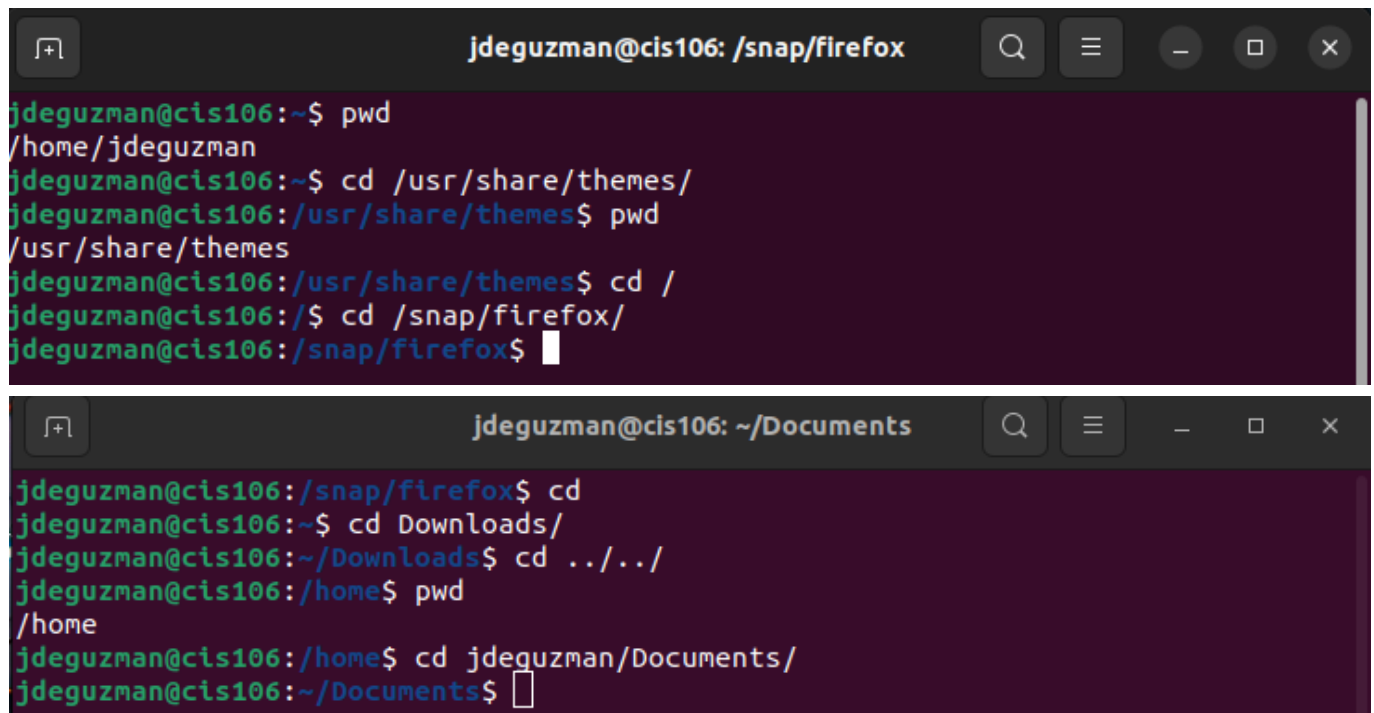


Lab 4 The Linux FS

Question 1



The image shows two terminal window screenshots. The first window, titled 'jdeguzman@cis106: /snap/firefox', shows a sequence of commands: 'pwd' (returns /home/jdeguzman), 'cd /usr/share/themes/' (returns /usr/share/themes), 'pwd' (returns /usr/share/themes), 'cd /' (returns /), 'cd /snap/firefox/' (returns /snap/firefox), and the prompt is ready for the next command. The second window, titled 'jdeguzman@cis106: ~/Documents', shows a sequence of commands: 'cd' (returns /snap/firefox), 'cd Downloads/' (returns ~/Downloads), 'cd ../../' (returns /home), 'pwd' (returns /home), 'cd jdeguzman/Documents/' (returns ~/Documents), and the prompt is ready for the next command.

```
jdeguzman@cis106:~$ pwd
/home/jdeguzman
jdeguzman@cis106:~$ cd /usr/share/themes/
jdeguzman@cis106:/usr/share/themes$ pwd
/usr/share/themes
jdeguzman@cis106:/usr/share/themes$ cd /
jdeguzman@cis106:/$ cd /snap/firefox/
jdeguzman@cis106:/snap/firefox$
```

```
jdeguzman@cis106:/snap/firefox$ cd
jdeguzman@cis106:~$ cd Downloads/
jdeguzman@cis106:~/Downloads$ cd ../../
jdeguzman@cis106:/home$ pwd
/home
jdeguzman@cis106:/home$ cd jdeguzman/Documents/
jdeguzman@cis106:~/Documents$
```

Question 2

```

1/1  +  [  ]  Tilix: jdeguzman@
1:jdeguzman@cis106: ~/lab4files  AI  □  ×

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

```

```

1/1  +  [  ]  Tilix: jdeguzman@
1:jdeguzman@cis106: ~/lab4files  AI  □  ×

jdeguzman@cis106:~/lab4files$ ls -lhs
total 6.5M
-rw-rw-r-- 1 jdeguzman jdeguzman 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 jdeguzman jdeguzman 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 jdeguzman jdeguzman 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 jdeguzman jdeguzman 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 jdeguzman jdeguzman 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 jdeguzman jdeguzman 135K Feb 22 2022 website.html
-rw-rw-r-- 1 jdeguzman jdeguzman 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 jdeguzman jdeguzman 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 jdeguzman jdeguzman 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 jdeguzman jdeguzman 76 Feb 22 2022 helloWorld.c
jdeguzman@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
jdeguzman@cis106:~/lab4files$ ls -lhsGgi
total 6.5M
948290 -rw-rw-r-- 1 2.5M Feb 22 2022 Linux.pdf
948292 -rw-rw-r-- 1 2.1M Feb 22 2022 Ubuntu.pdf
948295 -rw-rw-r-- 1 747K Feb 22 2022 document.docx
948296 -rw-rw-r-- 1 726K Feb 22 2022 globe.avi

```

```

948290 -rw-rw-r-- 1 720K Feb 22 2022 globe.avi
948294 -rw-rw-r-- 1 278K Feb 22 2022 csvfile.csv
948300 -rw-rw-r-- 1 135K Feb 22 2022 website.html
948291 -rw-rw-r-- 1 42K Feb 22 2022 Tux.png
948293 -rw-rw-r-- 1 20K Feb 22 2022 countries.json
948299 -rw-rw-r-- 1 8.5K Feb 22 2022 sample.xls
948298 -rw-rw-r-- 1 76 Feb 22 2022 helloWorld.c

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

```

Question 4

```

jdeguzman@cis106:~$ pwd
/home/jdeguzman
jdeguzman@cis106:~$ cd /usr/
jdeguzman@cis106:/usr$ cd /proc/sys/net/ipv4/
jdeguzman@cis106:/proc/sys/net/ipv4$ cd ../
jdeguzman@cis106:/proc/sys/net$ 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
jdeguzman@cis106:/proc/sys/net$ ls ~/cis106/
cheatSheets  labs  weekReports
jdeguzman@cis106:/proc/sys/net$ cd ~/Downloads/
jdeguzman@cis106:~/Downloads$ ls
games  lab4files.zip

```

```

jdeguzman@cis106:~/Downloads$ cd /dev/disk/by-id/
jdeguzman@cis106:/dev/disk/by-id$ ls -al ~
total 180
drwxr-x--- 22 jdeguzman jdeguzman 4096 Mar 14 15:09 .
drwxr-xr-x  3 root      root      4096 Feb 11 12:59 ..
-rw-----  1 jdeguzman jdeguzman 5378 Mar 14 15:32 .bash_history
-rw-r--r--  1 jdeguzman jdeguzman  220 Feb 11 12:59 .bash_logout
-rw-r--r--  1 jdeguzman jdeguzman 3771 Feb 11 12:59 .bashrc
drwx----- 22 jdeguzman jdeguzman 4096 Feb 28 23:00 .cache
drwxrwxr-x  6 jdeguzman jdeguzman 4096 Mar  3 17:51 cis106
-rw-rw-r--  1 jdeguzman jdeguzman 3520 Feb 28 16:39 .cis106.png
drwx----- 26 jdeguzman jdeguzman 4096 Mar 14 15:25 .config
drwxr-xr-x  2 jdeguzman jdeguzman 4096 Feb 28 16:42 Desktop
drwxr-xr-x  2 jdeguzman jdeguzman 4096 Mar  7 18:59 Documents
drwxrwxr-x  3 jdeguzman jdeguzman 4096 Feb 11 13:53 .dotnet
drwxr-xr-x  3 jdeguzman jdeguzman 4096 Mar 14 15:08 Downloads
drwxrwxr-x  2 jdeguzman jdeguzman 45056 Feb 28 19:40 .fonts
-rw-rw-r--  1 jdeguzman jdeguzman   91 Feb 11 14:48 gitcommands.txt
-rw-rw-r--  1 jdeguzman jdeguzman   66 Feb 11 14:19 .gitconfig
drwx-----  2 jdeguzman jdeguzman 4096 Feb 28 16:45 .gnupg
drwxrwxr-x  2 jdeguzman jdeguzman 4096 Feb 22 2022 lab4files
-rw-----  1 jdeguzman jdeguzman   20 Mar  3 14:26 .lessht
drwx-----  4 jdeguzman jdeguzman 4096 Feb 11 15:54 .local
drwxr-xr-x  2 jdeguzman jdeguzman 4096 Feb 11 13:17 Music
drwxr-xr-x  5 jdeguzman jdeguzman 4096 Mar  7 18:44 Pictures
drwx-----  3 jdeguzman jdeguzman 4096 Feb 11 13:51 .pki
-rw-r--r--  1 jdeguzman jdeguzman  807 Feb 11 12:59 .profile
drwxr-xr-x  2 jdeguzman jdeguzman 4096 Feb 11 13:17 Public
drwx-----  5 jdeguzman jdeguzman 4096 Feb 11 13:48 snap
drwx-----  2 jdeguzman jdeguzman 4096 Feb 11 14:22 .ssh
-rw-r--r--  1 jdeguzman jdeguzman    0 Feb 11 13:23 .sudo_as_admin_successful
drwxr-xr-x  2 jdeguzman jdeguzman 4096 Feb 11 13:17 Templates
-rw-r-----  1 jdeguzman jdeguzman    5 Mar 14 14:45 .vboxclient-clipboard.pid
-rw-r-----  1 jdeguzman jdeguzman    5 Mar 14 14:45 .vboxclient-draganddrop.pid
-rw-r-----  1 jdeguzman jdeguzman    5 Mar 14 14:45 .vboxclient-seamless.pid
-rw-r-----  1 jdeguzman jdeguzman    5 Mar 14 14:45 .vboxclient-vmtoolsd-session-tty2.pid
drwxr-xr-x  3 jdeguzman jdeguzman 4096 Mar  7 19:01 Videos
drwxrwxr-x  3 jdeguzman jdeguzman 4096 Feb 11 13:51 .vscode

```



```
jdeguzman@cis106:/dev/disk/by-id$ ls -lt /usr/share/themes/
total 120
drwxr-xr-x 7 root root 4096 Aug  9 2022 Yaru
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-bark
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-bark-dark
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-blue
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-blue-dark
drwxr-xr-x 7 root root 4096 Aug  9 2022 Yaru-dark
drwxr-xr-x 3 root root 4096 Aug  9 2022 Yaru-dark-hdpi
drwxr-xr-x 3 root root 4096 Aug  9 2022 Yaru-dark-xhdpi
drwxr-xr-x 3 root root 4096 Aug  9 2022 Yaru-hdpi
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-magenta
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-magenta-dark
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-olive
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-olive-dark
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-prussiangreen
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-prussiangreen-dark
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-purple
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-purple-dark
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-red
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-red-dark
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-sage
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-sage-dark
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-viridian
drwxr-xr-x 5 root root 4096 Aug  9 2022 Yaru-viridian-dark
drwxr-xr-x 3 root root 4096 Aug  9 2022 Yaru-xhdpi
drwxr-xr-x 4 root root 4096 Aug  9 2022 Default
drwxr-xr-x 4 root root 4096 Aug  9 2022 Emacs
drwxr-xr-x 3 root root 4096 Aug  9 2022 Raleigh
drwxr-xr-x 4 root root 4096 Aug  9 2022 Adwaita
drwxr-xr-x 4 root root 4096 Aug  9 2022 Adwaita-dark
drwxr-xr-x 4 root root 4096 Aug  9 2022 HighContrast
```

```
jdeguzman@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
aisleriot             gnome-tweaks          perl5
alacarte              gnome-video-effects  perl-openssl-defaults
alsa                  gnupg                pipewire
alsa-base             grilo-plugins         pixmaps
alsa-card-profile    groff                 pkgconfig
appdata               grub                  plymouth
app-info              grub-gfxpayload-lists pnm2ppa
applications          gst-plugins-base     pocketsphinx
appport              gtk-doc               polkit-1
apps                  gtk-engines           poppler
apturl                gtksourceview-4      ppd
aspell                guile                 ppp
avahi                 gupnp-av              publicsuffix
backgrounds           gvfs                  pulseaudio
base-files            help                  pyshared
base-passwd           help-langpack         python3
bash-completion       hplip                 python-apt
binfmts               hunspell              qlogging-categories5
branding               hwdata                qt5
brlty                 hyphen                readline
bug                   i18n                  remmina
build-essential        ibus                  rhythmbox
ca-certificates       ibus-table            rig
caffeine-indicator    icons                 rsync
catdoc                 ImageMagick-6         rsyslog
cmake                  im-config             rubygems-integration
code                   indicator-application rygel
cogl                   indicator-power        samba
color                  indicators             seahorse
colord                 info                   secureboot
common-licenses        initramfs-tools       sensible-utils
consolefonts           installed-tests       session-migration
console-setup          ipp-usb                sgml
consoletrans           iptables               sgml-base
cowsay                 iso-codes              sgml-data
cups                   java                   snmp
```

dbus-1	javascript	software-properties
dconf	kconf_update	solid
debconf	kde4	sounds
debhelper	keyrings	source-highlight
debianutils	kf5	speech-dispatcher
defaults	knotifications5	ssl-cert
desktop-directories	kservices5	system-config-printer
dict	kservicetypes5	systemd
dictionaries-common	language-selector	systemtap
distro-info	language-support	tabset
djvu	language-tools	tccltk
dns	libcaca	terminfo
dnsmasq-base	libc-bin	tex-common
doc	libdebuginfod-common	texlive
doc-base	libdrm	texmf
dpkg	libexttextcat	themes
emacs	libgnomekbd	thumbnailers
emacsens-common	libgweather	tilix
enchant-2	libgweather-4	totem
eog	libinput	tracker3
epiphany-browser	liblangtag	tracker3-miners
evince	liblouis	transmission
evolution-data-server	liblouisutdm1	ubuntu
figlet	libmysofa	ubuntu-drivers-common
file	libreoffice	ubuntu-release-upgrader
file-roller	librevenge	ubuntu-wayland
fish	libthai	ucf
flameshot	libwacom	ufw
flatpak	lightdm	unattended-upgrades
fontconfig	lintian	unity
fonts	linux-sound-base	update-manager
fonts-droid-fallback	locale	update-notifier
fonts-sil-abyssinica	locale-langpack	upstart
fonts-sil-padauk	locales	usb-creator
foo2qpdf	lto-disabled-list	usb_modeswitch
foo2zjs	m2300w	vala
fwupd	man	vim
gamemode	man-db	vlc
games	mate-panel	vulkan
gcc	maven-repo	w3m
GConf	media-player-info	wayland-sessions

```

gdb          menu          X11
gdm          mesa-demos    xapps-common
geany        metainfo     xdg-desktop-portal
geary        mfx          xml
gedit        mime         xml-core
GeoIP        misc         xsessions
gettext      mobile-broadband-provider-info yelp
ghostscript  ModemManager yelp-xsl
git-core     mousetweaks      zenity
gitweb       mythes       zoneinfo
glade        nano         zoneinfo-icu
glvnd        nautilus      zsh
gnome        nautilus-python
gnome-applets nautilus-share
gnome-background-properties nemo
gnome-bluetooth netpbm
gnome-control-center netplan
gnome-initial-setup numpy3
gnome-logs    open-vm-tools
gnome-mahjongg openvpn
gnome-panel   orca
gnome-remote-desktop os-prober
gnome-session p11-kit
gnome-settings-daemon package-data-downloads

```

Question 5

```

1/1  +  [ ]  [ ]
1:jdeguzman@cis106: ~/Downloads
jdeguzman@cis106:~$ cd /
jdeguzman@cis106:/$ cd /home/jdeguzman/Downloads/
jdeguzman@cis106:~/Downloads$ pwd
/home/jdeguzman/Downloads
jdeguzman@cis106:~/Downloads$ cd /usr/share/themes/Adwaita
jdeguzman@cis106:/usr/share/themes/Adwaita$ cd /home/jdeguzman/Documents/
jdeguzman@cis106:~/Documents$ pwd
/home/jdeguzman/Documents

```