TUGAS 1 SISTEM OPERASI

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1. Whereis

```
christina@christina-VirtualBox:~$ whereis firefox
firefox: /usr/bin/firefox /usr/lib/firefox /etc/firefox
```

Perintah whereis digunakan untuk mengetahui direktori dimana berkas-berkas perangkat lunak tersebut disimpan.

2. Which

```
christina@christina-VirtualBox:~$ which python3
/usr/bin/python3
```

Perintah which digunakan untuk menemukan direktori utama yang menyimpan berkas-berkas suatu perangkat lunak.

3. Whatis

```
christina@christina-VirtualBox:~$ whatis python3
python3 (1) - an interpreted, interactive, object-oriented programmi...
```

Perintah whatis digunakan untuk mencari tahu definisi dari sebuah perangkat lunak.

4. Locate & Find

- Find : Dengan perintah ~/ -iname (nama_file) bisa digunakan untuk mencari berkas secara keseluruhan.

```
christina@christina-VirtualBox:~$ find ~/ -iname 1.png
/home/christina/Desktop/1.png
```

5. Ping

```
christina@christina-VirtualBox:~$ ping google.com
PING forcesafesearch.google.com (216.239.38.120) 56(84) bytes of data.
64 bytes from any-in-2678.le100.net (216.239.38.120): icmp_seq=5 ttl=110 time=33
.8 ms
64 bytes from any-in-2678.le100.net (216.239.38.120): icmp_seq=6 ttl=110 time=39
.3 ms
64 bytes from any-in-2678.le100.net (216.239.38.120): icmp_seq=8 ttl=110 time=41
.2 ms
64 bytes from any-in-2678.le100.net (216.239.38.120): icmp_seq=14 ttl=110 time=3
3.3 ms
64 bytes from any-in-2678.le100.net (216.239.38.120): icmp_seq=15 ttl=110 time=3
4.0 ms
64 bytes from any-in-2678.le100.net (216.239.38.120): icmp_seq=22 ttl=110 time=1
08 ms
64 bytes from any-in-2678.le100.net (216.239.38.120): icmp_seq=50 ttl=110 time=1
08 ms
64 bytes from any-in-2678.le100.net (216.239.38.120): icmp_seq=50 ttl=110 time=3
1.3 ms
```

Perintah ping digunakan untuk melihat/cek koneksi internet sebuah IP Address, Website, dan lainlain.

6. Power Off

```
christina@christina-VirtualBox:~$ pweroff
```

Perintah poweroff jika dijalankan, sistem operasi akan di shutdown (di matikan).

7. Reboot

```
christina@christina-VirtualBox:~$ reboot
```

Perintah reboot jika dijalankan, sistem operasi akan di restart (di muat ulang).

8. Systemctl Suspend

```
christina@christina-VirtualBox:~$ systemctl suspend
```

Perintah systemctl suspend jika di jalankan, maka sistem operasi akan masuk pada mode *sleep*.

9. Sudo apt update

```
christina@christina-VirtualBox:~$ sudo apt update
[sudo] password for christina:
Ign:1 http://packages.linuxmint.com vanessa InRelease
File Edit View Search Terminal Help
christina@christina-VirtualBox:~$ sudo apt upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following NEW packages will be installed:
  linux-headers-5.15.0-47 linux-headers-5.15.0-47-generic
  linux-image-5.15.0-47-generic linux-modules-5.15.0-47-generic
  linux-modules-extra-5.15.0-47-generic
The following packages will be upgraded:
  apparmor apt apt-utils brltty bulky compiz compiz-core compiz-gnome compiz-plugins compiz-plugins-default compizconfig-settings-manager
  cryptsetup cryptsetup-bin cryptsetup-initramfs curl dmidecode
  evolution-data-server evolution-data-server-common firefox firefox-locale-en
  firmware-sof-signed fonts-opensymbol fprintd girl.2-gstreamer-1.0
  girl.2-gtk-3.0 girl.2-javascriptcoregtk-4.0 girl.2-nm-1.0 girl.2-notify-0.7 girl.2-webkit2-4.0 girl.2-xapp-1.0 girl.2-xviewer-3.0 gnome-desktop3-data
  gnome-keyring gnome-keyring-pkcsll gnome-settings-daemon-common
  gstreamer1.0-clutter-3.0 gstreamer1.0-gtk3 gstreamer1.0-plugins-good
  gstreamer1.0-pulseaudio gstreamer1.0-tools gtk-update-icon-cache gvfs
  gvfs-backends gvfs-common gvfs-daemons gvfs-fuse gvfs-libs intel-media-va-driver intel-microcode isc-dhcp-client isc-dhcp-common
  libapparmor1 libapt-pkg6.0 libbrlapi0.8 libc-bin libc6 libc6-dbg
  libcamel-1.2-63 libclutter-gst-3.0-0 libcompizconfig0 libcryptsetup12
  libcurl3-gnutls libcurl4 libdecoration0 libebackend-1.2-10 libebook-1.2-20
  libebook-contacts-1.2-3 libecal-2.0-1 libedata-book-1.2-26
  libedata-cal-2.0-1 libedataserver-1.2-26 libedataserverui-1.2-3 libegl-mesa0
libfprint-2-2 libgail-3-0 libgbm1 libgl1-mesa-dri libglapi-mesa libglx-mesa0
  libgnutls30 libgstreamer-plugins-good1.0-0 libgstreamer1.0-0 libgtk-3-0
  libgtk-3-bin libgtk-3-common libjavascriptcoregtk-4.0-18 libjson-c5 libldb2
  liblibreoffice-java libllvm13 libnetplan0 libnftables1 libnm0 libnotify-bin
  libnotify4 libnss-myhostname libnss-systemd libnvpair3linux
libpam-gnome-keyring libpam-systemd libpkcs11-helper1 libqt5core5a
```

Perintah sudo apt update digunakan untuk memperbaruhi daftar paket yang ada pada sistem, baik paket-palet lama maupun paket-paket yang baru datang ke repostori.

10. Sudo apt upgrade

```
christina@christina-VirtualBox:~$ sudo apt upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following NEW packages will be installed:
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  linux-image-5.15.0-47-generic linux-modules-5.15.0-47-generic
  linux-modules-extra-5.15.0-47-generic
The following packages will be upgraded:
  apparmor apt apt-utils brltty bulky compiz compiz-core compiz-gnome
  compiz-plugins compiz-plugins-default compizconfig-settings-manager
  cryptsetup cryptsetup-bin cryptsetup-initramfs curl dmidecode
  evolution-data-server evolution-data-server-common firefox firefox-locale-en
  firmware-sof-signed fonts-opensymbol fprintd gir1.2-gstreamer-1.0
  girl.2-gtk-3.0 girl.2-javascriptcoregtk-4.0 girl.2-nm-1.0 girl.2-notify-0.7
  girl.2-webkit2-4.0 girl.2-xapp-1.0 girl.2-xviewer-3.0 gnome-desktop3-data gnome-keyring gnome-keyring-pkcsll gnome-settings-daemon-common gstreamerl.0-clutter-3.0 gstreamerl.0-gtk3 gstreamerl.0-plugins-good
  gstreamer1.0-pulseaudio gstreamer1.0-tools gtk-update-icon-cache gvfs
  gvfs-backends gvfs-common gvfs-daemons gvfs-fuse gvfs-libs
  intel-media-va-driver intel-microcode isc-dhcp-client isc-dhcp-common
  libapparmor1 libapt-pkg6.0 libbrlapi0.8 libc-bin libc6 libc6-dbg
  libcamel-1.2-63 libclutter-gst-3.0-0 libcompizconfig0 libcryptsetup12
  libcurl3-gnutls libcurl4 libdecoration0 libebackend-1.2-10 libebook-1.2-20
  libebook-contacts-1.2-3 libecal-2.0-1 libedata-book-1.2-26
  libedata-cal-2.0-1 libedataserver-1.2-26 libedataserverui-1.2-3 libegl-mesa0
  libfprint-2-2 libgail-3-0 libgbm1 libgl1-mesa-dri libglapi-mesa libglx-mesa0
  libgnutls30 libgstreamer-plugins-good1.0-0 libgstreamer1.0-0 libgtk-3-0
  libgtk-3-bin libgtk-3-common libjavascriptcoregtk-4.0-18 libjson-c5 libldb2
  liblibreoffice-java libllvm13 libnetplan0 libnftables1 libnm0 libnotify-bin
  libnotify4 libnss-myhostname libnss-systemd libnvpair3linux
  libpam-gnome-keyring libpam-systemd libpkcs11-helper1 libqt5core5a
  libermadu taalibertaevi undikatseprivate libertaeijava varpinatori webappemanager
  wpasupplicant xapps-common xbrlapi xdg-desktop-portal xdg-utils xreader
  xreader-common xreader-dbg xserver-xorg-video-ati xserver-xorg-video-radeon
  xviewer xviewer-dbg zenity zenity-common zfs-initramfs zfs-zed
  zfsutils-linux
238 upgraded, 5 newly installed, 0 to remove and 0 not upgraded.
Need to get 805 MB of archives.
After this operation, 588 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libc6-dbg amd64 2.35-0ubuntu3.1 [1
Get:2 http://packages.linuxmint.com vanessa/backport amd64 xapps-common all 2.2.15+vanessa [66,5 k
Get:3 http://packages.linuxmint.com vanessa/backport amd64 libxapp1 amd64 2.2.15+vanessa [116 kB]
Get:4 http://packages.linuxmint.com vanessa/backport amd64 gir1.2-xapp-1.0 amd64 2.2.15+vanessa [1
8,1 kB]
Get:5 http://packages.linuxmint.com vanessa/upstream amd64 mintsources all 2.1.9 [124 kB]
Get:6 http://packages.linuxmint.com vanessa/upstream amd64 firefox amd64 104.0.2+linuxmint1+vaness
a [67,9 MB]
                                                                               16,4 kB/s 12h 58min 32s
```

Perintah sudo apt upgrade ini digunakan untuk menginstall paket-paket yang ada dalam repositori ke versi terbaru (di perbaharui).

11. Sudo apt autoremove

```
christina@christina-VirtualBox:~$ sudo apt autoremove
[sudo] password for christina:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
0 upgraded, 0 newly installed, 0 to remove and 238 not upgraded.
christina@christina-VirtualBox:~$
```

Perintah sudo apt autoremove digunakan untuk membersihkan paket-paket atau cache yang tersisa atau berhubungan setelah meng-uninstall suatu aplikasi.

12. Sudo apt autoclean

```
christina@christina-VirtualBox:~$ sudo apt autoclean
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
christina@christina-VirtualBox:~$
```

Perintah sudo apt autoclean digunakan untuk membersihkan cache.

TUGAS LATIHAN SOAL!

1. Membuat script dengan python di linux!

```
christina@christina-VirtualBox:~$ nano Tugasl_Script.py
```

Dengan perintah nano untuk membuat file dan format nama_file.py untuk membuka text editor python

```
print("Halo Dunia!\nIni script Bash pertamaku di Linux!")
```

Setelah masuk ke text editor, gunakan bahasa pemrograman python untuk print "Halo Dunia! Ini script Bash pertamaku di Linux!"

```
christina@christina-VirtualBox:~$ python3 Tugas1_Script.py
Halo Dunia!
Ini script Bash pertamaku di Linux!
```

Setelah itu save dan kembali ke terminal ketik python3 nama file untuk eksekusi script.

2. Membuat script dengan bash di linux!

```
christina@christina-VirtualBox:~$ touch TugasI_Script.sh
christina@christina-VirtualBox:~$ nano
```

Buat file dengan format nama_file.sh dengan perintah touch (bahasa bash), kemudian ketik nano untuk membuka text editor bash

```
echo "Halo Dunia!"
echo "Ini script Bash pertamaku di Linux!"
```

Pada bahasa bash, untuk print suatu perintah menggunakan echo, kemudian di save.