Lab 4 The Linux FS

Question 1

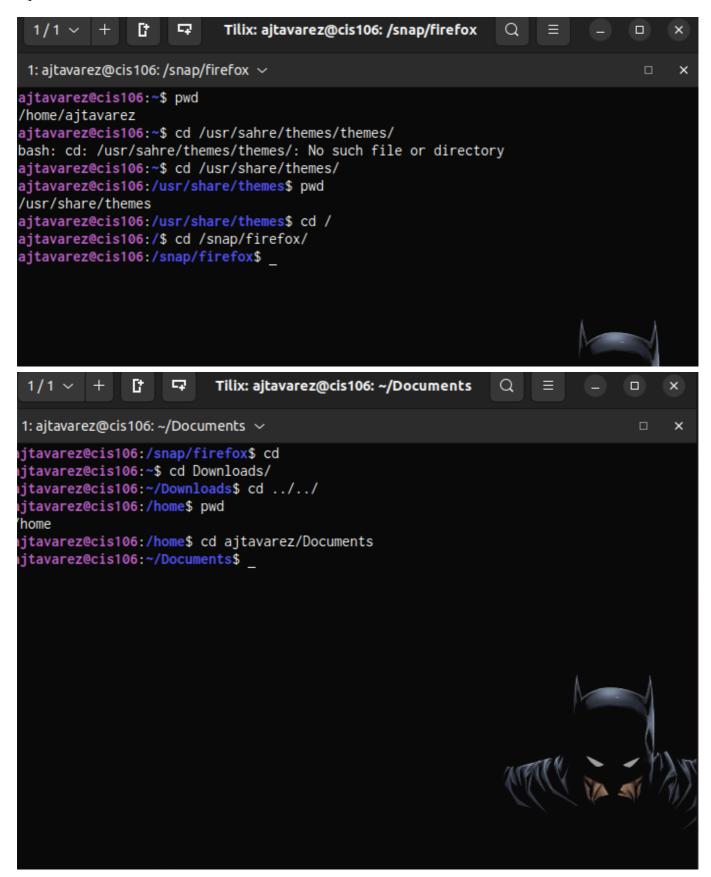
Question 2

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1: ajtavarez@cis106: ~/lab4files ∨                              A̲̲   ⬜

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

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1: ajtavarez@cis106: ~/lab4files ∨                       A̲̲   ⬜   ×

rw-rw-r-- 1 ajtavarez ajtavarez 2.1M Feb 22  2022 Ubuntu.pdf
rw-rw-r-- 1 ajtavarez ajtavarez 135K Feb 22  2022 website.html
jtavarez@cis106:~/lab4files$ ls -lhS
otal 6.5M
rw-rw-r-- 1 ajtavarez ajtavarez 2.5M Feb 22  2022 Linux.pdf
rw-rw-r-- 1 ajtavarez ajtavarez 2.1M Feb 22  2022 Ubuntu.pdf
rw-rw-r-- 1 ajtavarez ajtavarez 747K Feb 22  2022 document.docx
rw-rw-r-- 1 ajtavarez ajtavarez 726K Feb 22  2022 globe.avi
rw-rw-r-- 1 ajtavarez ajtavarez 278K Feb 22  2022 csvfile.csv
rw-rw-r-- 1 ajtavarez ajtavarez 135K Feb 22  2022 website.html
rw-rw-r-- 1 ajtavarez ajtavarez  42K Feb 22  2022 Tux.png
rw-rw-r-- 1 ajtavarez ajtavarez  20K Feb 22  2022 countries.json
rw-rw-r-- 1 ajtavarez ajtavarez 8.5K Feb 22  2022 sample.xls
rw-rw-r-- 1 ajtavarez ajtavarez  76 Feb 22  2022 helloWorld.c
jtavarez@cis106:~/lab4files$ ls -lhSgG
otal 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
jtavarez@cis106:~/lab4files$ ls -Xr
ample.xls   Ubuntu.pdf  countries.json  document.docx  helloWorld.c
ux.png      Linux.pdf   website.html    csvfile.csv    globe.avi
```

```
jtavarez@cis106:~/lab4files$ ls -Xr
ample.xls   Ubuntu.pdf  countries.json  document.docx  helloWorld.c
ux.png      Linux.pdf   website.html    csvfile.csv    globe.avi
jtavarez@cis106:~/lab4files$ ls -Xrl
otal 6580
rw-rw-r-- 1 ajtavarez ajtavarez    8704 Feb 22  2022 sample.xls
rw-rw-r-- 1 ajtavarez ajtavarez   42777 Feb 22  2022 Tux.png
rw-rw-r-- 1 ajtavarez ajtavarez 2114053 Feb 22  2022 Ubuntu.pdf
rw-rw-r-- 1 ajtavarez ajtavarez 2600138 Feb 22  2022 Linux.pdf
rw-rw-r-- 1 ajtavarez ajtavarez   20471 Feb 22  2022 countries.json
rw-rw-r-- 1 ajtavarez ajtavarez  137453 Feb 22  2022 website.html
rw-rw-r-- 1 ajtavarez ajtavarez  764176 Feb 22  2022 document.docx
rw-rw-r-- 1 ajtavarez ajtavarez  284042 Feb 22  2022 csvfile.csv
rw-rw-r-- 1 ajtavarez ajtavarez      76 Feb 22  2022 helloWorld.c
rw-rw-r-- 1 ajtavarez ajtavarez  742478 Feb 22  2022 globe.avi
jtavarez@cis106:~/lab4files$ _
```

Question 4

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1: ajtavarez@cis106: /usr/share ∨                                                                     A[  □

ajtavarez@cis106:~$ pwd
/home/ajtavarez
ajtavarez@cis106:~$ cd /usr/share/icons/default
ajtavarez@cis106:/usr/share/icons/default$ cd ../../
ajtavarez@cis106:/usr/share$ cd
ajtavarez@cis106:~$ cd /proc/sys/net/ipv4
ajtavarez@cis106:/proc/sys/net/ipv4$ cd
ajtavarez@cis106:~$ ls /usr/share/bakgrounds/
ls: cannot access '/usr/share/bakgrounds/': No such file or directory
ajtavarez@cis106:~$ ls /usr/share/bakgrounds
ls: cannot access '/usr/share/bakgrounds': No such file or directory
ajtavarez@cis106:~$ ls /usr/share/backgrounds
Blue_flower_by_Elena_Stravoravdi.jpg          jj_light_by_Hiking93.jpg
canvas_by_roytanck.jpg                        Mirror_by_Uday_Nakade.jpg
Cherry_Tree_in_Lakones_by_elenastravoravdi.jpg Optical_Fibers_in_Dark_by_Elena_Stravoravdi.jpg
contest                                       ubuntu2_by_arman1992.jpg
DSC2943_by_kcpru.jpg                          ubuntu_by_arman1992.jpg
Jammy-Jellyfish_WP_4096x2304_Grey.png         ubuntu-default-greyscale-wallpaper.png
jj_dark_by_Hiking93.jpg                       warty-final-ubuntu.png
ajtavarez@cis106:~$ ls /home/ajtavarez/cis106/
cheatsheets  labs  weekreports
ajtavarez@cis106:~$ pwd/
bash: pwd/: No such file or directory
ajtavarez@cis106:~$ pwd
/home/ajtavarez
ajtavarez@cis106:~$ ls /home/ajtavarez/Downloads/
 Games   lab4files.zip   myfiles  'question 3'   texture.txt
ajtavarez@cis106:~$ cd /dev/disk/by-id
```

```
ajtavarez@cis106:/dev/disk/by-id$ ls -la ~
total 3128
drwxr-x--- 25 ajtavarez ajtavarez     4096 Oct 28 10:04  .
drwxr-xr-x  3 root      root          4096 Sep 26 19:19  ..
-rw-rw-r--  1 ajtavarez ajtavarez        0 Oct 26 18:17  1
-rw-rw-r--  1 ajtavarez ajtavarez        0 Oct 26 18:18  2
-rw-rw-r--  1 ajtavarez ajtavarez        0 Oct 26 18:18  3
-rw-------  1 ajtavarez ajtavarez     3976 Oct 27 22:23  .bash_history
-rw-r--r--  1 ajtavarez ajtavarez      220 Sep 26 19:19  .bash_logout
-rw-r--r--  1 ajtavarez ajtavarez     3771 Sep 26 19:19  .bashrc
drwx------ 23 ajtavarez ajtavarez     4096 Oct 14 18:19  .cache
drwxrwxr-x  6 ajtavarez ajtavarez     4096 Oct 15 09:31  cis106
-rw-rw-r--  1 ajtavarez ajtavarez      111 Oct  5 18:12 'cis 106 notes'
-rw-rw-r--  1 ajtavarez ajtavarez     3520 Oct 11 21:37  .cis106.png
drwx------ 26 ajtavarez ajtavarez     4096 Oct 27 22:01  .config
drwxr-xr-x  2 ajtavarez ajtavarez     4096 Oct 15 09:30  Desktop
drwxr-xr-x  3 ajtavarez ajtavarez     4096 Oct 26 18:32  Documents
drwxrwxr-x  7 ajtavarez ajtavarez     4096 Oct 19 18:39  dominos
drwxrwxr-x  3 ajtavarez ajtavarez     4096 Sep 26 20:10  .dotnet
drwxr-xr-x  4 ajtavarez ajtavarez     4096 Oct 27 21:44  Downloads
-rw-rw-r--  1 ajtavarez ajtavarez        0 Oct 26 18:23  file1
-rw-rw-r--  1 ajtavarez ajtavarez        0 Oct 26 18:23  file2
-rw-rw-r--  1 ajtavarez ajtavarez        0 Oct 26 18:23  file3
drwxrwxr-x  2 ajtavarez ajtavarez    20480 Oct 14 14:57  .fonts
-rw-rw-r--  1 ajtavarez ajtavarez       87 Sep 30 14:46  gitcommands.txt
-rw-rw-r--  1 ajtavarez ajtavarez       61 Sep 30 14:19  .gitconfig
drwx------  2 ajtavarez ajtavarez     4096 Oct 12 16:55  .gnupg
-rw-rw-r--  1 ajtavarez ajtavarez        0 Sep 28 17:59  .hidden_file
drwxrwxr-x  2 ajtavarez ajtavarez     4096 Feb 22  2022  lab4files
-rw-------  1 ajtavarez ajtavarez       20 Oct 14 21:21  .lesshst
drwx------  4 ajtavarez ajtavarez     4096 Sep 30 15:06  .local
drwxr-xr-x  2 ajtavarez ajtavarez     4096 Oct 26 18:37  Music
drwxrwxr-x  2 ajtavarez ajtavarez     4096 Oct 19 18:50  myproject
-rw-rw-r--  1 ajtavarez ajtavarez        0 Oct 26 18:11  orange
drwxr-xr-x  3 ajtavarez ajtavarez     4096 Oct 19 18:46  Pictures
drwx------  3 ajtavarez ajtavarez     4096 Sep 26 20:09  .pki
drwxrwxr-x  2 ajtavarez ajtavarez     4096 Oct 19 18:01 'plants"FC'
```

```
drwxrwxr-x  2 ajtavarez ajtavarez    4096 Oct 19 18:01  plants_lc
-rw-rw-r--  1 ajtavarez ajtavarez 3000320 Oct 12 18:35  practicels.tar
-rw-r--r--  1 ajtavarez ajtavarez     807 Sep 26 19:19  .profile
drwxr-xr-x  2 ajtavarez ajtavarez    4096 Sep 26 19:26  Public
drwx------  5 ajtavarez ajtavarez    4096 Sep 26 20:02  snap
drwx------  2 ajtavarez ajtavarez    4096 Sep 26 22:28  .ssh
-rw-r--r--  1 ajtavarez ajtavarez       0 Sep 26 19:37  .sudo_as_admin_successful
-rw-rw-r--  2 ajtavarez ajtavarez       0 Oct 26 18:36  sunflower.mp3
ajtavarez@cis106:~$ cd  /usr/share/themes
ajtavarez@cis106:/usr/share/themes$ ls -lt
total 120
drwxr-xr-x 7 root root 4096 Aug  7 18:54 Yaru
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-bark
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-bark-dark
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-blue
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-blue-dark
drwxr-xr-x 7 root root 4096 Aug  7 18:54 Yaru-dark
drwxr-xr-x 3 root root 4096 Aug  7 18:54 Yaru-dark-hdpi
drwxr-xr-x 3 root root 4096 Aug  7 18:54 Yaru-dark-xhdpi
drwxr-xr-x 3 root root 4096 Aug  7 18:54 Yaru-hdpi
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-magenta
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-magenta-dark
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-olive
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-olive-dark
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-prussiangreen
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-prussiangreen-dark
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-purple
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-purple-dark
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-red
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-red-dark
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-sage
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-sage-dark
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-viridian
drwxr-xr-x 5 root root 4096 Aug  7 18:54 Yaru-viridian-dark
drwxr-xr-x 3 root root 4096 Aug  7 18:54 Yaru-xhdpi
drwxr-xr-x 4 root root 4096 Aug  7 18:54 Default
drwxr-xr-x 4 root root 4096 Aug  7 18:54 Emacs
drwxr-xr-x 3 root root 4096 Aug  7 18:54 Raleigh
drwxr-xr-x 4 root root 4096 Aug  7 18:54 Adwaita
drwxr-xr-x 4 root root 4096 Aug  7 18:54 Adwaita-dark
drwxr-xr-x 4 root root 4096 Aug  7 18:54 HighContrast
```

```
lrwxr-xr-x 1 root root 4096 Aug  7 10:34 highcontrast
ajtavarez@cis106:/usr/share/themes$ cd ../
ajtavarez@cis106:/usr/share$ ls -X
accountsservice       gcc                          libc-bin                          rig
aclocal               GConf                        libdebuginfod-common              rsync
acpi-support          gdb                          libdrm                            rsyslog
adduser               gdm                          libexttextcat                     rubygems-integration
aisleriot             geany                        libgnomekbd                       rygel
alacarte              geary                        libgweather                       samba
alsa                  gedit                        libgweather-4                     seahorse
alsa-base             GeoIP                        libinput                          secureboot
alsa-card-profile     gettext                      liblangtag                        sensible-utils
appdata               ghostscript                  liblouis                          session-migration
app-info              git-core                     liblouisutdml                     sgml
applications          gitweb                       libmysofa                         sgml-base
apport                glade                        libreoffice                       sgml-data
apps                  glvnd                        librevenge                        snmp
apturl                gmpc                         libthai                           software-properties
aspell                gnome                        libwacom                          solid
avahi                 gnome-applets                lightdm                           sounds
backgrounds           gnome-background-properties  lintian                           source-highlight
base-files            gnome-bluetooth              linux-sound-base                  speech-dispatcher
base-passwd           gnome-control-center         locale                            ssl-cert
bash-completion       gnome-initial-setup          locale-langpack                   system-config-printer
binfmts               gnome-logs                   locales                           systemd
branding              gnome-mahjongg               lto-disabled-list                 systemtap
brltty                gnome-panel                  m2300w                            tabset
bug                   gnome-remote-desktop         man                               tcltk
build-essential       gnome-session                man-db                            terminfo
ca-certificates       gnome-settings-daemon        mate-panel                        tex-common
caffeine-indicator    gnome-shell                  maven-repo                        texlive
catdoc                gnome-software               media-player-info                 texmf
cmake                 gnome-system-monitor         menu                              themes
code                  gnome-todo                   mesa-demos                        thumbnailers
cogl                  gnome-tweaks                 metainfo                          tilix
color                 gnome-video-effects          mfx                               totem
colord                gnupg                        mime                              tracker3
common-licenses       grilo-plugins                misc                              tracker3-miners
consolefonts          groff                        mobile-broadband-provider-info    transmission
console-setup         grub                         ModemManager                      ubuntu
consoletrans          grub-gfxpayload-lists        mousetweaks                       ubuntu-drivers-common
cowsay                gst-plugins-base             mythes                            ubuntu-release-upgrader
cups                  gtk-doc                      nano                              ubuntu-wayland
```

```
1: ajtavarez@cis106: ~  ∨
onsoletrans          grub-gfxpayload-lists    mousetweaks              ubuntu-drivers-common
owsay                gst-plugins-base         mythes                   ubuntu-release-upgrader
ups                  gtk-doc                  nano                     ubuntu-wayland
bus-1                gtk-engines              nautilus                 ucf
conf                 gtksourceview-4          nautilus-python          ufw
ebconf               guile                    nautilus-share           unattended-upgrades
ebhelper             gupnp-av                 nemo                     unity
ebianutils           gvfs                     netpbm                   update-manager
efaults              help                     netplan                  update-notifier
esktop-directories   help-langpack            numpy3                   upstart
ict                  hplip                    open-vm-tools            usb-creator
ictionaries-common   hunspell                 openvpn                  usb_modeswitch
istro-info           hwdata                   orca                     vala
jvu                  hyphen                   os-prober                vim
ns                   i18n                     p11-kit                  vlc
nsmasq-base          ibus                     package-data-downloads   vulkan
oc                   ibus-table               PackageKit               w3m
oc-base              icons                    pam                      wayland-sessions
pkg                  ImageMagick-6            pam-configs              X11
macs                 im-config                perl                     xapps-common
macsen-common        indicator-application    perl5                    xdg-desktop-portal
nchant-2             indicator-power          perl-openssl-defaults    xml
og                   indicators               pipewire                 xml-core
piphany-browser      info                     pixmaps                  xsessions
vince                initramfs-tools          pkgconfig                yelp
volution-data-server installed-tests          plymouth                 yelp-xsl
iglet                ipp-usb                  pnm2ppa                  zenity
ile                  iptables                 pocketsphinx             zoneinfo
ile-roller           iso-codes                polkit-1                 zoneinfo-icu
ish                  java                     poppler                  zsh
lameshot             javascript               ppd                      gir-1.0
latpak               kconf_update             ppp                      glib-2.0
ontconfig            kde4                     publicsuffix             gnome-bluetooth-3.0
onts                 keyrings                 pulseaudio               goa-1.0
onts-droid-fallback  kf5                      pyshared                 gstreamer-1.0
onts-sil-abyssinica  knotifications5          python3                  gtk-4.0
onts-sil-padauk      kservices5               python-apt               gtksourceview-2.0
oo2qpdl              kservicetypes5           qlogging-categories5     gtksourceview-3.0
oo2zjs               language-selector        qt5                      gupnp-dlna-2.0
wupd                 language-support         readline                 org.gnome.Characters
amemode              language-tools           remmina                  drirc.d
ames                 libcaca                  rhythmbox
jtavarez@cis106:/usr/share$ cd ../../
jtavarez@cis106:/$ cd
jtavarez@cis106:~$
```

Question 5

```
1: ajtavarez@cis106: ~/Downloads  ∨

ajtavarez@cis106:/$ cd home
ajtavarez@cis106:/home$ cd ajtavarez
ajtavarez@cis106:~$ cd Downloads
ajtavarez@cis106:~/Downloads$ pwd
/home/ajtavarez/Downloads
ajtavarez@cis106:~/Downloads$ _
```

```
ajtavarez@cis106:~$ cd /usr/share/themes/Adwaita
ajtavarez@cis106:/usr/share/themes/Adwaita$ cd
ajtavarez@cis106:~$ cd /home/ajtavarez/Documents
ajtavarez@cis106:~/Documents$ pwd
/home/ajtavarez/Documents
ajtavarez@cis106:~/Documents$ _
```