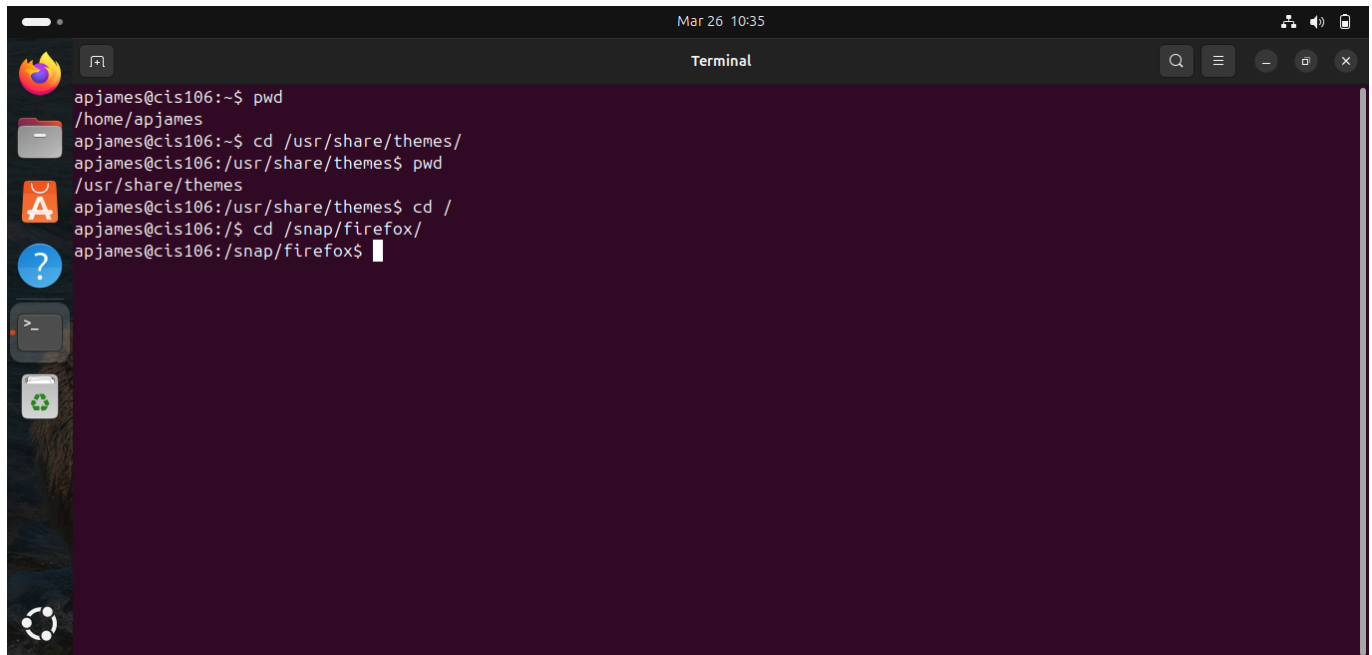
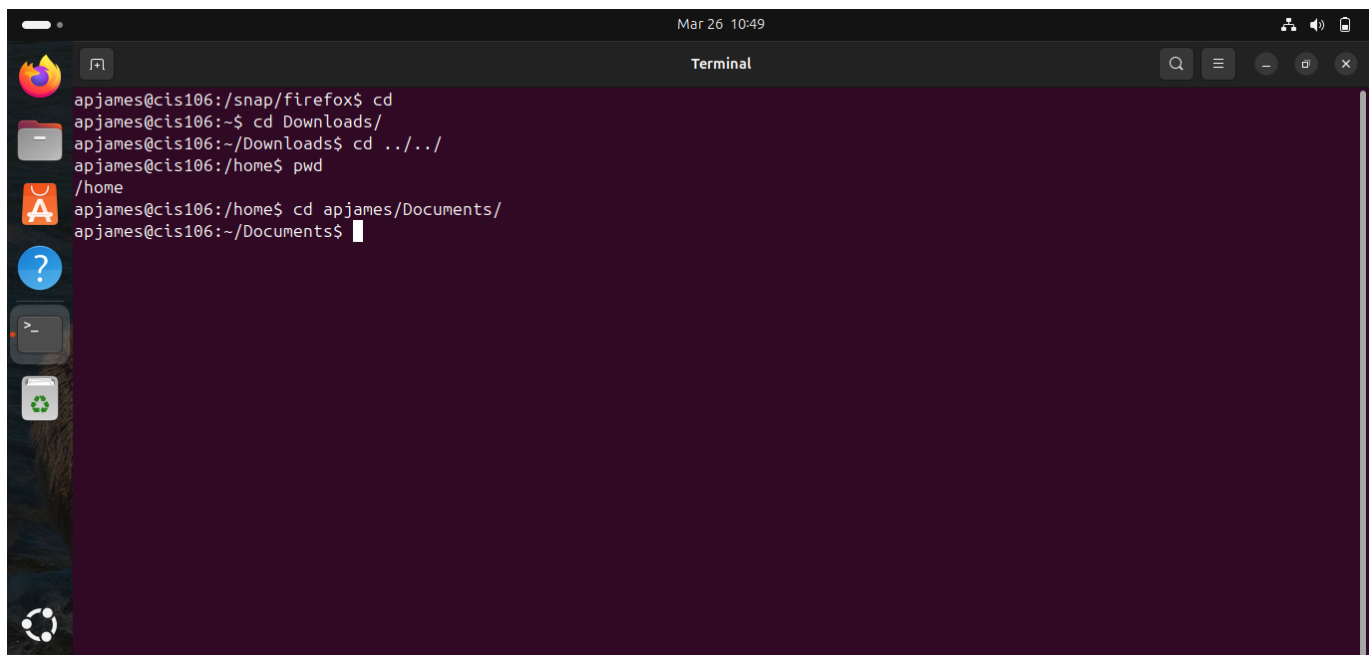


Lab 4 Submission

Question 1



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



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

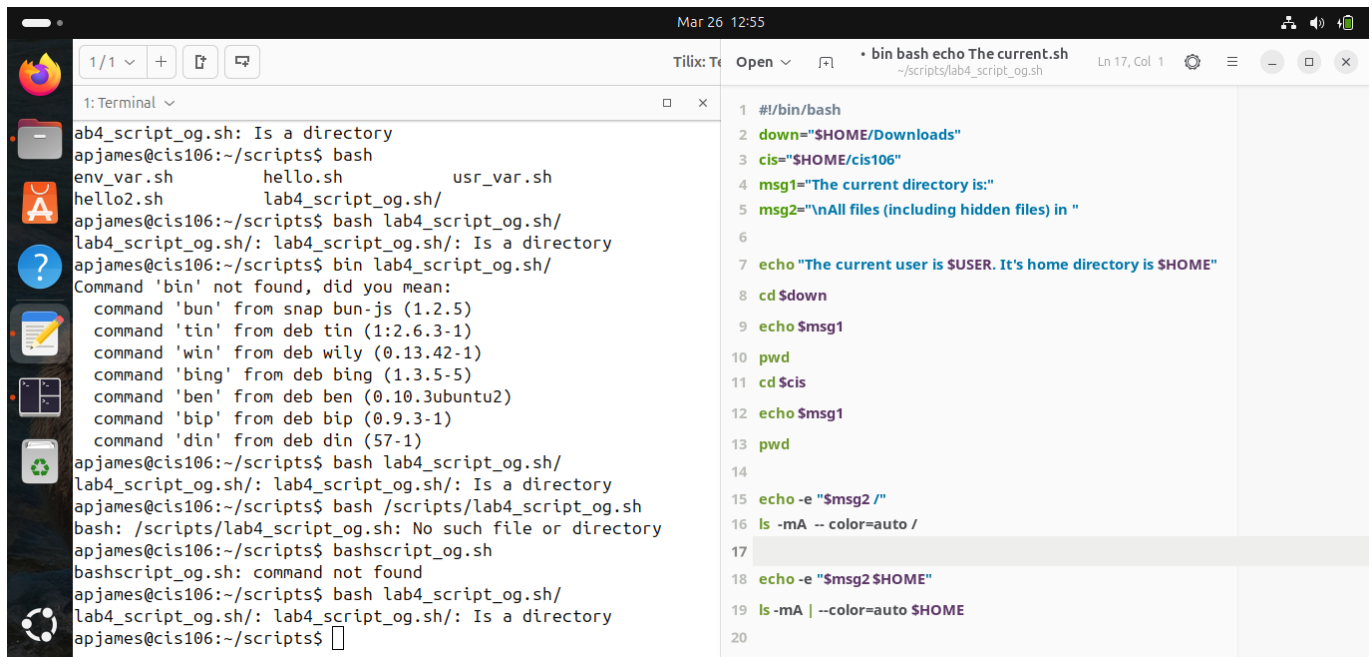
Question 2

```
Mar 26 11:24
Tilix: Terminal
1: Terminal
2: Terminal
-rw-rw-r-- 1 apjames apjames 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 apjames apjames 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 apjames apjames 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 apjames apjames 135K Feb 22 2022 website.html
-rw-rw-r-- 1 apjames apjames 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 apjames apjames 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 apjames apjames 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 apjames apjames 76 Feb 22 2022 helloWorld.c
apjames@cis106:~/lab4files$ ls -lhSgi
total 6.5M
674804 -rw-rw-r-- 1 apjames 2.5M Feb 22 2022 Linux.pdf
674806 -rw-rw-r-- 1 apjames 2.1M Feb 22 2022 Ubuntu.pdf
674809 -rw-rw-r-- 1 apjames 747K Feb 22 2022 document.docx
674810 -rw-rw-r-- 1 apjames 726K Feb 22 2022 globe.avi
674808 -rw-rw-r-- 1 apjames 278K Feb 22 2022 csvfile.csv
674813 -rw-rw-r-- 1 apjames 135K Feb 22 2022 website.html
674805 -rw-rw-r-- 1 apjames 42K Feb 22 2022 Tux.png
674807 -rw-rw-r-- 1 apjames 20K Feb 22 2022 countries.json
674812 -rw-rw-r-- 1 apjames 8.5K Feb 22 2022 sample.xls
674811 -rw-rw-r-- 1 apjames 76 Feb 22 2022 helloWorld.c
apjames@cis106:~/lab4files$ ls -lvr
total 6580
-rw-rw-r-- 1 apjames apjames 137453 Feb 22 2022 website.html
-rw-rw-r-- 1 apjames apjames 8704 Feb 22 2022 sample.xls
```

```
Mar 26 11:24
Tilix: Terminal
1: Terminal
2: Terminal
apjames@cis106:~$ cdc /usr/share/
Command 'cdc' not found, but there are 25 similar ones.
apjames@cis106:~$ cd /usr/share/
apjames@cis106:/usr/share$ ls ~/lab4files/
countries.json  globe.avi  sample.xls  website.html
csvfile.csv    helloWorld.c  Tux.png
document.docx  Linux.pdf  Ubuntu.pdf
apjames@cis106:/usr/share$ cd ~/lab4files/
apjames@cis106:~/lab4files$ ls -lh
total 6.5M
-rw-rw-r-- 1 apjames apjames 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 apjames apjames 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 apjames apjames 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 apjames apjames 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 apjames apjames 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 apjames apjames 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 apjames apjames 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 apjames apjames 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 apjames apjames 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 apjames apjames 135K Feb 22 2022 website.html
apjames@cis106:~/lab4files$ ls -lhS
total 6.5M
-rw-rw-r-- 1 apjames apjames 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 apjames apjames 2.1M Feb 22 2022 Ubuntu.pdf
```

```
Mar 26 11:25
Tilix: Terminal
1: Terminal
2: Terminal
total 6.5M
674804 -rw-rw-r-- 1 apjames 2.5M Feb 22 2022 Linux.pdf
674806 -rw-rw-r-- 1 apjames 2.1M Feb 22 2022 Ubuntu.pdf
674809 -rw-rw-r-- 1 apjames 747K Feb 22 2022 document.docx
674810 -rw-rw-r-- 1 apjames 726K Feb 22 2022 globe.avi
674808 -rw-rw-r-- 1 apjames 278K Feb 22 2022 csvfile.csv
674813 -rw-rw-r-- 1 apjames 135K Feb 22 2022 website.html
674805 -rw-rw-r-- 1 apjames 42K Feb 22 2022 Tux.png
674807 -rw-rw-r-- 1 apjames 20K Feb 22 2022 countries.json
674812 -rw-rw-r-- 1 apjames 8.5K Feb 22 2022 sample.xls
674811 -rw-rw-r-- 1 apjames 76 Feb 22 2022 helloWorld.c
apjames@cis106:~/lab4files$ ls -lvr
total 6580
-rw-rw-r-- 1 apjames apjames 137453 Feb 22 2022 website.html
-rw-rw-r-- 1 apjames apjames 8704 Feb 22 2022 sample.xls
-rw-rw-r-- 1 apjames apjames 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 apjames apjames 742478 Feb 22 2022 globe.avi
-rw-rw-r-- 1 apjames apjames 764176 Feb 22 2022 document.docx
-rw-rw-r-- 1 apjames apjames 284042 Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 apjames apjames 20471 Feb 22 2022 countries.json
-rw-rw-r-- 1 apjames apjames 2114053 Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 apjames apjames 42777 Feb 22 2022 Tux.png
-rw-rw-r-- 1 apjames apjames 2600138 Feb 22 2022 Linux.pdf
apjames@cis106:~/lab4files$
```

Question 3



The screenshot shows a terminal window on the left and a script editor on the right. The terminal window title is "1: Terminal" and it shows the execution of a shell script named `lab4_script_og.sh`. The script contains several commands, including `bash`, `env_var.sh`, `hello.sh`, `usr_var.sh`, `hello2.sh`, `lab4_script_og.sh/`, `bin lab4_script_og.sh/`, `command 'bin' not found, did you mean:`, `command 'bun' from snap bun-js (1.2.5)`, `command 'tin' from deb tin (1:2.6.3-1)`, `command 'win' from deb wily (0.13.42-1)`, `command 'bing' from deb bing (1.3.5-5)`, `command 'ben' from deb ben (0.10.3ubuntu2)`, `command 'bip' from deb bip (0.9.3-1)`, `command 'din' from deb din (57-1)`, `bash lab4_script_og.sh/`, `lab4_script_og.sh/: lab4_script_og.sh/: Is a directory`, `bash /scripts/lab4_script_og.sh`, `bash: /scripts/lab4_script_og.sh: No such file or directory`, `bashscript_og.sh: command not found`, `bash lab4_script_og.sh/`, `lab4_script_og.sh/: lab4_script_og.sh/: Is a directory`, and `apjames@cis106:~/scripts$`. The script editor window title is "bin bash echo The current.sh" and it shows the script content:

```
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
```