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Pertemuan 2

Pengenalan VMWare Workstation dan Linux OS

I. Pengenalan VMWare Workstation

Conceptual Application

Secara konsep letak VMWare sebagai wadah dari virtual OS, letak virtual OS diatas vmware workstation.

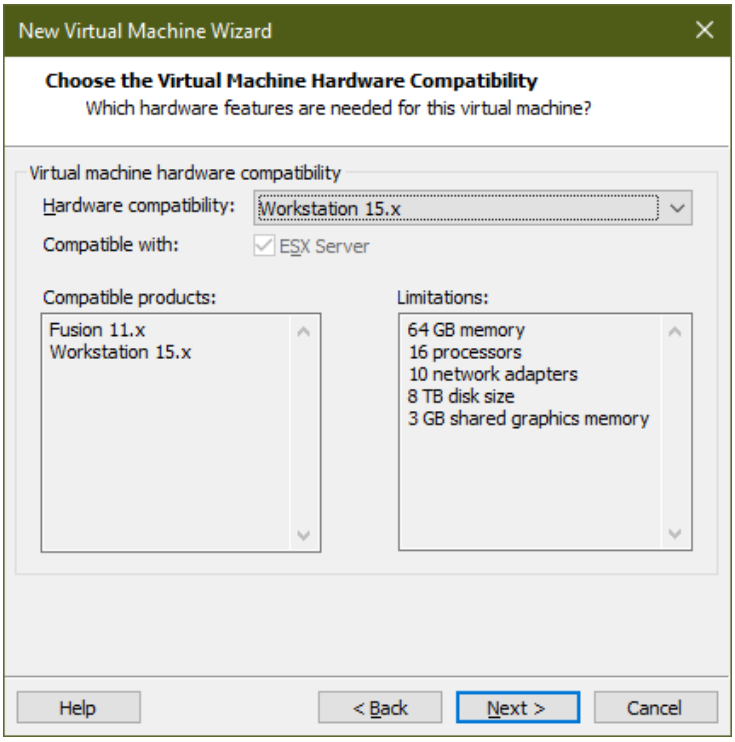
Memanfaatkan Fasilitas Swapping.

Setelah instalasi VMWare akan menimbulkan konflik dengan XAMPP maka perlu dikonfigurasi kembali port pada VMWare.

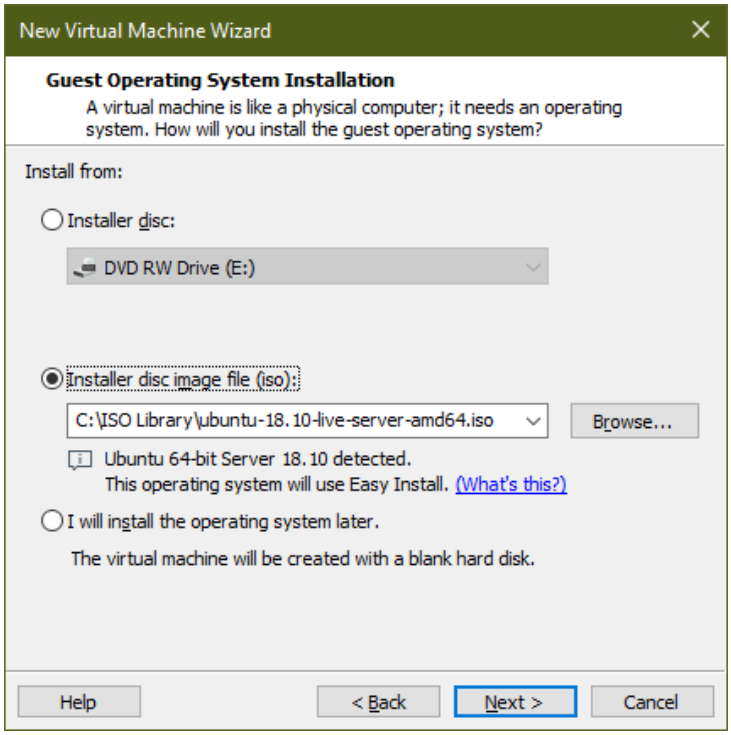
Tahapan dalam membuat virtual OS di VMWare

1. Pertama, buka aplikasi VMWare kemudian pilih menu *Create a New Virtual Machine* kemudian akan muncul window seperti gambar dibawah lalu pilih *custom*

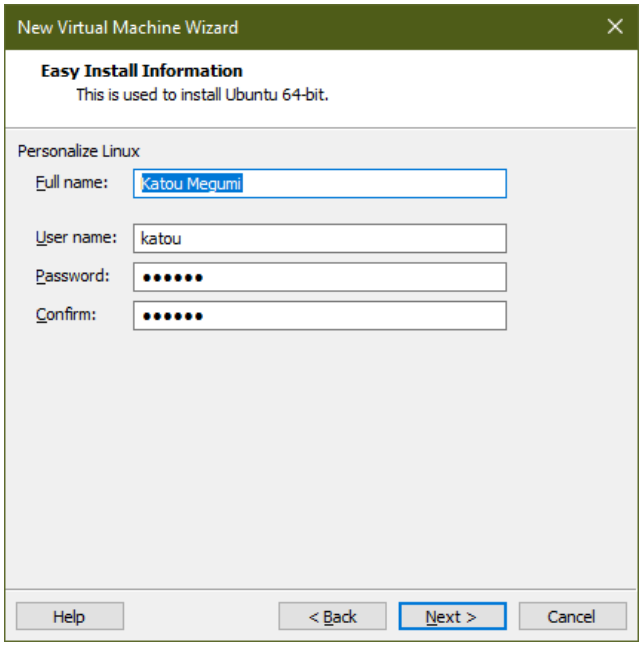
2. Kemudian akan muncul window seperti di bawah, untuk *Hardware compatibility* pilih *Workstation 15.x* kemudian klik *Next*



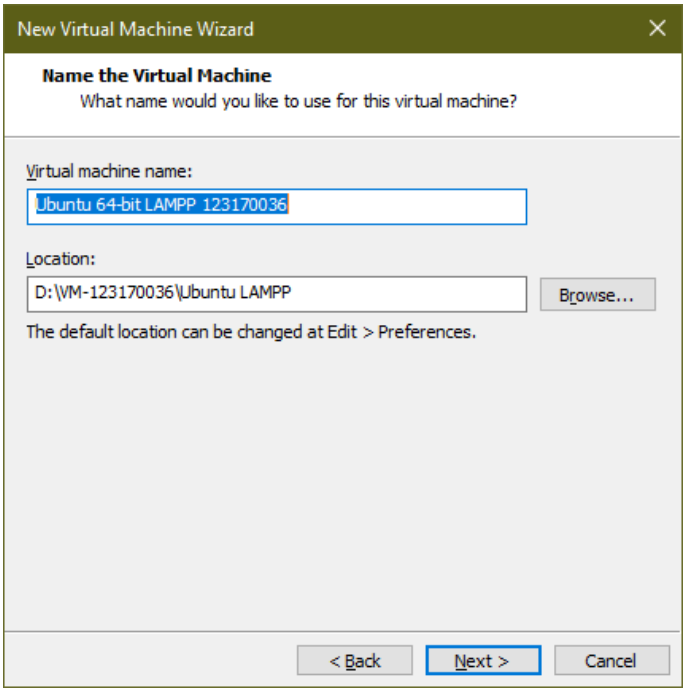
3. Kemudian pilih Instalasi Filenya, dalam hal ini kita menggunakan File ISO Ubuntu 18.0 setelah dipilih kemudian pilih *Next*



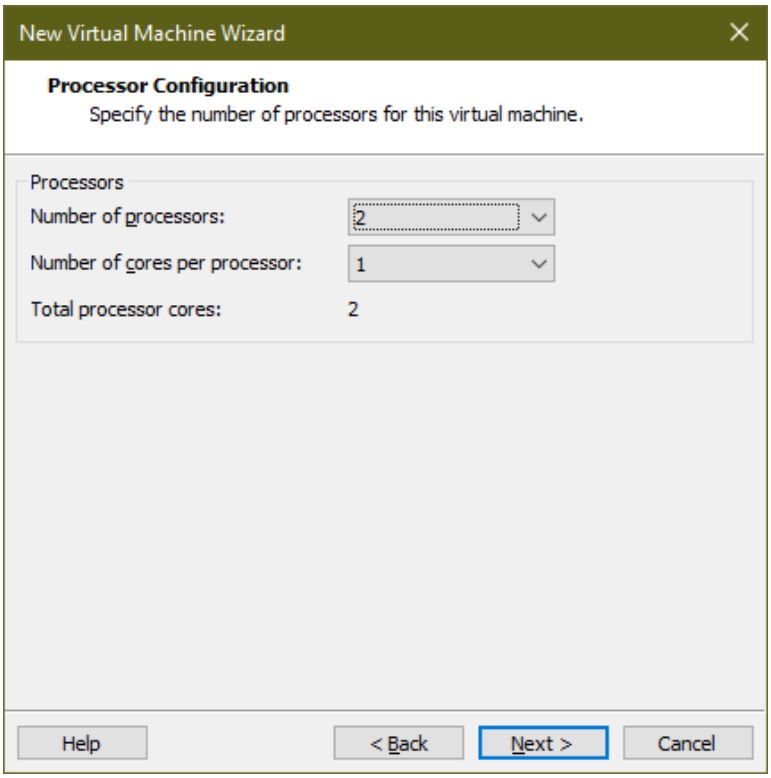
4. Kemudian akan muncul window seperti dibawah isi sesuai keinginan



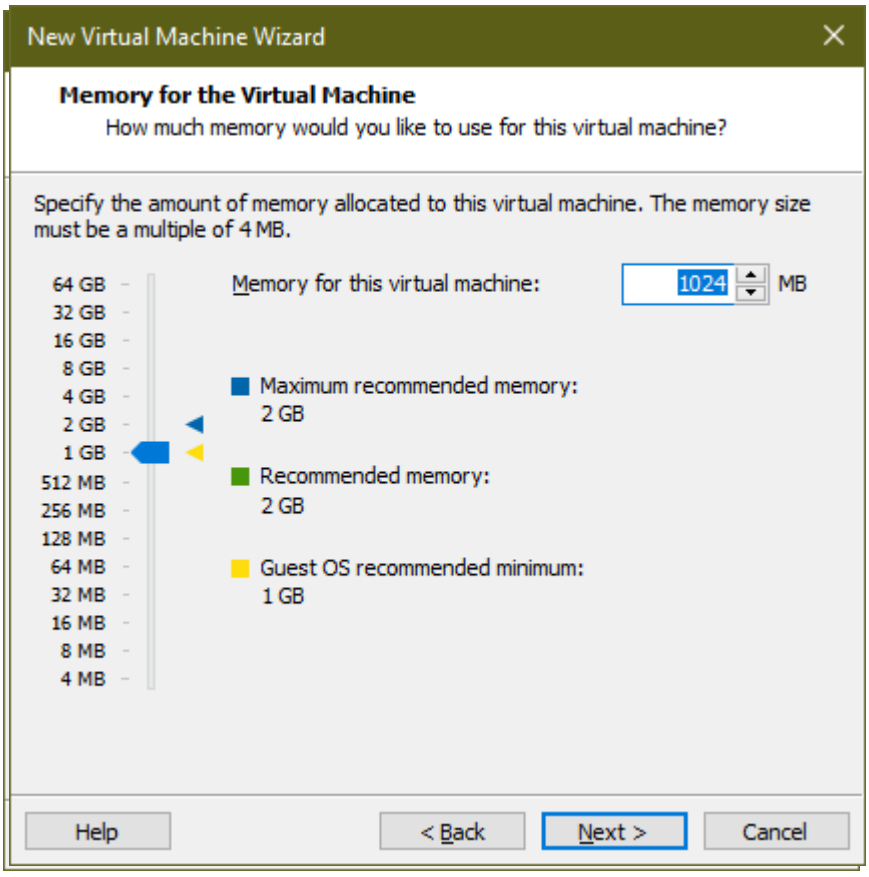
5. Klik Next, beri nama virtual name sesuai keinginan



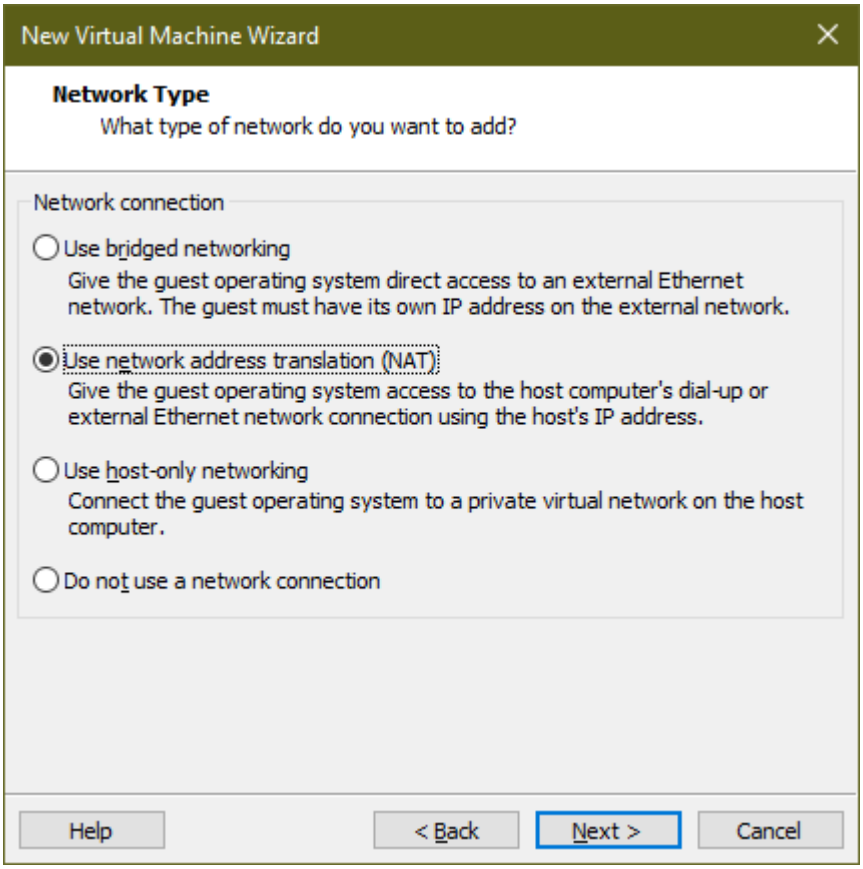
6. Klik Next, isi number of processors seperti dibawah. Untuk menghindari lagging, kita gunakan batas minimal.



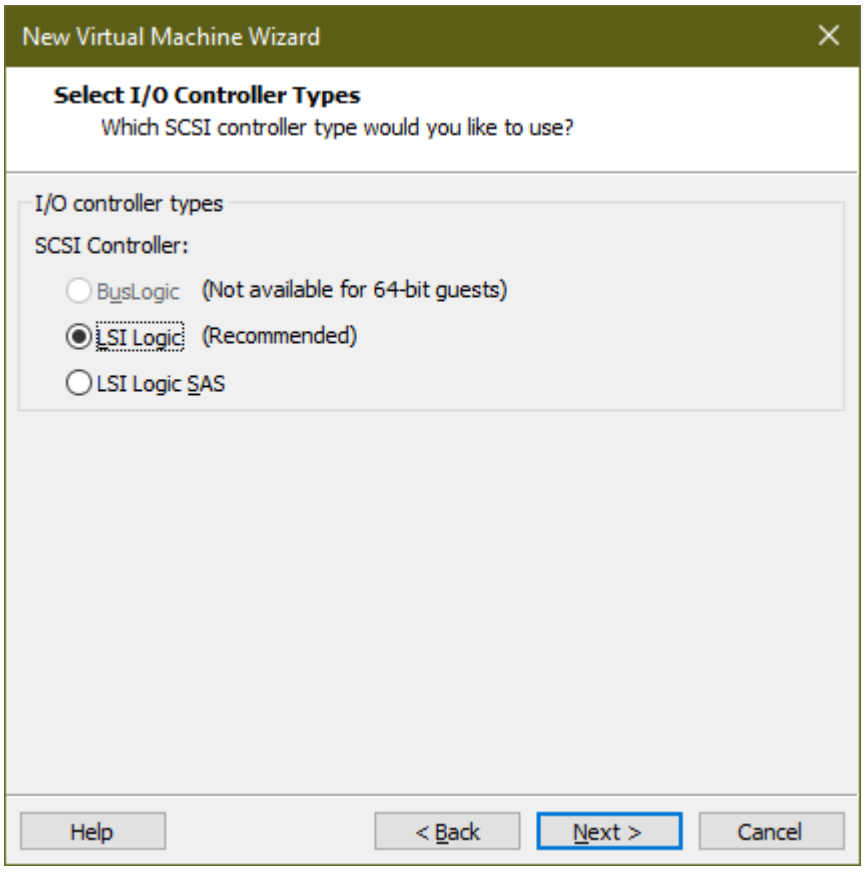
7. Isi sebanyak 1024 MB, alasannya sama seperti diatas. Lalu klik Next



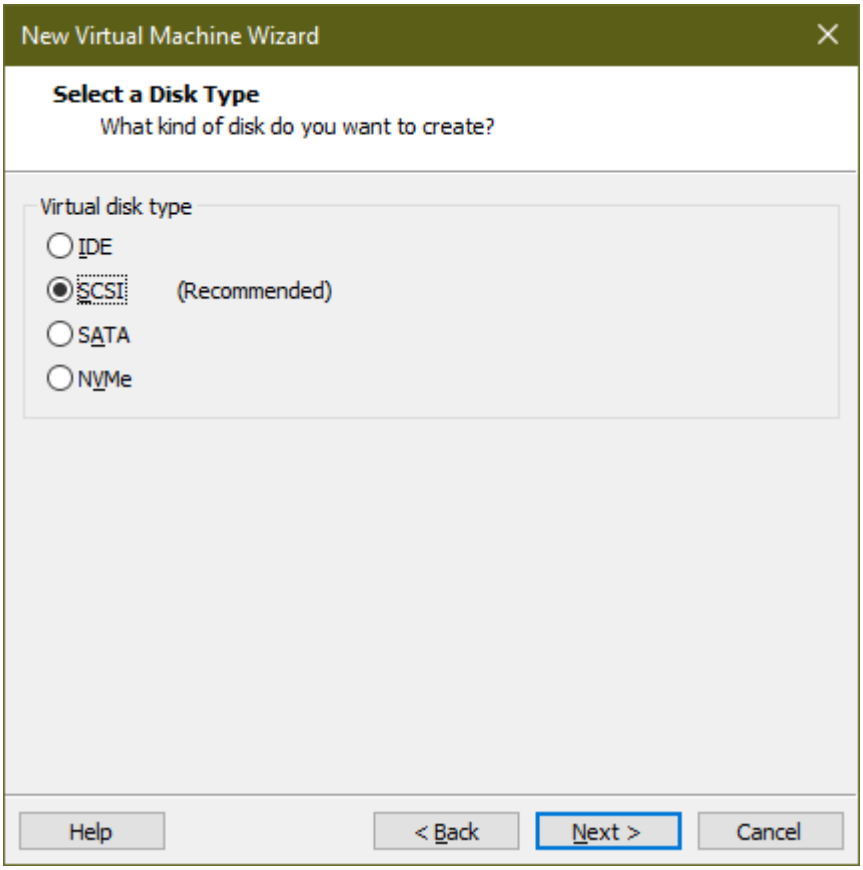
8. Pilih NAT dalam langkah kali ini, kemudian klik Next



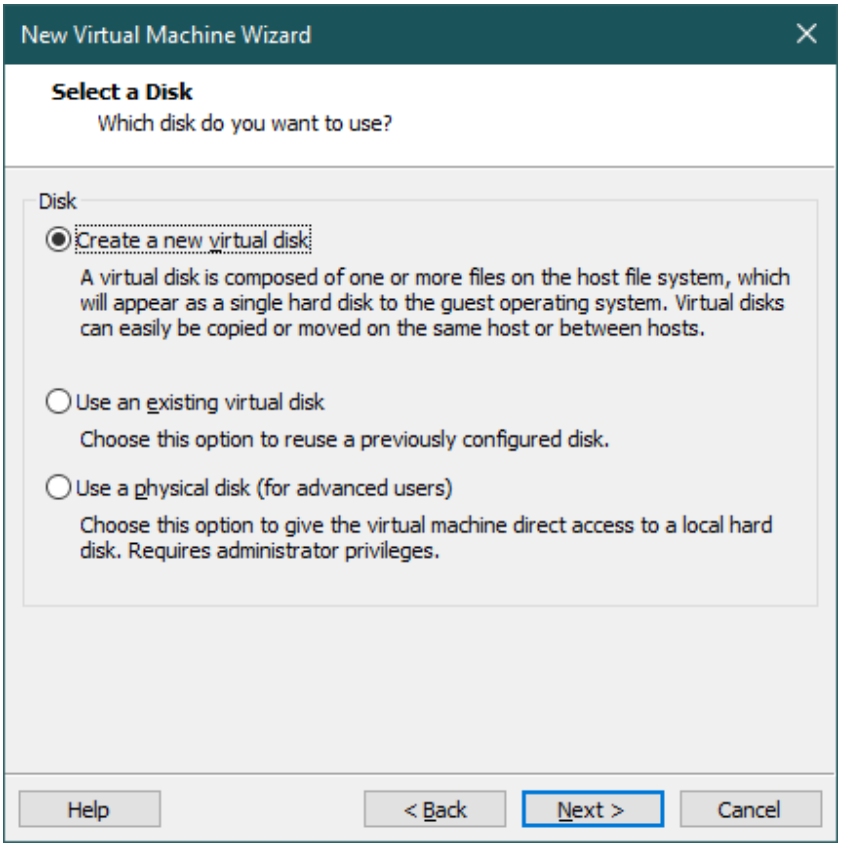
9. Kemudian pilih LSI Logic, kemudian klik next



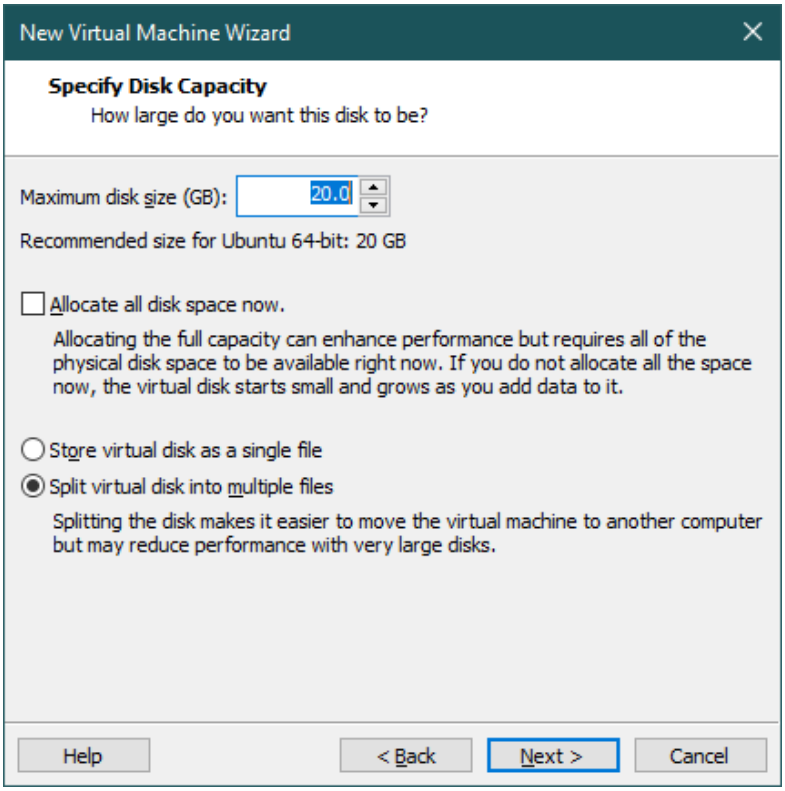
10. Kemudian pilih SCSI



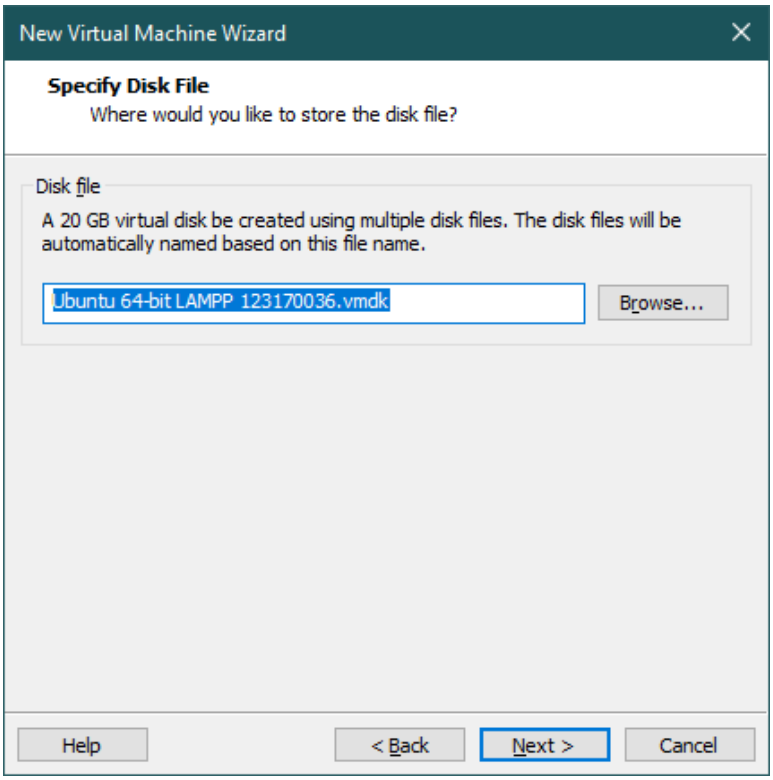
11. Pilih Create a new virtual disk



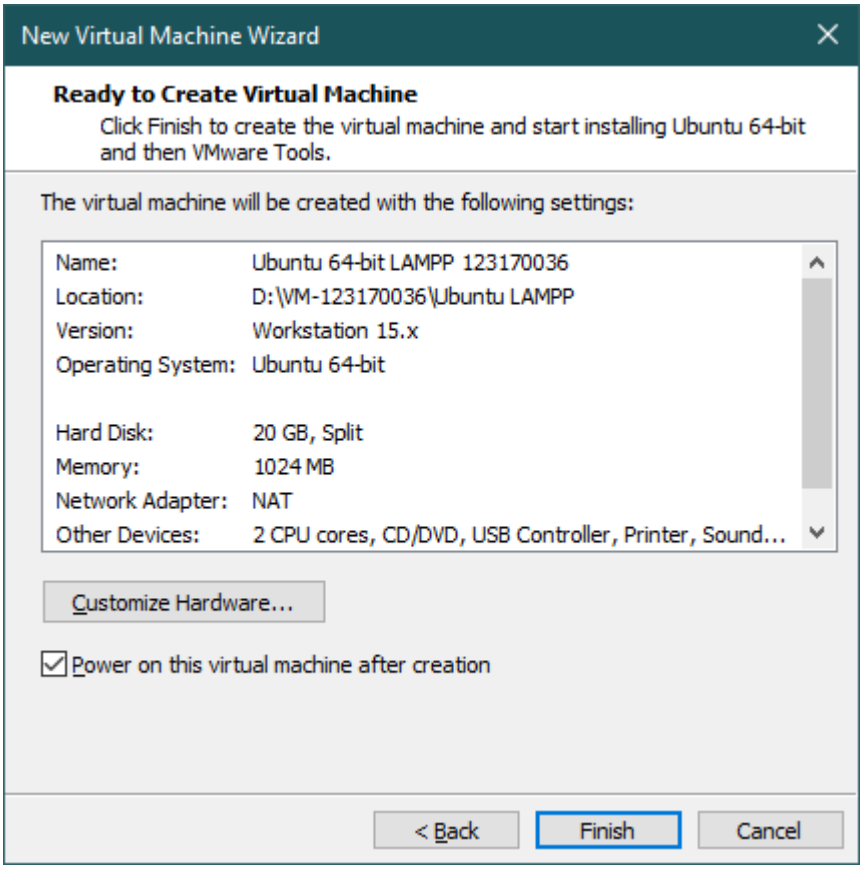
12. K1lik Next



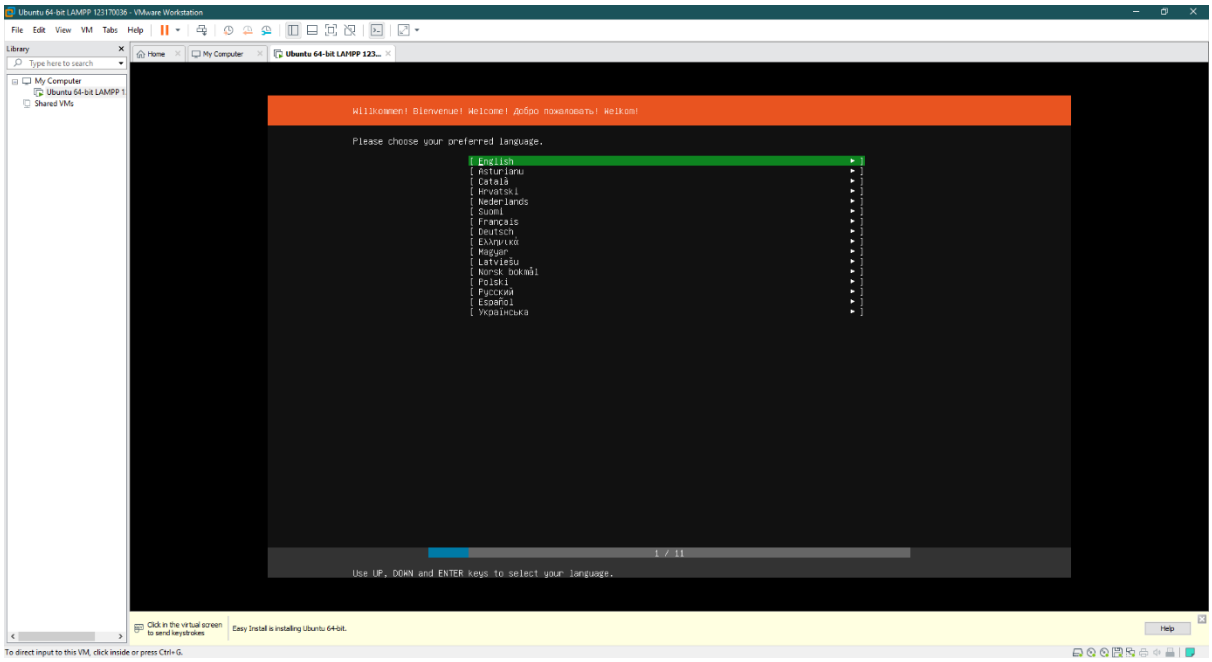
13. Klik Next



14. Lalu Finish

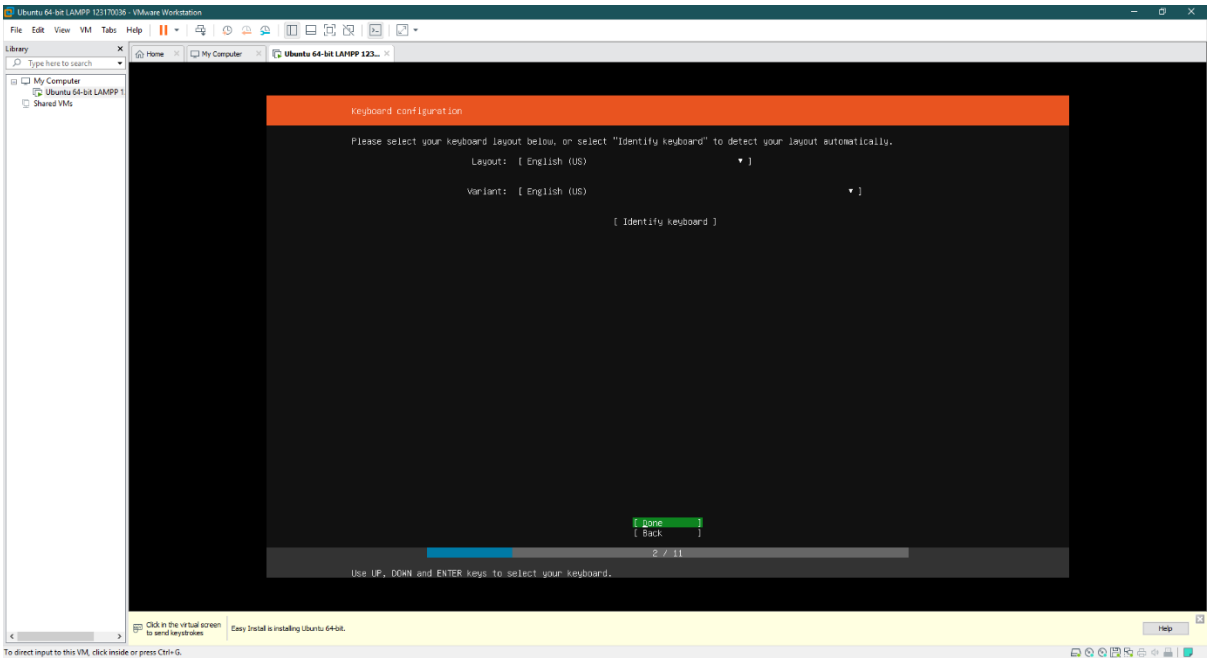


15. Untuk berinteraksi dengan VMWare tekan CTRL+G atau untuk kembali ke windows tekan CTRL+A

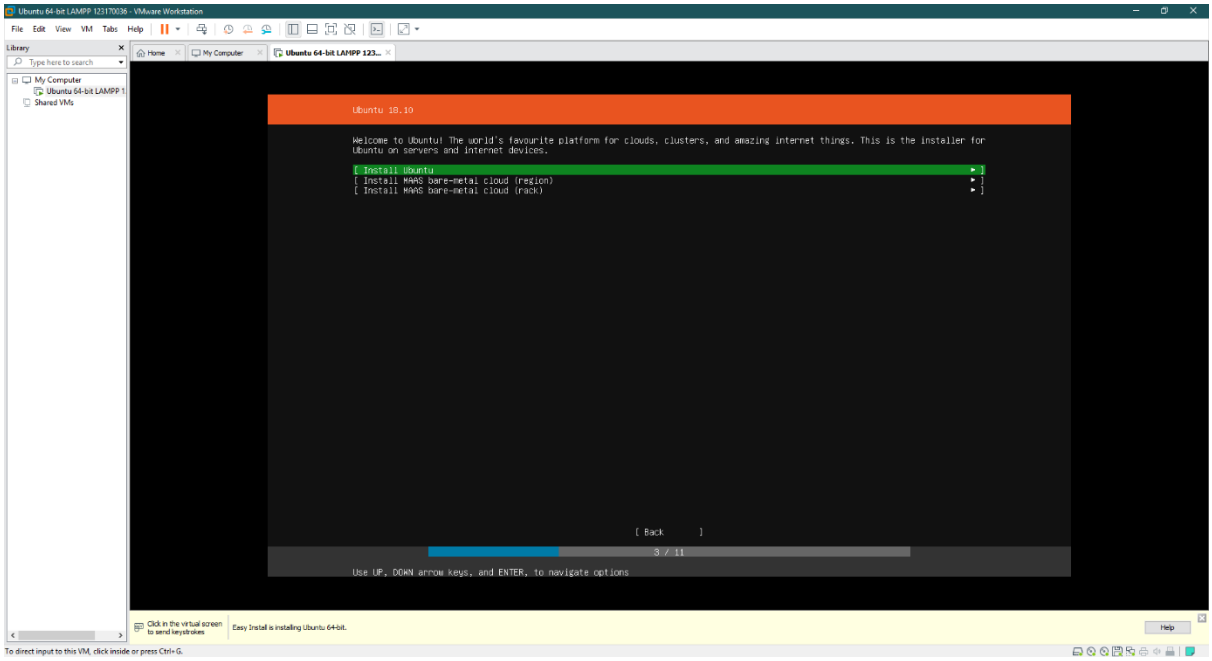


Kemudian setelah proses instalasi akan tampil seperti tampilan diatas.

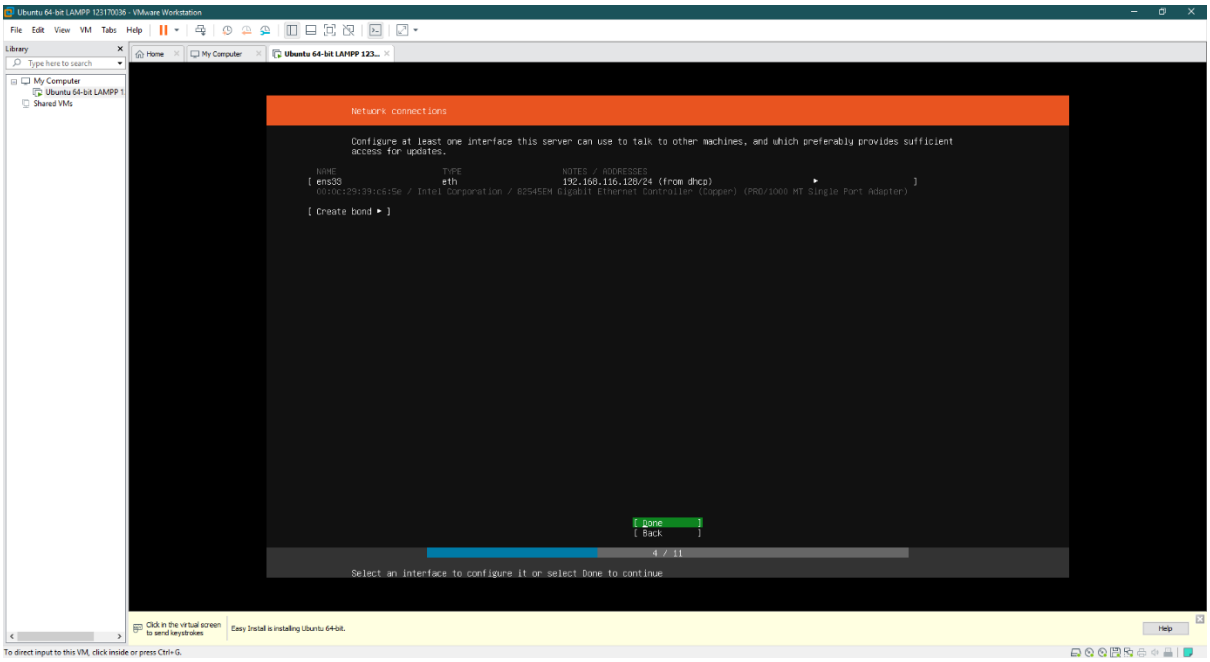
16. Pilih keyboard layout, sesuaikan secara default



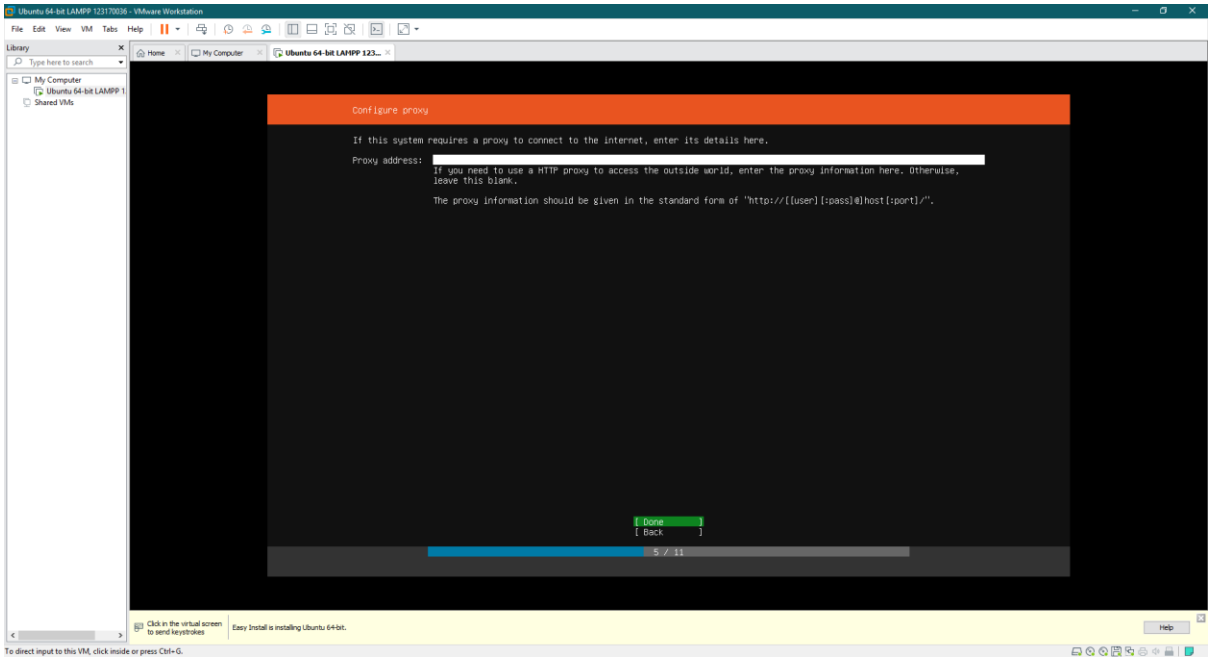
17. Kemudian pilih Ubuntu



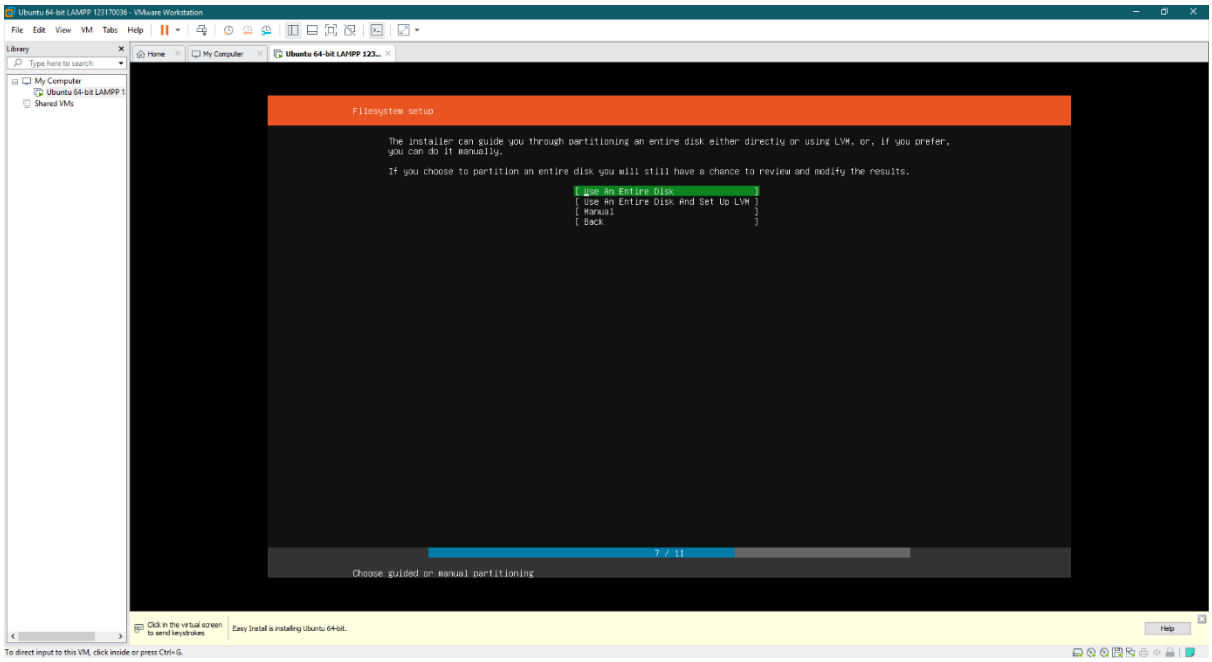
18. Kemudian Next



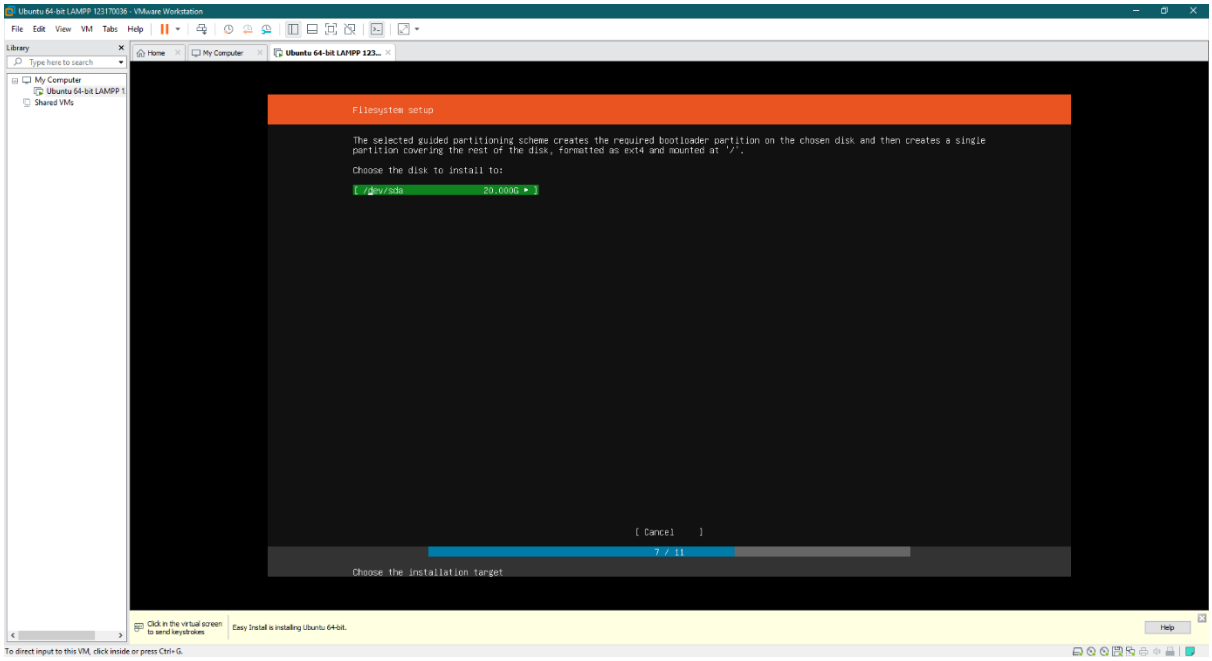
19. Kosongkan, Next



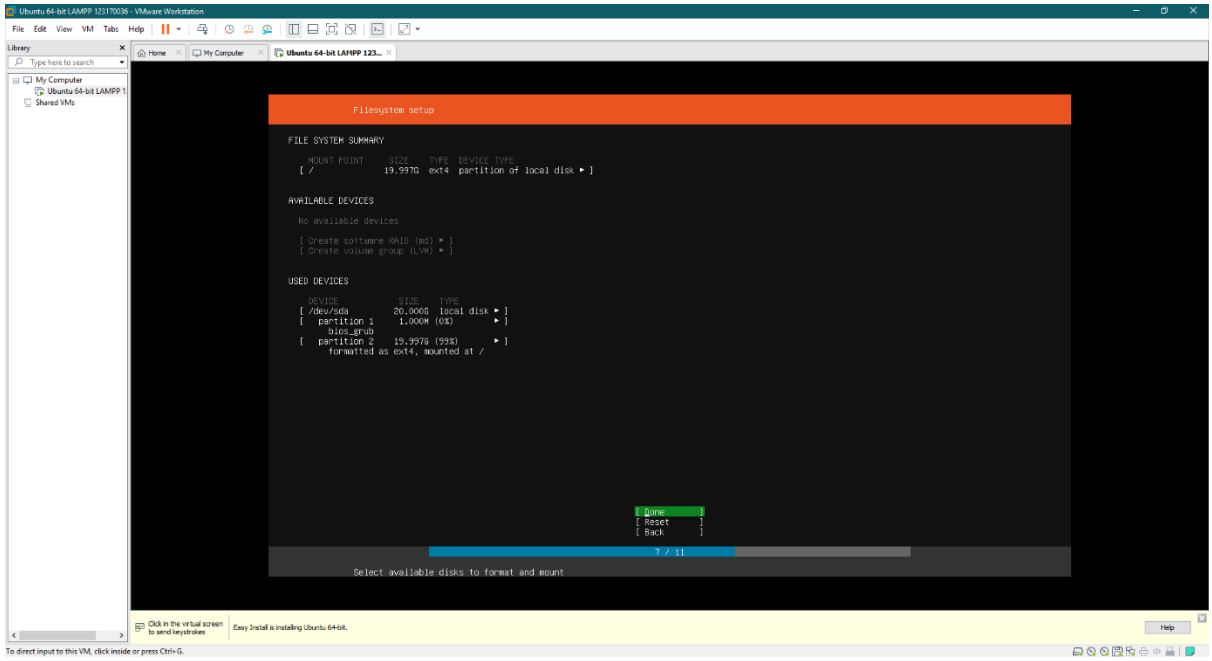
20. Kemudian, Pilih Use an Entire Disk, Kemudian Next



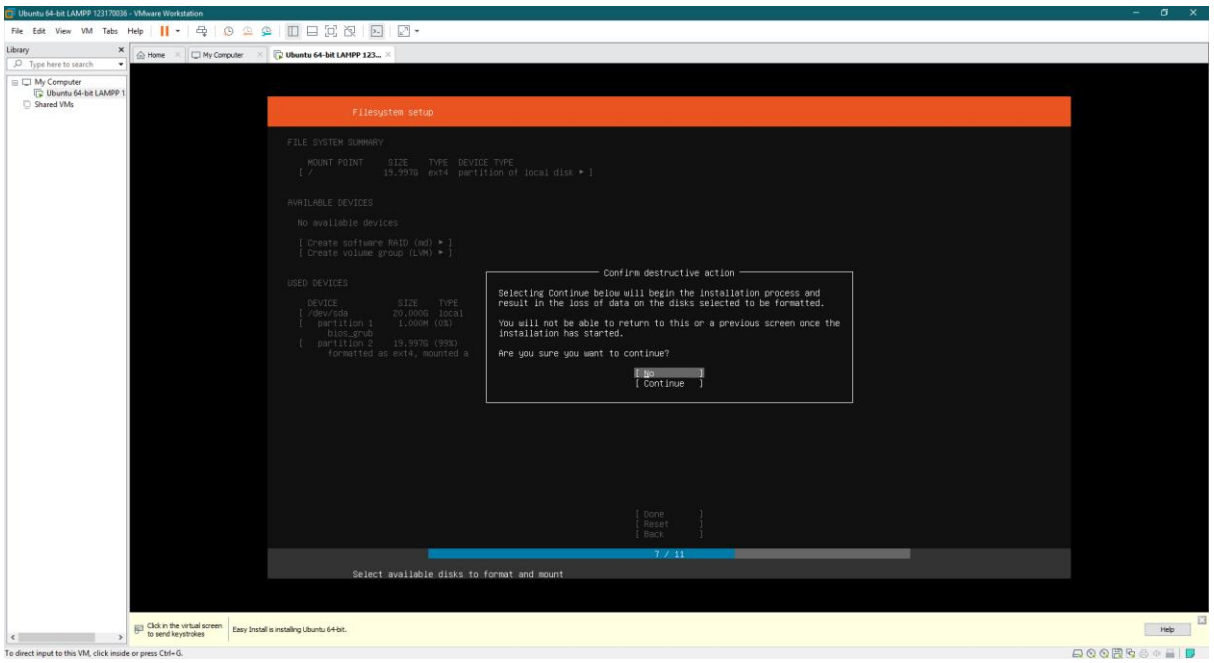
21. Kemudian klik Next



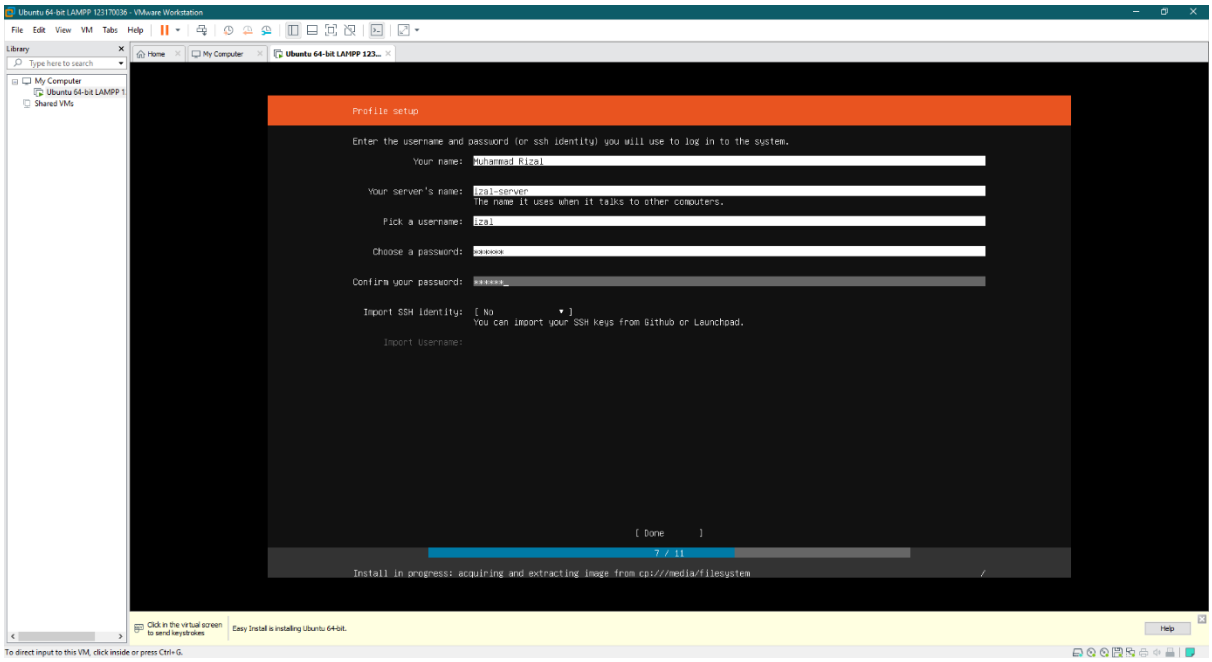
22. Kemudian, akan tampil seperti berikut



23. Klik Ok



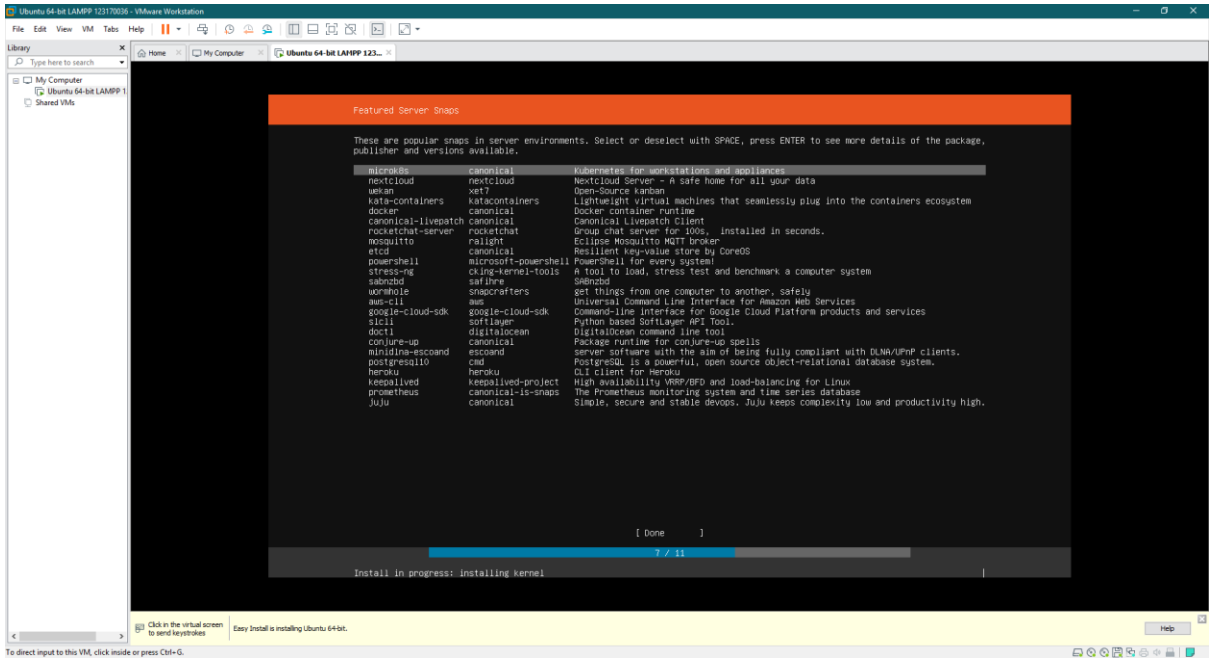
24. Kemudian isi data seperti berikut :



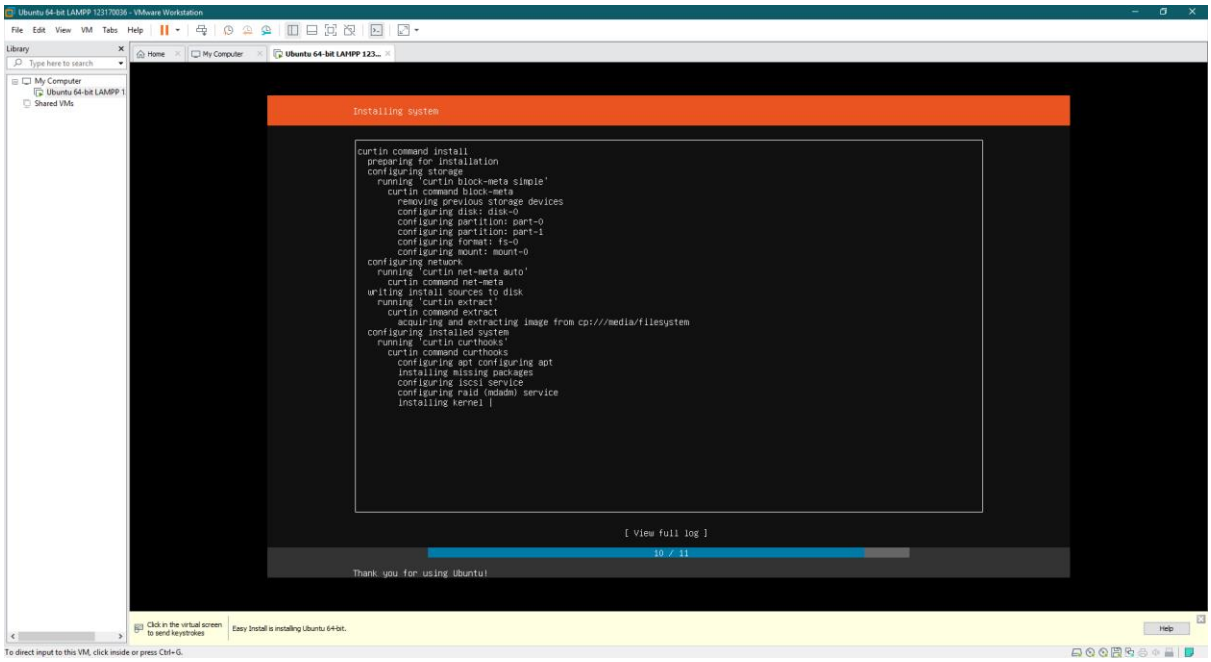
Username: izal

Password: 354123

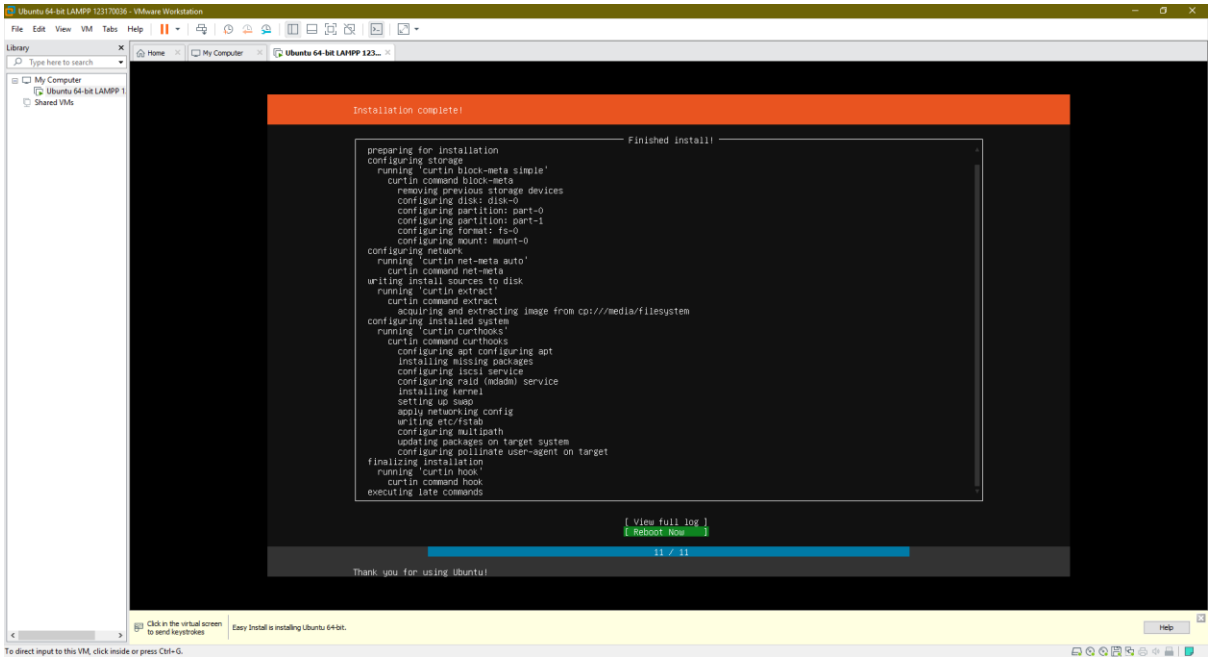
25. Dalam opsi ini akan muncul daftar add-on yang diperlukan, dalam hal ini kita cukup next.



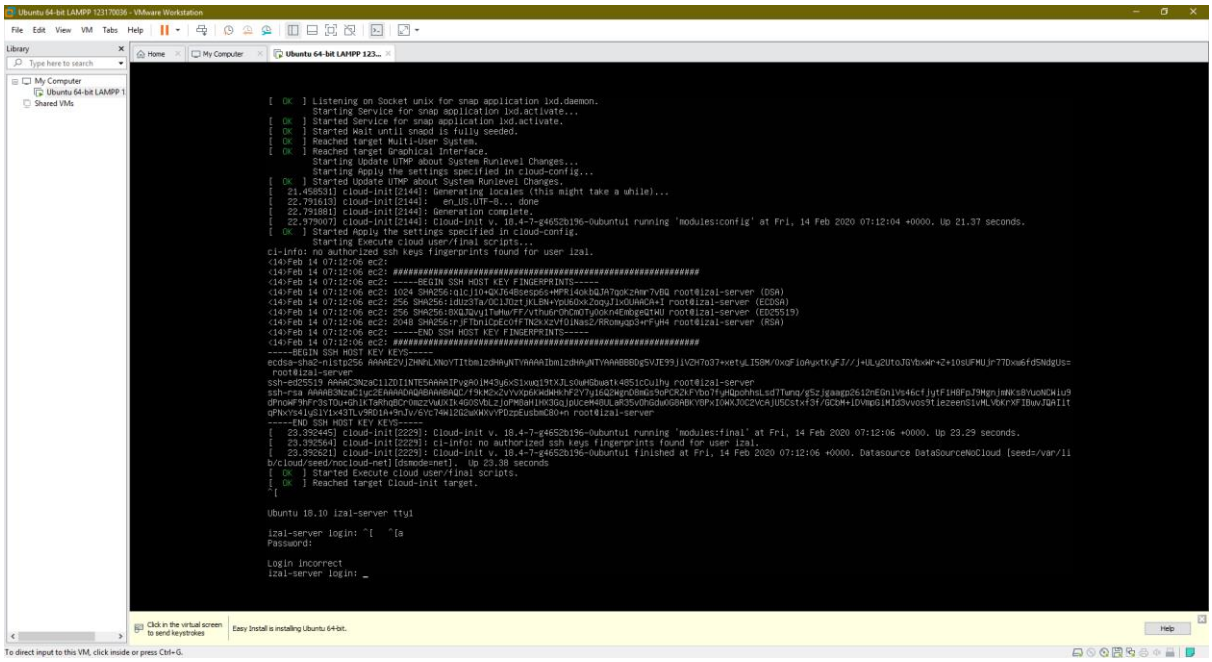
26. Kemudian akan proses installasi kernel seperti tampilan berikut



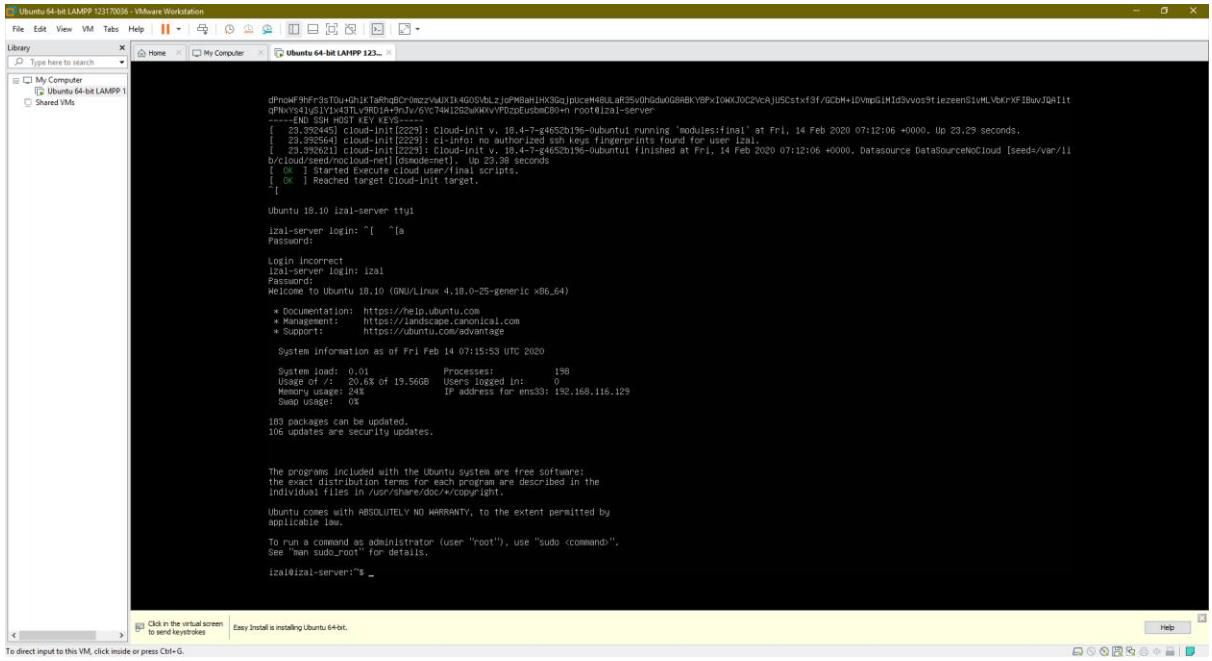
Kemudian jika sudah seperti berikut, klik *Reboot now*



Kemudian login, jika proses telah selesai.



Kemudian, setelah login ketikkan *sudo su* untuk mengganti akses ke root



Untuk kembali ke akun asli, ketikkan *exit*

```
izal@izal-server:~$ sudo su
[sudo] password for izal:
root@izal-server:/home/izal# _
```

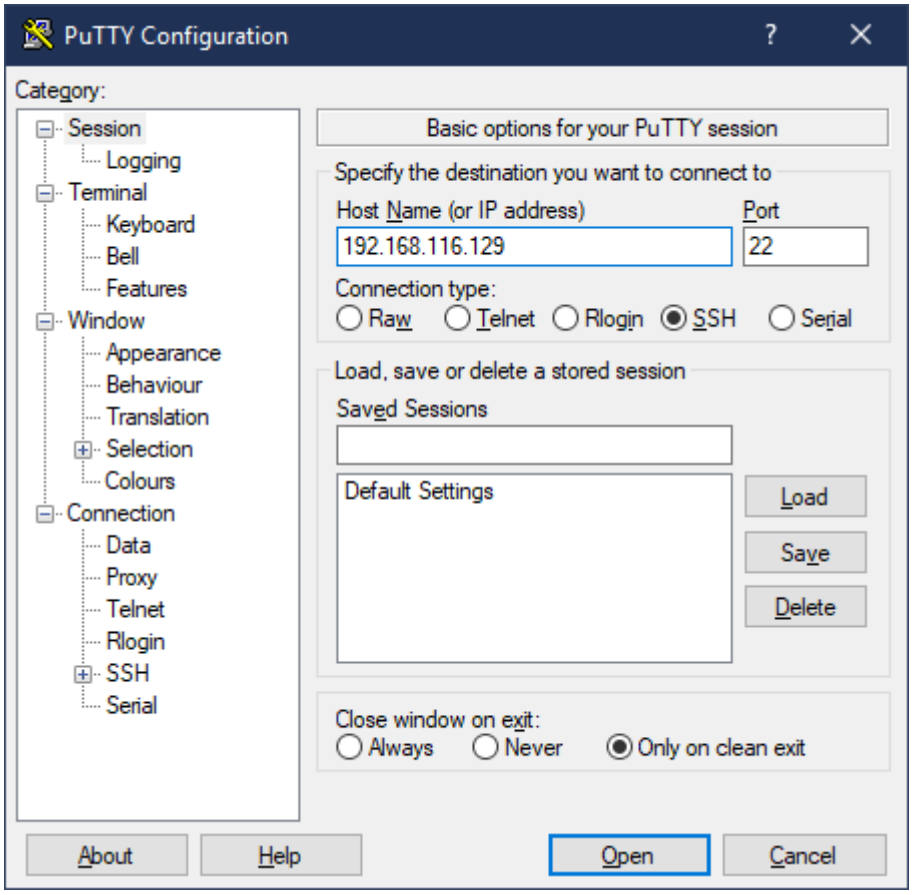
Untuk tampilan sebagai root akan tampil seperti diatas. *root@izal-server*

Untuk mengganti MOTD(Message of The Day) atau welcome screen kita harus konfigurasi *nano /etc/motd* kemudian isi welcome screen sesuai keinginan.

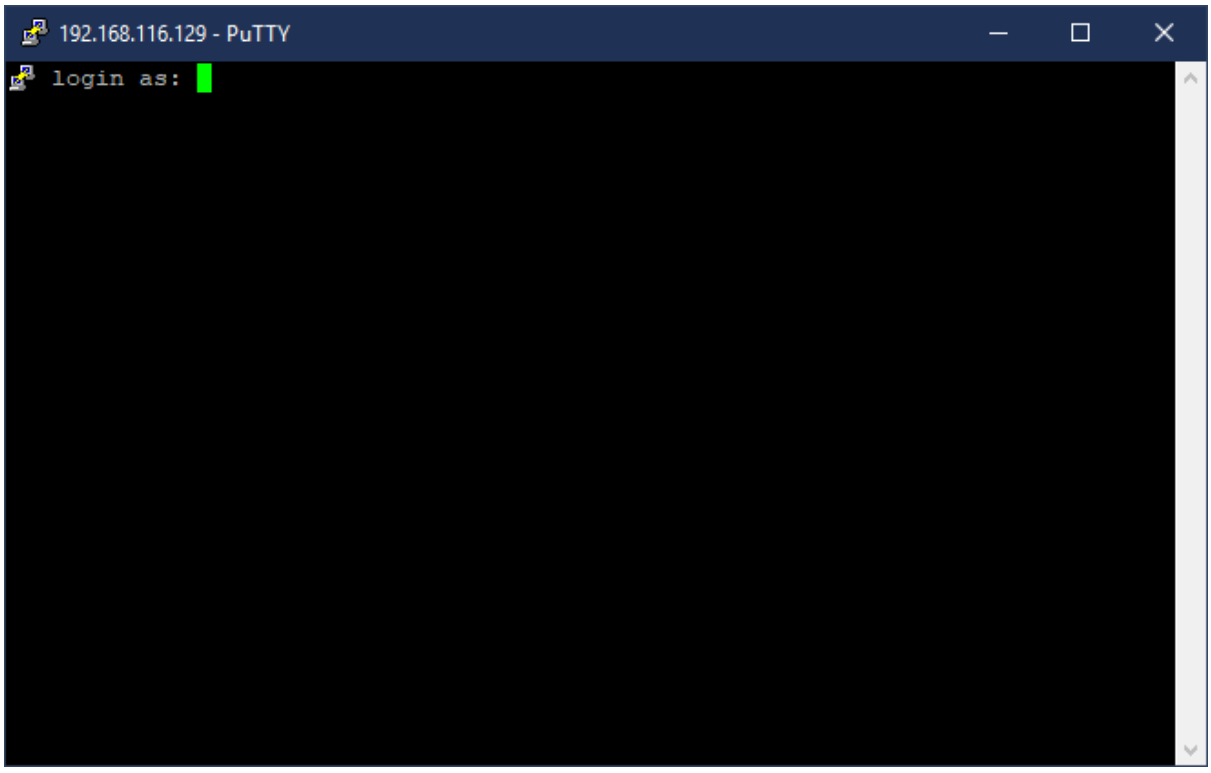
Kemudian untuk melihat IP bisa menggunakan peritah *ifconfig*

```
izal@izal-server:~$ ifconfig
ens33: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.116.129  netmask 255.255.255.0  broadcast 192.168.116.255
        inet6 fe80::20c:29ff:fe39:c65e  prefixlen 64  scopeid 0x20<link>
        ether 00:0c:29:39:c6:5e  txqueuelen 1000  (Ethernet)
        RX packets 288  bytes 68601 (68.6 KB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 127  bytes 18573 (18.5 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 216  bytes 17020 (17.0 KB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 216  bytes 17020 (17.0 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

izal@izal-server:~$ _
```

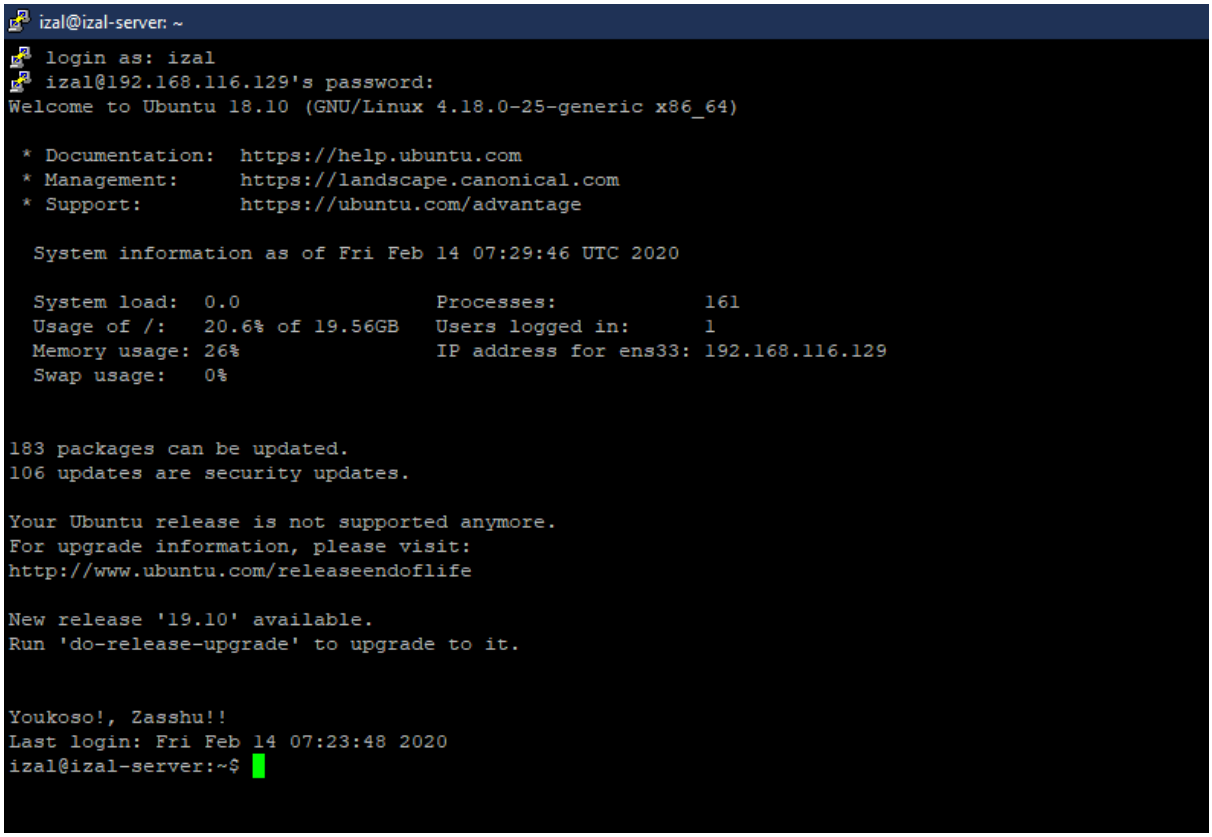
Lalu bukan IP Address Virtual OS tadi di Aplikasi Putty



Klik Open, Lalu Klik Yes. Kemudian akan muncul window command prompt seperti dibawah.



Lalu login akan muncul tampilan seperti berikut :



Kemudian untuk membuat folder di virtual os tersebut seperti berikut.

ls : Perintah untuk menampilkan list folder atau file

```
izal@izal-server:~$ ls -l
total 4
drwxrwxr-x 2 izal izal 4096 Feb 14 07:32 pertemuan-2
izal@izal-server:~$
```

ls -l : menampilkan tampilan seperti diatas, list folder beserta user login dan tanggal.

mkdir <nama-folder> : Perintah diatas untuk membuat folder

```
izal@izal-server:~$ mkdir pertemuan-2
izal@izal-server:~$ ls
pertemuan-2
izal@izal-server:~$
```

copy -r <nama-folder1> <nama-folder2> : Menyalin folder itu sendiri (recursive)

```
izal@izal-server:~$ cp -r pertemuan-2 pertemuan-1
izal@izal-server:~$ dir
pertemuan-1  pertemuan-2
izal@izal-server:~$ ls
pertemuan-1  pertemuan-2
izal@izal-server:~$
```

Untuk melihat perintah lanjutan dari perintah *copy* bisa menggunakan perintah *copy –help* akan tampil informasi tentang perintah *copy* lebih lanjut seperti dibawah

```
izal@izal-server:~$ cp --help
Usage: cp [OPTION]... [-T] SOURCE DEST
  or:  cp [OPTION]... SOURCE... DIRECTORY
  or:  cp [OPTION]... -t DIRECTORY SOURCE...
Copy SOURCE to DEST, or multiple SOURCE(s) to DIRECTORY.

Mandatory arguments to long options are mandatory for short options too.
  -a, --archive                same as -dR --preserve=all
      --attributes-only        don't copy the file data, just the attributes
      --backup[=CONTROL]       make a backup of each existing destination file
  -b                           like --backup but does not accept an argument
      --copy-contents          copy contents of special files when recursive
  -d                           same as --no-dereference --preserve=links
  -f, --force                  if an existing destination file cannot be
                                 opened, remove it and try again (this option
                                 is ignored when the -n option is also used)
  -i, --interactive            prompt before overwrite (overrides a previous -n
                                 option)
  -H                           follow command-line symbolic links in SOURCE
  -l, --link                   hard link files instead of copying
  -L, --dereference            always follow symbolic links in SOURCE
  -n, --no-clobber             do not overwrite an existing file (overrides
                                 a previous -i option)
  -P, --no-dereference         never follow symbolic links in SOURCE
  -p                           same as --preserve=mode,ownership,timestamps
      --preserve[=ATTR_LIST]   preserve the specified attributes (default:
                                 mode,ownership,timestamps), if possible
                                 additional attributes: context, links, xattr,
                                 all
      --no-preserve=ATTR_LIST  don't preserve the specified attributes
      --parents                use full source file name under DIRECTORY
  -R, -r, --recursive          copy directories recursively
      --reflink[=WHEN]         control clone/CoW copies. See below
      --remove-destination     remove each existing destination file before
                                 attempting to open it (contrast with --force)
      --sparse=WHEN            control creation of sparse files. See below
      --strip-trailing-slashes  remove any trailing slashes from each SOURCE
                                 argument
  -s, --symbolic-link          make symbolic links instead of copying
  -S, --suffix=SUFFIX          override the usual backup suffix
  -t, --target-directory=DIRECTORY  copy all SOURCE arguments into DIRECTORY
  -T, --no-target-directory    treat DEST as a normal file
  -u, --update                 copy only when the SOURCE file is newer
                                 than the destination file or when the
                                 destination file is missing
  -v, --verbose                explain what is being done
  -x, --one-file-system        stay on this file system
  -Z                           set SELinux security context of destination
                                 file to default type
      --context[=CTX]          like -Z, or if CTX is specified then set the
                                 SELinux or SMACK security context to CTX
      --help     display this help and exit
      --version  output version information and exit

By default, sparse SOURCE files are detected by a crude heuristic and the
corresponding DEST file is made sparse as well.  That is the behavior
selected by --sparse=auto.  Specify --sparse=always to create a sparse DEST
file whenever the SOURCE file contains a long enough sequence of zero bytes.
Use --sparse=never to inhibit creation of sparse files.

When --reflink[=always] is specified, perform a lightweight copy, where the
data blocks are copied only when modified.  If this is not possible the copy
fails, or if --reflink=auto is specified, fall back to a standard copy.
```

```
izal@izal-server:~$ mv pertemuan-2 "pertemuan-2-LAMPP"
izal@izal-server:~$ dir
pertemuan-1  pertemuan-2-LAMPP
izal@izal-server:~$
```

mv <old-folder> <new-folder> : Untuk mengganti nama folder

```
izal@izal-server:~$ mv --help
Usage: mv [OPTION]... [-T] SOURCE DEST
  or:  mv [OPTION]... SOURCE... DIRECTORY
  or:  mv [OPTION]... -t DIRECTORY SOURCE...
Rename SOURCE to DEST, or move SOURCE(s) to DIRECTORY.

Mandatory arguments to long options are mandatory for short options too.
      --backup[=CONTROL]       make a backup of each existing destination file
  -b                           like --backup but does not accept an argument
  -f, --force                  do not prompt before overwriting
  -i, --interactive            prompt before overwrite
  -n, --no-clobber             do not overwrite an existing file
If you specify more than one of -i, -f, -n, only the final one takes effect.
      --strip-trailing-slashes  remove any trailing slashes from each SOURCE
                                  argument
  -S, --suffix=SUFFIX          override the usual backup suffix
  -t, --target-directory=DIRECTORY  move all SOURCE arguments into DIRECTORY
  -T, --no-target-directory    treat DEST as a normal file
  -u, --update                 move only when the SOURCE file is newer
                                 than the destination file or when the
                                 destination file is missing
  -v, --verbose                explain what is being done
  -Z, --context                set SELinux security context of destination
                                 file to default type
      --help     display this help and exit
      --version  output version information and exit

The backup suffix is '~', unless set with --suffix or SIMPLE_BACKUP_SUFFIX.
The version control method may be selected via the --backup option or through
the VERSION_CONTROL environment variable.  Here are the values:

  none, off       never make backups (even if --backup is given)
  numbered, t     make numbered backups
  existing, nil   numbered if numbered backups exist, simple otherwise
  simple, never   always make simple backups

GNU coreutils online help: <http://www.gnu.org/software/coreutils/>
Full documentation at: <http://www.gnu.org/software/coreutils/mv>
or available locally via: info '(coreutils) mv invocation'
```

nano <nama-file> : Untuk membuat file text / code tertentu

cat <nama-file> : Untuk melihat isi file bagian atas

tail <nama-file> : Untuk melihat isi file bagian bawah