

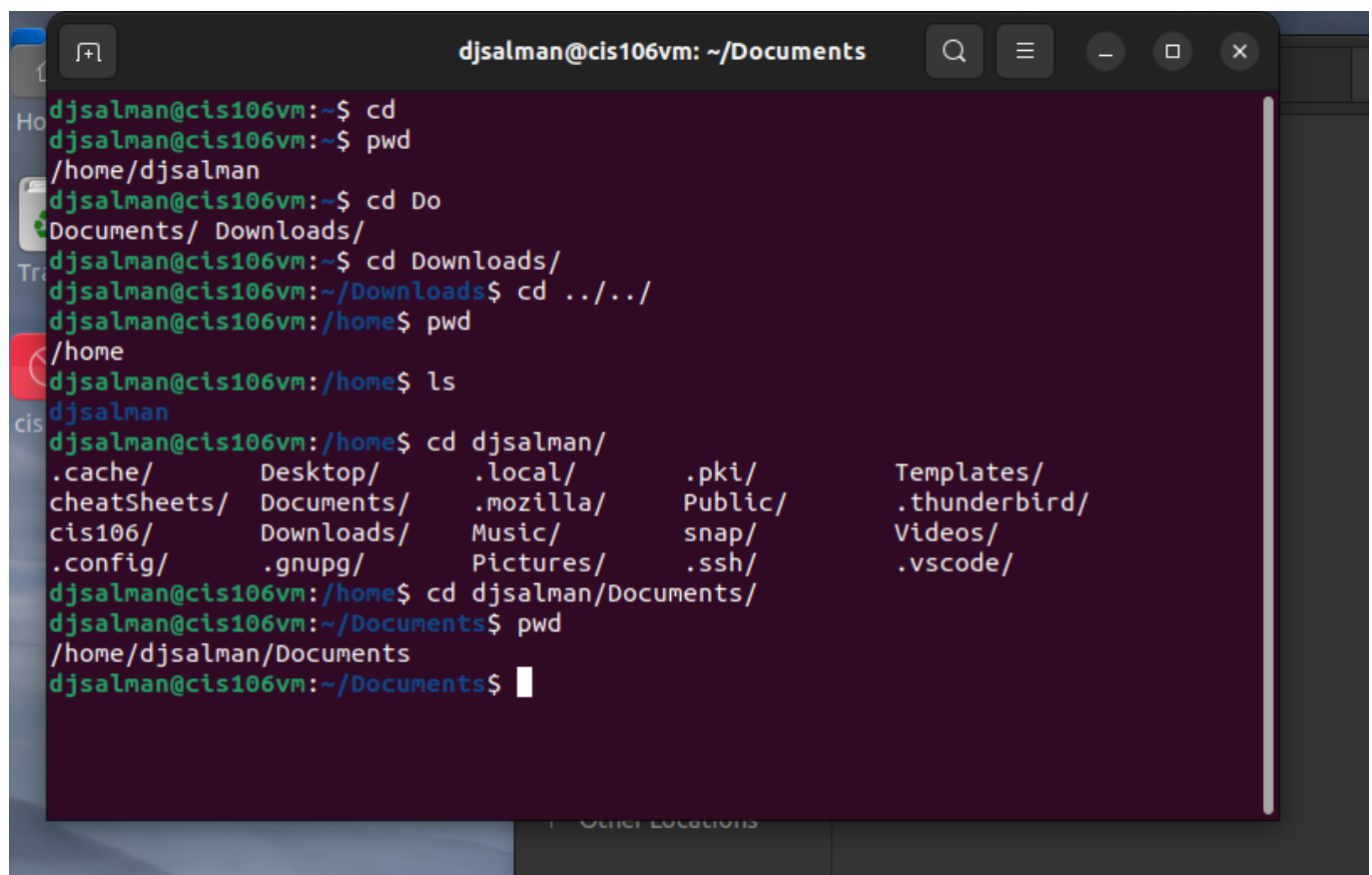
... name : Diaa Salman semester: fall 22 course: cis106 - linux fund ...

Lab 4 Submission

Question 1



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



```
djsalman@cis106vm: ~/Documents  
djsalman@cis106vm:~$ cd  
djsalman@cis106vm:~$ pwd  
/home/djsalman  
djsalman@cis106vm:~$ cd Do  
Documents/ Downloads/  
djsalman@cis106vm:~$ cd Downloads/  
djsalman@cis106vm:~/Downloads$ cd ../../  
djsalman@cis106vm:/home$ pwd  
/home  
djsalman@cis106vm:/home$ ls  
djsalman  
djsalman@cis106vm:/home$ cd djsalman/  
.cache/ Desktop/ .local/ .pki/ Templates/  
cheatSheets/ Documents/ .mozilla/ Public/ .thunderbird/  
cis106/ Downloads/ Music/ snap/ Videos/  
.config/ .gnupg/ Pictures/ .ssh/ .vscode/  
djsalman@cis106vm:/home$ cd djsalman/Documents/  
djsalman@cis106vm:~/Documents$ pwd  
/home/djsalman/Documents  
djsalman@cis106vm:~/Documents$
```

Question 2

```

djsalman@cis106vm: ~/lab4files

djsalman@cis106vm:/home$ ls
djsalman
djsalman@cis106vm:/home$ cd djsalman/
.cache/      Desktop/      .local/      .pki/        Templates/
cheatSheets/ Documents/    .mozilla/    Public/       .thunderbird/
cis106/      Downloads/   Music/       snap/         Videos/
.config/     .gnupg/     Pictures/    .ssh/         .vscode/
djsalman@cis106vm:/home$ cd djsalman/Documents/
djsalman@cis106vm:~/Documents$ pwd
/home/djsalman/Documents
djsalman@cis106vm:~/Documents$ cd /usr/share/
bash: cd /usr/share/: No such file or directory
djsalman@cis106vm:~/Documents$ cd /usr/share/
djsalman@cis106vm:/usr/share$ ls /home/djsalman/lab4files/
countries.json  document.docx  helloWorld.c  sample.xls  Ubuntu.pdf
csvfile.csv     globe.avi      Linux.pdf     Tux.png     website.html
djsalman@cis106vm:/usr/share$ cd /home/djsalman/lab4files/
djsalman@cis106vm:~/lab4files$ ^C
djsalman@cis106vm:~/lab4files$ ls -l
total 6580
-rw-rw-r-- 1 djsalman djsalman 20471 Feb 22 2022 countries.json
-rw-rw-r-- 1 djsalman djsalman 284042 Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 djsalman djsalman 764176 Feb 22 2022 document.docx
-rw-rw-r-- 1 djsalman djsalman 742478 Feb 22 2022 globe.avi
-rw-rw-r-- 1 djsalman djsalman 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 djsalman djsalman 2600138 Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 djsalman djsalman 8704 Feb 22 2022 sample.xls
-rw-rw-r-- 1 djsalman djsalman 42777 Feb 22 2022 Tux.png
-rw-rw-r-- 1 djsalman djsalman 2114053 Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 djsalman djsalman 137453 Feb 22 2022 website.html
djsalman@cis106vm:~/lab4files$

```

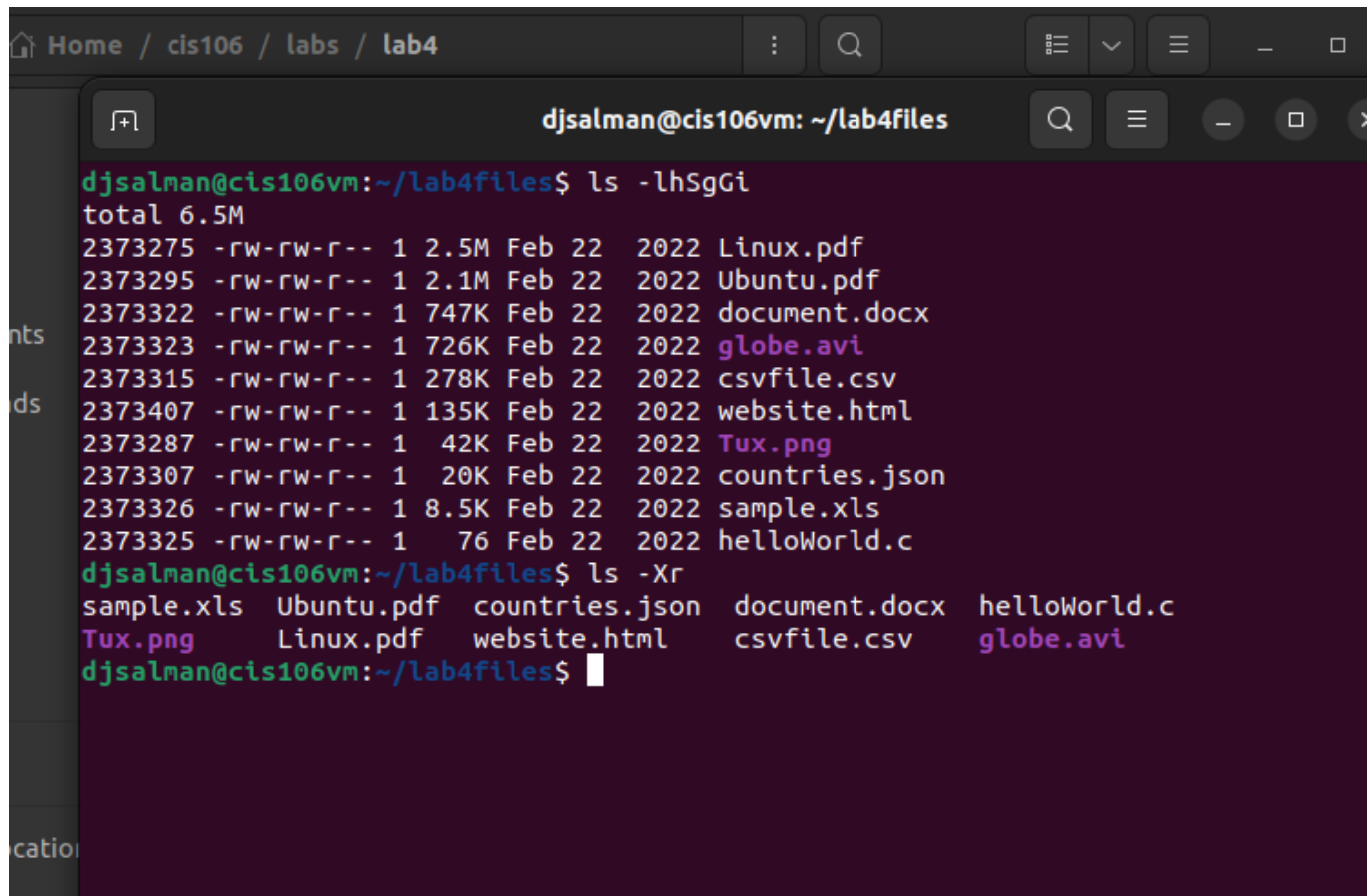
```

Home / cis106 / labs / lab4

djsalman@cis106vm: ~/lab4files

total 6.5M
-rw-rw-r-- 1 djsalman djsalman 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 djsalman djsalman 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 djsalman djsalman 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 djsalman djsalman 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 djsalman djsalman 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 djsalman djsalman 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 djsalman djsalman 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 djsalman djsalman 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 djsalman djsalman 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 djsalman djsalman 135K Feb 22 2022 website.html
djsalman@cis106vm:~/lab4files$ ls -lhs
total 6.5M
-rw-rw-r-- 1 djsalman djsalman 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 djsalman djsalman 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 djsalman djsalman 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 djsalman djsalman 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 djsalman djsalman 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 djsalman djsalman 135K Feb 22 2022 website.html
-rw-rw-r-- 1 djsalman djsalman 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 djsalman djsalman 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 djsalman djsalman 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 djsalman djsalman 76 Feb 22 2022 helloWorld.c
djsalman@cis106vm:~/lab4files$

```



The image shows a terminal window with a dark background. The title bar at the top reads "djsalman@cis106vm: ~/lab4files". The terminal content shows two commands and their outputs. The first command is `ls -lhSgGi`, which lists files in long format, sorted by size. The second command is `ls -Xr`, which lists files in long format, sorted by extension. The files listed include `Linux.pdf`, `Ubuntu.pdf`, `document.docx`, `globe.avi`, `csvfile.csv`, `website.html`, `Tux.png`, `countries.json`, `sample.xls`, and `helloWorld.c`.

```
djsalman@cis106vm:~/lab4files$ ls -lhSgGi
total 6.5M
2373275 -rw-rw-r-- 1 2.5M Feb 22 2022 Linux.pdf
2373295 -rw-rw-r-- 1 2.1M Feb 22 2022 Ubuntu.pdf
2373322 -rw-rw-r-- 1 747K Feb 22 2022 document.docx
2373323 -rw-rw-r-- 1 726K Feb 22 2022 globe.avi
2373315 -rw-rw-r-- 1 278K Feb 22 2022 csvfile.csv
2373407 -rw-rw-r-- 1 135K Feb 22 2022 website.html
2373287 -rw-rw-r-- 1 42K Feb 22 2022 Tux.png
2373307 -rw-rw-r-- 1 20K Feb 22 2022 countries.json
2373326 -rw-rw-r-- 1 8.5K Feb 22 2022 sample.xls
2373325 -rw-rw-r-- 1 76 Feb 22 2022 helloWorld.c
djsalman@cis106vm:~/lab4files$ ls -Xr
sample.xls  Ubuntu.pdf  countries.json  document.docx  helloWorld.c
Tux.png    Linux.pdf   website.html   csvfile.csv    globe.avi
djsalman@cis106vm:~/lab4files$
```

Question 3

```
Applications Places
1/1 + [ [
Tilix: djsalman@cis106vm: ~/Downloads

1: djsalman@cis106vm: ~/Downloads
djsalman@cis106vm:~$ cd /etc/
djsalman@cis106vm:/etc$ tree ~/lab4files/
/home/djsalman/lab4files/
├── countries.json
├── csvfile.csv
├── document.docx
├── globe.avi
├── helloWorld.c
├── Linux.pdf
├── sample.xls
├── Tux.png
├── Ubuntu.pdf
└── website.html

0 directories, 10 files
djsalman@cis106vm:/etc$ cd ~/downloads/
bash: cd: /home/djsalman/downloads/: No such file or directory
djsalman@cis106vm:/etc$ cd ~/Downloads/
djsalman@cis106vm:~/Downloads$ tree -fph ../lab4files/
drwxrwxr-x 4.0K] ../lab4files
├── [drwxrwxr-x 20K] /lab4files/countries.json
├── [drwxrwxr-x 20K] /lab4files/csvfile.csv
├── [drwxrwxr-x 20K] /lab4files/document.docx
├── [drwxrwxr-x 20K] /lab4files/globe.avi
├── [drwxrwxr-x 20K] /lab4files/helloWorld.c
├── [drwxrwxr-x 20K] /lab4files/Linux.pdf
├── [drwxrwxr-x 20K] /lab4files/sample.xls
├── [drwxrwxr-x 20K] /lab4files/Tux.png
├── [drwxrwxr-x 20K] /lab4files/Ubuntu.pdf
└── [drwxrwxr-x 20K] /lab4files/website.html

0 directories, 10 files
djsalman@cis106vm:~/Downloads$ tree -tug ../lab4files/
[djsalman djsalman] ../lab4files/
├── [djsalman djsalman] Linux.pdf
├── [djsalman djsalman] Tux.png
├── [djsalman djsalman] Ubuntu.pdf
├── [djsalman djsalman] sample.xls
├── [djsalman djsalman] globe.avi
├── [djsalman djsalman] document.docx
├── [djsalman djsalman] csvfile.csv
├── [djsalman djsalman] countries.json
├── [djsalman djsalman] website.html
└── [djsalman djsalman] helloWorld.c

0 directories, 10 files
djsalman@cis106vm:~/Downloads$ exa --help
Usage:
  exa [options] [files...]

META OPTIONS
  -?, --help          show list of command-line options
  -v, --version        show version of exa

DISPLAY OPTIONS
  -1, --oneline        display one entry per line
```

```

Applications  Places
1/1  +  [?]  [?]
Tilix: djsalman@cis106vm: ~/D

1: djsalman@cis106vm: ~/Downloads  v

.rw-rw-r-- 764k djsalman 22 Feb 14:13 document.docx
.rw-rw-r-- 742k djsalman 22 Feb 14:12 globe.avi
.rw-rw-r-- 76 d djsalman 22 Feb 14:18 helloWorld.c
.rw-rw-r-- 2.6M djsalman 22 Feb 14:10 Linux.pdf
.rw-rw-r-- 8.7k djsalman 22 Feb 14:12 sample.xls
.rw-rw-r-- 43k djsalman 22 Feb 14:10 Tux.png
.rw-rw-r-- 2.1M djsalman 22 Feb 14:11 Ubuntu.pdf
.rw-rw-r-- 137k djsalman 22 Feb 14:16 website.html
djsalman@cis106vm:~/Downloads$ exa ~/lab4files/ -lh
Permissions Size User      Date Modified Name
.rw-rw-r-- 20k djsalman 22 Feb 14:16 countries.json
.rw-rw-r-- 284k djsalman 22 Feb 14:15 csvfile.csv
.rw-rw-r-- 764k djsalman 22 Feb 14:13 document.docx
.rw-rw-r-- 742k djsalman 22 Feb 14:12 globe.avi
.rw-rw-r-- 76 djsalman 22 Feb 14:18 helloWorld.c
.rw-rw-r-- 2.6M djsalman 22 Feb 14:10 Linux.pdf
.rw-rw-r-- 8.7k djsalman 22 Feb 14:12 sample.xls
.rw-rw-r-- 43k djsalman 22 Feb 14:10 Tux.png
.rw-rw-r-- 2.1M djsalman 22 Feb 14:11 Ubuntu.pdf
.rw-rw-r-- 137k djsalman 22 Feb 14:16 website.html
djsalman@cis106vm:~/Downloads$

```

```

Applications  Places
1/1  +  [?]  [?]
Tilix: djsalman@cis106vm: ~/D

1: djsalman@cis106vm: ~/Downloads  v

.rw-rw-r-- 764k djsalman 22 Feb 14:13 document.docx
.rw-rw-r-- 742k djsalman 22 Feb 14:12 globe.avi
.rw-rw-r-- 76 djsalman 22 Feb 14:18 helloWorld.c
.rw-rw-r-- 2.6M djsalman 22 Feb 14:10 Linux.pdf
.rw-rw-r-- 8.7k djsalman 22 Feb 14:12 sample.xls
.rw-rw-r-- 43k djsalman 22 Feb 14:10 Tux.png
.rw-rw-r-- 2.1M djsalman 22 Feb 14:11 Ubuntu.pdf
.rw-rw-r-- 137k djsalman 22 Feb 14:16 website.html
djsalman@cis106vm:~/Downloads$ exa ~/lab4files/ -lh --no-user -U
Permissions Size Date Created Name
.rw-rw-r-- 20k 14 Oct 22:19 countries.json
.rw-rw-r-- 284k 14 Oct 22:19 csvfile.csv
.rw-rw-r-- 764k 14 Oct 22:19 document.docx
.rw-rw-r-- 742k 14 Oct 22:19 globe.avi
.rw-rw-r-- 76 14 Oct 22:19 helloWorld.c
.rw-rw-r-- 2.6M 14 Oct 22:19 Linux.pdf
.rw-rw-r-- 8.7k 14 Oct 22:19 sample.xls
.rw-rw-r-- 43k 14 Oct 22:19 Tux.png
.rw-rw-r-- 2.1M 14 Oct 22:19 Ubuntu.pdf
.rw-rw-r-- 137k 14 Oct 22:19 website.html
djsalman@cis106vm:~/Downloads$

```

Question 4

```
djsalman@cis106vm:~$ pwd
/home/djsalman
djsalman@cis106vm:~$
```

```
djsalman@cis106vm:~$ pwd
/home/djsalman
djsalman@cis106vm:~$ /usr/
bash: /usr/: Is a directory
djsalman@cis106vm:~$ usr/
bash: usr/: No such file or directory
djsalman@cis106vm:~$ cd /usr/
djsalman@cis106vm:/usr$
```

```
djsalman@cis106vm:~$ pwd
/home/djsalman
djsalman@cis106vm:~$ /usr/
bash: /usr/: Is a directory
djsalman@cis106vm:~$ usr/
bash: usr/: No such file or directory
djsalman@cis106vm:~$ cd /usr/
djsalman@cis106vm:/usr$ cd /proc/
djsalman@cis106vm:/proc$
```

```
djsalman@cis106vm:~$ pwd
/home/djsalman
djsalman@cis106vm:~$ /usr/
bash: /usr/: Is a directory
djsalman@cis106vm:~$ usr/
bash: usr/: No such file or directory
djsalman@cis106vm:~$ cd /usr/
djsalman@cis106vm:/usr$ cd /proc/
djsalman@cis106vm:/proc$ cd ../
djsalman@cis106vm:/$
```