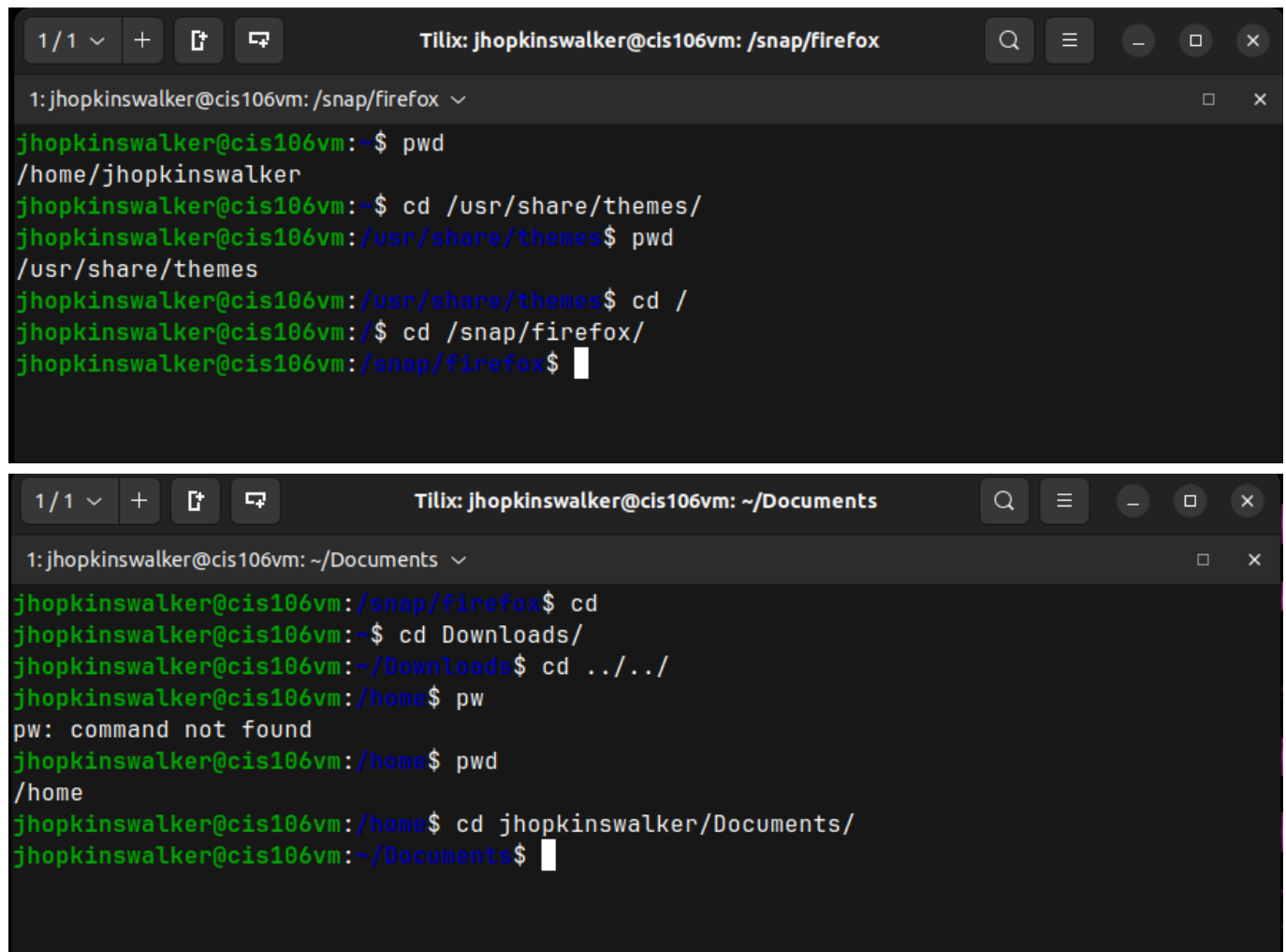


Lab 4 Submission

Question 1 | Moving Around the file System



The image contains two screenshots of a terminal window titled 'Tilix: jhopkinswalker@cis106vm: /snap/firefox'. The first screenshot shows the user navigating from their home directory to /usr/share/themes and then back to /snap/firefox. The second screenshot shows the user navigating from /snap/firefox to their home directory, then to the Downloads directory, back to home, and finally to the Documents directory.

```
1: jhopkinswalker@cis106vm: /snap/firefox
jhopkinswalker@cis106vm:~$ pwd
/home/jhopkinswalker
jhopkinswalker@cis106vm:~$ cd /usr/share/themes/
jhopkinswalker@cis106vm:/usr/share/themes$ pwd
/usr/share/themes
jhopkinswalker@cis106vm:/usr/share/themes$ cd /
jhopkinswalker@cis106vm:/$ cd /snap/firefox/
jhopkinswalker@cis106vm:/snap/firefox$

1: jhopkinswalker@cis106vm: ~/Documents
jhopkinswalker@cis106vm:/snap/firefox$ cd
jhopkinswalker@cis106vm:~$ cd Downloads/
jhopkinswalker@cis106vm:~/Downloads$ cd ../../
jhopkinswalker@cis106vm:/home$ pw
pw: command not found
jhopkinswalker@cis106vm:/home$ pwd
/home
jhopkinswalker@cis106vm:/home$ cd jhopkinswalker/Documents/
jhopkinswalker@cis106vm:~/Documents$
```

Question 2 | The ls Command

```
1/1 v + [ ] [ ] Tilix: jhopkinswalker@cis106vm: ~/lab4files v
1:jhopkinswalker@cis106vm: ~/lab4files v
jhopkinswalker@cis106vm:~$ cd /usr/share/
jhopkinswalker@cis106vm:/usr/share$ ls ~/lab4files
countries.json  document.docx  helloWorld.c  sample.xls  Ubuntu.pdf
csvfile.csv    globe.avi      Linux.pdf     Tux.png     website.html
jhopkinswalker@cis106vm:/usr/share$ cd ~/lab4files/
jhopkinswalker@cis106vm:~/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@cis106vm:~/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@cis106vm:~/lab4files$ ls -lhSGi
total 6.5M
1581395 -rw-rw-r-- 1 jhopkinswalker 2.5M Feb 22 2022 Linux.pdf
1581400 -rw-rw-r-- 1 jhopkinswalker 2.1M Feb 22 2022 Ubuntu.pdf
1581450 -rw-rw-r-- 1 jhopkinswalker 747K Feb 22 2022 document.docx
1581455 -rw-rw-r-- 1 jhopkinswalker 726K Feb 22 2022 globe.avi
1581444 -rw-rw-r-- 1 jhopkinswalker 278K Feb 22 2022 csvfile.csv
1581466 -rw-rw-r-- 1 jhopkinswalker 135K Feb 22 2022 website.html
1581397 -rw-rw-r-- 1 jhopkinswalker 42K Feb 22 2022 Tux.png
```

```
1/1 v + [ ] [ ] Tilix: jhopkinswalker@cis106vm: ~/lab4files v
1:jhopkinswalker@cis106vm: ~/lab4files v
-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@cis106vm:~/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@cis106vm:~/lab4files$ ls -lhSGi
total 6.5M
1581395 -rw-rw-r-- 1 jhopkinswalker 2.5M Feb 22 2022 Linux.pdf
1581400 -rw-rw-r-- 1 jhopkinswalker 2.1M Feb 22 2022 Ubuntu.pdf
1581450 -rw-rw-r-- 1 jhopkinswalker 747K Feb 22 2022 document.docx
1581455 -rw-rw-r-- 1 jhopkinswalker 726K Feb 22 2022 globe.avi
1581444 -rw-rw-r-- 1 jhopkinswalker 278K Feb 22 2022 csvfile.csv
1581466 -rw-rw-r-- 1 jhopkinswalker 135K Feb 22 2022 website.html
1581397 -rw-rw-r-- 1 jhopkinswalker 42K Feb 22 2022 Tux.png
1581442 -rw-rw-r-- 1 jhopkinswalker 20K Feb 22 2022 countries.json
1581460 -rw-rw-r-- 1 jhopkinswalker 8.5K Feb 22 2022 sample.xls
1581459 -rw-rw-r-- 1 jhopkinswalker 76 Feb 22 2022 helloWorld.c
jhopkinswalker@cis106vm:~/lab4files$ ls -Xr
sample.xls  countries.json  helloWorld.c
Tux.png    website.html    globe.avi
Ubuntu.pdf document.docx
Linux.pdf  csvfile.csv
jhopkinswalker@cis106vm:~/lab4files$

```

Question 3 | Shell Scripting

```

1/1 v + [ ] [ ]
Tillix: jhopkinswalker@cis106vm: ~
jhopkinswalker@cis106vm: ~
jhopkinswalker@cis106vm: $ bash scripts/Lab4_script.sh
The current user is jhopkinswalker. It's 'home' directory is /home/jhopkinswalker
The current directory is:
/home/jhopkinswalker/Downloads
The current directory is:
/home/jhopkinswalker/cis106

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

All files (including hidden files) in /home/jhopkinswalker
., all_files.md, .bash_aliases, .bash_history, .bash_logout, .bashrc, .cache,
cat, cereal-sorted.csv.json, cis106, .cis106.png, .config, Desktop, Documents,
Downloads, er, findatFiles, finalSubmission, fonts, food2.txt,
Food3.txt, food.txt, gitcommands.txt, .gitconfig, GNU+Linux.md,
.GNU+Linux.md.swp, .gnupg, lab4files, .lessht, linux.md, linux+other.md,
local, Music, Pictures, .pub, practiois, practicels.tar.xz,
practicels.tar.xz.1, .profile, Public, scripts, search, shopping.txt, snap,
ssh, .sudo_as_admin_successful, tasks.txt, templates, .textFiles,
'Untitled Document 1', .var, .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, .viminfo, .vscode,
wildcardpractice

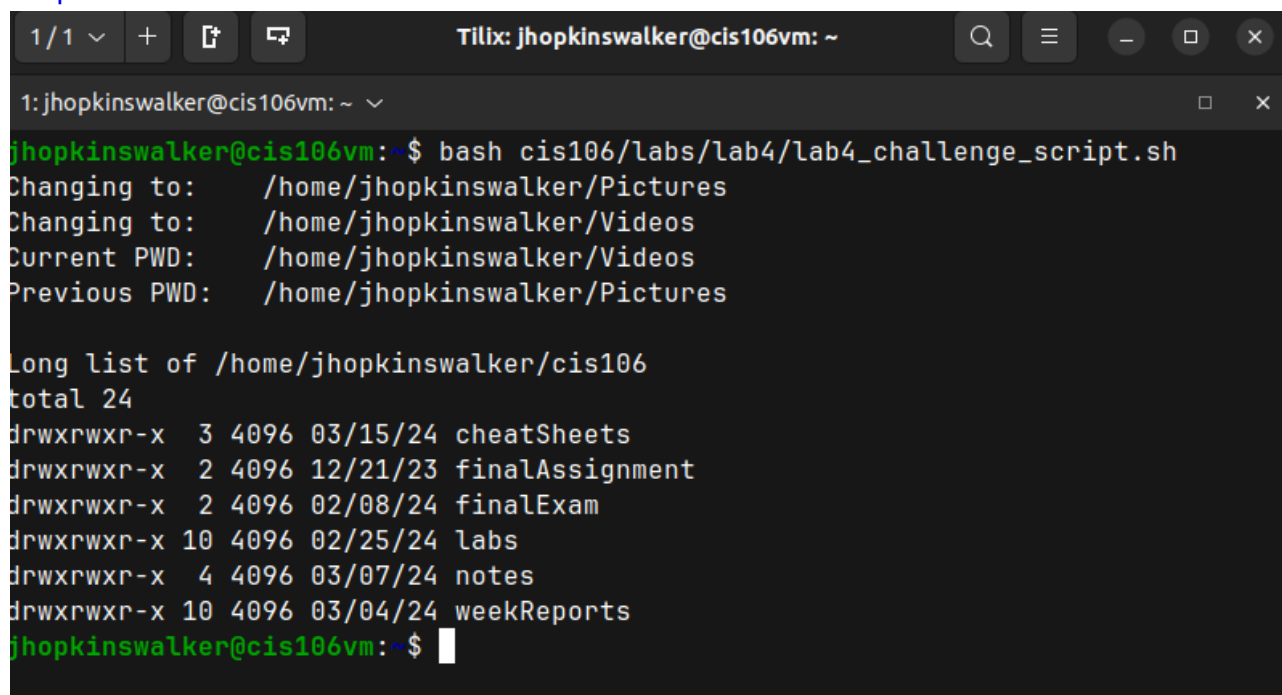
All files (including hidden files) in /home/jhopkinswalker/Downloads
'Absolute Path VS Relative Path Cheat sheet.png',
code_1.85.0-1701902998_amd64.deb, 'Fall 23 Final Exam CIS106 (1).pdf', Food,
Images, istockphoto-1596798637-1024x1024.jpg, lab4_script.sh,
'Linux Workshop Ubuntu Software installation cheat sheet.png',
notes1_original.pdf, 'The LS command Cheat Sheet.png', tree.png

All files (including hidden files) in /home/jhopkinswalker/cis106

```

Question 4 | Challenge Write a Script

- [Script Source Code](#)

A terminal window titled 'Tilix: jhopkinswalker@cis106vm: ~' showing the execution of a script. The prompt is 'jhopkinswalker@cis106vm:~\$'. The script runs 'bash cis106/labs/lab4/lab4_challenge_script.sh'. It outputs directory changes and a long listing of the user's home directory. The listing shows a total of 24 files and directories, including 'cheatSheets', 'finalAssignment', 'finalExam', 'labs', 'notes', and 'weekReports'.

```
1: jhopkinswalker@cis106vm: ~  
jhopkinswalker@cis106vm:~$ bash cis106/labs/lab4/lab4_challenge_script.sh  
Changing to: /home/jhopkinswalker/Pictures  
Changing to: /home/jhopkinswalker/Videos  
Current PWD: /home/jhopkinswalker/Videos  
Previous PWD: /home/jhopkinswalker/Pictures  
  
Long list of /home/jhopkinswalker/cis106  
total 24  
drwxrwxr-x 3 4096 03/15/24 cheatSheets  
drwxrwxr-x 2 4096 12/21/23 finalAssignment  
drwxrwxr-x 2 4096 02/08/24 finalExam  
drwxrwxr-x 10 4096 02/25/24 labs  
drwxrwxr-x 4 4096 03/07/24 notes  
drwxrwxr-x 10 4096 03/04/24 weekReports  
jhopkinswalker@cis106vm:~$
```