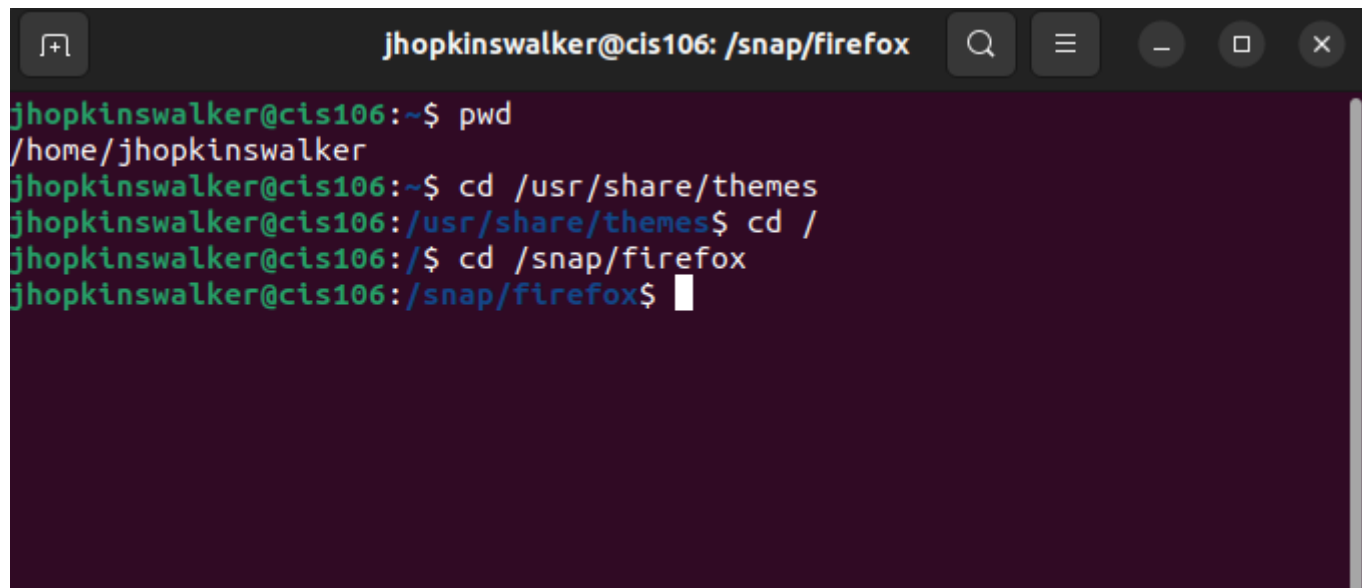


Lab 4 The Linux FS

Question 1

A terminal window with a dark purple background. The title bar shows the user 'jhopkinswalker' on host 'cis106' in the directory '/snap/firefox'. The terminal contains the following commands and output:

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

 q1.2

Question 2

```

jhopkinswalker@cis106: ~/lab4files

jhopkinswalker@cis106:~/Documents$ cd /usr/share/
jhopkinswalker@cis106:/usr/share$ ls /home/jhopkinswalker/lab4files/
countries.json  document.docx  helloWorld.c  sample.xls  Ubuntu.pdf
csvfile.csv     globe.avi      Linux.pdf     Tux.png     website.html
jhopkinswalker@cis106:/usr/share$ cd ~/lab4files/
jhopkinswalker@cis106:~/lab4files$ ls -l
total 6580
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 20471 Feb 22 2022 countries.json
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 284042 Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 764176 Feb 22 2022 document.docx
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 742478 Feb 22 2022 globe.avi
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 2600138 Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 8704 Feb 22 2022 sample.xls
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 42777 Feb 22 2022 Tux.png
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 2114053 Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 137453 Feb 22 2022 website.html
jhopkinswalker@cis106:~/lab4files$ ls -lh
total 6.5M
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 135K Feb 22 2022 website.html
jhopkinswalker@cis106:~/lab4files$ ls -lhs
total 6.5M
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 135K Feb 22 2022 website.html
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 76 Feb 22 2022 helloWorld.c
jhopkinswalker@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
jhopkinswalker@cis106:~/lab4files$ ls -lhSgGi
total 6.5M
609787 -rw-rw-r-- 1 2.5M Feb 22 2022 Linux.pdf
609789 -rw-rw-r-- 1 2.1M Feb 22 2022 Ubuntu.pdf
609792 -rw-rw-r-- 1 747K Feb 22 2022 document.docx

```

```

609793 -rw-rw-r-- 1 726K Feb 22 2022 globe.avi
609791 -rw-rw-r-- 1 278K Feb 22 2022 csvfile.csv
609796 -rw-rw-r-- 1 135K Feb 22 2022 website.html
609788 -rw-rw-r-- 1 42K Feb 22 2022 Tux.png
609790 -rw-rw-r-- 1 20K Feb 22 2022 countries.json
609795 -rw-rw-r-- 1 8.5K Feb 22 2022 sample.xls
609794 -rw-rw-r-- 1 76 Feb 22 2022 helloWorld.c
609797 -rw-rw-r-- 1 76 Feb 22 2022 helloWorld.c
jhopkinswalker@cis106:~/lab4files$ ls -Xr
sample.xls  Ubuntu.pdf  countries.json  document.docx  helloWorld.c
Tux.png     Linux.pdf   website.html   csvfile.csv    globe.avi
jhopkinswalker@cis106:~/lab4files$ ls -Xrl
total 6580
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 8704 Feb 22 2022 sample.xls
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 42777 Feb 22 2022 Tux.png
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 2114053 Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 2600138 Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 20471 Feb 22 2022 countries.json
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 137453 Feb 22 2022 website.html
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 764176 Feb 22 2022 document.docx
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 284042 Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 jhopkinswalker jhopkinswalker 742478 Feb 22 2022 globe.avi
jhopkinswalker@cis106:~/lab4files$ ls -Xr1
sample.xls
Tux.png
Ubuntu.pdf
Linux.pdf
countries.json
website.html
document.docx
csvfile.csv
helloWorld.c
globe.avi
jhopkinswalker@cis106:~/lab4files$

```

Questions 4

```
jhopkinswalker@cis106: /dev/disk/by-id

hopkinswalker@cis106:~$ pwd
/home/jhopkinswalker
hopkinswalker@cis106:~$ cd /usr/share/icons/default/
hopkinswalker@cis106:/usr/share/icons/default$ cd /proc/sys/net/ipv4/
hopkinswalker@cis106:/proc/sys/net/ipv4$ cd -
usr/share/icons/default

jhopkinswalker@cis106: /dev/disk/by-id

jhopkinswalker@cis106:/usr/share/icons/default$ ls ../../backgrounds/
Blue_flower_by_Elena_Stravoravdi.jpg
canvas_by_roytanck.jpg
Cherry_Tree_in_Lakones_by_elenastravoravdi.jpg
contest
OSC2943_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
jhopkinswalker@cis106:/usr/share/icons/default$ ls /home/jhopkinswalker/ci
s106
cheatSheets  labs  weekReports
jhopkinswalker@cis106:/usr/share/icons/default$ cd /home
jhopkinswalker@cis106:/home$ pwd
/home

jhopkinswalker@cis106: /dev/disk/by-id

hopkinswalker@cis106:/home$ ls /home/jhopkinswalker/Downloads
Absolute Path VS Relative Path Cheat sheet.png'
Games
images.zip
lab4files.zip
myfiles
practicels.tar.xz
The LS command Cheat Sheet.png'
hopkinswalker@cis106:/home$ cd /dev/disk/by-id
```

```
jhopkinswalker@cis106: /dev/disk/by-id
```

```
jhopkinswalker@cis106:/dev/disk/by-id$ ls -la /home/jhopkinswalker/
```

```
total 36672
drwxr-x--- 37 jhopkinswalker jhopkinswalker 4096 Nov 17 14:57 .
drwxr-xr-x  3 root            root            4096 Sep 29 23:02 ..
-rw-rw-r--  1 jhopkinswalker jhopkinswalker    0 Oct 26 18:10 apple.t
xt
drwxrwxr-x  3 jhopkinswalker jhopkinswalker 184320 Nov  2 18:54 bakery
-rw-rw-r--  1 jhopkinswalker jhopkinswalker   41 Nov  9 17:55 .bash_a
liases
-rw-----  1 jhopkinswalker jhopkinswalker 10852 Nov 17 16:29 .bash_h
istory
-rw-r--r--  1 jhopkinswalker jhopkinswalker  220 Sep 29 23:02 .bash_l
ogout
-rw-r--r--  1 jhopkinswalker jhopkinswalker 3771 Sep 29 23:02 .bashrc
drwxrwxr-x  2 jhopkinswalker jhopkinswalker 4096 Nov  2 18:13 box
drwx----- 23 jhopkinswalker jhopkinswalker 4096 Oct 12 19:38 .cache
drwxrwxr-x  6 jhopkinswalker jhopkinswalker 4096 Nov 17 12:13 cis106
-rw-rw-r--  1 jhopkinswalker jhopkinswalker 3520 Oct 11 22:08 .cis106
.png
-rw-rw-r--  1 jhopkinswalker jhopkinswalker 34875064 Nov 17 12:07 cis106.
zip
```

```
jhopkinswalker@cis106: /dev/disk/by-id
```

```
drwxrwxr-x 4 jhopkinswalker jhopkinswalker 4096 Oct 19 18:35 website
```

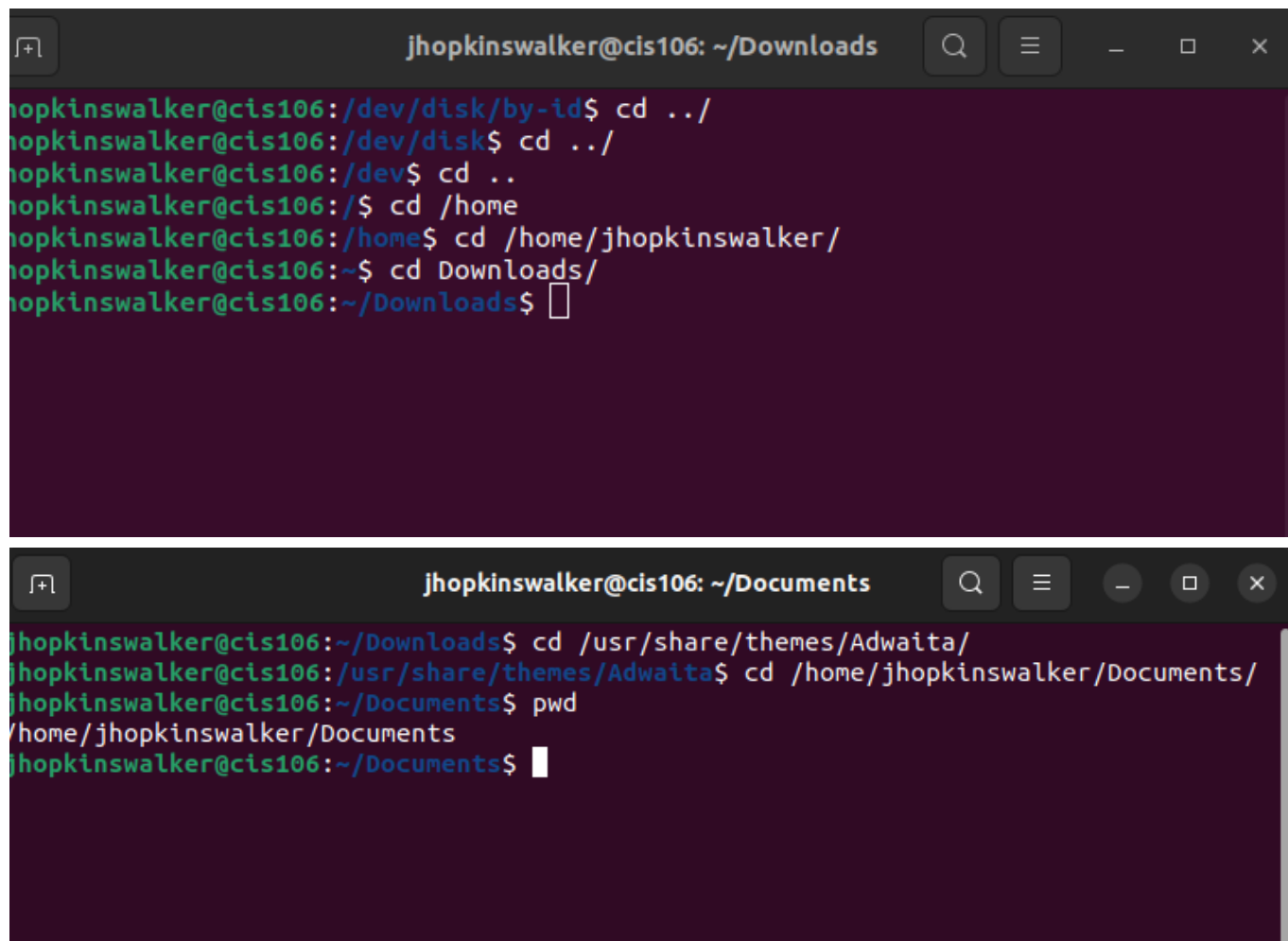
```
jhopkinswalker@cis106:/dev/disk/by-id$ ls -c ../../usr/share/themes
```

```
Adwaita      Yaru-bark-dark    Yaru-magenta-dark    Yaru-red-dark
Adwaita-dark Yaru-blue         Yaru-olive            Yaru-sage
Default      Yaru-blue-dark    Yaru-olive-dark       Yaru-sage-dark
Emacs        Yaru-dark         Yaru-prussiangreen    Yaru-viridian
HighContrast Yaru-dark-hdpi    Yaru-prussiangreen-dark Yaru-viridian-dark
Raleigh      Yaru-dark-xhdpi   Yaru-purple           Yaru-xhdpi
Yaru         Yaru-hdpi         Yaru-purple-dark
Yaru-bark    Yaru-magenta      Yaru-red
```

```
jhopkinswalker@cis106:/dev/disk/by-id$ ls -X ../../usr/share
```

```
accountsservice  libdrm
aclocal           libexttextcat
acpi-support     libgnomekbd
adduser          libgweather
aerc             libgweather-4
aisleriot        libinput
alacarte         liblangtag
alsa            liblouis
alsa-base       liblouisutdm1
alsa-card-profile libmysofa
```

Question 5



The image contains two terminal window screenshots. The top window has a title bar 'jhopkinswalker@cis106: ~/Downloads' and shows a series of 'cd' commands navigating from '/dev/disk/by-id' to the user's home directory and then to the 'Downloads' folder. The bottom window has a title bar 'jhopkinswalker@cis106: ~/Documents' and shows navigation from the 'Downloads' folder to '/usr/share/themes/Adwaita/' and then to the 'Documents' folder, followed by a 'pwd' command that confirms the current directory.

```
jhopkinswalker@cis106: ~/Downloads
jhopkinswalker@cis106:/dev/disk/by-id$ cd ../
jhopkinswalker@cis106:/dev/disk$ cd ../
jhopkinswalker@cis106:/dev$ cd ..
jhopkinswalker@cis106:/home$ cd /home/jhopkinswalker/
jhopkinswalker@cis106:~/home$ cd Downloads/
jhopkinswalker@cis106:~/Downloads$

jhopkinswalker@cis106: ~/Documents
jhopkinswalker@cis106:~/Downloads$ cd /usr/share/themes/Adwaita/
jhopkinswalker@cis106:/usr/share/themes/Adwaita$ cd /home/jhopkinswalker/Documents/
jhopkinswalker@cis106:~/Documents$ pwd
/home/jhopkinswalker/Documents
jhopkinswalker@cis106:~/Documents$
```