

Lab 4

Question 1

```
richard@cis106: /snap/firefox

richard@cis106:~$ pwd
/home/richard
richard@cis106:~$ cd /usr/share/themes/
richard@cis106:/usr/share/themes$ pwd
/usr/share/themes
richard@cis106:/usr/share/themes$ cd /
richard@cis106:/$ cd /snap/firefox/
richard@cis106:/snap/firefox$ █

richard@cis106: ~/Documents

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

Question 2

```

1/1  +  [ ] [x] Tilix: richard@ci
1: richard@cis106: ~/lab4files  A  □  ×

richard@cis106:~$ cd /usr/share/
richard@cis106:/usr/share$ ls ~/lab4files/
countries.json csvfile.csv document.docx globe.avi helloWorld.c Linux.pdf sample.xls Tux.png U
buntu.pdf website.html
richard@cis106:/usr/share$ cd ~/lab4files/
richard@cis106:~/lab4files$ ls -lh
total 6.5M
-rw-rw-r-- 1 richard richard 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 richard richard 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 richard richard 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 richard richard 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 richard richard 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 richard richard 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 richard richard 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 richard richard 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 richard richard 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 richard richard 135K Feb 22 2022 website.html
richard@cis106:~/lab4files$ ls -lhs
total 6.5M
-rw-rw-r-- 1 richard richard 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 richard richard 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 richard richard 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 richard richard 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 richard richard 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 richard richard 135K Feb 22 2022 website.html
-rw-rw-r-- 1 richard richard 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 richard richard 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 richard richard 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 richard richard 76 Feb 22 2022 helloWorld.c
richard@cis106:~/lab4files$ ls -lhi --block-size=human-readable lab4files | sort -h -k5
ls: cannot access 'lab4files': No such file or directory
richard@cis106:~/lab4files$ ^C
richard@cis106:~/lab4files$ ^C
richard@cis106:~/lab4files$ ls -lhis --block-size=human-readable lab4files
ls: cannot access 'lab4files': No such file or directory
richard@cis106:~/lab4files$ ls -lhis --block-size=human-readable /full/path/to/lab4files
ls: cannot access '/full/path/to/lab4files': No such file or directory
richard@cis106:~/lab4files$ ls -lhis
total 6.5M
1062699 -rw-rw-r-- 1 richard richard 2.5M Feb 22 2022 Linux.pdf
1062701 -rw-rw-r-- 1 richard richard 2.1M Feb 22 2022 Ubuntu.pdf
1062704 -rw-rw-r-- 1 richard richard 747K Feb 22 2022 document.docx
1062705 -rw-rw-r-- 1 richard richard 726K Feb 22 2022 globe.avi
1062703 -rw-rw-r-- 1 richard richard 278K Feb 22 2022 csvfile.csv
1062708 -rw-rw-r-- 1 richard richard 135K Feb 22 2022 website.html
1062700 -rw-rw-r-- 1 richard richard 42K Feb 22 2022 Tux.png
richard@cis106:~/lab4files$ ls -lXr
total 6580
-rw-rw-r-- 1 richard richard 8704 Feb 22 2022 sample.xls
-rw-rw-r-- 1 richard richard 42777 Feb 22 2022 Tux.png
-rw-rw-r-- 1 richard richard 2114053 Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 richard richard 2600138 Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 richard richard 20471 Feb 22 2022 countries.json
-rw-rw-r-- 1 richard richard 137453 Feb 22 2022 website.html
-rw-rw-r-- 1 richard richard 764176 Feb 22 2022 document.docx
-rw-rw-r-- 1 richard richard 284042 Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 richard richard 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 richard richard 742478 Feb 22 2022 globe.avi
richard@cis106:~/lab4files$

```

Question 3


```

Open  [icon] lab4_script_v1.sh
~/scripts

lab4_script_v1.sh ×

1 #!/bin/bash
2 down="$HOME/Downloads"
3 cis="$HOME/cis106"
4 msg1="The current directory is:"
5 msg2="\nAll files (including hidden files) in"
6
7 echo "The current user is $USER. It's home directory is $HOME."
8 cd $down
9 echo $msg1
10 pwd
11 cd $cis
12 echo $msg1
13 pwd
14
15 echo -e "$msg2 /"
16 ls -mA --color=auto /
17
18 echo -e "$msg2 $HOME"
19 ls -mA / --color=auto $HOME
20
21 echo -e "$msg2 $down"
22 ls -mA / --color=auto $down
23
24 echo -e "$msg2 $cis"
25 ls -mA / --color=auto $cis
26
27

```

```

[icon] richard@cis106: ~/scripts

richard@cis106:~$ cd scripts/
richard@cis106:~/scripts$ bash lab4_script_v1.sh
The current user is richard. It's home directory is /home/richard.
The current directory is:
/home/richard/Downloads
The current directory is:
/home/richard/cis106

All files (including hidden files) in /
bin, boot, cdrom, dev, etc, home, lib, lib32, lib64, libx32, lost+found, media,
mnt, opt, proc, root, run,/sbin, snap, srv, swapfile, sys, tmp, usr, var

All files (including hidden files) in /home/richard
/:
bin, boot, cdrom, dev, etc, home, lib, lib32, lib64, libx32, lost+found, media,
mnt, opt, proc, root, run,/sbin, snap, srv, swapfile, sys, tmp, usr, var

/home/richard:
.bash_history, .bash_logout, .bashrc, .cache, cis106, .config, Desktop,
Documents, .dotnet, downloads, Downloads, .fontconfig, games, .gitconfig,
.gnupg, lab4files, .lessht, .local, Music, Pictures, .pki, practicels,
practicels.tar.xz, .profile, Public, scripts, script.sh, snap, .ssh,
.sudo_as_admin_successful, Templates, .vboxclient-clipboard-tty2-control.pid,
.vboxclient-clipboard-tty2-service.pid,
.vboxclient-draganddrop-tty2-control.pid,
.vboxclient-draganddrop-tty2-service.pid,
.vboxclient-hostversion-tty2-control.pid, .vboxclient-seamless-tty2-control.pid,
.vboxclient-seamless-tty2-service.pid,
.vboxclient-vmvga-session-tty2-control.pid,
.vboxclient-vmvga-session-tty2-service.pid, Videos, .vscode, website.js

All files (including hidden files) in /home/richard/Downloads
/:
bin, boot, cdrom, dev, etc, home, lib, lib32, lib64, libx32, lost+found, media,
mnt, opt, proc, root, run,/sbin, snap, srv, swapfile, sys, tmp, usr, var

/home/richard/Downloads:
Food, Games, lab4_script.sh,

```

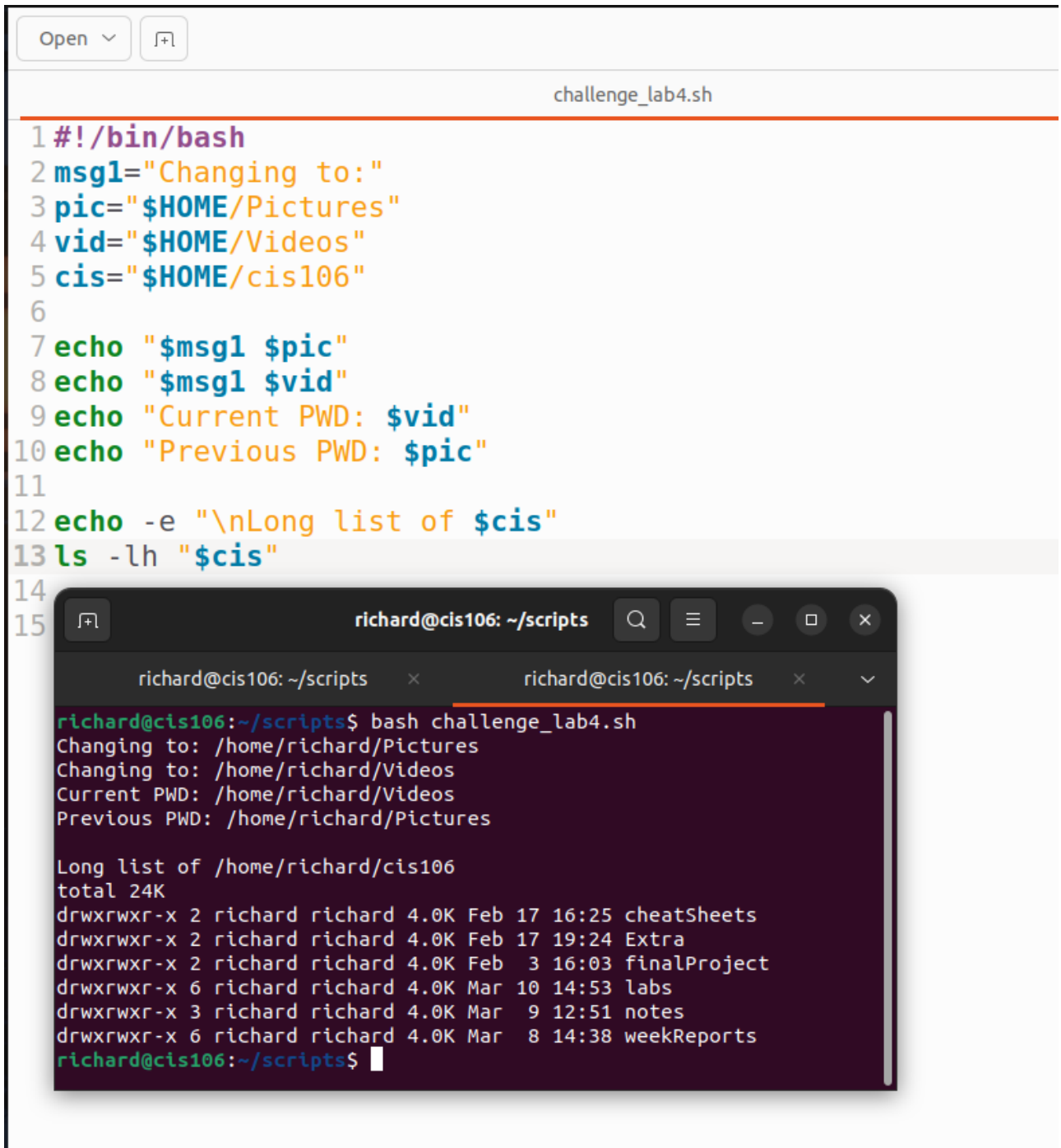
```
'Linux Workshop Ubuntu Software installation cheat sheet.png', pizza.txt

All files (including hidden files) in /home/richard/cis106
/:
bin, boot, cdrom, dev, etc, home, lib, lib32, lib64, libx32, lost+found, media,
mnt, opt, proc, root, run, sbin, snap, srv, swapfile, sys, tmp, usr, var

/home/richard/cis106:
cheatSheets, Extra, finalProject, .git, labs, notes, weekReports
richard@cis106:~/scripts$
```

Question 4 (Challenge question)

- [Script Source Code](#)



```
Open  [icon]

challenge_lab4.sh

1#!/bin/bash
2msg1="Changing to:"
3pic="$HOME/Pictures"
4vid="$HOME/Videos"
5cis="$HOME/cis106"
6
7echo "$msg1 $pic"
8echo "$msg1 $vid"
9echo "Current PWD: $vid"
10echo "Previous PWD: $pic"
11
12echo -e "\nLong list of $cis"
13ls -lh "$cis"
14
15
```

```
richard@cis106: ~/scripts  [search] [menu] [back] [forward] [close]

richard@cis106: ~/scripts  x  richard@cis106: ~/scripts  x  v

richard@cis106:~/scripts$ bash challenge_lab4.sh
Changing to: /home/richard/Pictures
Changing to: /home/richard/Videos
Current PWD: /home/richard/Videos
Previous PWD: /home/richard/Pictures

Long list of /home/richard/cis106
total 24K
drwxrwxr-x 2 richard richard 4.0K Feb 17 16:25 cheatSheets
drwxrwxr-x 2 richard richard 4.0K Feb 17 19:24 Extra
drwxrwxr-x 2 richard richard 4.0K Feb  3 16:03 finalProject
drwxrwxr-x 6 richard richard 4.0K Mar 10 14:53 labs
drwxrwxr-x 3 richard richard 4.0K Mar  9 12:51 notes
drwxrwxr-x 6 richard richard 4.0K Mar  8 14:38 weekReports
richard@cis106:~/scripts$
```