

LAPORAN PRAKTIKUM SISTEM OPERASI

MODUL 12: REMASTERING



Disusun oleh:

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FAKULTAS KOMUNIKASI DAN INFORMATIKA

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TUGAS

1. Buka file Ubuntu yang akan digunakan untuk remastering.
2. Buka terminal pada Ubuntu.
3. Untuk melakukan remastering kita menggunakan aplikasi Cubic, untuk menginstall aplikasi tersebut kita mengetikkan `sudo apt-add-repository ppa:cubic-wizard/release`.

```
File Edit View Search Terminal Help
riyan@riyan-VirtualBox:~$ sudo apt-add-repository ppa:cubic-wizard/release
[sudo] password for riyan:
PPA for Cubic release branch

  Custom Ubuntu ISO Creator

Cubic (Custom Ubuntu ISO Creator) is a GUI wizard to create a customized Ubuntu
Live ISO image.

More info: https://launchpad.net/cubic
More info: https://launchpad.net/~cubic-wizard/+archive/ubuntu/release
Press [ENTER] to continue or Ctrl-C to cancel adding it.

Hit:1 http://id.archive.ubuntu.com/ubuntu bionic InRelease
Hit:2 http://id.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:3 http://id.archive.ubuntu.com/ubuntu bionic-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu bionic-security InRelease
Hit:5 http://ppa.launchpad.net/cubic-wizard/release/ubuntu bionic InRelease
Reading package lists... Done
riyan@riyan-VirtualBox:~$
```

4. Lalu ketik `sudo apt update`, tunggu proses update hingga selesai.

```

riyan@riyan-VirtualBox:~$ sudo apt update
Hit:1 http://id.archive.ubuntu.com/ubuntu bionic InRelease
Hit:2 http://id.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:3 http://id.archive.ubuntu.com/ubuntu bionic-backports InRelease
Hit:4 http://ppa.launchpad.net/cubic-wizard/release/ubuntu bionic InRelease
Hit:5 http://security.ubuntu.com/ubuntu bionic-security InRelease
Reading package lists... Done
Building dependency tree
Reading state information... Done
262 packages can be upgraded. Run 'apt list --upgradable' to see them.
riyan@riyan-VirtualBox:~$

```

5. masukkan kode `sudo apt -y install cubic`, dimana kode ini digunakan untuk menginstall aplikasi Cubic.

```

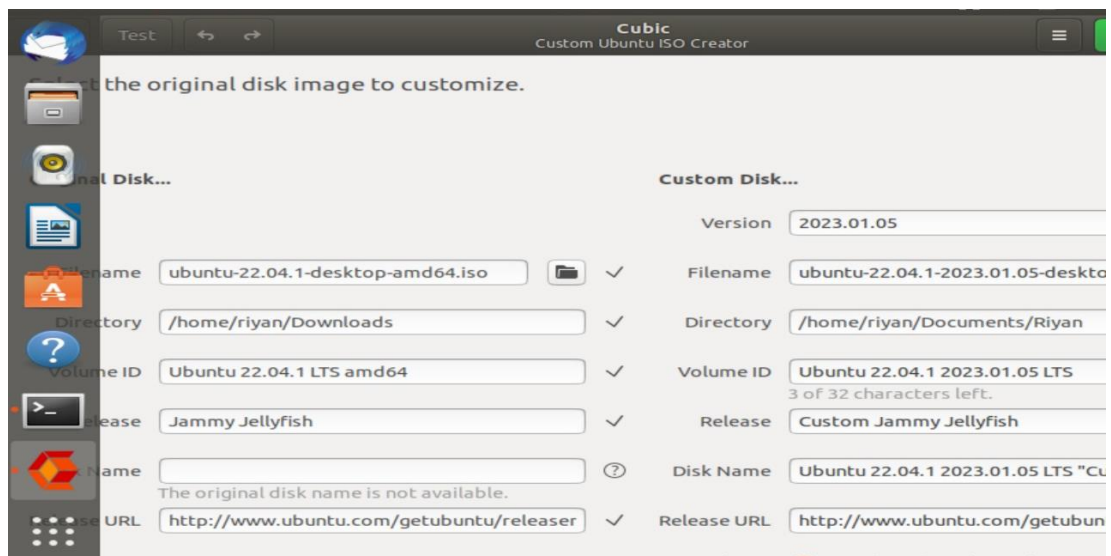
riyan@riyan-VirtualBox:~$ sudo apt -y install cubic
Reading package lists... Done
Building dependency tree
Reading state information... Done
cubic is already the newest version (2022.12-74-release~202212012320~ubuntu18.04.1).
0 upgraded, 0 newly installed, 0 to remove and 262 not upgraded.
riyan@riyan-VirtualBox:~$

```

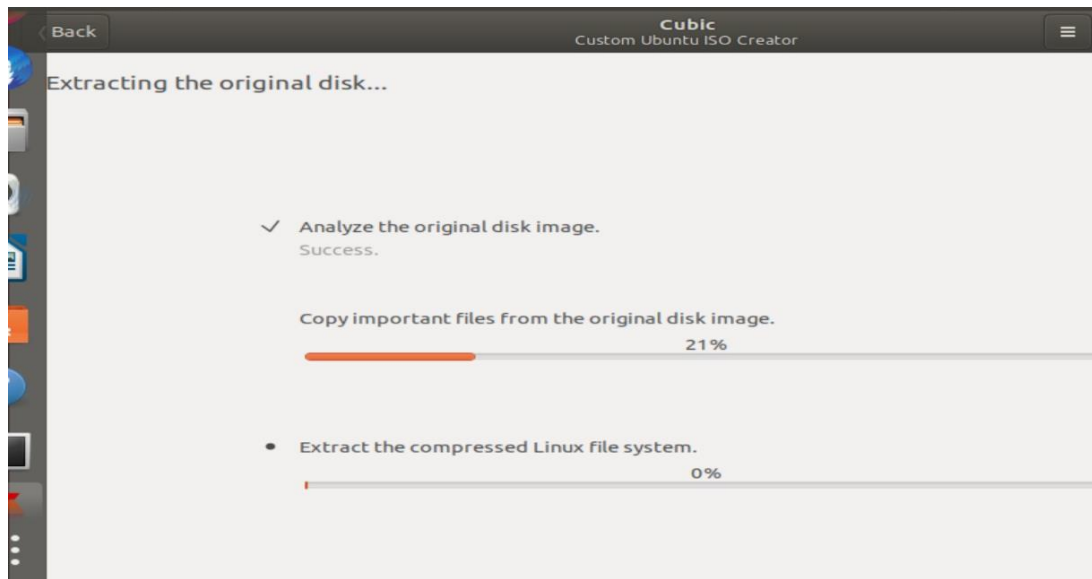
6. Jika sudah selesai kemudian ketik *cubic* untuk membuka cubic yang sudah kita install tadi dan begini tampilan awalnya setelah kita membuat folder di bagian dokumen,



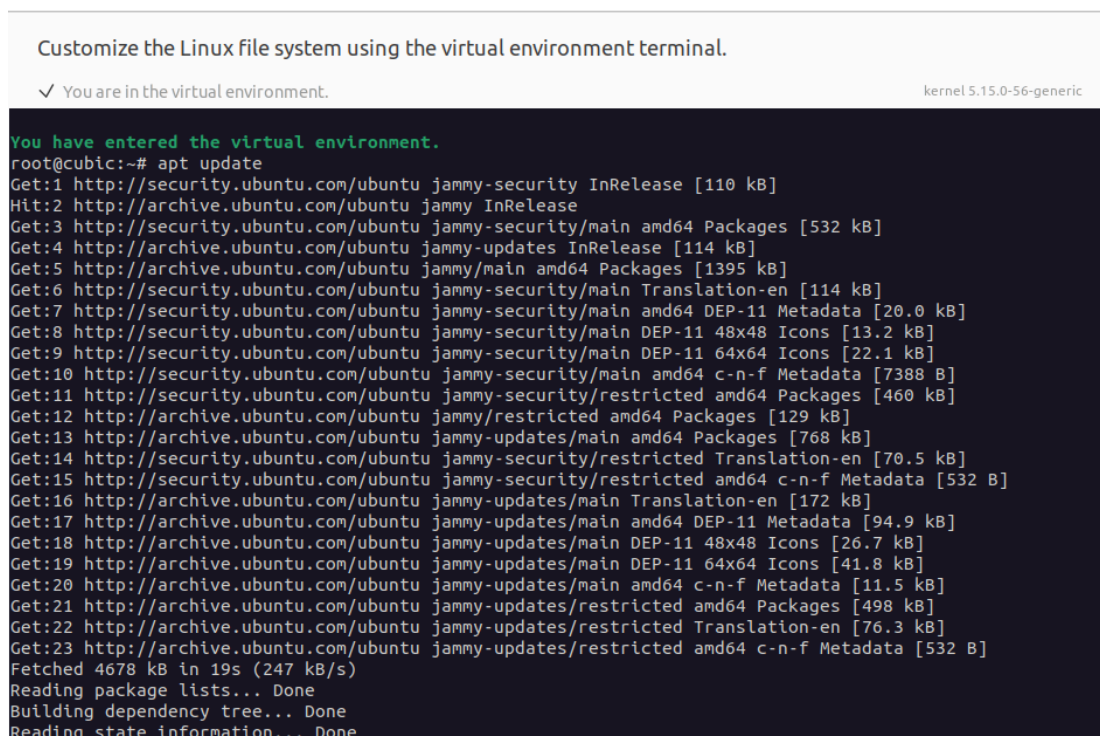
7. Lalu memilih original disk yang akan di customize dan mengatur informasi disk baru yang akan dibuat.



8. Menunggu proses sampai selesai



9. Masuk ke virtual environment kemudian ketik *apt update*.



10. Ketik add-apt-repository universe.

```
root@cubic:~# add-apt-repository universe
Adding component(s) 'universe' to all repositories.
Press [ENTER] to continue or Ctrl-c to cancel.
Added universe to: deb http://archive.ubuntu.com/ubuntu/ jammy universe main restricted
Added universe to: deb http://security.ubuntu.com/ubuntu/ jammy-security universe main restricted
Added universe to: deb http://archive.ubuntu.com/ubuntu/ jammy-updates universe main restricted
Hit:1 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:2 http://archive.ubuntu.com/ubuntu jammy InRelease
Get:3 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [622 kB]
Hit:4 http://archive.ubuntu.com/ubuntu jammy-updates InRelease
Get:5 http://archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:6 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [82.9 kB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 DEP-11 Metadata [13.3 kB]
Get:8 http://security.ubuntu.com/ubuntu jammy-security/universe DEP-11 48x48 Icons [5769 B]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/universe DEP-11 64x64 Icons [12.3 kB]
Get:10 http://security.ubuntu.com/ubuntu jammy-security/universe DEP-11 64x64@2 Icons [29 B]
Get:11 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [11.0 kB]
Get:12 http://archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
```

11. Ketik add-apt-repository multiverse

```
root@cubic:~# apt-add-repository multiverse
Adding component(s) 'multiverse' to all repositories.
Press [ENTER] to continue or Ctrl-c to cancel.
Added multiverse to: deb http://archive.ubuntu.com/ubuntu/ jammy main multiverse restricted universe
Added multiverse to: deb http://security.ubuntu.com/ubuntu/ jammy-security main multiverse restricted universe
Added multiverse to: deb http://archive.ubuntu.com/ubuntu/ jammy-updates main multiverse restricted universe
Hit:1 http://security.ubuntu.com/ubuntu jammy-security InRelease
Get:2 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [4268 B]
Get:3 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [972 B]
Get:4 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [228 B]
Hit:5 http://archive.ubuntu.com/ubuntu jammy InRelease
Hit:6 http://archive.ubuntu.com/ubuntu jammy-updates InRelease
Get:7 http://archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:8 http://archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:9 http://archive.ubuntu.com/ubuntu jammy/multiverse amd64 DEP-11 Metadata [42.1 kB]
Get:10 http://archive.ubuntu.com/ubuntu jammy/multiverse DEP-11 48x48 Icons [42.7 kB]
```

12. Ketik apt update

```
root@cubic:~# apt update
Hit:1 http://archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://security.ubuntu.com/ubuntu jammy-security InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
300 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

13. Ketik python3 -V. untuk mengetahui python versi berapa yang terdapat dlam Ubuntu

```
root@cubic:~# python3 -V
Python 3.10.4
```

14. Lalu kita melakukan install aplikasi yang nantinya akan ditampilkan dalam Ubuntu yang terbaru.

a) Menginstall aplikasi VLC dengan *apt install vlc*.

```
o such file or directory"
root@cubic:~# apt install vlc
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  i965-vd-driver intel-media-va-driver liba52-0.7.4 libaacs0 libaom3 libaribb24-0 libass9 libavcodec58 libavformat58 libavutil56
  libbdplus0 libbluray2 libcdcb2 libchromaprint1 libcodecs2-1.0 libdavid5 libdc1394-25 libdca0 libdouble-conversion3 libdvbpsi10
  libdvnav4 libdvdrread8 libebml5 libfaad2 libgme0 libgsm1 libgdm12 libixml10 libkate1 liblua5.2-0 libmad0 libmatroska7 libmd4c0
  libmfx1 libmpcdec6 libmpeg2-4 libmysofa1 libnorm1 libopenmpt-modplug1 libopenmpt0 libpcre2-16-0 libpgm-5.3-0 libplacebo192
  libpostproc55 libprotobuf-lite23 libproxy-tools libqt5core5a libqt5dbus5 libqt5gui5 libqt5network5 libqt5svg5 libqt5widgets5
  libqt5x11extras5 librabtmtq4 libresid-builder0c2a libSDL-image1.2 libSDL1.2debian libshine3 libsidplay2 libsnappy1v5 libsndio7.0
  libspatialaudio0 libstr1.4-gnutls libssh-gcrypt-4 libssh2-1 libswresample3 libswscale5 libudfread0 libupnp13 libva-drm2
  libva-wayland2 libva-x11-2 libva2 libvdpau1 libvlc-bin libvlc5 libvlccore9 libx264-163 libx265-199 libxcb-composite0
  libxcb-xinerama0 libxcb-xinput0 libxvidcore4 libzmq5 libzvt-common libzvt0 mesa-va-drivers mesa-vdpau-drivers
  ocl-icd-libopencl1 qt5-gtk-platformtheme qttranslations5-l10n va-driver-all vdpau-driver-all vlc-bin vlc-data vlc-l10n
  vlc-plugin-access-extra vlc-plugin-base vlc-plugin-notify vlc-plugin-qt vlc-plugin-samba vlc-plugin-skins2
  vlc-plugin-video-output vlc-plugin-video-splitter vlc-plugin-visualization
Suggested packages:
  i965-vd-driver-shaders libcuda1 libnvcuvid1 libnvidia-encode1 libbluray-bdj libvdpss2 qt5-image-formats-plugins qtwalland5
  sndiod opencl-icd libvdpau-via-gli vlc-plugin-fluidsynth vlc-plugin-jack vlc-plugin-svg
The following NEW packages will be installed:
  i965-vd-driver intel-media-va-driver liba52-0.7.4 libaacs0 libaom3 libaribb24-0 libass9 libavcodec58 libavformat58 libavutil56
  libbdplus0 libbluray2 libcdcb2 libchromaprint1 libcodecs2-1.0 libdavid5 libdc1394-25 libdca0 libdouble-conversion3 libdvbpsi10
  libdvnav4 libdvdrread8 libebml5 libfaad2 libgme0 libgsm1 libgdm12 libixml10 libkate1 liblua5.2-0 libmad0 libmatroska7 libmd4c0
  libmfx1 libmpcdec6 libmpeg2-4 libmysofa1 libnorm1 libopenmpt-modplug1 libopenmpt0 libpcre2-16-0 libpgm-5.3-0 libplacebo192
  libpostproc55 libprotobuf-lite23 libproxy-tools libqt5core5a libqt5dbus5 libqt5gui5 libqt5network5 libqt5svg5 libqt5widgets5
  libqt5x11extras5 librabtmtq4 libresid-builder0c2a libSDL-image1.2 libSDL1.2debian libshine3 libsidplay2 libsnappy1v5 libsndio7.0
  libspatialaudio0 libstr1.4-gnutls libssh-gcrypt-4 libssh2-1 libswresample3 libswscale5 libudfread0 libupnp13 libva-drm2
  libva-wayland2 libva-x11-2 libva2 libvdpau1 libvlc-bin libvlc5 libvlccore9 libx264-163 libx265-199 libxcb-composite0
  libxcb-xinerama0 libxcb-xinput0 libxvidcore4 libzmq5 libzvt-common libzvt0 mesa-va-drivers mesa-vdpau-drivers
```

b) Menginstall aplikasi Geany dengan *apt install geany*.

```
root@cubic:~# apt install geany
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  geany-common
Suggested packages:
  libvte9 doc-base
The following NEW packages will be installed:
  geany geany-common
0 upgraded, 2 newly installed, 0 to remove and 310 not upgraded.
Need to get 3298 kB of archives.
After this operation, 12.1 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu jammy/universe amd64 geany-common all 1.38-1 [2057 kB]
Get:2 http://archive.ubuntu.com/ubuntu jammy/universe amd64 geany amd64 1.38-1 [1241 kB]
Fetched 3298 kB in 14s (233 kB/s)
ERROR: couldn't connect to zsys daemon: connection error: desc = "transport: Error while dialing dial unix /run/zsysd.sock: connect: no such file or directory"
Selecting previously unselected package geany-common.
(Reading database ... 209071 files and directories currently installed.)
Preparing to unpack .../geany-common_1.38-1_all.deb ...
Unpacking geany-common (1.38-1) ...
Selecting previously unselected package geany.
Preparing to unpack .../geany_1.38-1_amd64.deb ...
Unpacking geany (1.38-1) ...
Setting up geany-common (1.38-1) ...
Setting up geany (1.38-1) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
```

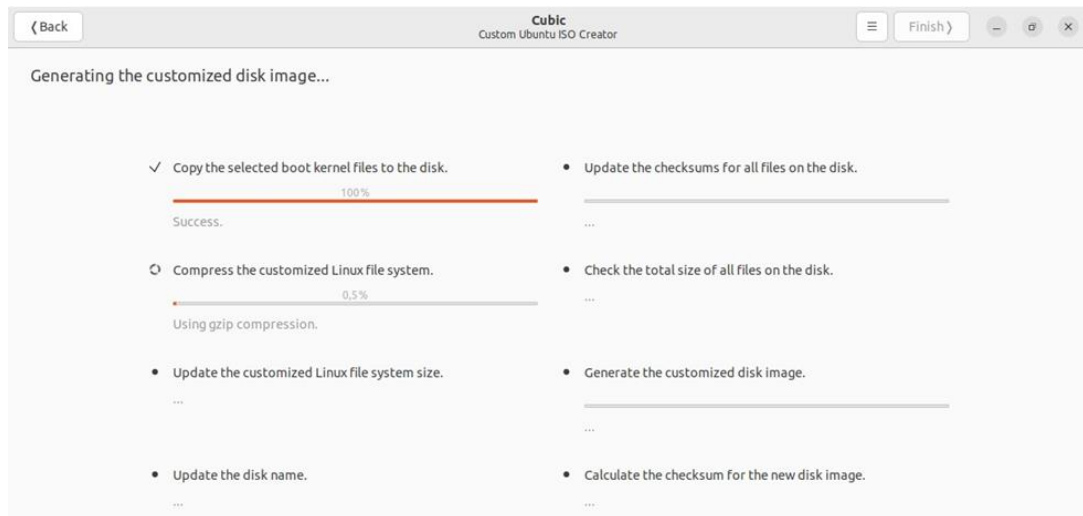
c) Menginstall aplikasi Inkscape dengan *apt install inkscape*.

```
root@cubic:~# apt install inkscape
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  fig2dev gawk gsfontr inkscape-common inkscape-6.q16 lib2geom1.1.0 libde265-0 libfftw3-double3 libgsl27
  libgslcblas0 libheif1 libilmbase25 libimage-magick-perl libimage-magick-q16-perl libjxr-tools libjxr0 liblqr-1.0
  libmagick++-6.q16-8 libmagickcore-6.q16-6 libmagickcore-6.q16-6-extra libmagickwand-6.q16-6 libnetpbm10 libopenexr25 libpotrace0
  libsigsegv2 libwmf-bin netpbm python3-bs4 python3-html5lib python3-lxml python3-numpy python3-scour python3-soupsieve
  python3-webencodings
Suggested packages:
  xfig gawk-doc inkscape-doc autotrace curl enscript gimp gnuplot grads graphviz hp2xx html2ps mplayer povray radiance
  texlive-base-bin ufraw-batch dia inkscape-tutorials libsvg-perl pstotext python3-uniconvertor ruby libfftw3-bin libfftw3-dev
  gsl-ref-psdoc | gsl-doc-pdf | gsl-doc-info | gsl-ref-html python3-genshi python-lxml-doc gcc gfortran python-numpy-doc
  python3-dev python3-pytest
The following NEW packages will be installed:
  fig2dev gawk gsfontr inkscape inkscape-common inkscape-6.q16 lib2geom1.1.0 libde265-0 libfftw3-double3
  libgsl27 libgslcblas0 libheif1 libilmbase25 libimage-magick-perl libimage-magick-q16-perl libjxr-tools libjxr0 liblqr-1.0
  libmagick++-6.q16-8 libmagickcore-6.q16-6 libmagickcore-6.q16-6-extra libmagickwand-6.q16-6 libnetpbm10 libopenexr25 libpotrace0
  libsigsegv2 libwmf-bin netpbm python3-bs4 python3-html5lib python3-lxml python3-numpy python3-scour python3-soupsieve
  python3-webencodings
0 upgraded, 36 newly installed, 0 to remove and 310 not upgraded.
Need to get 34.4 MB of archives.
After this operation, 147 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu jammy/main amd64 libsigsegv2 amd64 2.13-1ubuntu3 [14.6 kB]
Get:2 http://security.ubuntu.com/ubuntu jammy-security/main amd64 python3-numpy amd64 1:1.21.5-1ubuntu22.04.1 [3467 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy/main amd64 gawk amd64 1:5.1.0-1build3 [447 kB]
Get:4 http://archive.ubuntu.com/ubuntu jammy/universe amd64 inkscape-common all 8:6.9.11.60+dfsg-1.3build2 [64.4 kB]
Get:5 http://archive.ubuntu.com/ubuntu jammy/main amd64 libfftw3-double3 amd64 3.3.8-2ubuntu8 [770 kB]
12% [5 libfftw3-double3 422 kB/770 kB 55%] 15.8 kB/s 31min 36s
```

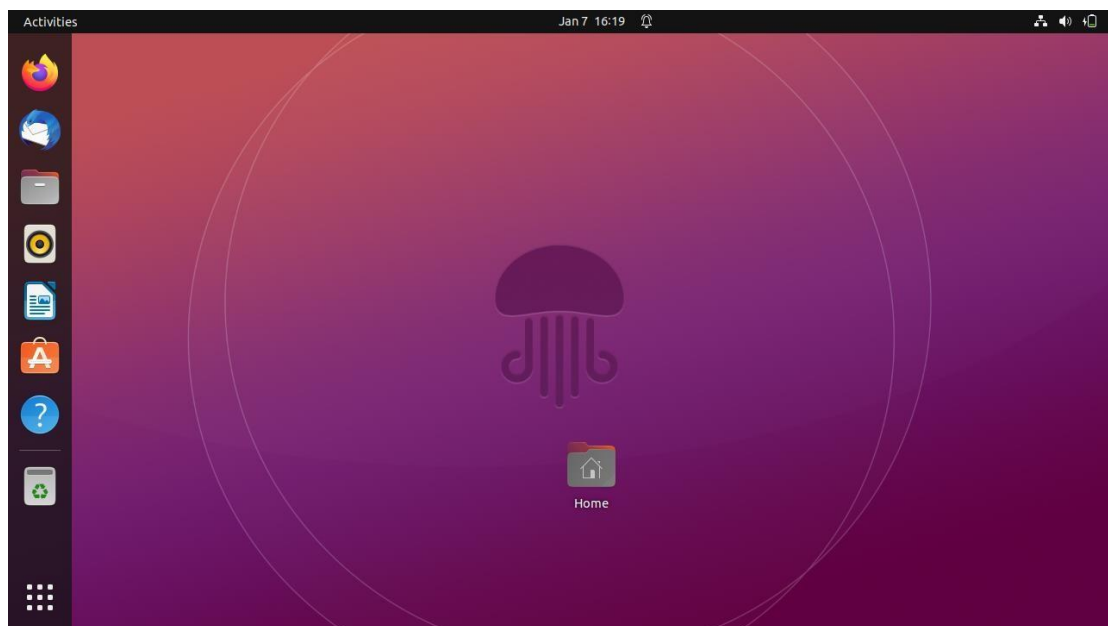
15. Lalu masuk ke Cubic lagi dan edit beberapa fitur

```
You have entered the virtual environment.
root@cubic:~# nano /etc/lsb-release
root@cubic:~# nano /etc/issue
root@cubic:~# nano /etc/issue.net
root@cubic:~# nano /usr/share/ubiquity-slideshow/slides/welcome.html
root@cubic:~#
```

16. Jika program telah selesai pindahkan ISO yang sudah di remastering di dalam Ubuntu ke dalam windows untuk melanjutkan tahap berikutnya.



17. Masuk ke virtual box dan buat program Ubuntu baru. Untuk ISO Ubuntu gunakan ISO Ubuntu yang sudah di remastering.



18. Berikut ini beberapa aplikasi yang sudah kita install sebelumnya yaitu VLC, Geany, dan Inkscape.

