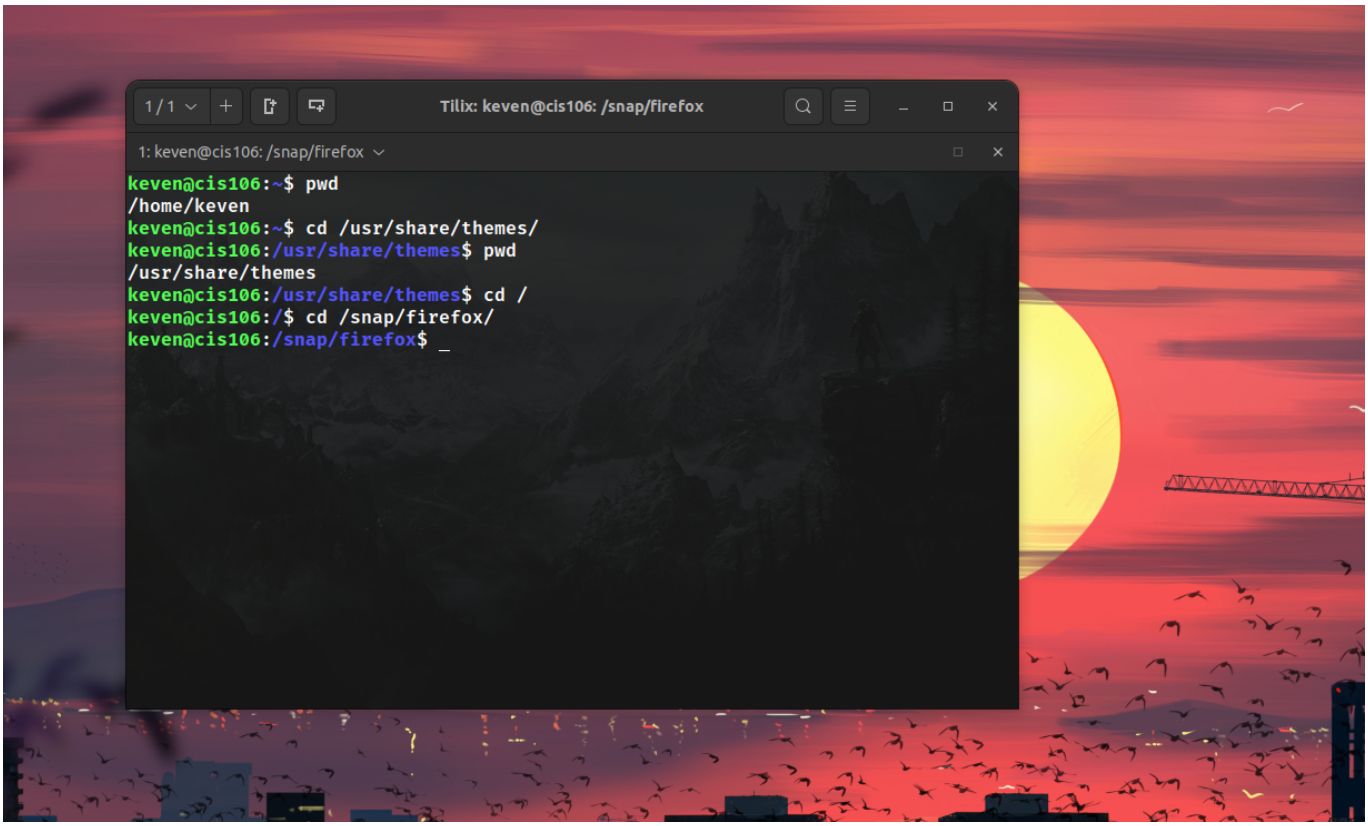
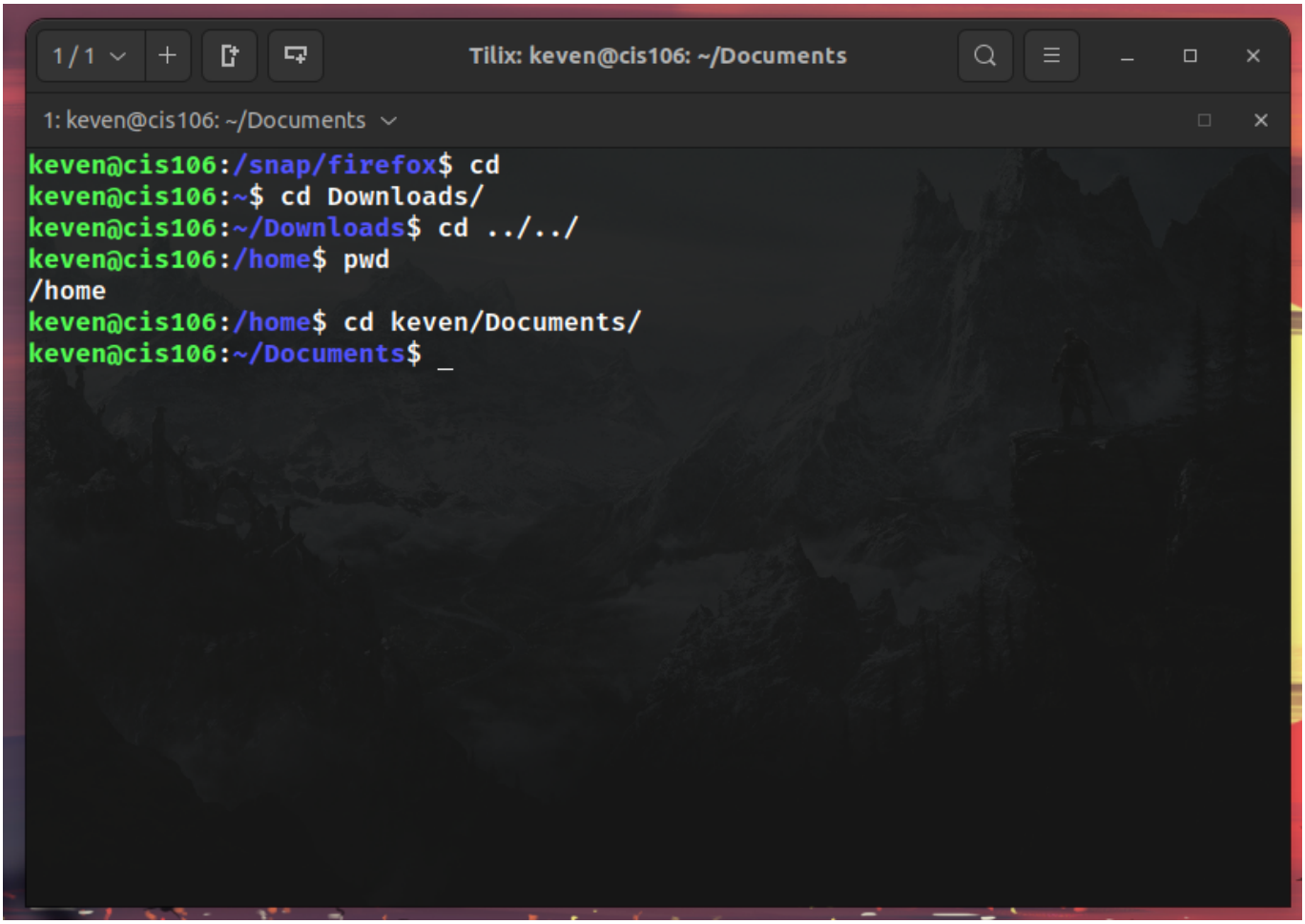
Lab 4 The Linux FS

Question 1





Question 2

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

```
keven@cis106:~/lab4files$ ls -lhS
total 6.5M
-rw-rw-r-- 1 keven keven 2.5M Feb 22  2022 Linux.pdf
-rw-rw-r-- 1 keven keven 2.1M Feb 22  2022 Ubuntu.pdf
-rw-rw-r-- 1 keven keven 747K Feb 22  2022 document.docx
-rw-rw-r-- 1 keven keven 726K Feb 22  2022 globe.avi
-rw-rw-r-- 1 keven keven 278K Feb 22  2022 csvfile.csv
-rw-rw-r-- 1 keven keven 135K Feb 22  2022 website.html
-rw-rw-r-- 1 keven keven  42K Feb 22  2022 Tux.png
-rw-rw-r-- 1 keven keven  20K Feb 22  2022 countries.json
-rw-rw-r-- 1 keven keven 8.5K Feb 22  2022 sample.xls
-rw-rw-r-- 1 keven keven   76 Feb 22  2022 helloWorld.c
keven@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
keven@cis106:~/lab4files$ ls -lhSgGi
total 6.5M
1334351 -rw-rw-r-- 1 2.5M Feb 22  2022 Linux.pdf
1334578 -rw-rw-r-- 1 2.1M Feb 22  2022 Ubuntu.pdf
1334585 -rw-rw-r-- 1 747K Feb 22  2022 document.docx
1334586 -rw-rw-r-- 1 726K Feb 22  2022 globe.avi
1334583 -rw-rw-r-- 1 278K Feb 22  2022 csvfile.csv
1334589 -rw-rw-r-- 1 135K Feb 22  2022 website.html
1334577 -rw-rw-r-- 1  42K Feb 22  2022 Tux.png
1334582 -rw-rw-r-- 1  20K Feb 22  2022 countries.json
1334588 -rw-rw-r-- 1 8.5K Feb 22  2022 sample.xls
1334587 -rw-rw-r-- 1   76 Feb 22  2022 helloWorld.c
```

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

Question 4

```
keven@cis106:~$ pwd
/home/keven
keven@cis106:~$ cd /usr/share/icons/default/
keven@cis106:/usr/share/icons/default$ cd /proc/sys/net/ipv4/
keven@cis106:/proc/sys/net/ipv4$ cd -
/usr/share/icons/default
keven@cis106:/usr/share/icons/default$ ls /usr/share/backgrounds/
Blue_flower_by_Elena_Stravoravdi.jpg
canvas_by_roytanck.jpg
Cherry_Tree_in_Lakones_by_elenastravoravdi.jpg
contest
DSC2943_by_kcpru.jpg
Jammy-Jellyfish_WP_4096x2304_Grey.png
jj_dark_by_Hiking93.jpg
jj_light_by_Hiking93.jpg
Mirror_by_Uday_Nakade.jpg
Optical_Fibers_in_Dark_by_Elena_Stravoravdi.jpg
ubuntu2_by_arman1992.jpg
ubuntu_by_arman1992.jpg
ubuntu-default-greyscale-wallpaper.png
warty-final-ubuntu.png
keven@cis106:/usr/share/icons/default$ cd
keven@cis106:~$ ls /home/keven/cis106/cis106-2/
cheatsheets  labs  weekReports
keven@cis106:~$ ls /home/keven/Downloads/
lab4files.zip
keven@cis106:~$ cd /dev/disk/by-id/
keven@cis106:/dev/disk/by-id$ ls -a /home/keven/
.                .gitconfig                  .vboxclient-clipboard-tty2-control.pid
..               .gnupg                      .vboxclient-clipboard-tty2-service.pid
.bash_history    lab4files                   .vboxclient-draganddrop-tty2-control.pid
.bash_logout     .lesshst                    .vboxclient-draganddrop-tty2-service.pid
.bashrc          .local                      .vboxclient-hostversion-tty2-control.pid
.cache           Music                       .vboxclient-seamless-tty2-control.pid
cis106           Pictures                    .vboxclient-seamless-tty2-service.pid
.cis106.png      .pki                        .vboxclient-vmsvga-session-tty2-control.pid
.config          .profile                    .vboxclient-vmsvga-session-tty2-service.pid
Desktop          Public                      Videos
Documents        snap                        .vscode
.dotnet          .ssh                        website
Downloads        .sudo_as_admin_successful
.fonts           Templates
```

```
keven@cis106:/dev/disk/by-id$ ls -t /usr/share/themes/
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
keven@cis106:/dev/disk/by-id$ ls -X /usr/share/
accountsservice              gnome-shell                  PackageKit
aclocal                      gnome-software               pam
acpi-support                 gnome-system-monitor         pam-configs
adduser                      gnome-todo                   perl
aerc                         gnome-tweaks                 perl5
aisleriot                    gnome-video-effects          perl-openssl-defaults
alacarte                     gnupg                        pipewire
alsa                         grilo-plugins                pixmaps
alsa-base                    groff                        pkgconfig
alsa-card-profile            grub                         plymouth
appdata                      grub-gfxpayload-lists        pnm2ppa
app-info                     gst-plugins-base             pocketsphinx
applications                 gtk-doc                      polkit-1
apport                       gtk-engines                  poppler
apps                         gtksourceview-4              ppd
apturl                       guile                        ppp
aspell                       gupnp-av                     publicsuffix
avahi                        gvfs                         pulseaudio
backgrounds                  help                         pyshared
base-files                   help-langpack                python3
base-passwd                  hplip                        python-apt
bash-completion              hunspell                     qlogging-categories5
binfmts                      hwdata                       qt5
branding                     hyphen                       readline
brltty                       i18n                         remmina
bug                          ibus                         rhythmbox
build-essential              ibus-table                   rig
ca-certificates              icons                        rsync
caffeine-indicator           ImageMagick-6                rsyslog
```

```
catdoc                    im-config                 rubygems-integration
cmake                     indicator-application     rygel
code                      indicator-power           samba
cogl                      indicators                seahorse
color                     info                      secureboot
```

```
colord                    initramfs-tools           sensible-utils
common-licenses           installed-tests           session-migration
consolefonts              ipp-usb                   sgml
console-setup             iptables                  sgml-base
consoletrans              iso-codes                 sgml-data
cowsay                    java                      snmp
cups                      javascript                software-properties
dbus-1                    kconf_update              solid
dconf                     kde4                      sounds
debconf                   keyrings                  source-highlight
debhelper                 kf5                       speech-dispatcher
debianutils               knotifications5           ssl-cert
defaults                  kservices5                system-config-printer
desktop-directories       kservicetypes5            systemd
dict                      language-selector         systemtap
dictionaries-common       language-support          tabset
distro-info               language-tools            tcltk
djvu                      libcaca                   terminfo
dns                       libc-bin                  tex-common
dnsmasq-base              libdebuginfod-common      texlive
doc                       libdrm                    texmf
doc-base                  libexttextcat             themes
dpkg                      libgnomekbd               thumbnailers
emacs                     libgweather               tilix
emacsen-common            libgweather-4             totem
enchant-2                 libinput                  tracker3
eog                       liblangtag                tracker3-miners
epiphany-browser          liblouis                  transmission
evince                    liblouisutdml             ubuntu
evolution-data-server     libmysofa                 ubuntu-drivers-common
figlet                    libreoffice               ubuntu-release-upgrader
file                      librevenge                ubuntu-wayland
file-roller               libthai                   ucf
fish                      libwacom                  ufw
flameshot                 lightdm                   unattended-upgrades
flatpak                   lintian                   unity
fontconfig                linux-sound-base          update-manager
fonts                     locale                    update-notifier
fonts-droid-fallback      locale-langpack           upstart
fonts-sil-abyssinica      locales                   usb-creator
fonts-sil-padauk          lto-disabled-list         usb_modeswitch
foo2qpdl                  lxmusic                   vala
```

```
foo2zjs                          m2300w                           vim
fwupd                            man                              vlc
gamemode                         man-db                           vulkan
games                            mate-panel                       w3m
gcc                              maven-repo                       wayland-sessions
GConf                            media-player-info                X11
gdb                              menu                             xapps-common
gdm                              mesa-demos                       xdg-desktop-portal
geany                            metainfo                         xml
gedit                            mfx                              xml-core
GeoIP                            mime                             xmms2
gettext                          misc                             xsessions
ghostscript                      mobile-broadband-provider-info   yelp
git-core                         ModemManager                     yelp-xsl
gitweb                           mousetweaks                      zenity
glade                            mythes                           zoneinfo
glvnd                            nano                             zoneinfo-icu
gnome                            nautilus                         zsh
gnome-applets                    nautilus-python                  gir-1.0
gnome-background-properties      nautilus-share                   glib-2.0
gnome-bluetooth                  nemo                             gnome-bluetooth-3.0
gnome-control-center             netpbm                           goa-1.0
gnome-gmail                      netplan                          gstreamer-1.0
gnome-initial-setup              numpy3                           gtk-4.0
gnome-logs                       open-vm-tools                    gtksourceview-2.0
gnome-mahjongg                   openvpn                          gtksourceview-3.0
gnome-panel                      orca                             gupnp-dlna-2.0
gnome-remote-desktop             os-prober                        org.gnome.Characters
gnome-session                    p11-kit                          drirc.d
gnome-settings-daemon            package-data-downloads
keven@cis106:/dev/disk/by-id$ _
```

Question 5

```
1: keven@cis106: ~/Downloads
keven@cis106:~$ cd /
keven@cis106:/$ cd /home/
keven@cis106:/home$ cd /home/keven/
keven@cis106:~$ cd /home/keven/Downloads/
keven@cis106:~/Downloads$ _
```

```
1: keven@cis106: ~/Documents
keven@cis106:~$ cd /usr/share/themes/Adwaita
keven@cis106:/usr/share/themes/Adwaita$ cd ~/Documents
keven@cis106:~/Documents$ _
```