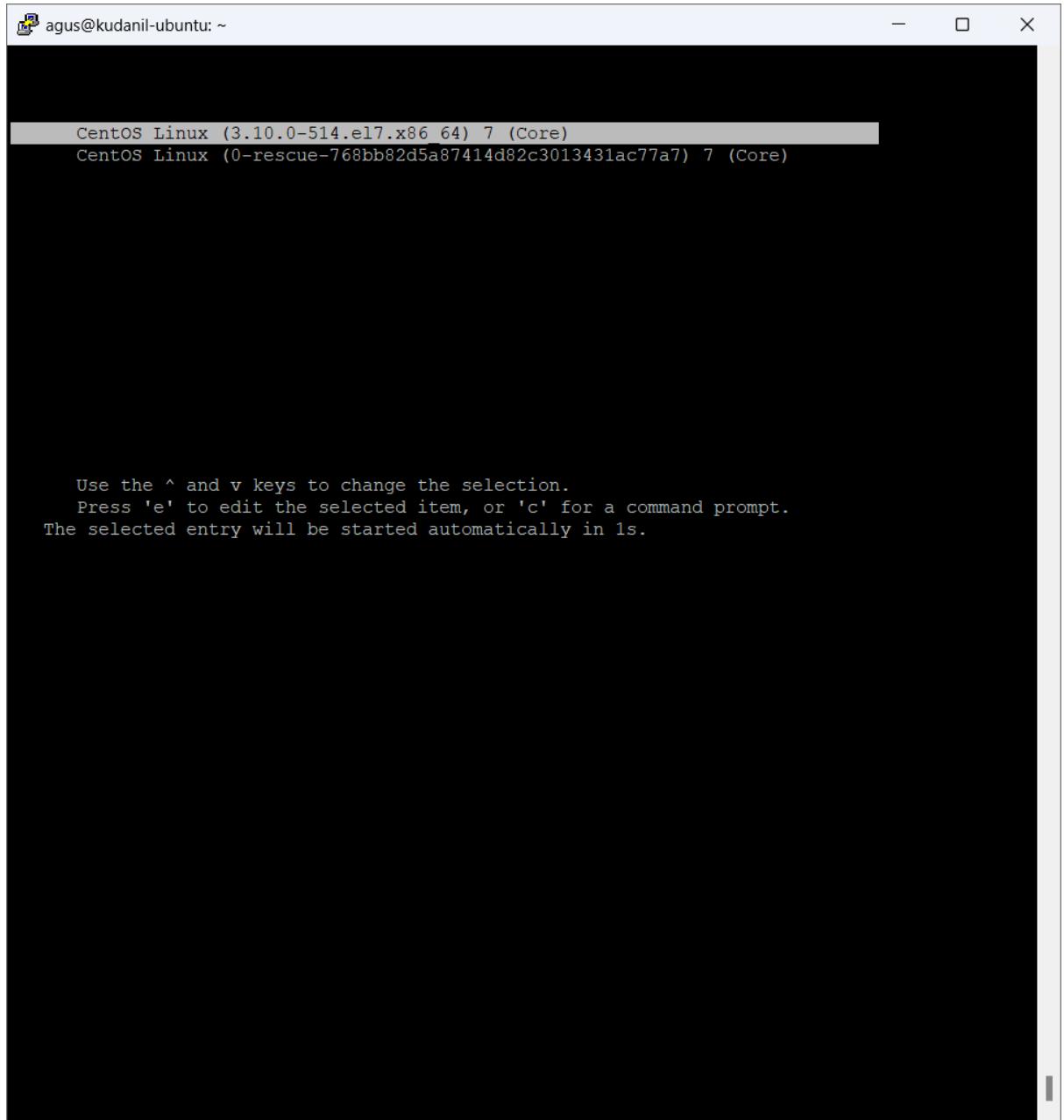
Please make your choice from above ['q' to quit | 'b' to begin installation |
'r' to refresh]: b
=====
=====
Progress
Setting up the installation environment
.
Creating disklabel on /dev/vda
.
Password:
```

62. Setelah selesai, maka VM akan merestart dengan menekan **Enter** pada keyboard.

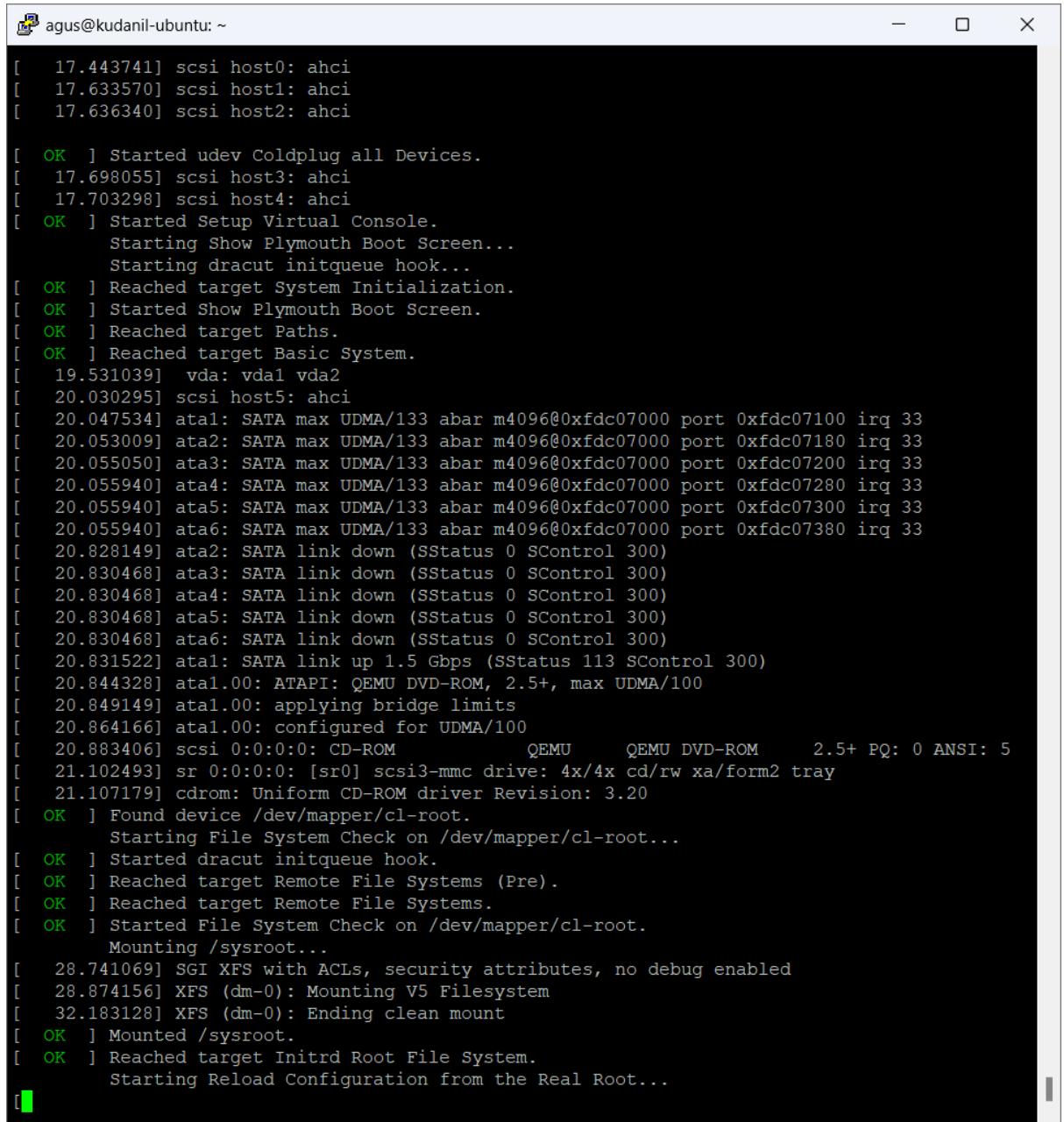


```
agus@kudanil-ubuntu: ~
[ OK ] Stopped Anaconda.
[ OK ] Started Show Default Reboot Screen.
[ OK ] Stopped target Anaconda System Services.
Stopping Service enabling compressing RAM with zRam...
Stopping Login Service...
Stopping System Logging Service...
[ OK ] Stopped Login Service.
[ OK ] Stopped System Logging Service.
[ OK ] Stopped Availability of block devices.
Stopping Logout off all iSCSI sessions on shutdown...
[ OK ] Stopped Logout off all iSCSI sessions on shutdown.
[ OK ] Stopped target Network.
Stopping Network Manager...
[ OK ] stopped Service enabling compressing RAM with zRam.
```

63. Setelah itu, kita akan diberikan dua pilihan. Pilihlah bagian atas



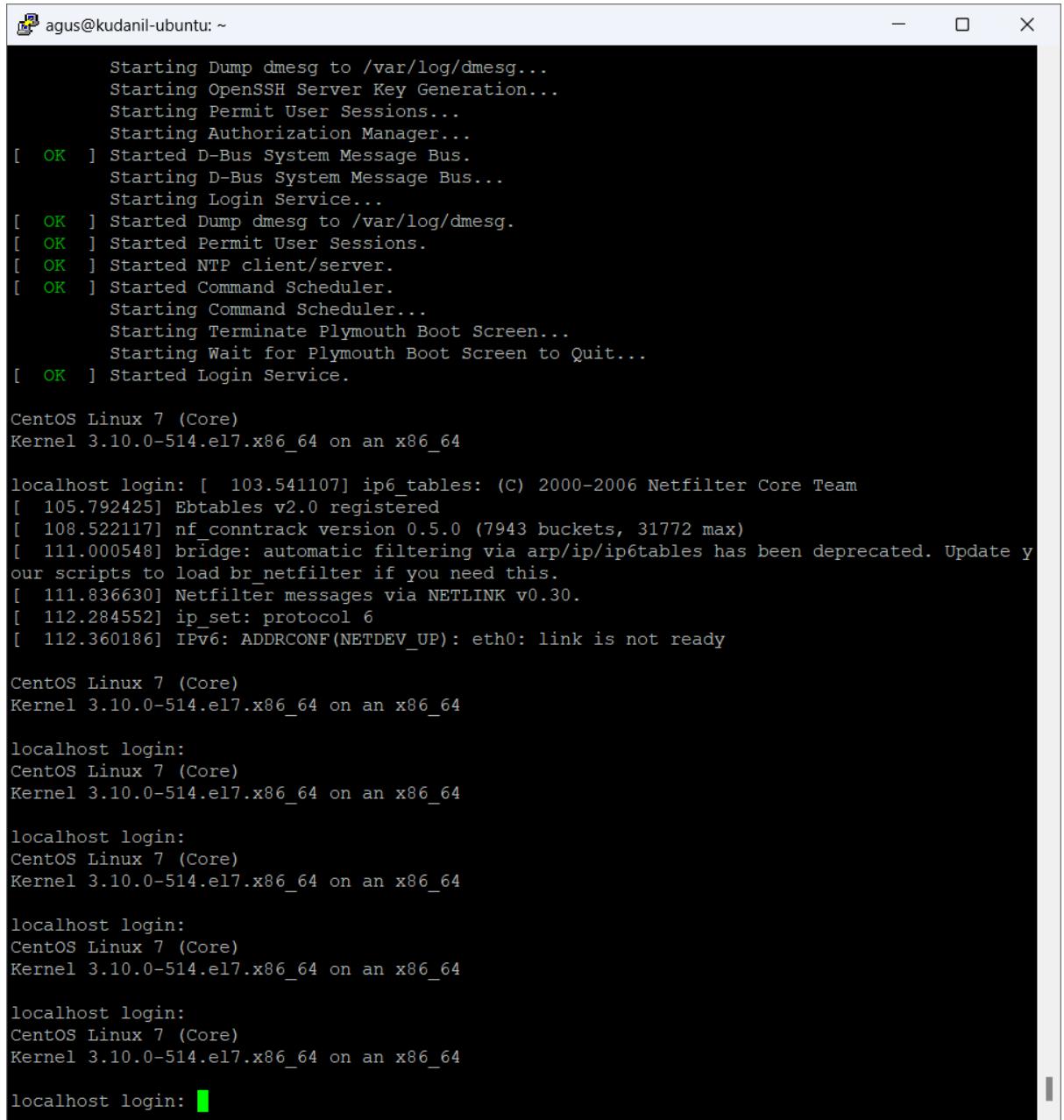
64. Tunggu hingga tampilan CentOS CLI nya tampil



```
[ 17.443741] scsi host0: ahci
[ 17.633570] scsi host1: ahci
[ 17.636340] scsi host2: ahci

[ OK ] Started udev Coldplug all Devices.
[ 17.698055] scsi host3: ahci
[ 17.703298] scsi host4: ahci
[ OK ] Started Setup Virtual Console.
          Starting Show Plymouth Boot Screen...
          Starting dracut initqueue hook...
[ OK ] Reached target System Initialization.
[ OK ] Started Show Plymouth Boot Screen.
[ OK ] Reached target Paths.
[ OK ] Reached target Basic System.
[ 19.531039] vda: vdal vda2
[ 20.030295] scsi host5: ahci
[ 20.047534] ata1: SATA max UDMA/133 abar m4096@0xfd07000 port 0xfd07100 irq 33
[ 20.053009] ata2: SATA max UDMA/133 abar m4096@0xfd07000 port 0xfd07180 irq 33
[ 20.055050] ata3: SATA max UDMA/133 abar m4096@0xfd07000 port 0xfd07200 irq 33
[ 20.055940] ata4: SATA max UDMA/133 abar m4096@0xfd07000 port 0xfd07280 irq 33
[ 20.055940] ata5: SATA max UDMA/133 abar m4096@0xfd07000 port 0xfd07300 irq 33
[ 20.055940] ata6: SATA max UDMA/133 abar m4096@0xfd07000 port 0xfd07380 irq 33
[ 20.828149] ata2: SATA link down (SStatus 0 SControl 300)
[ 20.830468] ata3: SATA link down (SStatus 0 SControl 300)
[ 20.830468] ata4: SATA link down (SStatus 0 SControl 300)
[ 20.830468] ata5: SATA link down (SStatus 0 SControl 300)
[ 20.830468] ata6: SATA link down (SStatus 0 SControl 300)
[ 20.831522] ata1: SATA link up 1.5 Gbps (SStatus 113 SControl 300)
[ 20.844328] ata1.00: ATAPI: QEMU DVD-ROM, 2.5+, max UDMA/100
[ 20.849149] ata1.00: applying bridge limits
[ 20.864166] ata1.00: configured for UDMA/100
[ 20.883406] scsi 0:0:0:0: CD-ROM           QEMU      QEMU DVD-ROM    2.5+ PQ: 0 ANSI: 5
[ 21.102493] sr 0:0:0:0: [sr0] scsi3-mmc drive: 4x/4x cd/rw xa/form2 tray
[ 21.107179] cdrom: Uniform CD-ROM driver Revision: 3.20
[ OK ] Found device /dev/mapper/cl-root.
          Starting File System Check on /dev/mapper/cl-root...
[ OK ] Started dracut initqueue hook.
[ OK ] Reached target Remote File Systems (Pre).
[ OK ] Reached target Remote File Systems.
[ OK ] Started File System Check on /dev/mapper/cl-root.
          Mounting /sysroot...
[ 28.741069] SGI XFS with ACLs, security attributes, no debug enabled
[ 28.874156] XFS (dm-0): Mounting V5 Filesystem
[ 32.183128] XFS (dm-0): Ending clean mount
[ OK ] Mounted /sysroot.
[ OK ] Reached target Initrd Root File System.
          Starting Reload Configuration from the Real Root...
[
```

65. Dan sekarang kita sudah berada Di CentOS CLI nya



```
agus@kudanil-ubuntu: ~
Starting Dump dmesg to /var/log/dmesg...
Starting OpenSSH Server Key Generation...
Starting Permit User Sessions...
Starting Authorization Manager...
[ OK ] Started D-Bus System Message Bus.
Starting D-Bus System Message Bus...
Starting Login Service...
[ OK ] Started Dump dmesg to /var/log/dmesg.
[ OK ] Started Permit User Sessions.
[ OK ] Started NTP client/server.
[ OK ] Started Command Scheduler.
Starting Command Scheduler...
Starting Terminate Plymouth Boot Screen...
Starting Wait for Plymouth Boot Screen to Quit...
[ OK ] Started Login Service.

CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login: [ 103.541107] ip6_tables: (C) 2000-2006 Netfilter Core Team
[ 105.792425] Ebttables v2.0 registered
[ 108.522117] nf_conntrack version 0.5.0 (7943 buckets, 31772 max)
[ 111.000548] bridge: automatic filtering via arp/ip/ip6tables has been deprecated. Update your scripts to load br_nfnetfilter if you need this.
[ 111.836630] Netfilter messages via NETLINK v0.30.
[ 112.284552] ip_set: protocol 6
[ 112.360186] IPv6: ADDRCONF(NETDEV_UP): eth0: link is not ready

CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

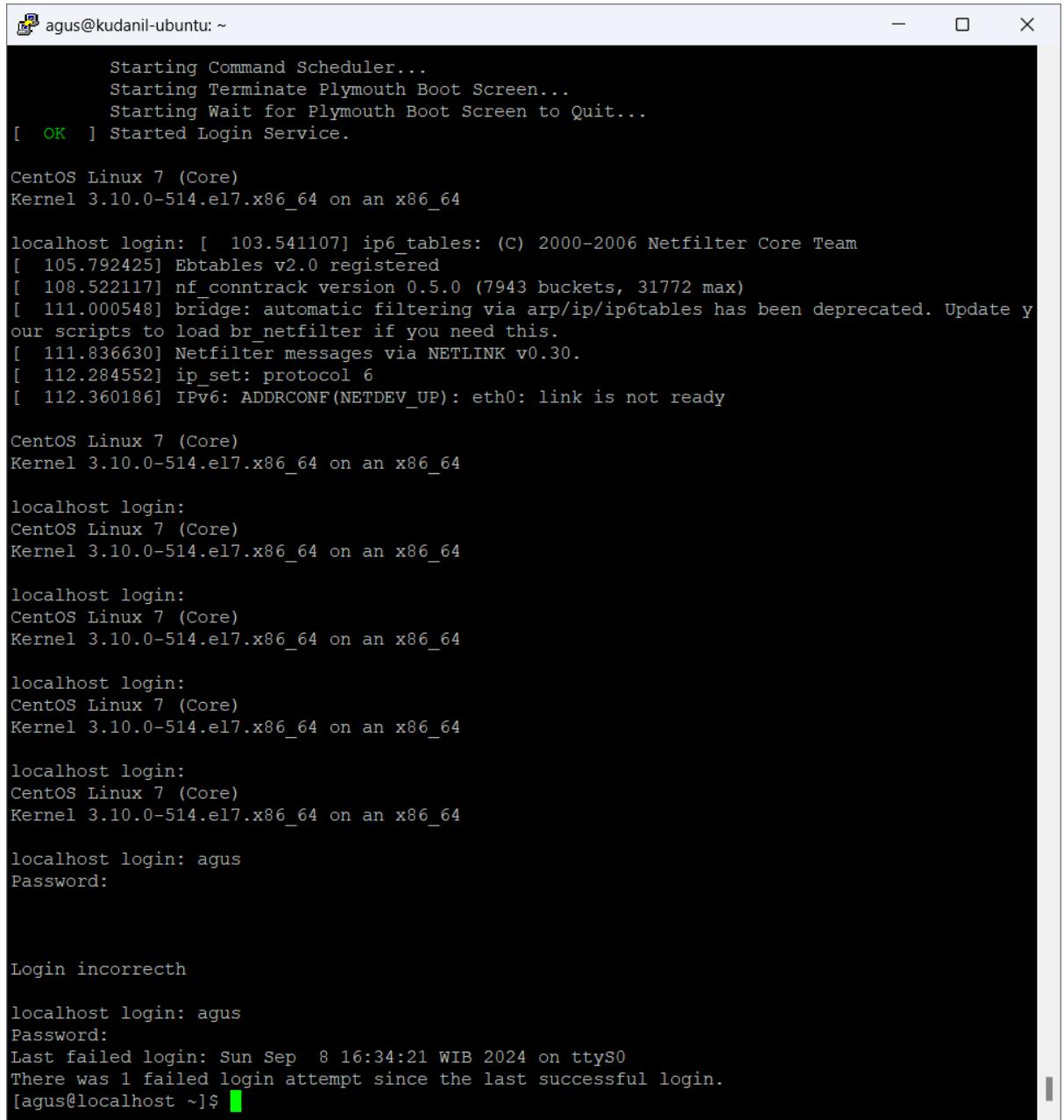
localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login:
```

66. Dan sekarang, kita bisa login di CentOS 7 CLI nya



```
agus@kudanil-ubuntu: ~
Starting Command Scheduler...
Starting Terminate Plymouth Boot Screen...
Starting Wait for Plymouth Boot Screen to Quit...
[ OK ] Started Login Service.

CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login: [ 103.541107] ip6_tables: (C) 2000-2006 Netfilter Core Team
[ 105.792425] Ebttables v2.0 registered
[ 108.522117] nf_conntrack version 0.5.0 (7943 buckets, 31772 max)
[ 111.000548] bridge: automatic filtering via arp/ip/iptables has been deprecated. Update your scripts to load br_nfnetfilter if you need this.
[ 111.836630] Netfilter messages via NETLINK v0.30.
[ 112.284552] ip_set: protocol 6
[ 112.360186] IPv6: ADDRCONF(NETDEV_UP): eth0: link is not ready

CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

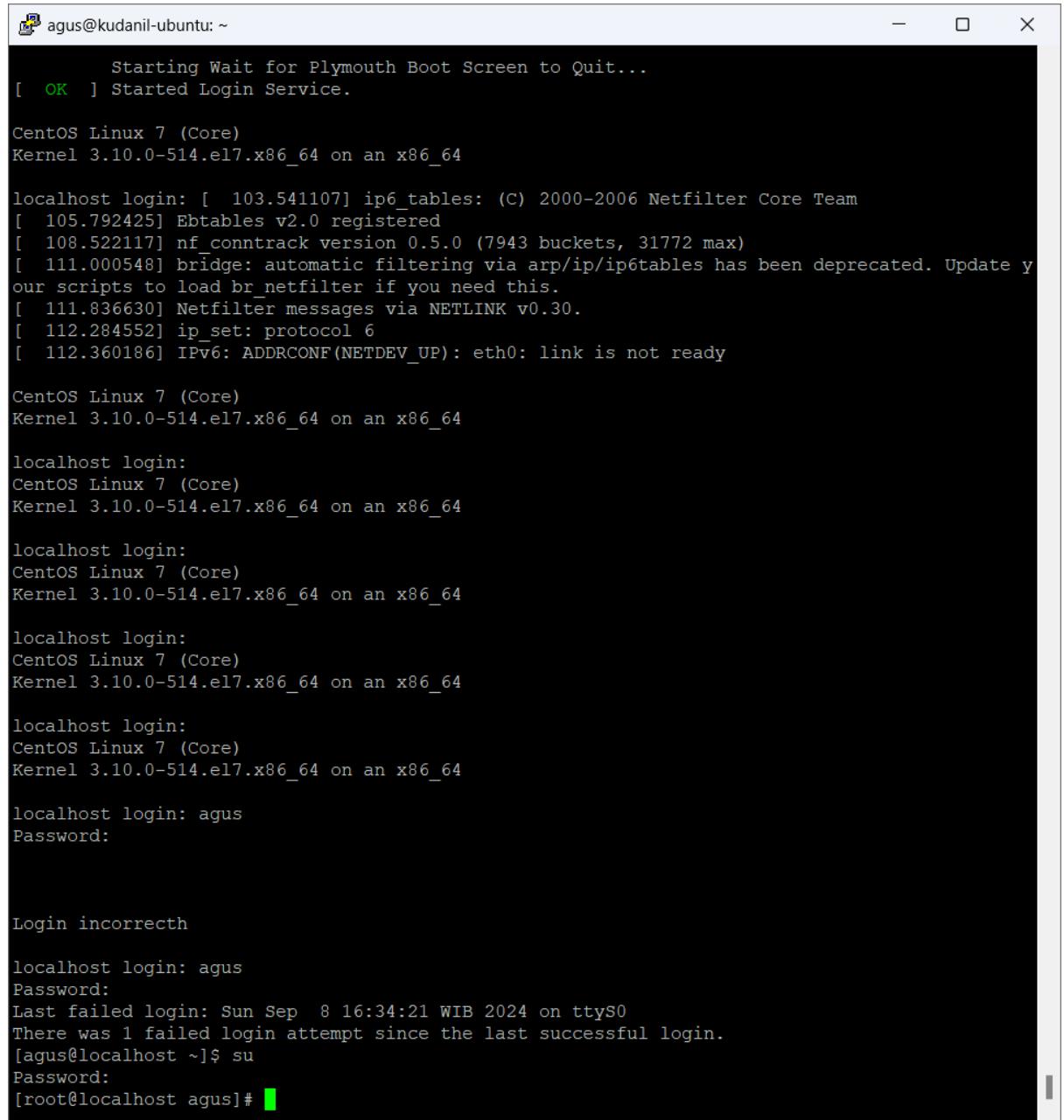
localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login: agus
Password:

Login incorrecth

localhost login: agus
Password:
Last failed login: Sun Sep  8 16:34:21 WIB 2024 on ttys0
There was 1 failed login attempt since the last successful login.
[agus@localhost ~]$
```

67. Dan untuk rootnya juga bisa digunakan pada CentOS 7



```
agus@kudanil-ubuntu: ~
Starting Wait for Plymouth Boot Screen to Quit...
[ OK ] Started Login Service.

CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login: [ 103.541107] ip6_tables: (C) 2000-2006 Netfilter Core Team
[ 105.792425] Ebttables v2.0 registered
[ 108.522117] nf_conntrack version 0.5.0 (7943 buckets, 31772 max)
[ 111.000548] bridge: automatic filtering via arp/ip/arpTables has been deprecated. Update your scripts to load br_nfnetfilter if you need this.
[ 111.836630] Netfilter messages via NETLINK v0.30.
[ 112.284552] ip_set: protocol 6
[ 112.360186] IPv6: ADDRCONF(NETDEV_UP): eth0: link is not ready

CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

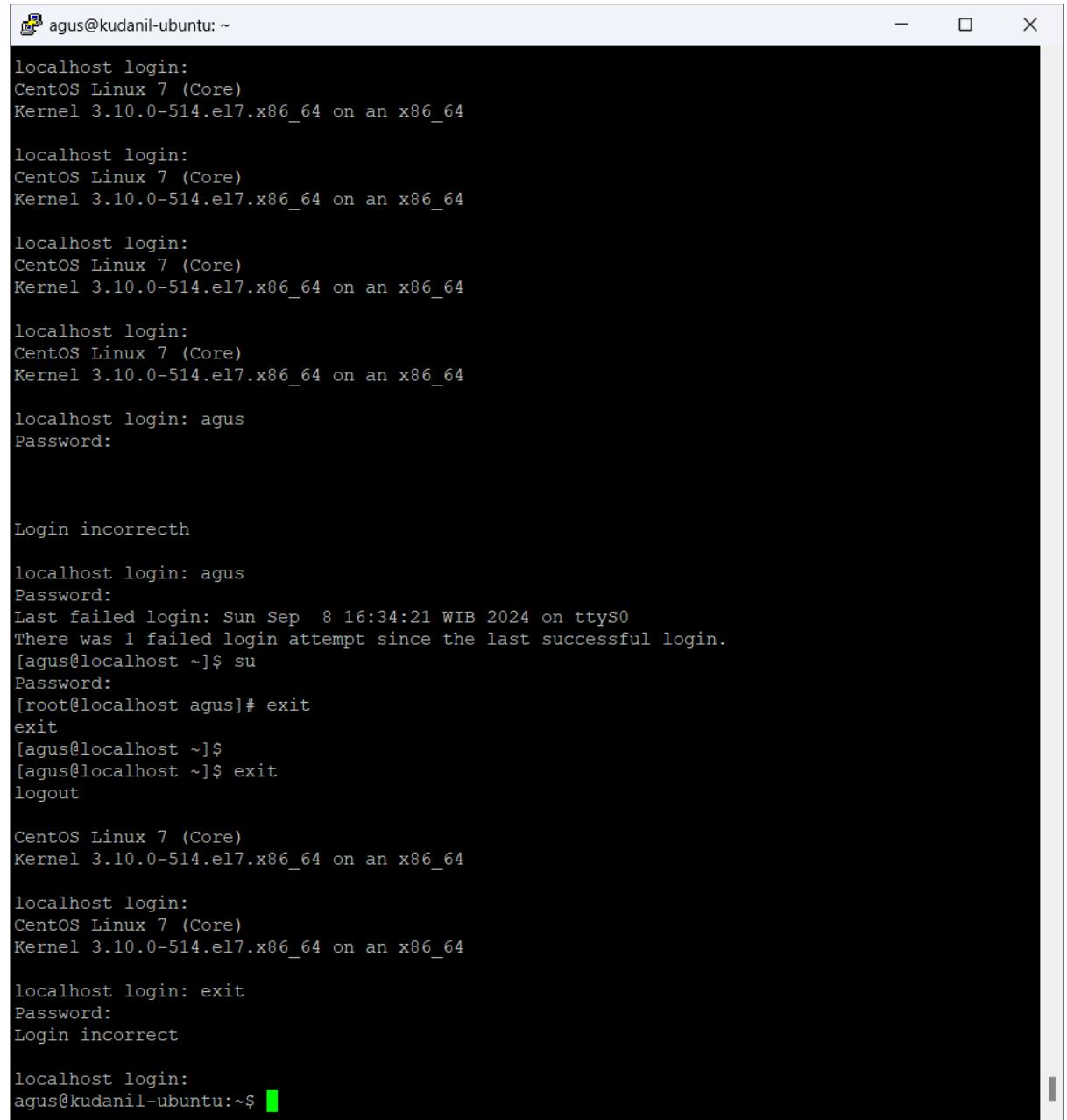
localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login: agus
Password:

Login incorrecth

localhost login: agus
Password:
Last failed login: Sun Sep  8 16:34:21 WIB 2024 on ttys0
There was 1 failed login attempt since the last successful login.
[agus@localhost ~]$ su
Password:
[root@localhost agus]#
```

68. Untuk mengeluarkannya, tekan **Ctrl + }**



```
agus@kudanil-ubuntu: ~
localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login: agus
Password:

Login incorrecth

localhost login: agus
Password:
Last failed login: Sun Sep  8 16:34:21 WIB 2024 on ttys0
There was 1 failed login attempt since the last successful login.
[agus@localhost ~]$ su
Password:
[root@localhost agus]# exit
exit
[agus@localhost ~]$ 
[agus@localhost ~]$ exit
logout

CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login:
CentOS Linux 7 (Core)
Kernel 3.10.0-514.el7.x86_64 on an x86_64

localhost login: exit
Password:
Login incorrect

localhost login:
agus@kudanil-ubuntu:~$
```