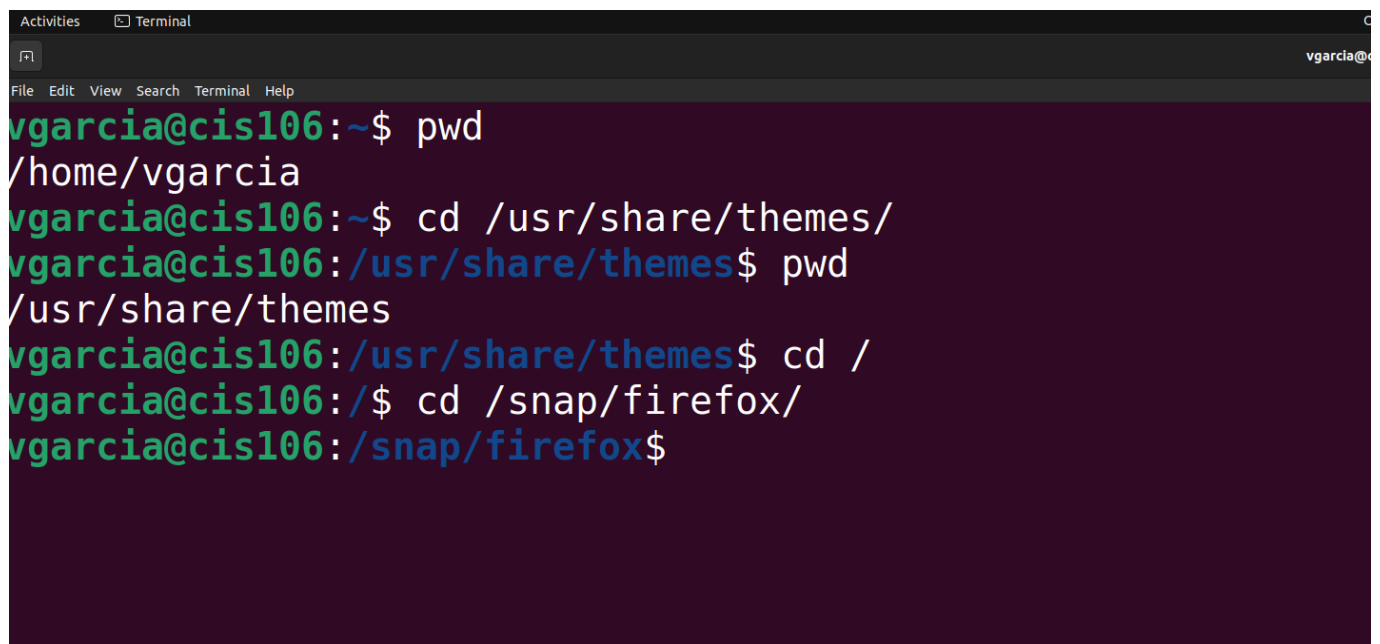
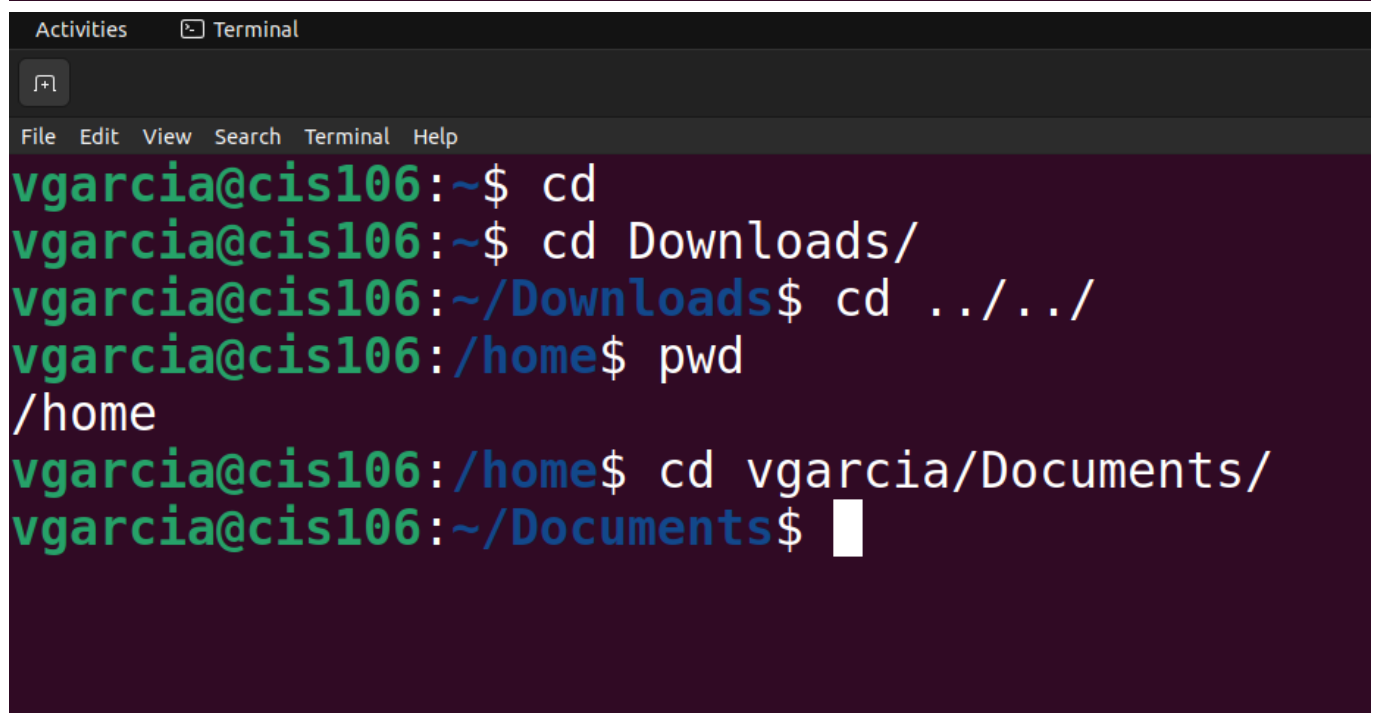


#Lab 4 The Linux FS

Question 1



```
Activities Terminal
vgarcia@cis106:~$ pwd
/home/vgarcia
vgarcia@cis106:~$ cd /usr/share/themes/
vgarcia@cis106:/usr/share/themes$ pwd
/usr/share/themes
vgarcia@cis106:/usr/share/themes$ cd /
vgarcia@cis106:/$ cd /snap/firefox/
vgarcia@cis106:/snap/firefox$
```



```
Activities Terminal
vgarcia@cis106:~$ cd
vgarcia@cis106:~$ cd Downloads/
vgarcia@cis106:~/Downloads$ cd ../../
vgarcia@cis106:/home$ pwd
/home
vgarcia@cis106:/home$ cd vgarcia/Documents/
vgarcia@cis106:~/Documents$
```

Question 2

```

vgarcia@cis106:~/Documents$ cd /usr/share/
vgarcia@cis106:/usr/share$ ls /home/vgarcia/lab4files/
countries.json  csvfile.csv  document.docx  globe.avi  helloWorld.c  Linux.pdf  sample.xls  Tux.png  Ubuntu.pdf  website.html
vgarcia@cis106:/usr/share$ cd -/lab4files/
bash: cd: -/: invalid option
cd: usage: cd [-L|[-P [-e]] [-@]] [dir]
vgarcia@cis106:/usr/share$ cd -/lab4files/
bash: cd: -/: invalid option
cd: usage: cd [-L|[-P [-e]] [-@]] [dir]
vgarcia@cis106:/usr/share$ cd /home/vgarcia/lab4files/
vgarcia@cis106:~/lab4files$ ls -l
total 6580
-rw-rw-r-- 1 vgarcia vgarcia 20471 Feb 22 2022 countries.json
-rw-rw-r-- 1 vgarcia vgarcia 284042 Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 vgarcia vgarcia 764176 Feb 22 2022 document.docx
-rw-rw-r-- 1 vgarcia vgarcia 742478 Feb 22 2022 globe.avi
-rw-rw-r-- 1 vgarcia vgarcia 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 vgarcia vgarcia 2600138 Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 vgarcia vgarcia 8704 Feb 22 2022 sample.xls
-rw-rw-r-- 1 vgarcia vgarcia 42777 Feb 22 2022 Tux.png
-rw-rw-r-- 1 vgarcia vgarcia 2114053 Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 vgarcia vgarcia 137453 Feb 22 2022 website.html
vgarcia@cis106:~/lab4files$ ls -lh
total 6.5M
-rw-rw-r-- 1 vgarcia vgarcia 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 vgarcia vgarcia 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 vgarcia vgarcia 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 vgarcia vgarcia 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 vgarcia vgarcia 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 vgarcia vgarcia 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 vgarcia vgarcia 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 vgarcia vgarcia 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 vgarcia vgarcia 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 vgarcia vgarcia 135K Feb 22 2022 website.html

```

```

vgarcia@cis106:~/lab4files$ ls -lhS
total 6.5M
-rw-rw-r-- 1 vgarcia vgarcia 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 vgarcia vgarcia 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 vgarcia vgarcia 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 vgarcia vgarcia 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 vgarcia vgarcia 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 vgarcia vgarcia 135K Feb 22 2022 website.html
-rw-rw-r-- 1 vgarcia vgarcia 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 vgarcia vgarcia 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 vgarcia vgarcia 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 vgarcia vgarcia 76 Feb 22 2022 helloWorld.c
vgarcia@cis106:~/lab4files$ ls -lhSgG
total 6.5M
-rw-rw-r-- 1 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 135K Feb 22 2022 website.html
-rw-rw-r-- 1 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 76 Feb 22 2022 helloWorld.c
vgarcia@cis106:~/lab4files$ ls -lhSgGi
total 6.5M
1484741 -rw-rw-r-- 1 2.5M Feb 22 2022 Linux.pdf
1484792 -rw-rw-r-- 1 2.1M Feb 22 2022 Ubuntu.pdf
1484804 -rw-rw-r-- 1 747K Feb 22 2022 document.docx
1484806 -rw-rw-r-- 1 726K Feb 22 2022 globe.avi
1484803 -rw-rw-r-- 1 278K Feb 22 2022 csvfile.csv
1484810 -rw-rw-r-- 1 135K Feb 22 2022 website.html
1484782 -rw-rw-r-- 1 42K Feb 22 2022 Tux.png
1484801 -rw-rw-r-- 1 20K Feb 22 2022 countries.json
1484808 -rw-rw-r-- 1 8.5K Feb 22 2022 sample.xls
1484807 -rw-rw-r-- 1 76 Feb 22 2022 helloWorld.c

```

```
vgarcia@cis106:~/lab4files$ ls -Xr
sample.xls  Ubuntu.pdf  countries.json  document.docx  helloWorld.c
Tux.png     Linux.pdf   website.html    csvfile.csv    globe.avi
vgarcia@cis106:~/lab4files$ ls -Xr1
sample.xls
Tux.png
Ubuntu.pdf
Linux.pdf
countries.json
website.html
document.docx
csvfile.csv
helloWorld.c
globe.avi
vgarcia@cis106:~/lab4files$
```

Question 4

```
vgarcia@cis106:/$ pwd
/
```

```
vgarcia@cis106:/$ cd /usr/share/icons/default/
vgarcia@cis106:/usr/share/icons/default$ pwd
/usr/share/icons/default
```

```
vgarcia@cis106:/usr/share/icons/default$ cd /proc/sys/net/ipv4/
vgarcia@cis106:/proc/sys/net/ipv4$ pwd
/proc/sys/net/ipv4
```

```
vgarcia@cis106:/proc/sys/net/ipv4$ cd -
/usr/share/icons/default
```

```
vgarcia@cis106:/usr/share/icons/default$ ls /usr/share/backgrounds/
ls: cannot access '/usr/share/backgrounds/': No such file or directory
vgarcia@cis106:/usr/share/icons/default$ ls /usr/share/backgrounds/
Blue_flower_by_Elena_Stravoravdi.jpg  Jammy-Jellyfish_WP_4096x2304_Grey.png  ubuntu2_by_arman1992.jpg
canvas_by_roytanck.jpg                 jj_dark_by_Hiking93.jpg                 ubuntu_by_arman1992.jpg
Cherry_Tree_in_Lakones_by_elenastravoravdi.jpg  jj_light_by_Hiking93.jpg                 ubuntu-default-greyscale-wallpaper.png
contest                                  Mirror_by_Uday_Nakade.jpg                 warty-final-ubuntu.png
DSC2943_by_kcpru.jpg                   Optical_Fibers_in_Dark_by_Elena_Stravoravdi.jpg
```

```
vgarcia@cis106:/usr/share/icons/default$ cd
vgarcia@cis106:~$ ls /home/vgarcia/cis106/
cheatsheets  labs  weekReports
```

```
vgarcia@cis106:~$ ls /home/vgarcia/Downloads/
code_1.82.2-1694671812_amd64.deb  lab4files.zip  Ms_Madi  Ms_Madi.zip
```

```
vgarcia@cis106:~$ cd /dev/disk/by-id/
vgarcia@cis106:/dev/disk/by-id$ ls -l
total 0
lrwxrwxrwx 1 root root 9 Oct 21 15:18 ata-VBOX_CD-ROM_VB2-01700376 -> ../../sr0
lrwxrwxrwx 1 root root 9 Oct 21 15:18 ata-VBOX_HARDDISK_VBf8a62091-70be4379 -> ../../sda
lrwxrwxrwx 1 root root 10 Oct 21 15:18 ata-VBOX_HARDDISK_VBf8a62091-70be4379-part1 -> ../../sda1
lrwxrwxrwx 1 root root 10 Oct 21 15:18 ata-VBOX_HARDDISK_VBf8a62091-70be4379-part2 -> ../../sda2
lrwxrwxrwx 1 root root 10 Oct 21 15:18 ata-VBOX_HARDDISK_VBf8a62091-70be4379-part3 -> ../../sda3
```

```
vgarcia@cis106:~$ cd /usr/share/themes/
vgarcia@cis106:/usr/share/themes$ ls -t
Yaru
Yaru-bark
Yaru-bark-dark
Yaru-blue
Yaru-blue-dark
Yaru-dark
Yaru-dark-hdpi
Yaru-dark-xhdpi
Yaru-hdpi
Yaru-magenta
Yaru-magenta-dark
Yaru-olive
Yaru-olive-dark
Yaru-olive-xhdpi
Yaru-prussiangreen
Yaru-prussiangreen-dark
Yaru-purple
Yaru-purple-dark
Yaru-red
Yaru-red-dark
Yaru-sage
Yaru-sage-dark
Yaru-viridian
Yaru-viridian-dark
Yaru-xhdpi
Default
Emacs
Raleigh
Adwaita
Adwaita-dark
HighContrast
```

```

vgarcia@cis106:/usr/share/themes$ cd /usr/share/
vgarcia@cis106:/usr/share$ ls -X
accountsservice  gnome-shell                pam-configs
aclocal          gnome-software             perl
acpi-support     gnome-system-monitor       perl5
adduser          gnome-todo                 perl-openssl-defaults
aisleriot        gnome-tweaks               pipewire
alacarte         gnome-video-effects        pixmaps
alsa             gnuapp                     pkgconfig
alsa-base        grilo-plugins              plymouth
alsa-card-profile groff                       pnm2ppa
appdata          grub                       pocketsphinx
app-info         grub-gfxpayload-lists     polkit-1
applications     gst-plugins-base           poppler
appport          gtk-doc                    pppd
apps             gtk-engines                ppp
apturl           gtksourceview-4            publicsuffix
aspell           gupnp-av                   pulseaudio
avahi            gvfs                       pyshared
backgrounds      help                        python3
base-files       help-langpack              python-apt
base-passwd      hplip                       qt5
bash-completion hunspell                    readline
binfmts          hwdata                      remmina
branding          hyphen                      rhythmbox
brltty           i18n                        rsync
bug              ibus                        rsyslog
build-essential ibus-table                  rubygems-integration
ca-certificates icons                        rygel
caffeine-indicator ImageMagick-6               samba
catdoc           im-config                  seahorse
cmake            indicator-application       secureboot
code             indicator-power             sensible-utils
cogl             indicators                  session-migration
color            info                        sgml
colord           initramfs-tools             sgml-base
common-licenses installed-tests              sgml-data
consolefonts     ipp-usb                     snmp
console-setup    iptables                    software-properties
consoletrans     iso-codes                   solid
cups             java                         sounds
dbus-1           javascript                  source-highlight
dconf            kde4                         speech-dispatcher
debconf          keyrings                    ssl-cert
debhelper        language-selector           system-config-printer

```

```

vgarcia@cis106:/usr/share$ ls -X
cups             java                         sounds
dbus-1           javascript                  source-highlight
dconf            kde4                         speech-dispatcher
debconf          keyrings                    ssl-cert
debhelper        language-selector           system-config-printer
debianutils     language-support            systemd
defaults         language-tools              systemtap
desktop-directories libccata                     tabset
dict             libc-bin                    tccltk
dictionaries-common libdebuginfod-common        terminfo
distro-info      libdrm                       tex-common
divvui           libdnettext                  texlive
dms              libgdnokbd                   texmf
dmsmasq-base     libgweather                  themes
dpc              libinput                     thumbnails
dsc-base         liblangtag                   totem
dsg              liblouis                      tracker3
dscacen-common   liblouisoutdnl              tracker3-miners
dshant-2         libmisofo                    transmission
dsg              libraoffice                  ubuntu
eyince           libvenge                     ubuntu-drivers-common
evolution-data-server libthai                      ubuntu-release-upgrader
figlet           libwacom                     ubuntu-wayland
file             lintian                       ucf
file-roller      linux-sound-base             ufw
fish             locale                        unattended-upgrades
flameshot        locale-langpack              unity
flatpak          locales                       update-manager
fontconfig       lto-disabled-list            update-notifier
fonts            m230w                         upstart
fonts-droid-fallback mao                           usb-creator
fonts-sil-abysynica man                             usb_modeswitch
fonts-sil-padauk  man-db                        vala
font2pdf         mate-panel                   vim
font2zjs         maven-repo                   vlc
fontd            media-player-info            vulkan
fontnode         menu                           w3m
gcr              mesa-demos                   wayland-sessions
gconf            metainfo                     x11
gdb              mfx                           xapps-common
gdm              mime                           xdg-desktop-portal
geany            misc                           xml
gedit            mobile-broadband-provider-info xml-core
geopip           ModemManager                 xsessions
gettext          mousestweaks                 yelp
ghostscript      mythes                        yelp-xsl
git-core         nano                          zenity
gitweb           nautilus                     zoneinfo
glade            nautilus-python              zoneinfo-icu
glvnd            nautilus-share               zsh
gnome            neo                           gir-1.0
gnome-applets    netplan                      glib-2.0
gnome-background-properties netplan                       gnome-bluetooth-3.0
gnome-bluetooth  numpy3                        goa-1.0
gnome-control-center open-vpn-tools                gstreamer-1.0
gnome-initial-setup openvpn                       gtk-4.0
gnome-logs       orca                           gtksourceview-2.0
gnome-mahjongg   os-prober                     gtksourceview-3.0
gnome-panel      pll-kit                       gupnp-dlna-2.0
gnome-remote-desktop package-data-downloads       org.gnome.Characters
gnome-session    PackageKit                    drirc.d
gnome-settings-daemon pam

```

Question 5

```
vgarcia@cis106:/$ cd /home/student/desktop/document/Downloads/
bash: cd: /home/student/desktop/document/Downloads/: No such file or directory
vgarcia@cis106:/$ cd /home/student/downloads/
bash: cd: /home/student/downloads/: No such file or directory
vgarcia@cis106:/$ cd /
vgarcia@cis106:/$ pwd
/
vgarcia@cis106:/$ cd /Downloads
bash: cd: /Downloads: No such file or directory

vgarcia@cis106:/$ cd /usr/share/themes/Adwaita/
vgarcia@cis106:/usr/share/themes/Adwaita$ pwd
/usr/share/themes/Adwaita
vgarcia@cis106:/usr/share/themes/Adwaita$ cd ../../
vgarcia@cis106:/usr/share$ pwd
/usr/share
vgarcia@cis106:/usr/share$ cd ../
vgarcia@cis106:/usr$ cd /
vgarcia@cis106:/$ pwd
/
vgarcia@cis106:/$ █
```