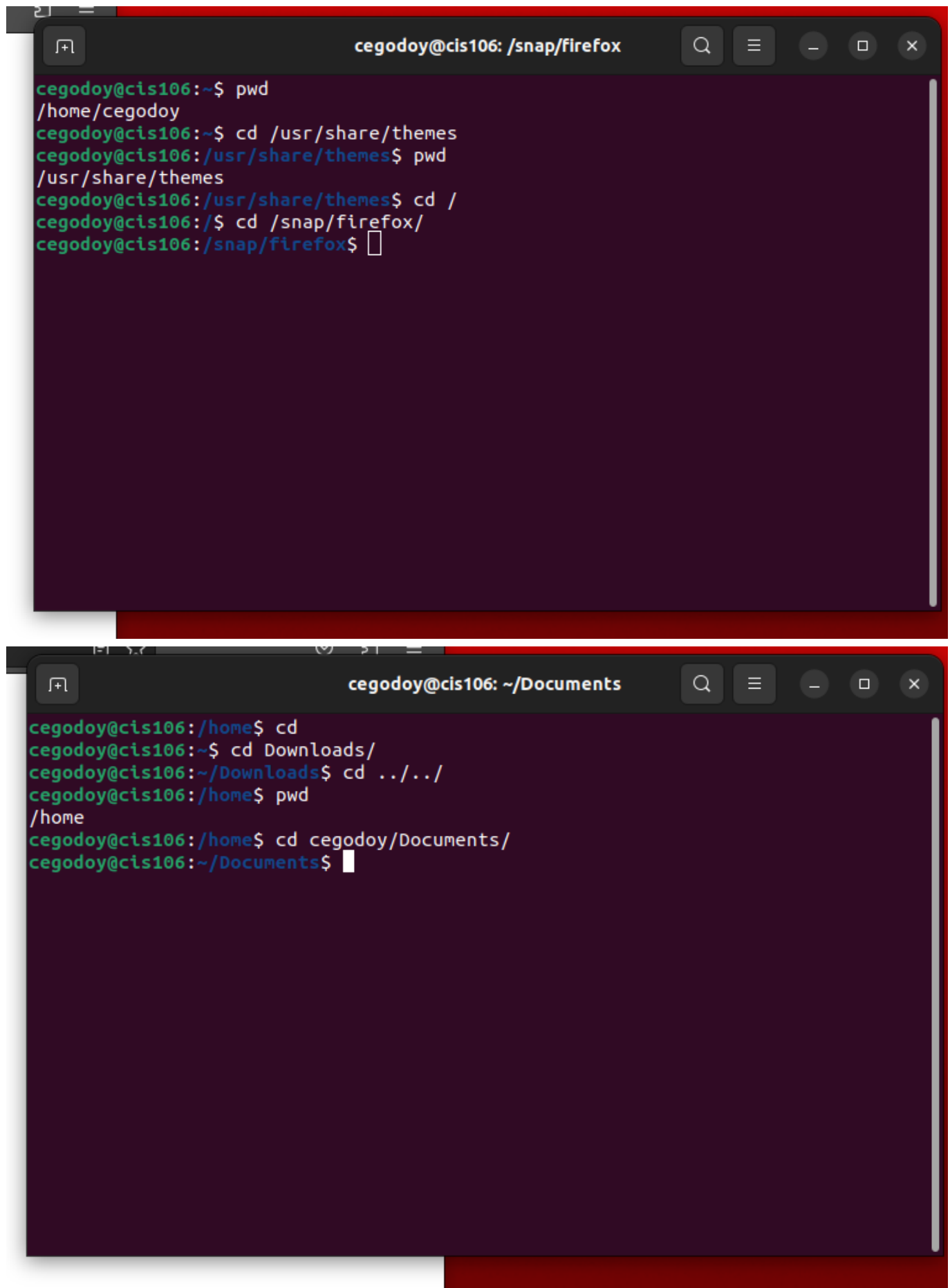


Lab 4

Question 1



The image shows two terminal windows from a user named cegodoy on a machine named cis106. The top window has a title bar that says 'cegodoy@cis106: /snap/firefox'. The bottom window has a title bar that says 'cegodoy@cis106: ~/Documents'. Both windows have a dark purple background and a light gray border. The terminal text is as follows:

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

```
cegodoy@cis106:/home$ cd
cegodoy@cis106:~$ cd Downloads/
cegodoy@cis106:~/Downloads$ cd ../../
cegodoy@cis106:/home$ pwd
/home
cegodoy@cis106:/home$ cd cegodoy/Documents/
cegodoy@cis106:~/Documents$
```

Question 2


```

1 / 1  +  [ ] [ ]
Tilix: cegodoy@

1: cegodoy@cis106: ~/lab4files
cegodoy@cis106:~$ cd
cegodoy@cis106:~$ cd Downloads/
cegodoy@cis106:~/Downloads$ cd ../../
cegodoy@cis106:/home$ pwd
/home
cegodoy@cis106:/home$ cd cegodoy/Documents/
cegodoy@cis106:~/Documents$ cd /usr/share
cegodoy@cis106:/usr/share$ ls /home/cegodoy/lab4files
lab4files/      lab4files.zip
cegodoy@cis106:/usr/share$ ls /home/cegodoy/lab4files/
countries.json  document.docx  helloWorld.c  sample.xls  Ubuntu.pdf
csvfile.csv     globe.avi      Linux.pdf     Tux.png     website.html
cegodoy@cis106:/usr/share$ cd ~/lab4files/
cegodoy@cis106:~/lab4files$ ls -l
total 6580
-rw-rw-r-- 1 cegodoy cegodoy  20471 Feb 22  2022 countries.json
-rw-rw-r-- 1 cegodoy cegodoy 284042 Feb 22  2022 csvfile.csv
-rw-rw-r-- 1 cegodoy cegodoy 764176 Feb 22  2022 document.docx
-rw-rw-r-- 1 cegodoy cegodoy 742478 Feb 22  2022 globe.avi
-rw-rw-r-- 1 cegodoy cegodoy    76 Feb 22  2022 helloWorld.c
-rw-rw-r-- 1 cegodoy cegodoy 2600138 Feb 22  2022 Linux.pdf
-rw-rw-r-- 1 cegodoy cegodoy   8704 Feb 22  2022 sample.xls
-rw-rw-r-- 1 cegodoy cegodoy  42777 Feb 22  2022 Tux.png
-rw-rw-r-- 1 cegodoy cegodoy 2114053 Feb 22  2022 Ubuntu.pdf
-rw-rw-r-- 1 cegodoy cegodoy 137453 Feb 22  2022 website.html
cegodoy@cis106:~/lab4files$ ls -lh
total 6.5M
-rw-rw-r-- 1 cegodoy cegodoy  20K Feb 22  2022 countries.json
-rw-rw-r-- 1 cegodoy cegodoy 278K Feb 22  2022 csvfile.csv
-rw-rw-r-- 1 cegodoy cegodoy 747K Feb 22  2022 document.docx
-rw-rw-r-- 1 cegodoy cegodoy 726K Feb 22  2022 globe.avi
-rw-rw-r-- 1 cegodoy cegodoy   76 Feb 22  2022 helloWorld.c
-rw-rw-r-- 1 cegodoy cegodoy 2.5M Feb 22  2022 Linux.pdf
-rw-rw-r-- 1 cegodoy cegodoy 8.5K Feb 22  2022 sample.xls
-rw-rw-r-- 1 cegodoy cegodoy  42K Feb 22  2022 Tux.png
-rw-rw-r-- 1 cegodoy cegodoy 2.1M Feb 22  2022 Ubuntu.pdf
-rw-rw-r-- 1 cegodoy cegodoy 135K Feb 22  2022 website.html
cegodoy@cis106:~/lab4files$ ls -lhs
total 6.5M
-rw-rw-r-- 1 cegodoy cegodoy 2.5M Feb 22  2022 Linux.pdf
-rw-rw-r-- 1 cegodoy cegodoy 2.1M Feb 22  2022 Ubuntu.pdf
-rw-rw-r-- 1 cegodoy cegodoy 747K Feb 22  2022 document.docx
-rw-rw-r-- 1 cegodoy cegodoy 726K Feb 22  2022 globe.avi
-rw-rw-r-- 1 cegodoy cegodoy 278K Feb 22  2022 csvfile.csv
-rw-rw-r-- 1 cegodoy cegodoy 135K Feb 22  2022 website.html
-rw-rw-r-- 1 cegodoy cegodoy  42K Feb 22  2022 Tux.png
-rw-rw-r-- 1 cegodoy cegodoy  20K Feb 22  2022 countries.json

```

```

1 / 1  +  [ ] [ ]
Tilix: cegodoy@

1: cegodoy@cis106: ~/lab4files
-rw-rw-r-- 1 cegodoy cegodoy 726K Feb 22  2022 globe.avi
-rw-rw-r-- 1 cegodoy cegodoy   76 Feb 22  2022 helloWorld.c
-rw-rw-r-- 1 cegodoy cegodoy 2.5M Feb 22  2022 Linux.pdf
-rw-rw-r-- 1 cegodoy cegodoy 8.5K Feb 22  2022 sample.xls
-rw-rw-r-- 1 cegodoy cegodoy  42K Feb 22  2022 Tux.png
-rw-rw-r-- 1 cegodoy cegodoy 2.1M Feb 22  2022 Ubuntu.pdf
-rw-rw-r-- 1 cegodoy cegodoy 135K Feb 22  2022 website.html
cegodoy@cis106:~/lab4files$ ls -lhs
total 6.5M
-rw-rw-r-- 1 cegodoy cegodoy 2.5M Feb 22  2022 Linux.pdf
-rw-rw-r-- 1 cegodoy cegodoy 2.1M Feb 22  2022 Ubuntu.pdf
-rw-rw-r-- 1 cegodoy cegodoy 747K Feb 22  2022 document.docx
-rw-rw-r-- 1 cegodoy cegodoy 726K Feb 22  2022 globe.avi
-rw-rw-r-- 1 cegodoy cegodoy 278K Feb 22  2022 csvfile.csv
-rw-rw-r-- 1 cegodoy cegodoy 135K Feb 22  2022 website.html
-rw-rw-r-- 1 cegodoy cegodoy  42K Feb 22  2022 Tux.png

```

```
-rw-rw-r-- 1 cegodoy cegodoy 20K Feb 22 2022 Tux.png
-rw-rw-r-- 1 cegodoy cegodoy 8.5K Feb 22 2022 countries.json
-rw-rw-r-- 1 cegodoy cegodoy 76 Feb 22 2022 sample.xls
-rw-rw-r-- 1 cegodoy cegodoy 76 Feb 22 2022 helloWorld.c
cegodoy@cis106:~/lab4files$ ls -lhSgG
total 6.5M
-rw-rw-r-- 1 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 135K Feb 22 2022 website.html
-rw-rw-r-- 1 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 76 Feb 22 2022 helloWorld.c
cegodoy@cis106:~/lab4files$ ls -lhSgGi
total 6.5M
2491488 -rw-rw-r-- 1 2.5M Feb 22 2022 Linux.pdf
2491551 -rw-rw-r-- 1 2.1M Feb 22 2022 Ubuntu.pdf
2491557 -rw-rw-r-- 1 747K Feb 22 2022 document.docx
2491573 -rw-rw-r-- 1 726K Feb 22 2022 globe.avi
2491555 -rw-rw-r-- 1 278K Feb 22 2022 csvfile.csv
2491578 -rw-rw-r-- 1 135K Feb 22 2022 website.html
2491549 -rw-rw-r-- 1 42K Feb 22 2022 Tux.png
2491554 -rw-rw-r-- 1 20K Feb 22 2022 countries.json
2491577 -rw-rw-r-- 1 8.5K Feb 22 2022 sample.xls
2491575 -rw-rw-r-- 1 76 Feb 22 2022 helloWorld.c
cegodoy@cis106:~/lab4files$ ls -Xr
sample.xls  Ubuntu.pdf  countries.json  document.docx  helloWorld.c
Tux.png     Linux.pdf   website.html   csvfile.csv    globe.avi
```

Question 4


```

Tilix: cegodoy@cis106:
1: cegodoy@cis106: /usr/share/themes
1/1 v + [ ] [ ]
cegodoy@cis106:/home$ pwd
/home
cegodoy@cis106:/home$ cd /usr/share/icons/default/
cegodoy@cis106:/usr/share/icons/default$ cd /proc/sys/net/ipv4/
cegodoy@cis106:/proc/sys/net/ipv4$ cd ..
cegodoy@cis106:/proc/sys/net$ ls /usr/share/backgrounds/
Blue_flower_by_Elena_Stravoravdi.jpg
canvas_by_roytanck.jpg
Cherry_Tree_in_Lakones_by_elenastravoravdi.jpg
contest
DSC2943_by_kcpru.jpg
Jammy-Jellyfish_WP_4096x2304_Grey.png
jj_dark_by_Hiking93.jpg
jj_light_by_Hiking93.jpg
Mirror_by_Uday_Nakade.jpg
Optical_Fibers_in_Dark_by_Elena_Stravoravdi.jpg
ubuntu2_by_arman1992.jpg
ubuntu_by_arman1992.jpg
ubuntu-default-greyscale-wallpaper.png
warty-final-ubuntu.png
cegodoy@cis106:/proc/sys/net$ ls /home/cegodoy/CIS106/
labs
cegodoy@cis106:/proc/sys/net$ ls /home/cegodoy/Downloads/
Files
cegodoy@cis106:/proc/sys/net$ cd /dev/disk/by-id/
cegodoy@cis106:/dev/disk/by-id$ ls -l
total 0
lrwxrwxrwx 1 root root 9 Oct 25 21:26 ata-VBOX_CD-ROM_VB2-01700376 -> ../../sr0
lrwxrwxrwx 1 root root 9 Oct 25 21:26 ata-VBOX_HARDDISK_VB7193fd81-f743c255 -> ../../sda
lrwxrwxrwx 1 root root 10 Oct 25 21:26 ata-VBOX_HARDDISK_VB7193fd81-f743c255-part1 -> ../../sda1
lrwxrwxrwx 1 root root 10 Oct 25 21:26 ata-VBOX_HARDDISK_VB7193fd81-f743c255-part2 -> ../../sda2
lrwxrwxrwx 1 root root 10 Oct 25 21:26 ata-VBOX_HARDDISK_VB7193fd81-f743c255-part3 -> ../../sda3
cegodoy@cis106:/dev/disk/by-id$ ls -la
total 0
drwxr-xr-x 2 root root 140 Oct 25 21:26 .
drwxr-xr-x 7 root root 140 Oct 25 21:26 ..
lrwxrwxrwx 1 root root 9 Oct 25 21:26 ata-VBOX_CD-ROM_VB2-01700376 -> ../../sr0

```

FINAL_EXAM

sl

```

Tilix: cegodoy@cis106:
1: cegodoy@cis106: /usr/share/themes
1/1 v + [ ] [ ]
lrwxrwxrwx 1 root root 9 Oct 25 21:26 ata-VBOX_HARDDISK_VB7193fd81-f743c255 -> ../../sda
lrwxrwxrwx 1 root root 10 Oct 25 21:26 ata-VBOX_HARDDISK_VB7193fd81-f743c255-part1 -> ../../sda1
lrwxrwxrwx 1 root root 10 Oct 25 21:26 ata-VBOX_HARDDISK_VB7193fd81-f743c255-part2 -> ../../sda2
lrwxrwxrwx 1 root root 10 Oct 25 21:26 ata-VBOX_HARDDISK_VB7193fd81-f743c255-part3 -> ../../sda3
cegodoy@cis106:/dev/disk/by-id$ ls -la
total 0

```



```

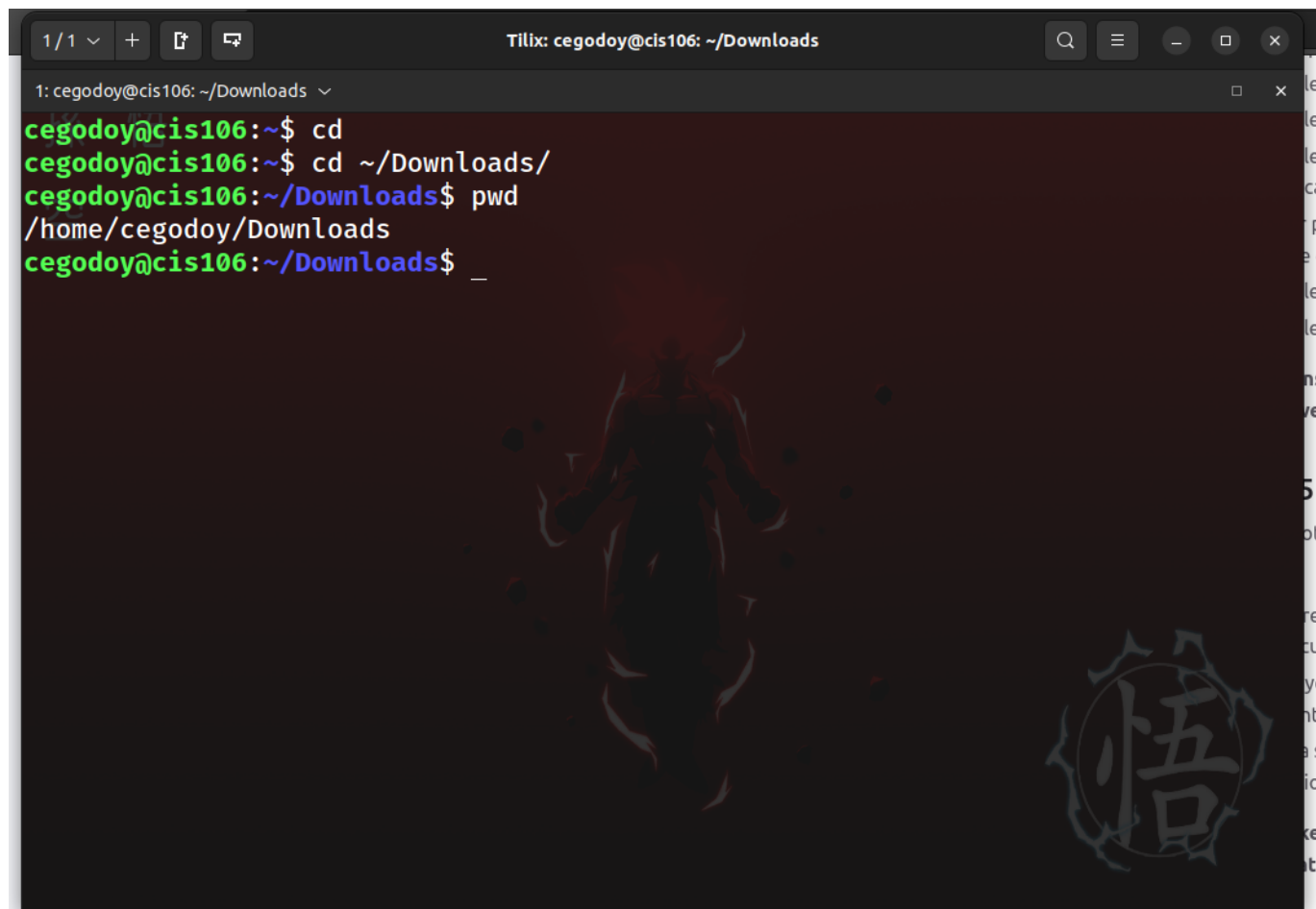
total 0
drwxr-xr-x 2 root root 140 Oct 25 21:26 .
drwxr-xr-x 7 root root 140 Oct 25 21:26 ..
lrwxrwxrwx 1 root root 9 Oct 25 21:26 ata-VBOX_CD-ROM_VB2-01700376 -> ../../
/sr0
lrwxrwxrwx 1 root root 9 Oct 25 21:26 ata-VBOX_HARDDISK_VB7193fd81-f743c255
-> ../../sda
lrwxrwxrwx 1 root root 10 Oct 25 21:26 ata-VBOX_HARDDISK_VB7193fd81-f743c255
-part1 -> ../../sda1
lrwxrwxrwx 1 root root 10 Oct 25 21:26 ata-VBOX_HARDDISK_VB7193fd81-f743c255
-part2 -> ../../sda2
lrwxrwxrwx 1 root root 10 Oct 25 21:26 ata-VBOX_HARDDISK_VB7193fd81-f743c255
-part3 -> ../../sda3
cegoday@cis106:/dev/disk/by-id$ cd /usr/share/themes/
cegoday@cis106:/usr/share/themes$ ls -t
Yaru          Yaru-hdpi          Yaru-purple-dark   Default
Yaru-bark     Yaru-magenta       Yaru-red           Emacs
Yaru-bark-dark Yaru-magenta-dark  Yaru-red-dark      Raleigh
Yaru-blue     Yaru-olive         Yaru-sage          Adwaita
Yaru-blue-dark Yaru-olive-dark    Yaru-sage-dark     Adwaita-dark
Yaru-dark     Yaru-prussiangreen Yaru-viridian      HighContrast
Yaru-dark-hdpi Yaru-prussiangreen-dark Yaru-viridian-dark
Yaru-dark-xdpi Yaru-purple        Yaru-xdpi
cegoday@cis106:/usr/share/themes$ ls -X
Adwaita      Yaru-bark-dark    Yaru-magenta-dark  Yaru-red-dark
Adwaita-dark Yaru-blue         Yaru-olive         Yaru-sage
Default      Yaru-blue-dark    Yaru-olive-dark    Yaru-sage-dark
Emacs        Yaru-dark         Yaru-prussiangreen Yaru-viridian
HighContrast Yaru-dark-hdpi    Yaru-prussiangreen-dark Yaru-viridian-dark
Raleigh      Yaru-dark-xdpi    Yaru-purple        Yaru-xdpi
Yaru         Yaru-hdpi         Yaru-purple-dark
Yaru-bark    Yaru-magenta      Yaru-red
cegoday@cis106:/usr/share/themes$ _

```

FINAL_EXAM

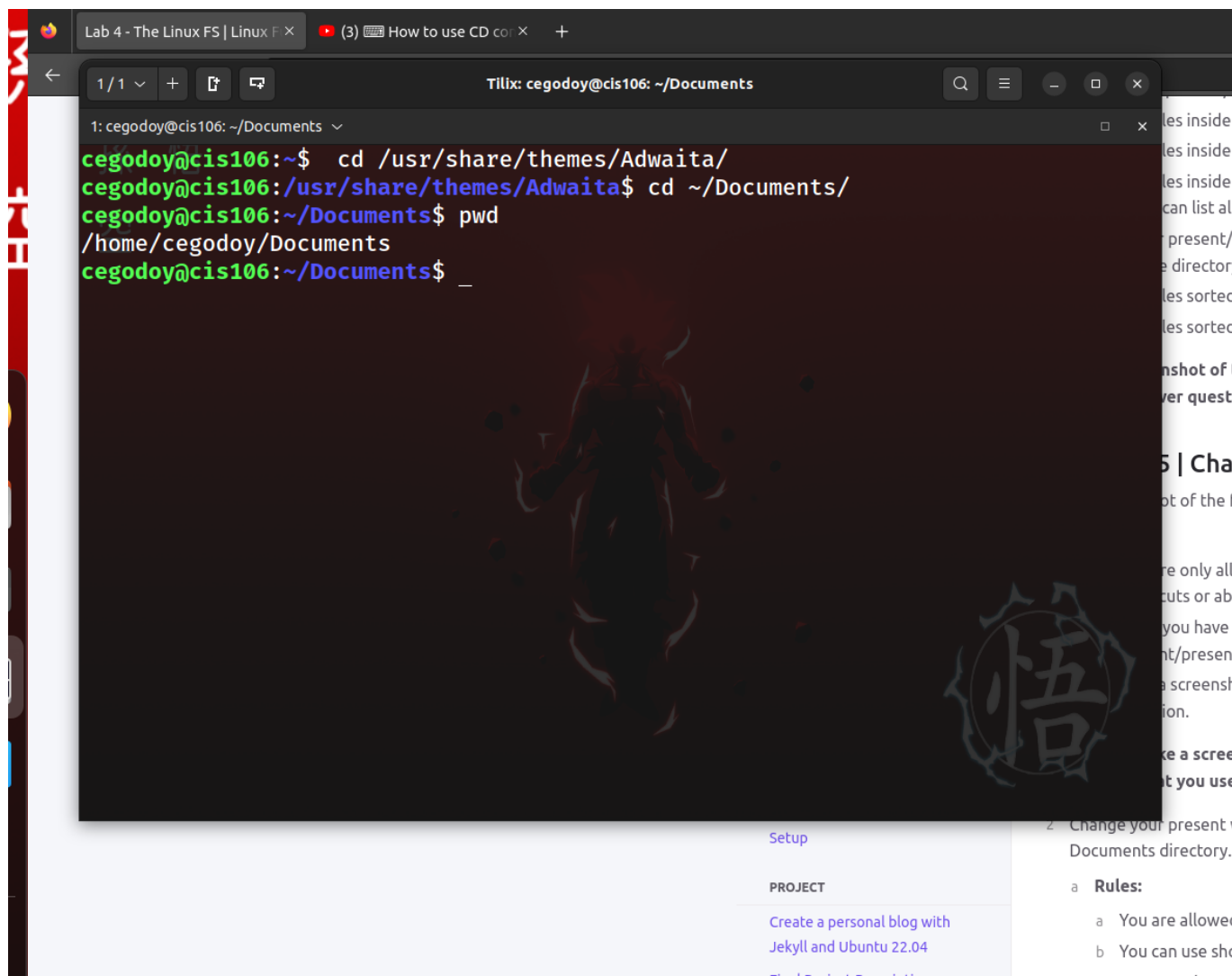
5

Question 5



A terminal window titled "Tilix: cegodoy@cis106: ~/Downloads" with a dark background and a large, faint, stylized character "悟" (Wu) in the bottom right corner. The terminal shows the following commands and output:

```
1: cegodoy@cis106: ~/Downloads
cegodoy@cis106:~$ cd
cegodoy@cis106:~$ cd ~/Downloads/
cegodoy@cis106:~/Downloads$ pwd
/home/cegodoy/Downloads
cegodoy@cis106:~/Downloads$ _
```



A terminal window titled "Tilix: cegodoy@cis106: ~/Documents" with a dark background and a large, faint, stylized character "悟" (Wu) in the bottom right corner. The terminal shows the following commands and output:

```
1: cegodoy@cis106: ~/Documents
cegodoy@cis106:~$ cd /usr/share/themes/Adwaita/
cegodoy@cis106:/usr/share/themes/Adwaita$ cd ~/Documents/
cegodoy@cis106:~/Documents$ pwd
/home/cegodoy/Documents
cegodoy@cis106:~/Documents$ _
```

Below the terminal window, there is a sidebar with a "PROJECT" section containing links: "Create a personal blog with Jekyll and Ubuntu 22.04" and "Final Project Description". To the right of the terminal, there is a document titled "Lab 4 - The Linux FS | Linux F..." with a red icon and a YouTube icon, and a section titled "5 | Cha" with a list of rules.

5 | Cha

- a Rules:
- a You are allowec
- b You can use shc
- c Once you have

