

TUGAS PENGANTAR TELEKOMUNIKASI



DISUSUN OLEH

NAMA : MUHAMMAD ARBI AL AFKARI

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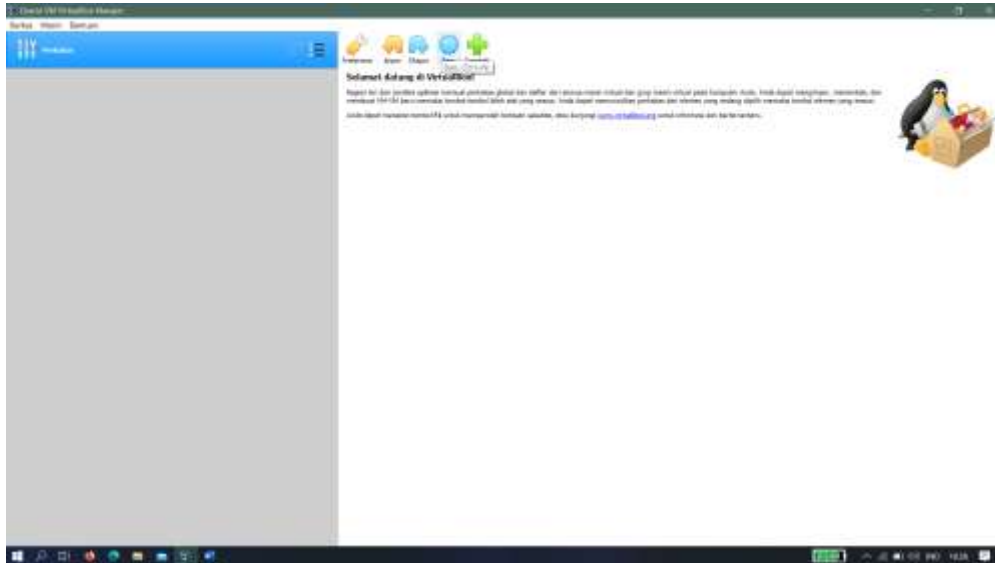
KELAS : SK1A

DOSEN PENGAMPU : ADI HERMANSYAH, S.KOM, M.T.

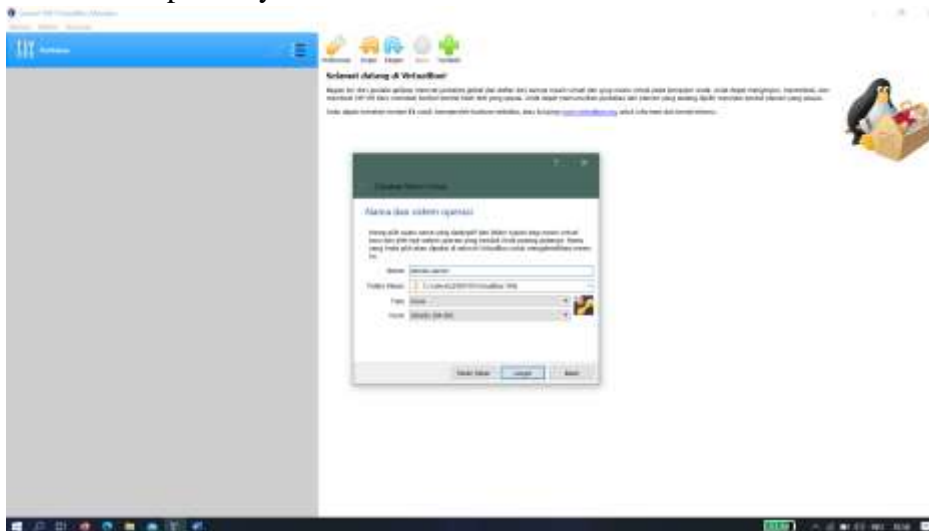
**PROGRAM STUDI SISTEM KOMPUTER
FAKULTAS ILMU KOMPUTER
UNIVERSITAS SRIWIJAYA**

•.INSTAL UBUNTU SERVER DI VIRTUAL BOX

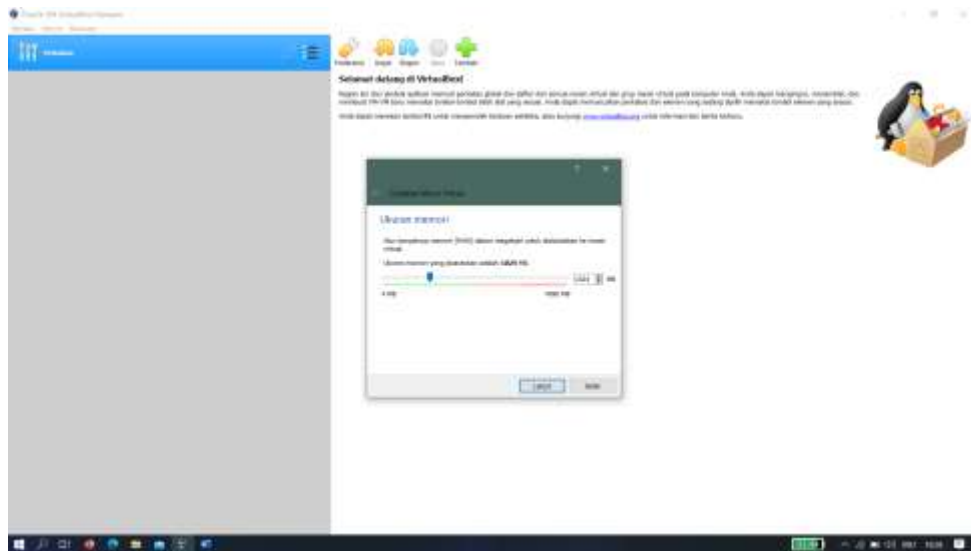
1.Setting virtual machine



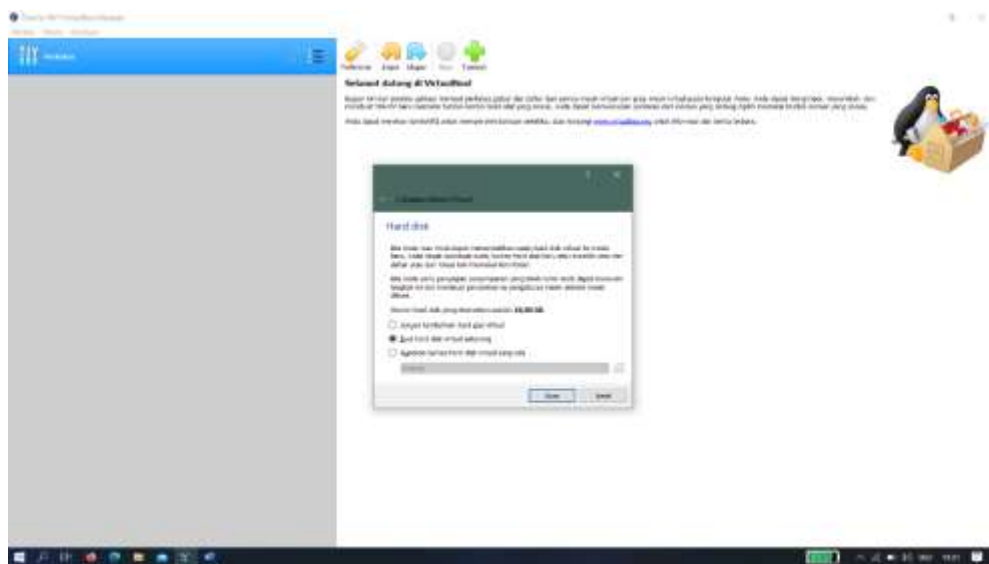
- Pilih tombol new
- Pada bagian **create virtual machine**,di name and operating system,kalian isikan kolom nama Ubuntu Server
- Lalu pada bagian **machine folder**,kalian tentukan lokasi penyimpanan sistem operasinya



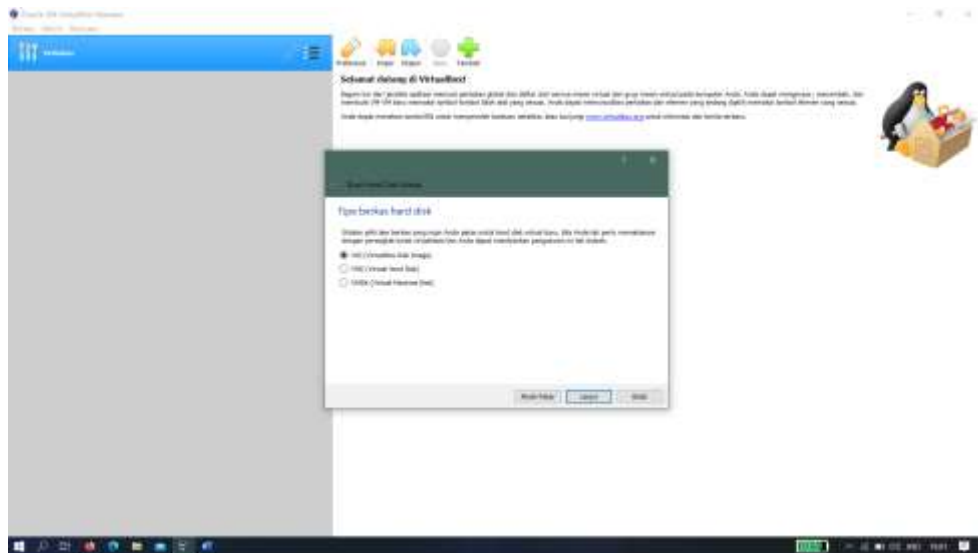
- Selanjutnya dibagian memory size kalian tentukan ukuran ram,disini saya pilih standar saja yaitu 1GB,lalu tekan tombol lanjut



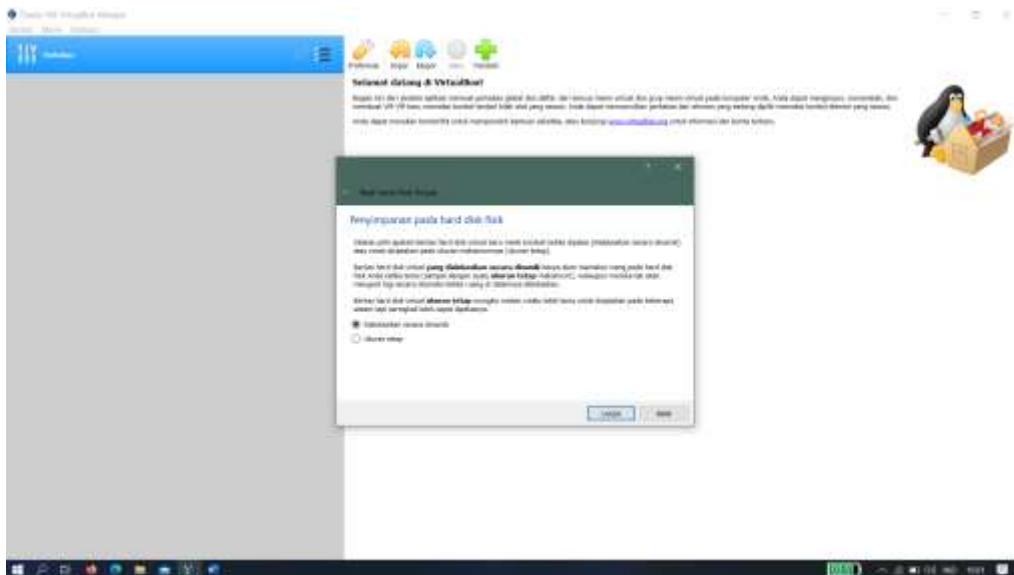
- Pada bagian hard disk , pilih **buat virtual hard disk sekarang** . lalu buat



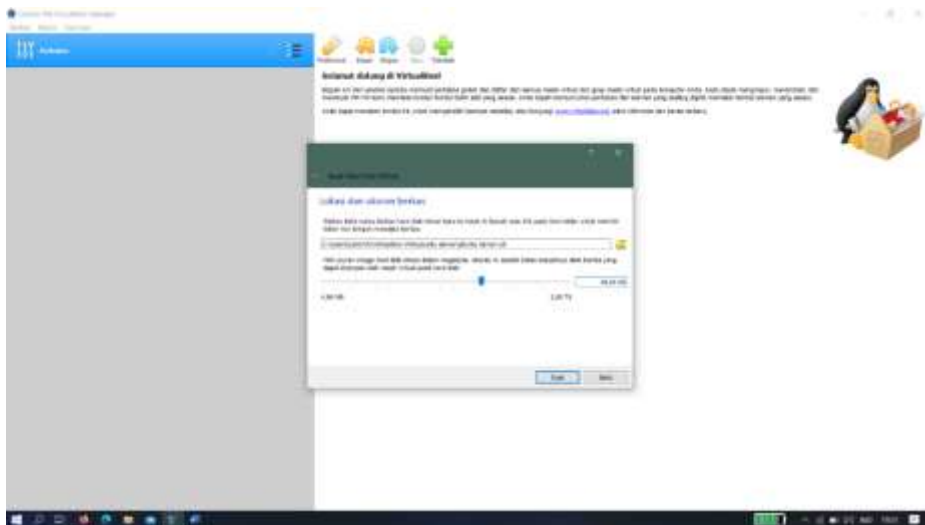
- Pada bagian hard disk file type ,pilih **VDI** (virtual disk image),lalu lanjut



- Pada bagian storage on physical hardisk,pilih **Dialokasikan secara dinamik**,lalu lanjut



- Pada lokasi dan ukuran berkas,tentukan lokasi dan ukuran virtual hard disk yang akan digunakan,lalu buat

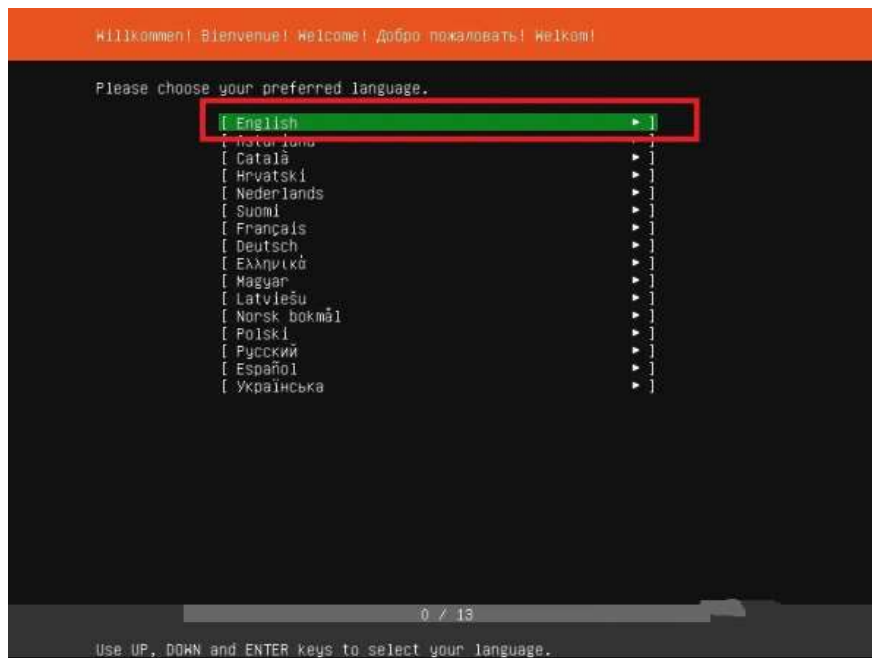


2. Setting network dan buka file iso

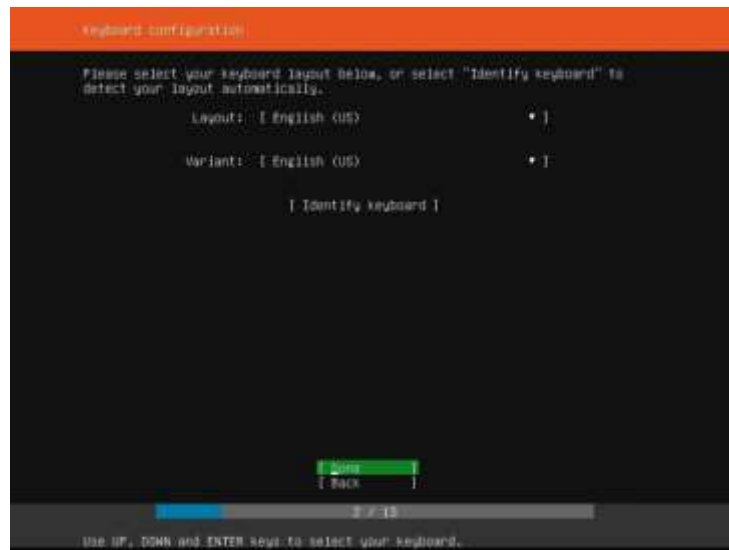
- Setelah virtual hard disk Berhasil Dibuat. Sekarang kalian pilih menu settings. Atau langsung saja Ctrl +S.
- Pilih menu tab network.
- Pada menu tab storage.
- Icon to add CD-ROM drive
- pilih select disk
- Add to. Cari file iso Ubuntu Server, please download yang sudah. Jika sudah pilih tombol selection

3. Mulai instalasi ubuntu server

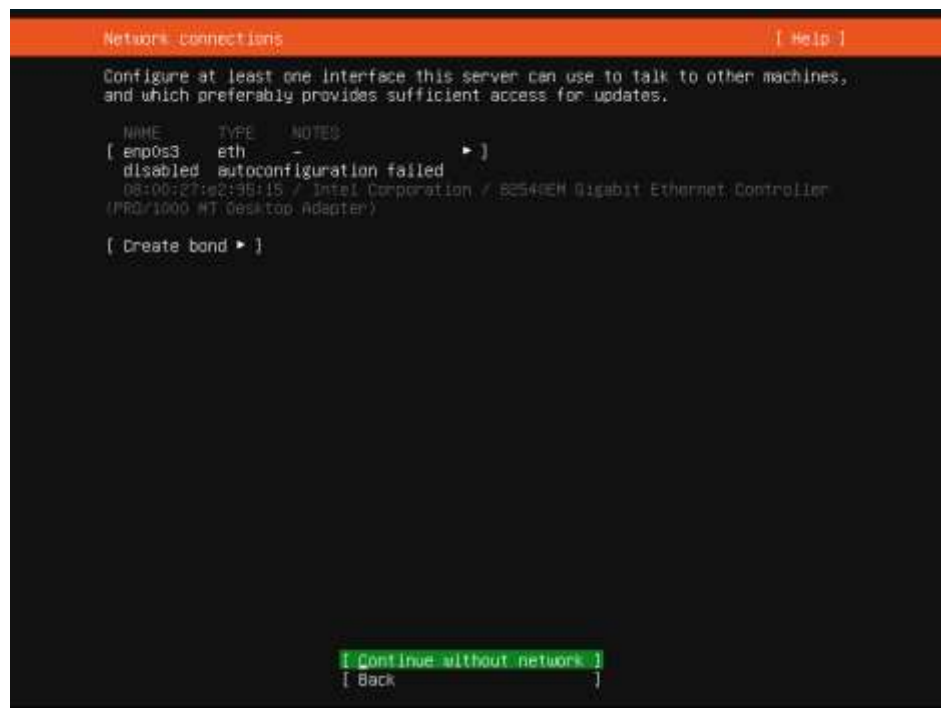
- Pilih menu start
- Pilih bahasa ,lalu enter



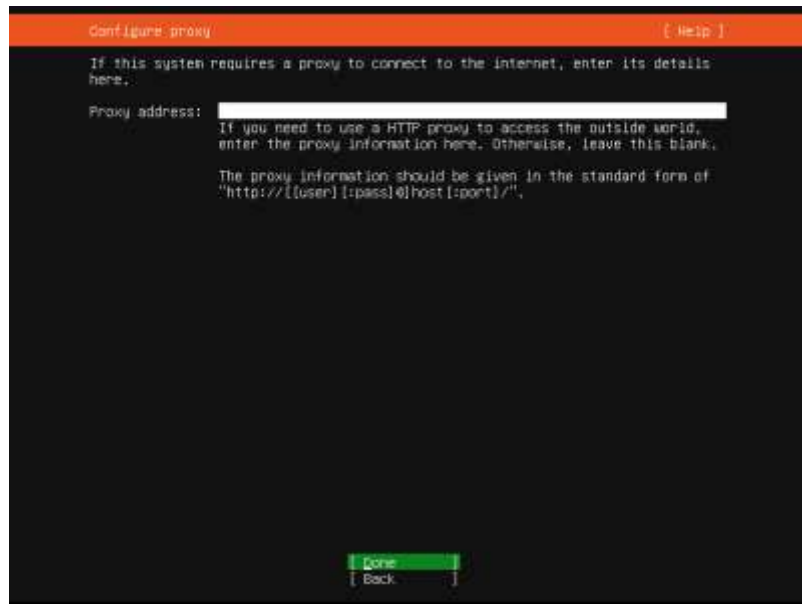
- Pada bagian keyboard configuration ini pilih done



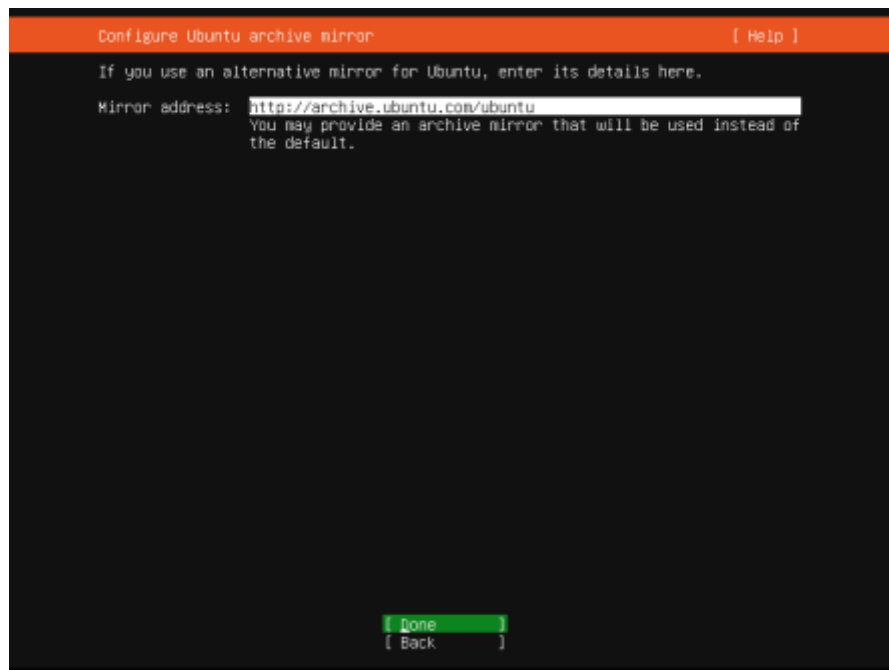
- Lau pada bagian ini pilih continue



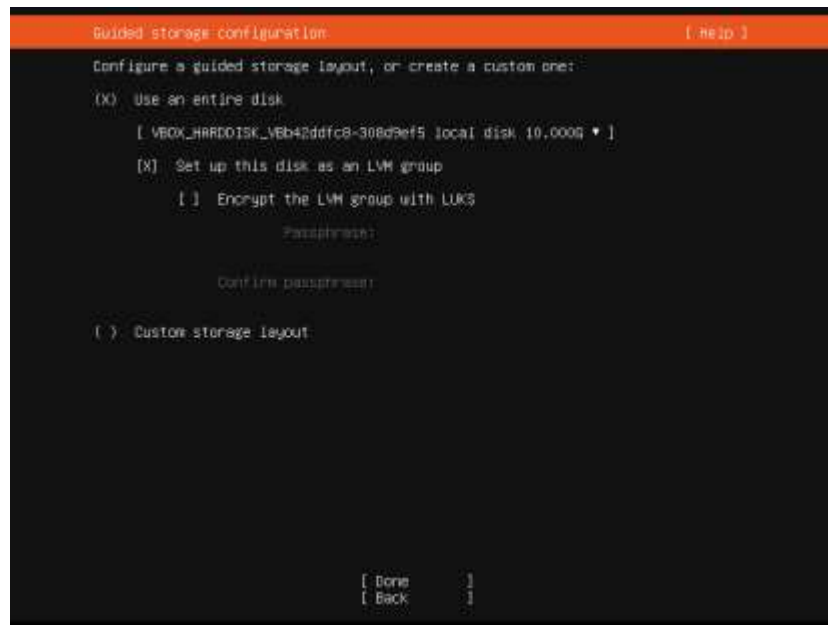
- Pada bagian ini biarkan kosong, lalu done



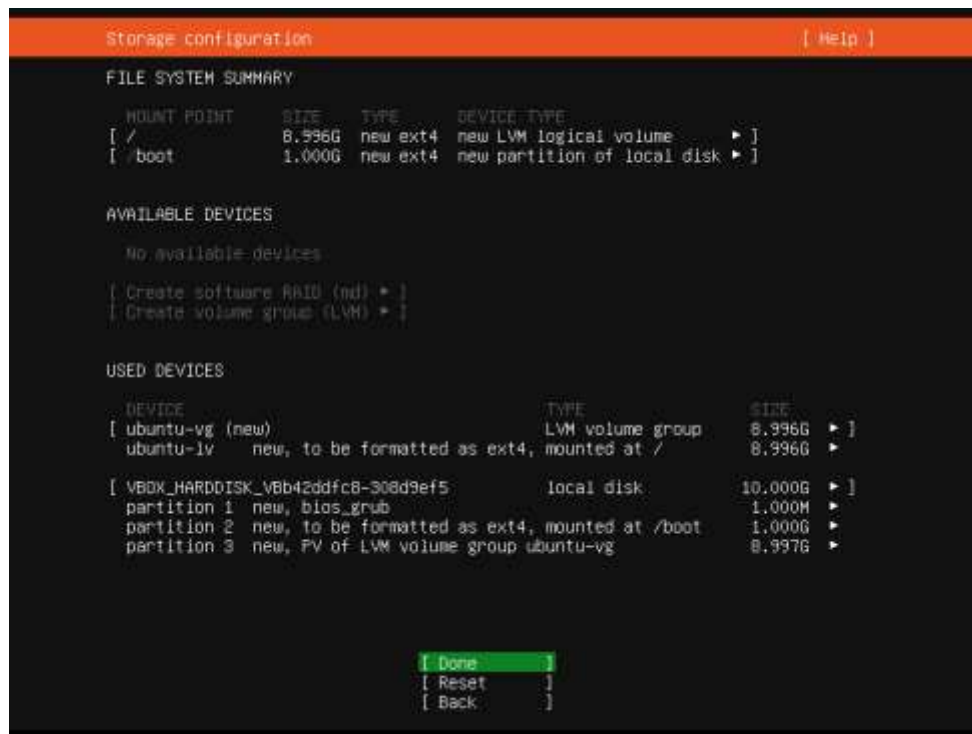
- Isi mirror address <http://archive.ubuntu.com/ubuntu>



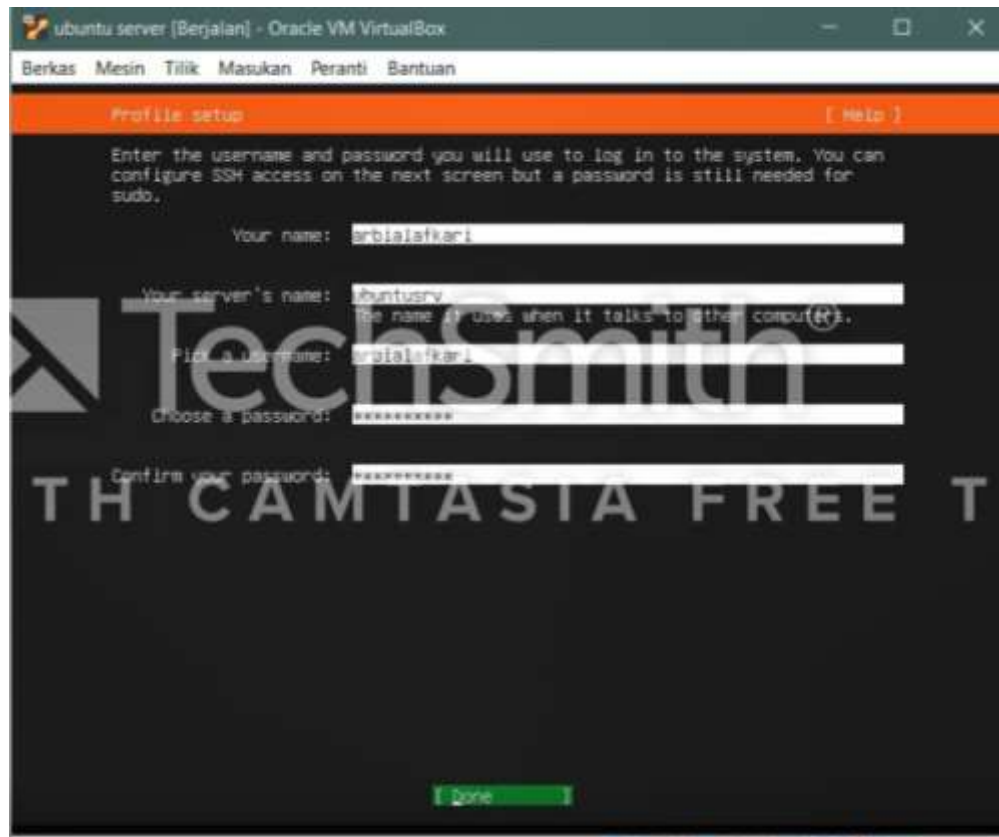
- Disini kita pilih “use an entire disk “ lalu klik done



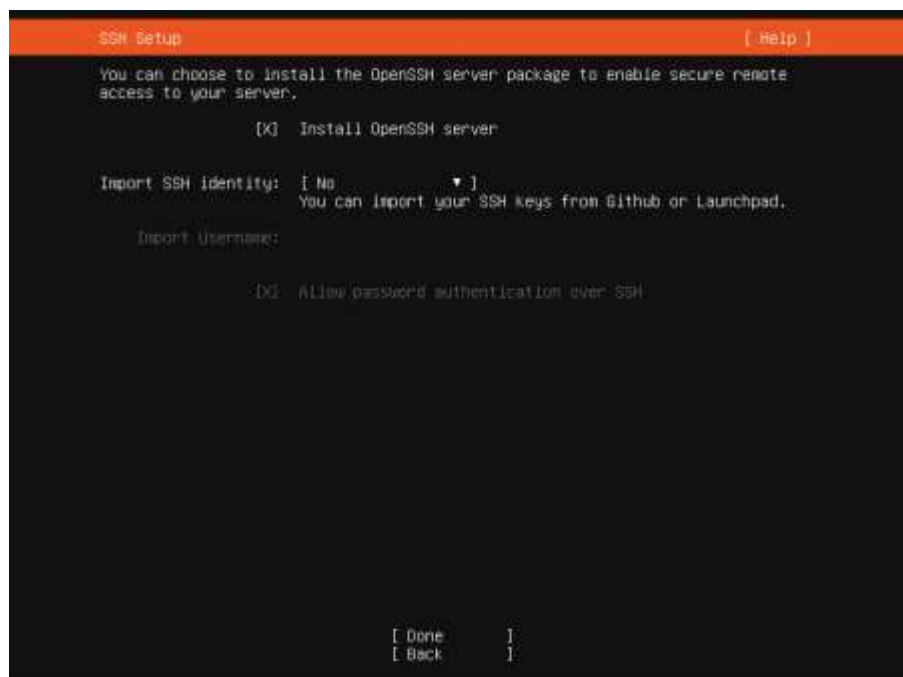
- Disini kita pilih done



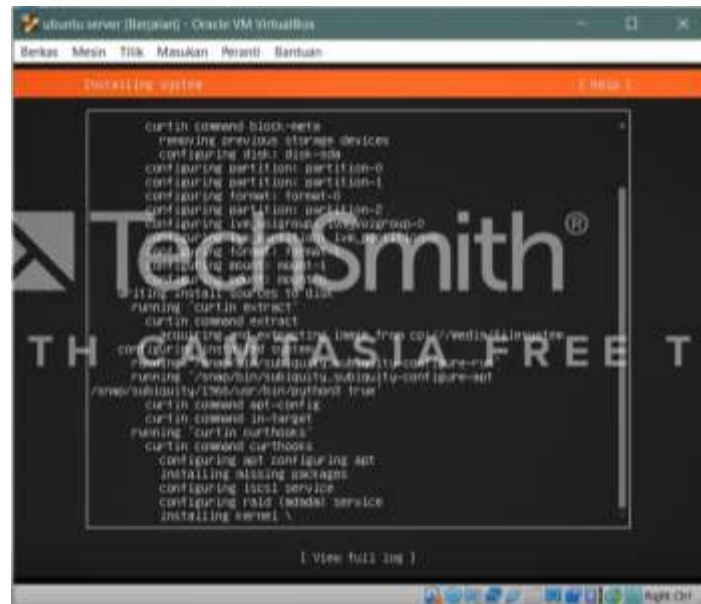
- pada bagian ini isi username dan password kalian dan harus diingat



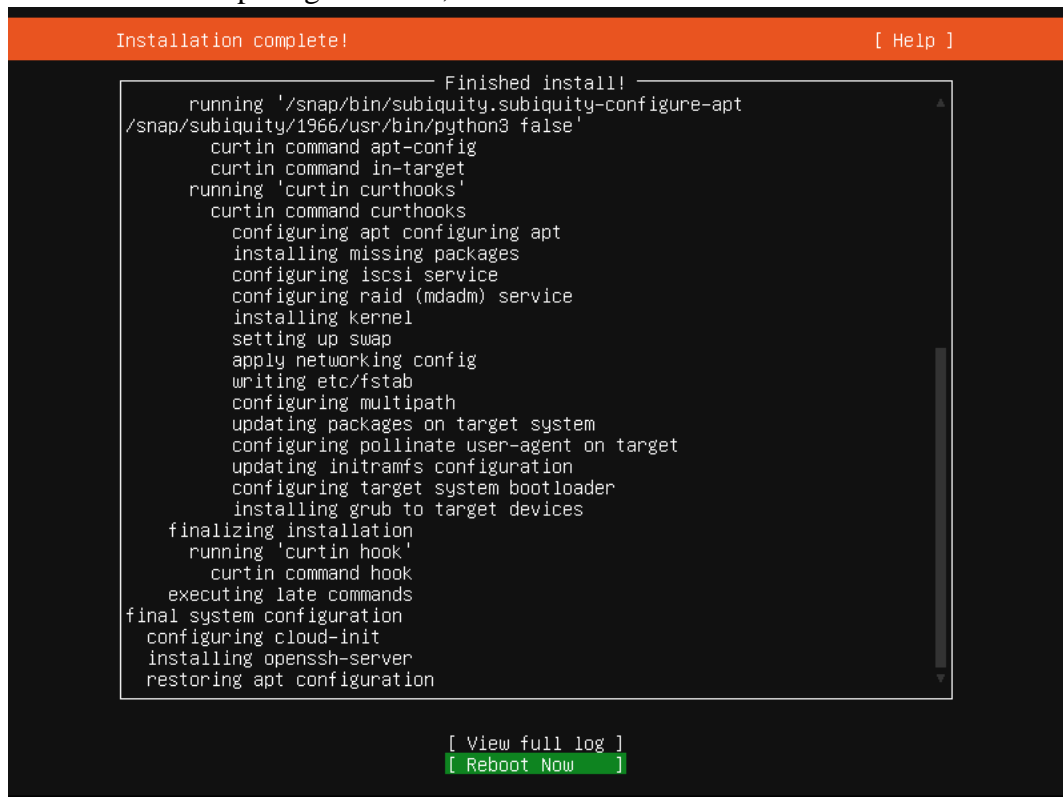
- centang bagian install openssh



- tunggu proses instalasi selesai sampai selesai



- apabila sudah selesai seperti gambar ini, tekan reboot now



- lalu masukan username dan password yang sudah dibuat sebelumnya

```

ubuntu server [Berjalan] - Oracle VM VirtualBox
Berkas Mesin Tilik Masukan Peranti Bantuan

Ubuntu 20.04.1 LTS ubuntu:~$
ubuntu:~$ login: arbialefkari
Password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-56-generic x86_64)

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

System information as of Tue 01 Dec 2020 03:25:30 PM UTC
System load: 0.11 Processes: 100
Usage of /: 23.1% of 10.57GB Users logged in: 0
Memory usage: 18% IPv4 address for enp0s3: 192.168.100.43
Disk usage: 0%

0 updates can be installed immediately.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

arbialefkari@ubuntu:~$

```

- selesai

• KONFIGURASI SSH

Bahan bahan yang digunakan

- Virtual box 20.04 pada VM Virtual box
- Jaringan internet
- Aplikasi putty

- \$ sudo apt install net-tools

```

ubuntu server [Berjalan] - Oracle VM VirtualBox
Berkas Mesin Titik Masukan Peranti Bantuan

arbisiafkar@ubuntu:~$ sudo apt install net-tools
arbisiafkar@ubuntu:~$ ifconfig
Command 'ifconfig' not found, but can be installed with:
sudo apt install net-tools
arbisiafkar@ubuntu:~$ ifconfig
Command 'ifconfig' not found, but can be installed with:
sudo apt install net-tools
arbisiafkar@ubuntu:~$ sudo apt install net-tools
[sudo] password for arbisiafkar:
Reading package lists... Done
Building dependency tree
Reading state information... Done
net-tools is already the newest version.
0 upgraded, 1 newly installed, 0 to remove and 78 not upgraded.
Need to get 196 kB of archives.
After this operation, 864 kB of additional disk space will be used.
Get:1 http://id.archive.ubuntu.com/ubuntu focal/main amd64 net-tools amd64 1.60+git20180626.aebd88e-1ubuntu1 [196 kB]
Fetched 196 kB in 2s (98.6 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 68092 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git20180626.aebd88e-1ubuntu1_amd64.deb ...
Unpacking net-tools (1.60+git20180626.aebd88e-1ubuntu1) ...
Setting up net-tools (1.60+git20180626.aebd88e-1ubuntu1) ...
Processing triggers for man-db (2.9.1-1) ...

```

- \$ ifconfig
Ip address (192.168.100.44)

```

ubuntu server2 [Berjalan] - Oracle VM VirtualBox
Berkas Mesin Titik Masukan Peranti Bantuan

Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
  net-tools
0 upgraded, 1 newly installed, 0 to remove and 78 not upgraded.
Need to get 196 kB of archives.
After this operation, 864 kB of additional disk space will be used.
Get:1 http://id.archive.ubuntu.com/ubuntu focal/main amd64 net-tools amd64 1.60+git20180626.aebd88e-1ubuntu1 [196 kB]
Fetched 196 kB in 1s (191 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 70955 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git20180626.aebd88e-1ubuntu1_amd64.deb ...
Unpacking net-tools (1.60+git20180626.aebd88e-1ubuntu1) ...
Setting up net-tools (1.60+git20180626.aebd88e-1ubuntu1) ...
Processing triggers for man-db (2.9.1-1) ...
arbiserver@arbiserver:~$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
    inet 192.168.100.44  netmask 255.255.255.0  broadcast 192.168.100.255
    inet6 fe80::a00:27ff:fec7:f295  prefixlen 64  scopeid 0x20<link>
    ether 08:00:27:c7:f2:95  txqueuelen 1000  (Ethernet)
    RX packets 825  bytes 1025175 (1.0 MB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 357  bytes 34465 (34.4 KB)
    TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0

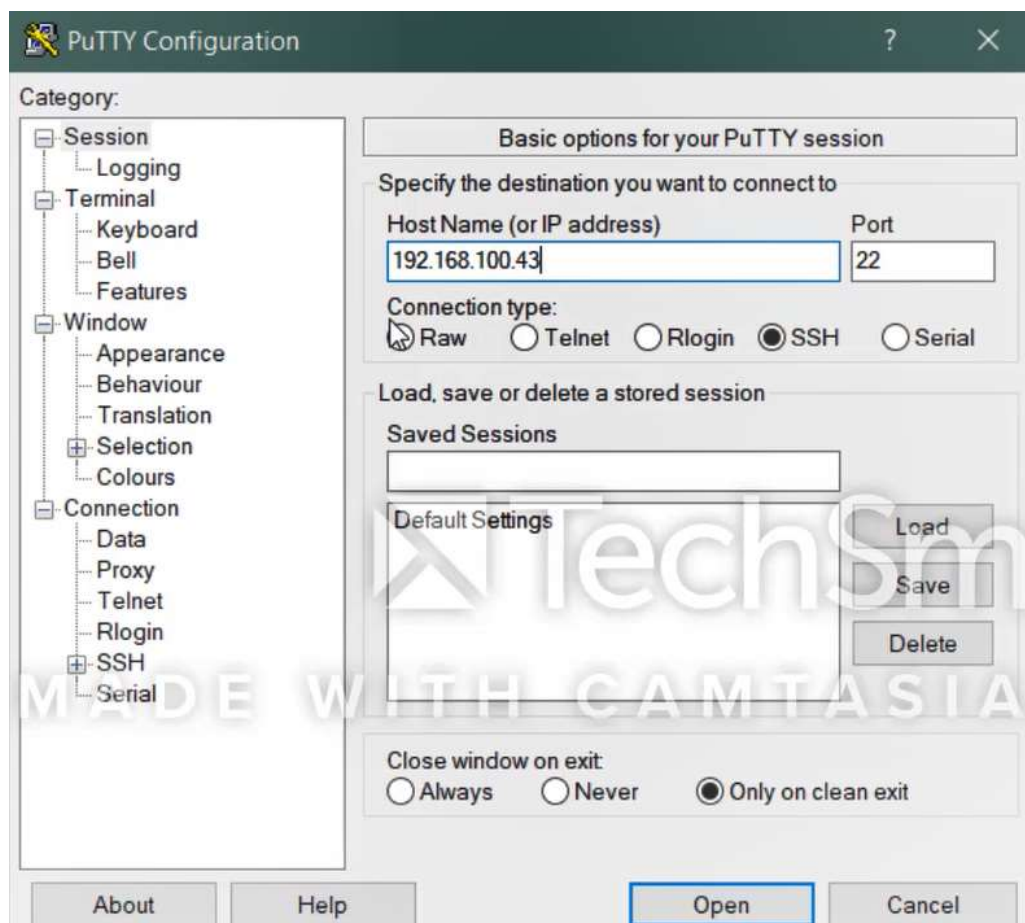
lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
    inet 127.0.0.1  netmask 255.0.0.0
    inet6 ::1  prefixlen 128  scopeid 0x10<host>
    loop txqueuelen 1000  (Local Loopback)
    RX packets 120  bytes 10028 (10.0 KB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 120  bytes 10028 (10.0 KB)
    TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0

arbiserver@arbiserver:~$ _

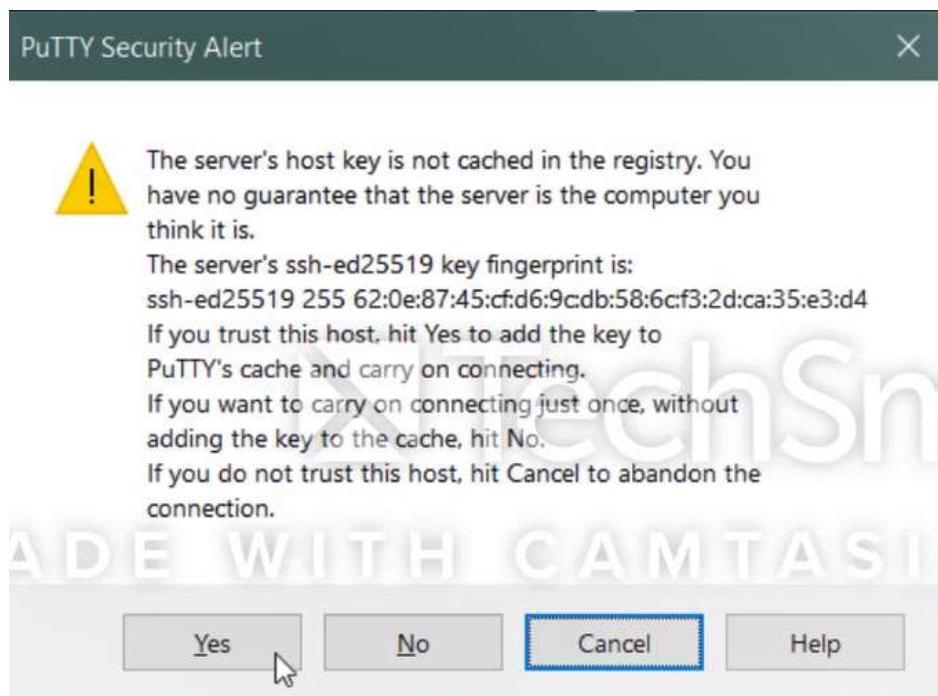
```

• REMOTE DENGAN TERMINAL DAN PUTTY

- Download terlebih dahulu putty
- Setelah didownload ,lalu run putty
- buka putty lalu masukan ip address yang munvul di ubuntu server tadi dengan port 22,lalu klik open



- lalu pada bagian ini pilih yes



- pada bagian ini masukan username dan password kita tadi

```
arbialafkari@ubuntu:~$ ssh -p 22 arbialafkari@192.168.100.43
login as: arbialafkari
arbialafkari@192.168.100.43's password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-56-generic x86_64)

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

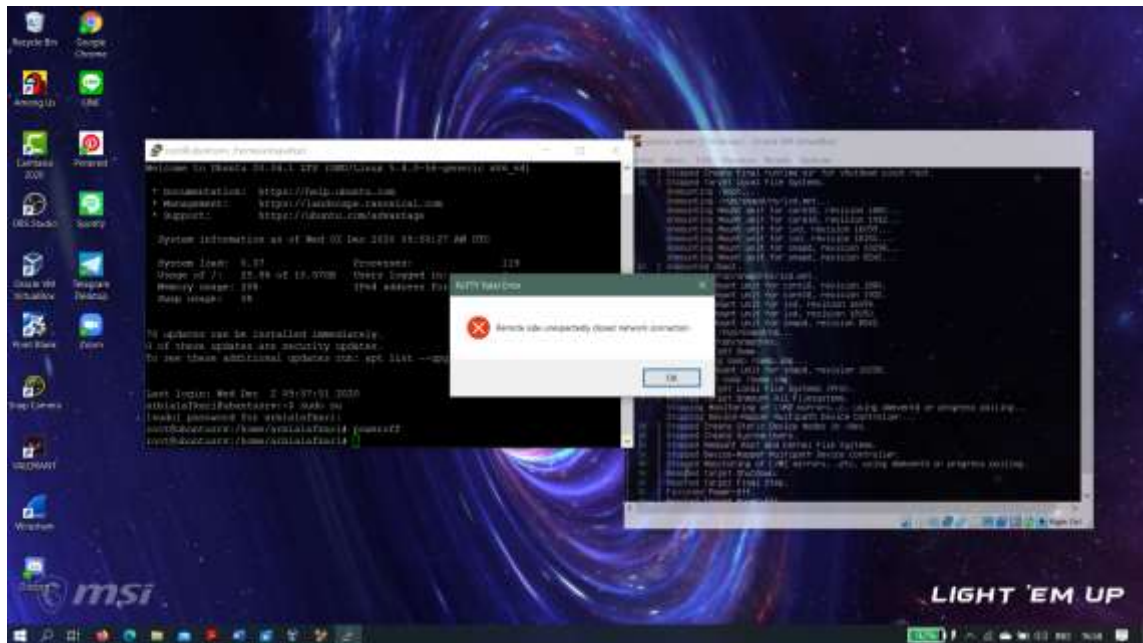
System information as of Wed 02 Dec 2020 09:52:09 AM UTC

System load:  0.17               Processes:    119
Usage of /:   25.8% of 18.57GB   Users logged in: 1
Memory usage: 21%               IPv4 address for enp0s3: 192.168.100.43
Swap usage:   0%

78 updates can be installed immediately.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable

Last login: Wed Dec  2 09:51:13 2020
arbialafkari@ubuntu:~$
```

- apabila telah memasukkan username dan password tampilanya seperti gambar diatas maka ubuntu server kita telah terconnect kepada putty
- kita akan mencoba mematikan mesin melalui putty dengan langkah:
 1. ketik \$ sudo su
 2. lalu kita masukan password kita
 3. lalu kita ketik \$ poweroff



4. apabila tampilanya sudah seperti gambar diatas maka kita berhasil mematikan mesin menggunakan remote putty
5. selesai.

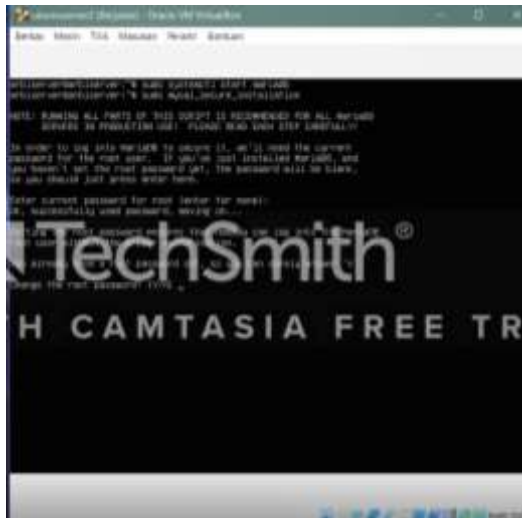
• MEMBUAT APLIKASI WORDPRESS PADA UBUNTU SERVER 20.04

Bahan yang akan digunakan;

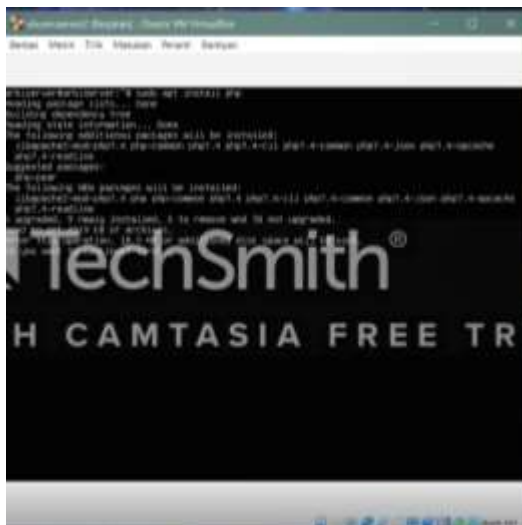
- Terminal
- Lamp (apache2,mariadb,php,mysql)
- Wordpress

- **INSTALL APACHE2,MARIADB,MYSQL DAN PHP**

1. Install apache2
\$ sudo apt install apache2 -y
2. Install mariadb
\$ sudo apt install mariadb-server mariadb-client
3. \$ sudo systemctl start mariadb
4. \$ sudo mysql_secure_installation



5. Install php
\$ sudo apt-get install php



- **DOWNLOAD FILE WORDPRESS**

1. Buka web wordpress (<https://wordpress.org/download>)
2. Copy link download <https://wordpress.org/latest.zip>

3. Lalu bukak terminal ,masukan perintah

i. \$ sudo apt install wget -y

```
arbiserver@arbiserver:~$ sudo apt install wget -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
wget is already the newest version (1.20.3-1ubuntu1).
wget set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 78 not upgraded.
arbiserver@arbiserver:~$ _
```

ii. \$ wget <https://wordpress.org/latest.zip>

```
arbiserver@arbiserver:~$ wget https://wordpress.org/latest.zip
--2020-12-03 05:01:53-- https://wordpress.org/latest.zip
Resolving wordpress.org (wordpress.org)... 198.143.164.252
Connecting to wordpress.org (wordpress.org)|198.143.164.252|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 14009358 (13M) [application/zip]
Saving to: 'latest.zip'

latest.zip           11%[==>] 1.57M 330KB/s eta 32s
```

iii. \$ sudo apt install unzip -y

iv. Unzip latest.zip

4. Lalu pindah kan ke direktori /var/www/html/

i. \$ cd wordpress/

ii. Wordpress \$ sudo cp -r * /var/www/html/

iii. Var/www/html \$ sudo rm -rf indeks.html

iv. /var/www/html \$ sudo apt install php-mysql php-cgi php-cli php-gd -y

```
arbiserver@arbiserver:~$ sudo apt install php-mysql php-cgi php-cli php-gd -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  fontconfig fontconfig-core libfontconfig1 libgd3 libimage-turbo libjpeg
  libjpeg-turbo libjpeg9 libpng16-1.6 libpng16-dev libpng16-0 libpng16-dev
  libpng16-dev libpng16-dev
The following NEW packages will be installed:
  fontconfig fontconfig-core libfontconfig1 libgd3 libimage-turbo libjpeg
  libjpeg-turbo libjpeg9 libpng16-1.6 libpng16-dev libpng16-dev
  libpng16-dev libpng16-dev
0 upgraded, 13 newly installed, 0 to remove and 78 not upgraded.
Need to get 13.0 MB of archives.
After this operation, 13.0 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

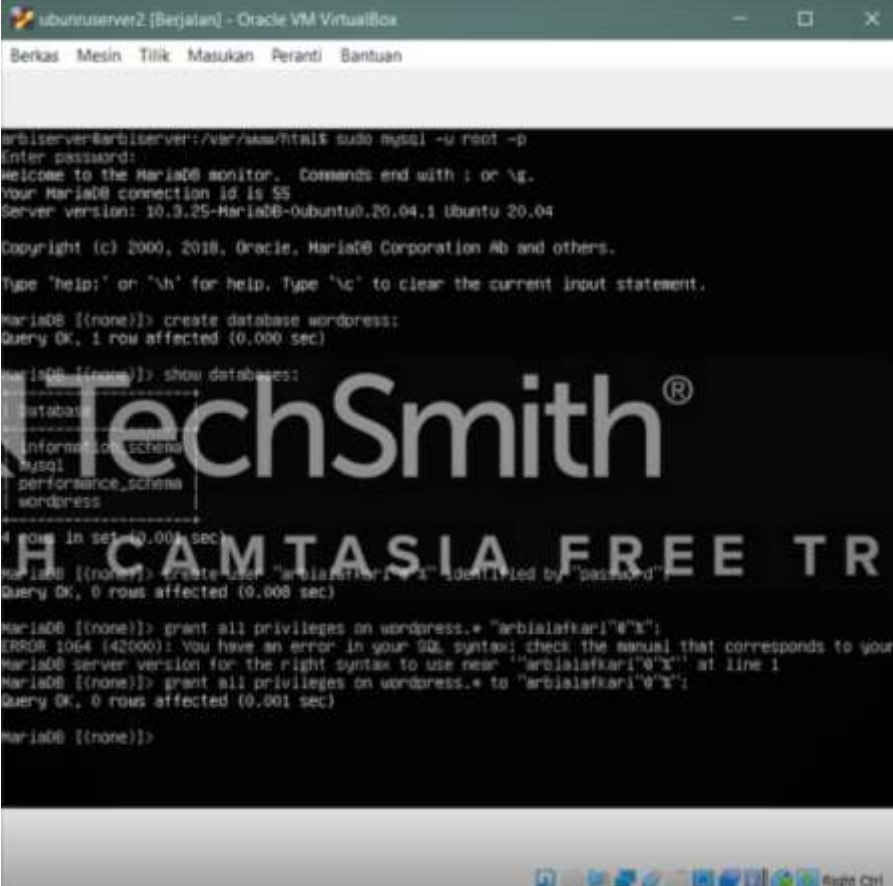
v. /var/www/html \$ sudo systemctl restart apache2

vi. /var/www/html \$ chown -R www-data:www-data /var/www/html

vii. /var/www/html \$ sudo chown -R www-data:www-data
/var/www/html

• BUKA BROWSER

1. Masukkan alamat ip kita tadi = 192.168.100.44
2. Lalu kita kan masuk ke wordpress
3. Masuk kembali ke terminal,lalu ketik perintah

A screenshot of a terminal window titled 'ubuntu-server2 [Berjalan] - Oracle VM VirtualBox'. The terminal shows the execution of 'sudo mysql -u root -p' to enter the MySQL command line. The user is prompted for a password. Once logged in, the user runs 'create database wordpress;', which is successful. Then, they run 'show databases;' and see a list including 'information_schema', 'mysql', 'performance_schema', and 'wordpress'. Next, they run 'create user "arbialafkari"@"%" identified by "password";', which is also successful. Finally, they run 'grant all privileges on wordpress.* to "arbialafkari"@"%";', which results in an error message: 'ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near "arbialafkari"@"%" at line 1'. The terminal ends with the MySQL prompt 'MariaDB [(none)]>'.

```
ubuntu-server2 [Berjalan] - Oracle VM VirtualBox
Berkas Mesin Titik Masukan Peranti Bantuan

arbiserver@arbiserver:/var/www/html$ sudo mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 55
Server version: 10.3.25-MariaDB-0ubuntu0.20.04.1 Ubuntu 20.04

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> create database wordpress;
Query OK, 1 row affected (0.000 sec)

MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| wordpress |
+-----+
4 rows in set (0.001 sec)

MariaDB [(none)]> create user "arbialafkari"@"%" identified by "password";
Query OK, 0 rows affected (0.000 sec)

MariaDB [(none)]> grant all privileges on wordpress.* to "arbialafkari"@"%";
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your
MariaDB server version for the right syntax to use near "arbialafkari"@"%" at line 1
MariaDB [(none)]> grant all privileges on wordpress.* to "arbialafkari"@"%";
Query OK, 0 rows affected (0.001 sec)

MariaDB [(none)]>
```

- (i) /var/www/html \$ sudo mysql -u root -p
- (ii) Mariadb [(none)] create database wordpress
- (iii) Mariadb [(none)] create user "arbialafkari"@"%" identified by "password"
- (iv) Mariadb [(none)] grant all privileges on wordpress.* to "arbialafkari"@"%";

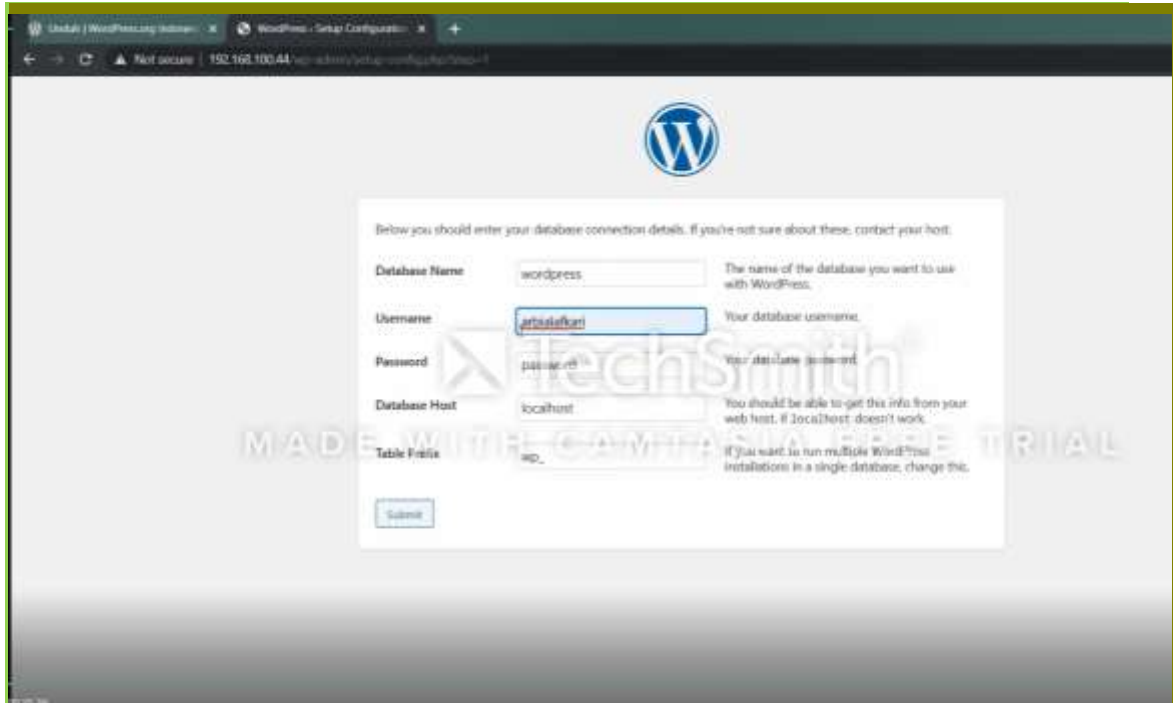
4. Maka isi data sebagai berikut

Database = wordpress

Username = arbialafkari

Password = password

Lalu masukan pada browser wordpress,kirim



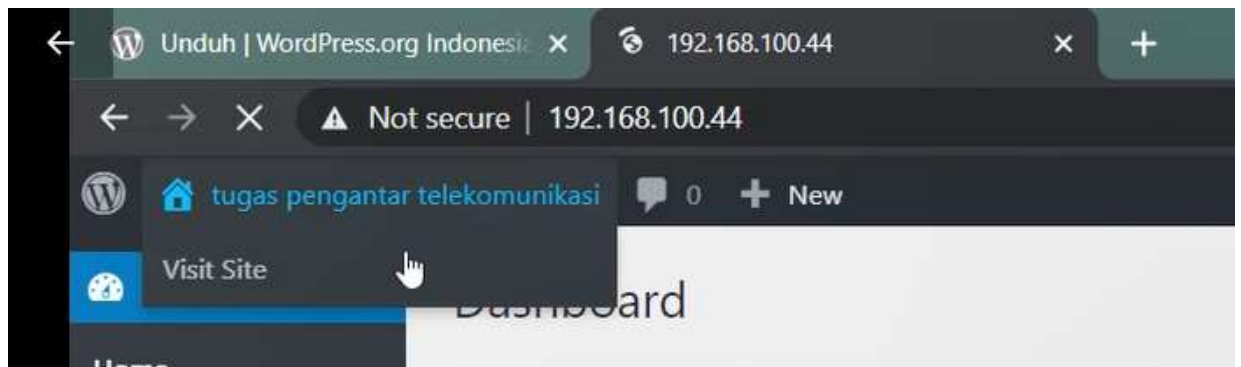
5. Klik install wordpress



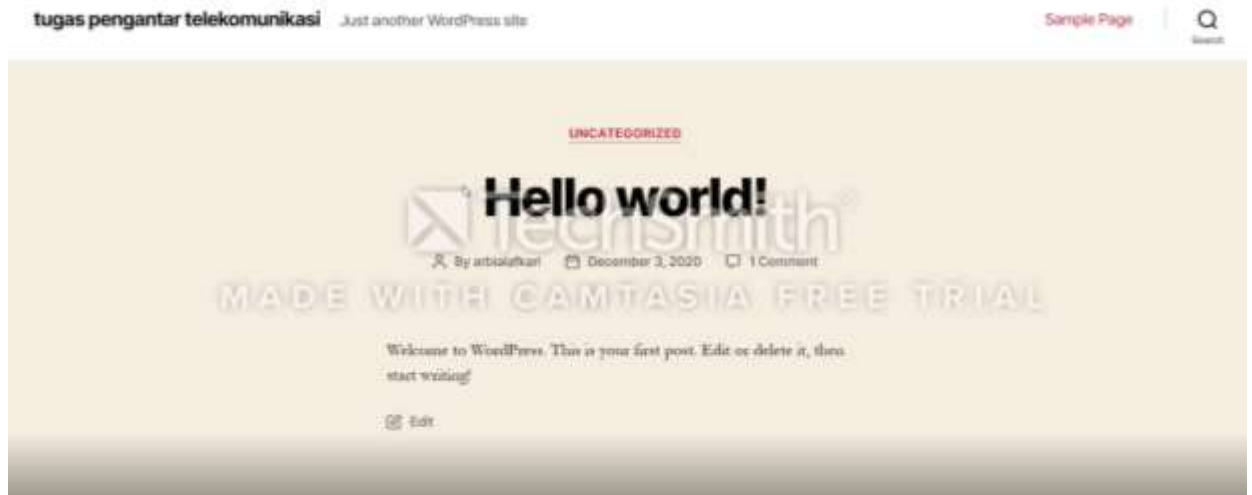
6. Lalu kita bisa login dengan username dan password yang sudah dibuat



7. Lalu akan masuk ke laman ip address kita tadi (192.168.100.44)
8. Untuk melihat tampilan web bisa diklik judul pada pojok kiri atas



9. Berikut adalah tampilanya



10. Selesai