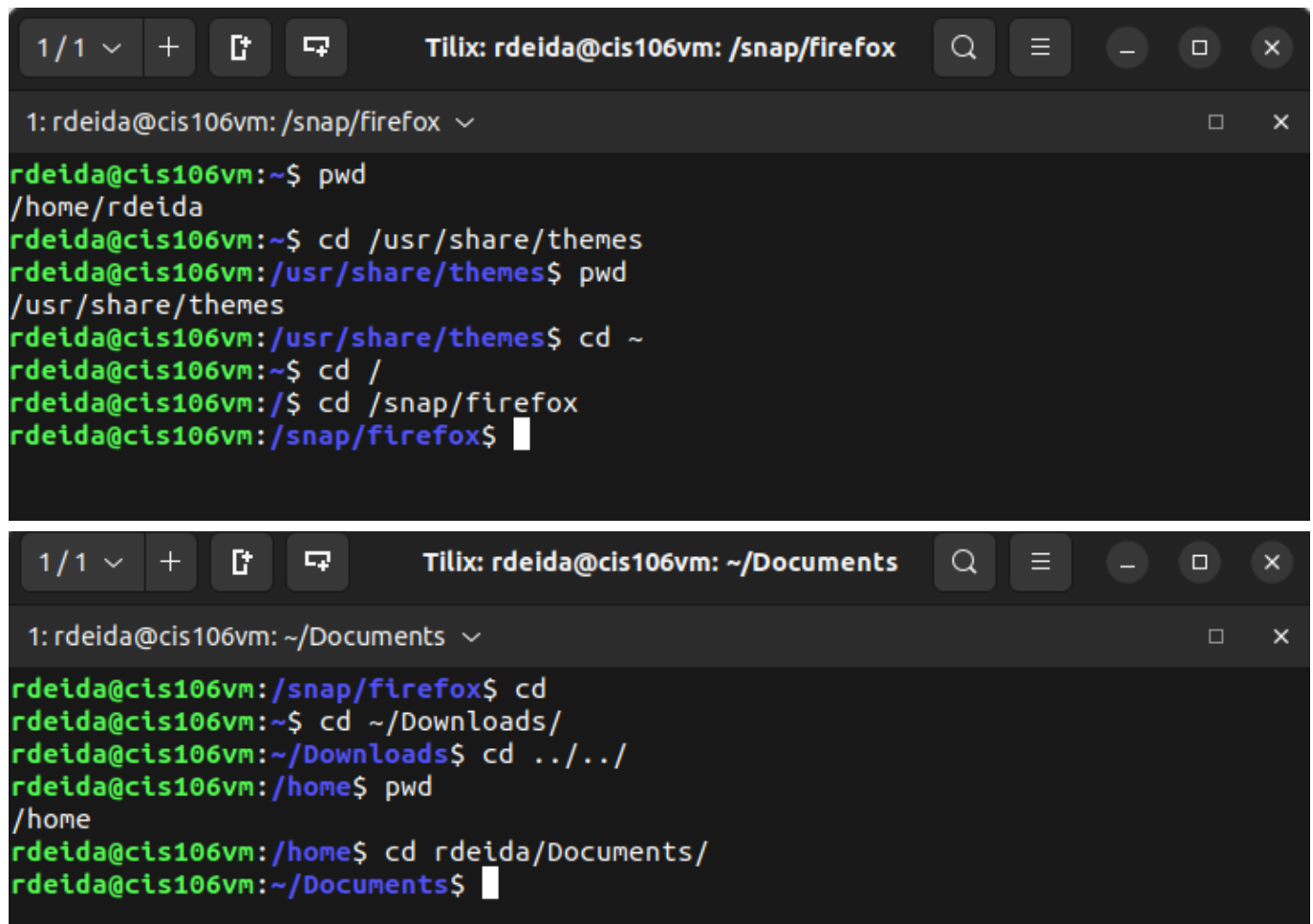


Lab 4 Submission

Question 1



The image shows two terminal windows from a Tilix application. The first window is titled 'Tilix: rdeida@cis106vm: /snap/firefox' and shows a series of commands: 'pwd' (returns /home/rdeida), 'cd /usr/share/themes' (changes to /usr/share/themes), 'pwd' (returns /usr/share/themes), 'cd ~' (changes to ~), 'cd /' (changes to /), and 'cd /snap/firefox' (changes to /snap/firefox). The second window is titled 'Tilix: rdeida@cis106vm: ~/Documents' and shows: 'cd' (changes to /snap/firefox), 'cd ~/Downloads/' (changes to ~/Downloads/), 'cd ../../' (changes to /home), 'pwd' (returns /home), 'cd rdeida/Documents/' (changes to ~/Documents/), and 'cd' (returns ~/Documents/).

```
1/1 + [Tilix: rdeida@cis106vm: /snap/firefox] Q [Tilix: rdeida@cis106vm: /snap/firefox] - [Tilix: rdeida@cis106vm: /snap/firefox] X  
1: rdeida@cis106vm: /snap/firefox v [Tilix: rdeida@cis106vm: /snap/firefox] X  
rdeida@cis106vm:~$ pwd  
/home/rdeida  
rdeida@cis106vm:~$ cd /usr/share/themes  
rdeida@cis106vm:/usr/share/themes$ pwd  
/usr/share/themes  
rdeida@cis106vm:/usr/share/themes$ cd ~  
rdeida@cis106vm:~$ cd /  
rdeida@cis106vm:/ $ cd /snap/firefox  
rdeida@cis106vm:/snap/firefox$  
  
1/1 + [Tilix: rdeida@cis106vm: ~/Documents] Q [Tilix: rdeida@cis106vm: ~/Documents] - [Tilix: rdeida@cis106vm: ~/Documents] X  
1: rdeida@cis106vm: ~/Documents v [Tilix: rdeida@cis106vm: ~/Documents] X  
rdeida@cis106vm:/snap/firefox$ cd  
rdeida@cis106vm:~$ cd ~/Downloads/  
rdeida@cis106vm:~/Downloads$ cd ../../  
rdeida@cis106vm:/home$ pwd  
/home  
rdeida@cis106vm:/home$ cd rdeida/Documents/  
rdeida@cis106vm:~/Documents$
```

Question 2


```

1/1  +  [ ]  [ ]
1: rdeida@cis106vm: ~/lab4files  v

rdeida@cis106vm:~$ cd /usr/share/
rdeida@cis106vm:/usr/share$ ls -A /home/rdeida/lab4files/
countries.json  document.docx  helloWorld.c  sample.xls  Ubuntu.pdf
csvfile.csv     globe.avi      Linux.pdf     Tux.png     website.html
rdeida@cis106vm:/usr/share$ cd ~/lab4files/
rdeida@cis106vm:~/lab4files$ ls -lh
total 6.5M
-rw-rw-r-- 1 rdeida rdeida 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 rdeida rdeida 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 rdeida rdeida 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 rdeida rdeida 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 rdeida rdeida 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 rdeida rdeida 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 rdeida rdeida 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 rdeida rdeida 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 rdeida rdeida 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 rdeida rdeida 135K Feb 22 2022 website.html
rdeida@cis106vm:~/lab4files$ ls -lhs
total 6.5M
20K -rw-rw-r-- 1 rdeida rdeida 20K Feb 22 2022 countries.json
280K -rw-rw-r-- 1 rdeida rdeida 278K Feb 22 2022 csvfile.csv
748K -rw-rw-r-- 1 rdeida rdeida 747K Feb 22 2022 document.docx
728K -rw-rw-r-- 1 rdeida rdeida 726K Feb 22 2022 globe.avi
4.0K -rw-rw-r-- 1 rdeida rdeida 76 Feb 22 2022 helloWorld.c
2.5M -rw-rw-r-- 1 rdeida rdeida 2.5M Feb 22 2022 Linux.pdf
12K -rw-rw-r-- 1 rdeida rdeida 8.5K Feb 22 2022 sample.xls
44K -rw-rw-r-- 1 rdeida rdeida 42K Feb 22 2022 Tux.png
2.1M -rw-rw-r-- 1 rdeida rdeida 2.1M Feb 22 2022 Ubuntu.pdf
136K -rw-rw-r-- 1 rdeida rdeida 135K Feb 22 2022 website.html
rdeida@cis106vm:~/lab4files$ ls -lhsGi
total 6.5M
1182954 20K -rw-rw-r-- 1 rdeida 20K Feb 22 2022 countries.json
1182955 280K -rw-rw-r-- 1 rdeida 278K Feb 22 2022 csvfile.csv
1182956 748K -rw-rw-r-- 1 rdeida 747K Feb 22 2022 document.docx
1182957 728K -rw-rw-r-- 1 rdeida 726K Feb 22 2022 globe.avi
1182958 4.0K -rw-rw-r-- 1 rdeida 76 Feb 22 2022 helloWorld.c
1182951 2.5M -rw-rw-r-- 1 rdeida 2.5M Feb 22 2022 Linux.pdf
1182959 12K -rw-rw-r-- 1 rdeida 8.5K Feb 22 2022 sample.xls
1182952 44K -rw-rw-r-- 1 rdeida 42K Feb 22 2022 Tux.png
1182953 2.1M -rw-rw-r-- 1 rdeida 2.1M Feb 22 2022 Ubuntu.pdf
1182960 136K -rw-rw-r-- 1 rdeida 135K Feb 22 2022 website.html
rdeida@cis106vm:~/lab4files$ ls -lhsGi
total 6.5M
1182954 20K -rw-rw-r-- 1 rdeida 20K Feb 22 2022 countries.json
1182955 280K -rw-rw-r-- 1 rdeida 278K Feb 22 2022 csvfile.csv
1182956 748K -rw-rw-r-- 1 rdeida 747K Feb 22 2022 document.docx
1182957 728K -rw-rw-r-- 1 rdeida 726K Feb 22 2022 globe.avi
1182958 4.0K -rw-rw-r-- 1 rdeida 76 Feb 22 2022 helloWorld.c
1182951 2.5M -rw-rw-r-- 1 rdeida 2.5M Feb 22 2022 Linux.pdf
1182959 12K -rw-rw-r-- 1 rdeida 8.5K Feb 22 2022 sample.xls
1182952 44K -rw-rw-r-- 1 rdeida 42K Feb 22 2022 Tux.png
1182953 2.1M -rw-rw-r-- 1 rdeida 2.1M Feb 22 2022 Ubuntu.pdf
1182960 136K -rw-rw-r-- 1 rdeida 135K Feb 22 2022 website.html

```

```
1182950 136K -rw-rw-r-- 1 rdeida 135K Feb 22 2022 website.html
rdeida@cis106vm:~/lab4files$ ls -lh -s
total 6.5M
 20K -rw-rw-r-- 1 rdeida rdeida 20K Feb 22 2022 countries.json
280K -rw-rw-r-- 1 rdeida rdeida 278K Feb 22 2022 csvfile.csv
748K -rw-rw-r-- 1 rdeida rdeida 747K Feb 22 2022 document.docx
728K -rw-rw-r-- 1 rdeida rdeida 726K Feb 22 2022 globe.avi
4.0K -rw-rw-r-- 1 rdeida rdeida 76 Feb 22 2022 helloWorld.c
2.5M -rw-rw-r-- 1 rdeida rdeida 2.5M Feb 22 2022 Linux.pdf
 12K -rw-rw-r-- 1 rdeida rdeida 8.5K Feb 22 2022 sample.xls
 44K -rw-rw-r-- 1 rdeida rdeida 42K Feb 22 2022 Tux.png
2.1M -rw-rw-r-- 1 rdeida rdeida 2.1M Feb 22 2022 Ubuntu.pdf
136K -rw-rw-r-- 1 rdeida rdeida 135K Feb 22 2022 website.html
rdeida@cis106vm:~/lab4files$ ls -lh -s -Gi
total 6.5M
1182954 20K -rw-rw-r-- 1 rdeida 20K Feb 22 2022 countries.json
1182955 280K -rw-rw-r-- 1 rdeida 278K Feb 22 2022 csvfile.csv
1182956 748K -rw-rw-r-- 1 rdeida 747K Feb 22 2022 document.docx
1182957 728K -rw-rw-r-- 1 rdeida 726K Feb 22 2022 globe.avi
1182958 4.0K -rw-rw-r-- 1 rdeida 76 Feb 22 2022 helloWorld.c
1182951 2.5M -rw-rw-r-- 1 rdeida 2.5M Feb 22 2022 Linux.pdf
1182959 12K -rw-rw-r-- 1 rdeida 8.5K Feb 22 2022 sample.xls
1182952 44K -rw-rw-r-- 1 rdeida 42K Feb 22 2022 Tux.png
1182953 2.1M -rw-rw-r-- 1 rdeida 2.1M Feb 22 2022 Ubuntu.pdf
1182960 136K -rw-rw-r-- 1 rdeida 135K Feb 22 2022 website.html
rdeida@cis106vm:~/lab4files$ ls -xr
website.html  Ubuntu.pdf  Tux.png
sample.xls   Linux.pdf   helloWorld.c
globe.avi    document.docx csvfile.csv
countries.json
rdeida@cis106vm:~/lab4files$ ls -x
countries.json csvfile.csv document.docx
globe.avi     helloWorld.c Linux.pdf
sample.xls    Tux.png      Ubuntu.pdf
website.html
```

Question 3

```

1: rdeida@cis106vm: ~
rdeida@cis106vm: ~/lab4files$ cd
rdeida@cis106vm:~$ bash ~/lab4files/Question3.sh
The current user is rdeida. It's 'home directory is /home/rdeida
The current directory is:
/home/rdeida/Downloads
The current directory is:
/home/rdeida/cis106

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

All files and hidden ones in /home/rdeida
., Applications, .bash_history, .bash_logout, .bashrc, .cache, .cargo, cis106, .config, Desktop,
Documents, .dotnet, Downloads, .gitconfig, .gnupg, lab4files, .lessht, .local, Music, Pictures,
Pizza.txt, .pkg, Potato.txt, practicedir, practicels, practicels.tar.xz, practicenkdir, .profile,
Public, .rustup, script_env_var.sh, scripts, share, snap, .ssh, .sudo_as_admin_successful,
Templates, tomato.txt, .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-vmsvga-session-tty2-control.pid, .vboxclient-vmsvga-session-tty2-service.pid, Videos,
.vscodes, Website, wildcardpractice

All files and hidden ones in /home/rdeida/Downloads
code_1.86.Z-1707854558_umd64.deb, Food, Games, lab4files.zip

All files and hidden ones in
cheatSheets, finalProject, .git, labs, notes, weekReports
rdeida@cis106vm:~$

2
3# John's Scrip to practice:
4# cd, pwd, ls, and variables
5
6# Variables
7cis106="$HOME/cis106"
8downloads="$HOME/Downloads"
9prompt1="The current directory is: \t"
10prompt2="\nAll files and hidden ones in"
11
12# Use cd in a script
13echo "The current user is $USER. It's 'home
14directory is $HOME"
15cd $downloads
16echo -e $prompt1
17pwd
18cd $cis106
19echo -e $prompt1
20pwd
21#Use ls in a script
22echo -e "$prompt2 /"
23ls -mA --color=auto /
24
25echo -e "$prompt2 $HOME"
26ls -mA --color=auto $HOME
27
28echo -e "$prompt2 $downloads"
29ls -mA --color=auto $downloads
30
31echo -e "$prompt2 $cis"
32ls -mA --color=auto $cis106

```

Challenge Question

```

1: rdeida@cis106vm: ~
rdeida@cis106vm:~$ bash ~/lab4files/Question4.sh
Changing to: /home/rdeida/Pictures
Changing to: /home/rdeida/Videos
Current PWD: /home/rdeida/Videos
Previous PWD: /home/rdeida/Pictures

Long list of /home/rdeida/cis106:
total 20K
4.0K drwxrwxr-x 2 rdeida 4.0K 02/13/24 cheatSheets
4.0K drwxrwxr-x 2 rdeida 4.0K 02/13/24 finalProject
4.0K drwxrwxr-x 6 rdeida 4.0K 03/11/24 labs
4.0K drwxrwxr-x 2 rdeida 4.0K 03/19/24 notes
4.0K drwxrwxr-x 6 rdeida 4.0K 03/19/24 weekReports
rdeida@cis106vm:~$

```

Script Source code:

lab3