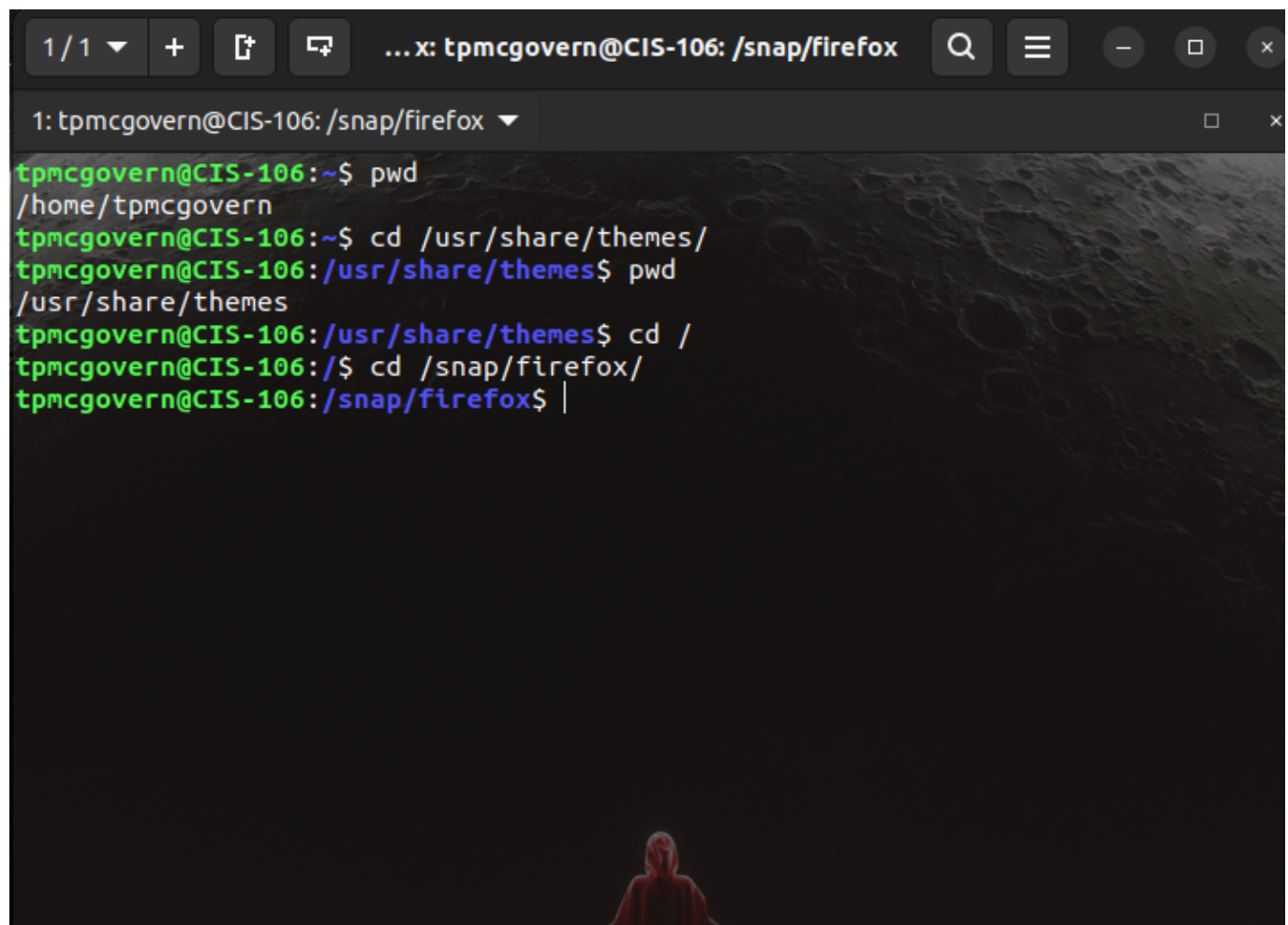


# Lab 4

---

## Question 1

A screenshot of a terminal window with a dark background and a subtle image of a person in a red hood. The terminal shows a series of commands and their outputs. The window title is "...x: tpmcgovern@CIS-106: /snap/firefox". The terminal content is as follows:

```
1: tpmcgovern@CIS-106: /snap/firefox ▼  
tpmcgovern@CIS-106:~$ pwd  
/home/tpmcgovern  
tpmcgovern@CIS-106:~$ cd /usr/share/themes/  
tpmcgovern@CIS-106:/usr/share/themes$ pwd  
/usr/share/themes  
tpmcgovern@CIS-106:/usr/share/themes$ cd /  
tpmcgovern@CIS-106:/$ cd /snap/firefox/  
tpmcgovern@CIS-106:/snap/firefox$ |
```

## Question 2

```

1/1 ▾ + [ ] [ ] Tilix: tpmcgovern@CIS-106: ~/lab4files 🔍 ☰ - □ ×

1: tpmcgovern@CIS-106: ~/lab4files ▾ □ ×
tpmcgovern@CIS-106:~$ cd /usr/share
tpmcgovern@CIS-106:/usr/share$ ls -
ls: cannot access '-': No such file or directory
tpmcgovern@CIS-106:/usr/share$ ls ~/lab4files/
countries.json  document.docx  helloWorld.c  sample.xls  Ubuntu.pdf
csvfile.csv    globe.avi      Linux.pdf     Tux.png     website.html
tpmcgovern@CIS-106:/usr/share$ cd ~/lab4files/
tpmcgovern@CIS-106:~/lab4files$ ls -lh
total 6.5M
-rw-rw-r-- 1 tpmcgovern tpmcgovern 20K
Feb 22  2022 countries.json
-rw-rw-r-- 1 tpmcgovern tpmcgovern 278K
Feb 22  2022 csvfile.csv
-rw-rw-r-- 1 tpmcgovern tpmcgovern 747K
Feb 22  2022 document.docx
-rw-rw-r-- 1 tpmcgovern tpmcgovern 726K
Feb 22  2022 globe.avi
-rw-rw-r-- 1 tpmcgovern tpmcgovern 76
Feb 22  2022 helloWorld.c

2: tpmcgovern@CIS-106: ~ ▾ □ ×
cape, shell-escape-al-
ways, c, escape (over-
rides QUOTING_STYLE en-
vironment variable)

-r, --reverse
reverse order while
sorting

-R, --recursive
list subdirectories re-
cursively

-s, --size
print the allocated
size of each file, in
blocks

-S
sort by file size,
largest first

--sort=WORD
sort by WORD instead of
5 63% (press h for help or q to quit)

```

```

1/1 ▾ + [ ] [ ] Tilix: tpmcgovern@CIS-106: ~/lab4files 🔍 ☰ - □ ×

1: tpmcgovern@CIS-106: ~/lab4files ▾ □ ×
tpmcgovern@CIS-106:~/lab4files$ ls -lh
total 6.5M
-rw-rw-r-- 1 tpmcgovern tpmcgovern 2.5M
Feb 22  2022 Linux.pdf
-rw-rw-r-- 1 tpmcgovern tpmcgovern 2.1M
Feb 22  2022 Ubuntu.pdf
-rw-rw-r-- 1 tpmcgovern tpmcgovern 747K
Feb 22  2022 document.docx
-rw-rw-r-- 1 tpmcgovern tpmcgovern 726K
Feb 22  2022 globe.avi
-rw-rw-r-- 1 tpmcgovern tpmcgovern 278K
Feb 22  2022 csvfile.csv
-rw-rw-r-- 1 tpmcgovern tpmcgovern 135K
Feb 22  2022 website.html

```

```
1/1 ▾ + [ ] Tmux: tpmcgovern@CIS-106: ~/lab4files  
1: tpmcgovern@CIS-106: ~/lab4files ▾ □ ×  
Feb 22 2022 countries.json  
rw-rw-r-- 1 tpmcgovern tpmcgovern 8.5K  
Feb 22 2022 sample.xls  
rw-rw-r-- 1 tpmcgovern tpmcgovern 76  
Feb 22 2022 helloWorld.c  
tpmcgovern@CIS-106:~/lab4files$ ls -lhs  
total 6.5M  
99619 -rw-rw-r-- 1 tpmcgovern 2.5M Feb  
22 2022 Linux.pdf  
99621 -rw-rw-r-- 1 tpmcgovern 2.1M Feb  
22 2022 Ubuntu.pdf  
99632 -rw-rw-r-- 1 tpmcgovern 747K Feb  
22 2022 document.docx  
99633 -rw-rw-r-- 1 tpmcgovern 726K Feb  
22 2022 globe.avi  
99631 -rw-rw-r-- 1 tpmcgovern 278K Feb  
22 2022 csvfile.csv  
99636 -rw-rw-r-- 1 tpmcgovern 135K Feb  
22 2022 website.html  
99620 -rw-rw-r-- 1 tpmcgovern 42K Feb  
22 2022 Tux.png  
99622 -rw-rw-r-- 1 tpmcgovern 20K Feb  
22 2022 countries.json
```

```
1/1 ▾ + [ ] Tmux: tpmcgovern@CIS-106: ~/lab4files  
1: tpmcgovern@CIS-106: ~/lab4files ▾ □ ×  
99632 -rw-rw-r-- 1 tpmcgovern 747K Feb  
22 2022 document.docx  
99633 -rw-rw-r-- 1 tpmcgovern 726K Feb  
22 2022 globe.avi  
99631 -rw-rw-r-- 1 tpmcgovern 278K Feb  
22 2022 csvfile.csv  
99636 -rw-rw-r-- 1 tpmcgovern 135K Feb  
22 2022 website.html  
99620 -rw-rw-r-- 1 tpmcgovern 42K Feb  
22 2022 Tux.png  
99622 -rw-rw-r-- 1 tpmcgovern 20K Feb  
22 2022 countries.json  
99635 -rw-rw-r-- 1 tpmcgovern 8.5K Feb  
22 2022 sample.xls  
99634 -rw-rw-r-- 1 tpmcgovern 76 Feb  
22 2022 helloWorld.c  
tpmcgovern@CIS-106:~/lab4files$ ls -Xr  
sample.xls      website.html  
Tux.png        document.docx  
Ubuntu.pdf     csvfile.csv  
Linux.pdf      helloWorld.c  
countries.json globe.avi  
tpmcgovern@CIS-106:~/lab4files$ |
```



```
Open ▾ + lab4... ~/scri... Save ≡ - □ ×

1 #!/bin/bash
2 down="$HOME/Downloads"
3 cis="$HOME/linux"
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
```

```
1/1 ▾ + TiliX: tpmcgovern@CIS-106: ~/scripts 🔍 ≡ - □ ×

1: tpmcgovern@CIS-106: ~/scripts ▾ □ ×

.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

All files (including hidden files ) in /home/tpmcgovern/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/tpmcgovern/Downloads:
code_1.86.1-1707298119_amd64.deb, lab4files.zip,
'Markdown Cheat sheet For CIS 106 Linux Fundamentals.png'

All files (including hidden files ) in /home/tpmcgovern/linux
/:
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/tpmcgovern/linux:
cheatSheets, finalProject, .git, labs, notes, weekReports
tpmcgovern@CIS-106:~/scripts$ |
```

### \*Script Source Code

```
1/1 + [ ] [ ] Tilix: tpmcgovern@CIS-106: ~/scripts
1: tpmcgovern@CIS-106: ~/scripts
tpmcgovern@CIS-106:~/scripts$ bash challengescript4.sh
Changing to: /home/tpmcgovern/Pictures
Changing to: /home/tpmcgovern/Videos
Current PWD: /home/tpmcgovern/scripts/Videos
Previous PWD: /home/tpmcgovern/scripts/Pictures

Long list of /home/tpmcgovern/linux
total 16K
drwxrwxr-x 2 tpmcgovern tpmcgovern 4.0K 02/26/24 cheatSheets
drwxrwxr-x 8 tpmcgovern tpmcgovern 4.0K 02/26/24 .git
drwxrwxr-x 6 tpmcgovern tpmcgovern 4.0K 03/05/24 labs
drwxrwxr-x 6 tpmcgovern tpmcgovern 4.0K 03/05/24 weekReports
tpmcgovern@CIS-106:~/scripts$ |

Open + chal... ~/scri... Save [ ] [ ] [ ]
1 #!bin/bash
2 echo "Changing to: $HOME/Pictures"
3 echo "Changing to: $HOME/Videos"
4 echo "Current PWD: $PWD/Videos"
5 echo "Previous PWD: $PWD/Pictures"
6 echo " "
7 echo "Long list of $HOME/linux"
8 cd $HOME/linux
9 ls -lhA --color=auto --time-style="+%m/%d/%y"
10
11

sh Tab Width: 8 Ln 1, Col 11 INS
```