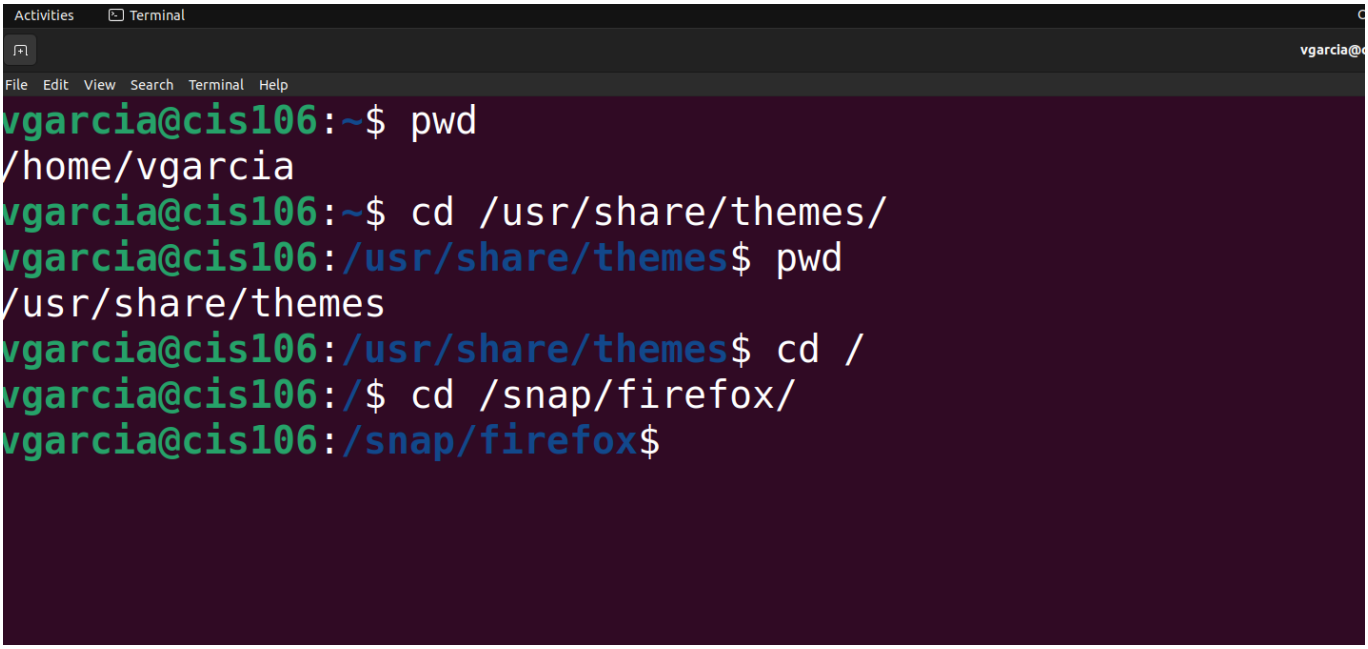
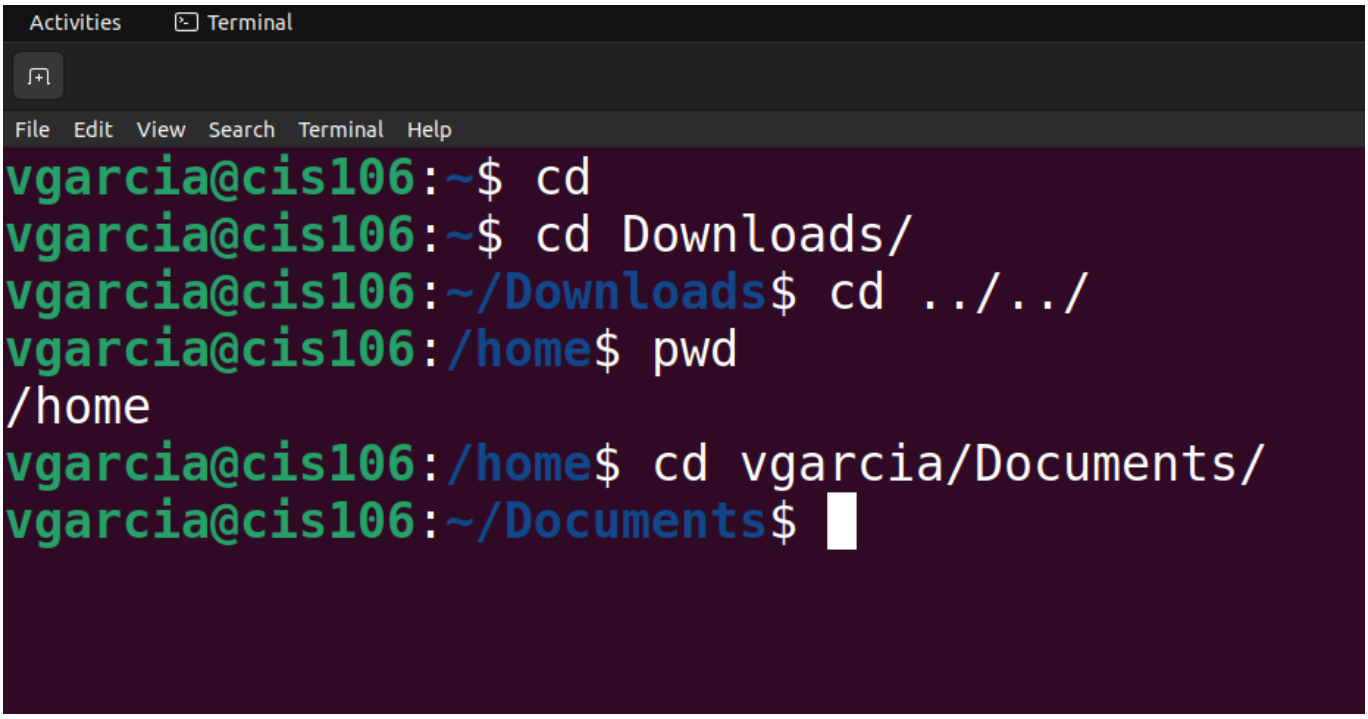
#Lab 4 The Linux FS

Question 1





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/backrounds/
ls: cannot access '/usr/share/backrounds/': 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-dark-hdpi     Yaru-olive-dark          Yaru-red-dark       Default
Yaru-bark        Yaru-dark-xhdpi    Yaru-prussiangreen       Yaru-sage           Emacs
Yaru-bark-dark   Yaru-hdpi          Yaru-prussiangreen-dark  Yaru-sage-dark      Raleigh
Yaru-blue        Yaru-magenta       Yaru-purple              Yaru-viridian       Adwaita
Yaru-blue-dark   Yaru-magenta-dark  Yaru-purple-dark         Yaru-viridian-dark  Adwaita-dark
Yaru-dark        Yaru-olive         Yaru-red                 Yaru-xhdpi          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                         gnupg                        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
apport                       gtk-doc                      ppd
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:/                vgarcia@cis106:/usr/share                vgarcia@cis106:/dev/disk/by-id
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
dafaults                     language-tools               systemtap
desktop-directories          libcaca                      tabset
dict                         libc-bin                     tcltk
dictionaries-common          libdebuginfod-common         terminfo
distro-info                  libdrm                       tex-common
djvu                         libexttextcat                texlive
dns                          libgnomekbd                  texmf
dnsmasq-base                 libgweather                  themes
doc                          libgweather-4                thumbnailers
doc-base                     libinput                     tilix
dpkg                         liblangtag                   totem
emacs                        liblouis                     tracker3
emacsen-common               liblouisutdml                tracker3-miners
enchant-2                    libmysofa                    transmission
eog                          libreoffice                  ubuntu
evince                       librevenge                   ubuntu-drivers-common
evolution-data-server        libthai                      ubuntu-release-upgrader
figlet                       libwacom                     ubuntu-wayland
file                         lightdm                      ucf
file-roller                  lintian                      ufw
fish                         linux-sound-base             unattended-upgrades
flameshot                    locale                       unity
flatpak                      locale-langpack              update-manager
fontconfig                   locales                      update-notifier
fonts                        lto-disabled-list            upstart
fonts-droid-fallback         m2300w                       usb-creator
fonts-sil-abyssinica         man                          usb_modeswitch
fonts-sil-padauk             man-db                       vala
foo2qpdl                     mate-panel                   vim
foo2zjs                      maven-repo                   vlc
fwupd                        media-player-info            vulkan
gamemode                     menu                         w3m
gcc                          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
GeoIP                        ModemManager                 xsessions
gettext                      mousetweaks                  yelp
ghostscript                  mythes                       yelp-xsl
git-core                     nano                         zenity
gitweb                       nautilus                     zoneinfo
glade                        nautilus-python              zoneinfo-icu
glvnd                        nautilus-share               zsh
gnome                        nemo                         gir-1.0
gnome-applets                netpbm                       glib-2.0
gnome-background-properties  netplan                      gnome-bluetooth-3.0
gnome-bluetooth              numpy3                       goa-1.0
gnome-control-center         open-vm-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                  p11-kit                      gupnp-dlna-2.0
gnome-remote-desktop         package-data-downloads       org.gnome.Characters
gnome-session                PackageKit                   drirc.d
gnome-settings-daemon        pam
vgarcia@cis106:/usr/share$
```

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:/$
```