

Lab 4 Submission

Question 1

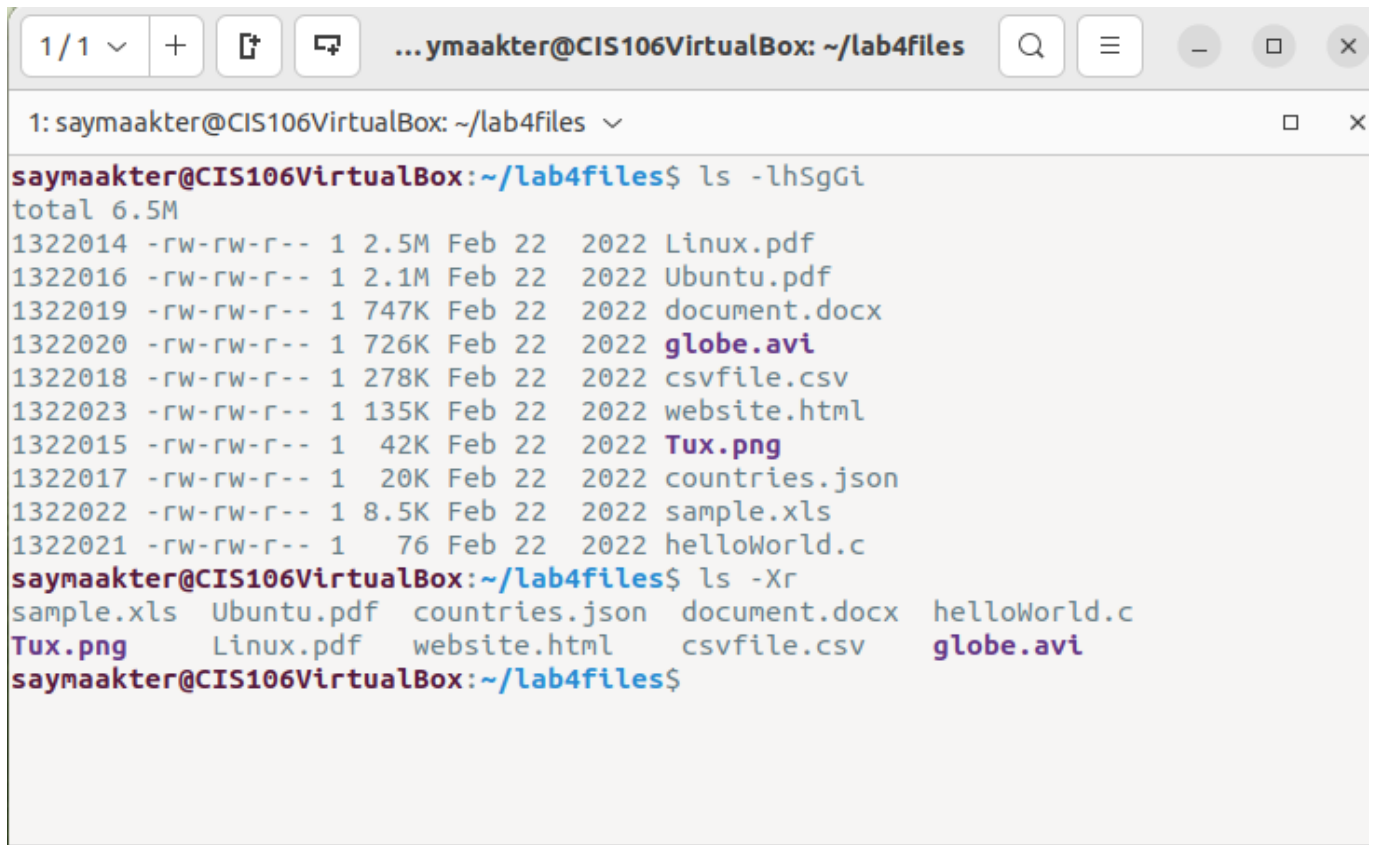
```
1/1 + ... kter@CIS106VirtualBox: /snap/firefox
1: saymaakter@CIS106VirtualBox: /snap/firefox
saymaakter@CIS106VirtualBox:~$ pwd
/home/saymaakter
saymaakter@CIS106VirtualBox:~$ cd /usr/share/themes/
saymaakter@CIS106VirtualBox:/usr/share/themes$ pwd
/usr/share/themes
saymaakter@CIS106VirtualBox:/usr/share/themes$ cd /
saymaakter@CIS106VirtualBox:/$ cd /snap/firefox/
saymaakter@CIS106VirtualBox:/snap/firefox$
```

```
1/1 + ... kter@CIS106VirtualBox: ~/Documents
1: saymaakter@CIS106VirtualBox: ~/Documents
saymaakter@CIS106VirtualBox:/snap/firefox$ cd
saymaakter@CIS106VirtualBox:~$ pwd
/home/saymaakter
saymaakter@CIS106VirtualBox:~$ cd Downloads/
saymaakter@CIS106VirtualBox:~/Downloads$ cd ../../
saymaakter@CIS106VirtualBox:/home$ pwd
/home
saymaakter@CIS106VirtualBox:/home$ ls
saymaakter
saymaakter@CIS106VirtualBox:/home$ cd saymaakter/
.cache/      Desktop/    .gnupg/    Pictures/   .ssh/
Cheatsheets/ Documents/  lab4files/ .pki/       Templates/
CIS106-22/   Downloads/ .local/    Public/     Videos/
.config/     .fontconfig/ Music/     snap/       .vscode/
saymaakter@CIS106VirtualBox:/home$ cd saymaakter/Documents/
saymaakter@CIS106VirtualBox:~/Documents$ pwd
/home/saymaakter/Documents
saymaakter@CIS106VirtualBox:~/Documents$
```

Question 2

```
Tilix: saymaakter@CIS106VirtualBox: ~/lab4files
1: saymaakter@CIS106VirtualBox: ~/lab4files
saymaakter@CIS106VirtualBox: /usr/share$ cd /home/saymaakter/lab4files/
saymaakter@CIS106VirtualBox: ~/lab4files$ ls -l
total 6580
-rw-rw-r-- 1 saymaakter saymaakter 20471 Feb 22 2022 countries.json
-rw-rw-r-- 1 saymaakter saymaakter 284042 Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 saymaakter saymaakter 764176 Feb 22 2022 document.docx
-rw-rw-r-- 1 saymaakter saymaakter 742478 Feb 22 2022 globe.avi
-rw-rw-r-- 1 saymaakter saymaakter 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 saymaakter saymaakter 2600138 Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 saymaakter saymaakter 8704 Feb 22 2022 sample.xls
-rw-rw-r-- 1 saymaakter saymaakter 42777 Feb 22 2022 Tux.png
-rw-rw-r-- 1 saymaakter saymaakter 2114053 Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 saymaakter saymaakter 137453 Feb 22 2022 website.html
saymaakter@CIS106VirtualBox: ~/lab4files$

1: saymaakter@CIS106VirtualBox: ~/lab4files
saymaakter@CIS106VirtualBox: ~/lab4files$ ls -lh
total 6.5M
-rw-rw-r-- 1 saymaakter saymaakter 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 saymaakter saymaakter 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 saymaakter saymaakter 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 saymaakter saymaakter 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 saymaakter saymaakter 76 Feb 22 2022 helloWorld.c
-rw-rw-r-- 1 saymaakter saymaakter 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 saymaakter saymaakter 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 saymaakter saymaakter 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 saymaakter saymaakter 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 saymaakter saymaakter 135K Feb 22 2022 website.html
saymaakter@CIS106VirtualBox: ~/lab4files$ ls -lhs
total 6.5M
-rw-rw-r-- 1 saymaakter saymaakter 2.5M Feb 22 2022 Linux.pdf
-rw-rw-r-- 1 saymaakter saymaakter 2.1M Feb 22 2022 Ubuntu.pdf
-rw-rw-r-- 1 saymaakter saymaakter 747K Feb 22 2022 document.docx
-rw-rw-r-- 1 saymaakter saymaakter 726K Feb 22 2022 globe.avi
-rw-rw-r-- 1 saymaakter saymaakter 278K Feb 22 2022 csvfile.csv
-rw-rw-r-- 1 saymaakter saymaakter 135K Feb 22 2022 website.html
-rw-rw-r-- 1 saymaakter saymaakter 42K Feb 22 2022 Tux.png
-rw-rw-r-- 1 saymaakter saymaakter 20K Feb 22 2022 countries.json
-rw-rw-r-- 1 saymaakter saymaakter 8.5K Feb 22 2022 sample.xls
-rw-rw-r-- 1 saymaakter saymaakter 76 Feb 22 2022 helloWorld.c
saymaakter@CIS106VirtualBox: ~/lab4files$
```



A terminal window titled "...ymaakter@CIS106VirtualBox: ~/lab4files" with standard window controls. The terminal shows the following commands and output:

```
1: saymaakter@CIS106VirtualBox: ~/lab4files
saymaakter@CIS106VirtualBox:~/lab4files$ ls -lhSgGi
total 6.5M
1322014 -rw-rw-r-- 1 2.5M Feb 22 2022 Linux.pdf
1322016 -rw-rw-r-- 1 2.1M Feb 22 2022 Ubuntu.pdf
1322019 -rw-rw-r-- 1 747K Feb 22 2022 document.docx
1322020 -rw-rw-r-- 1 726K Feb 22 2022 globe.avi
1322018 -rw-rw-r-- 1 278K Feb 22 2022 csvfile.csv
1322023 -rw-rw-r-- 1 135K Feb 22 2022 website.html
1322015 -rw-rw-r-- 1 42K Feb 22 2022 Tux.png
1322017 -rw-rw-r-- 1 20K Feb 22 2022 countries.json
1322022 -rw-rw-r-- 1 8.5K Feb 22 2022 sample.xls
1322021 -rw-rw-r-- 1 76 Feb 22 2022 helloWorld.c
saymaakter@CIS106VirtualBox:~/lab4files$ ls -Xr
sample.xls  Ubuntu.pdf  countries.json  document.docx  helloWorld.c
Tux.png     Linux.pdf   website.html   csvfile.csv    globe.avi
saymaakter@CIS106VirtualBox:~/lab4files$
```

Question 3

```
1 / 1  +  [?] [?]  Tilix: saymaakter@CIS106VirtualBox: ~/Downloads

1: saymaakter@CIS106VirtualBox: ~/Downloads  v
saymaakter@CIS106VirtualBox:/etc$ tree ~/lab4files/
/home/saymaakter/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
saymaakter@CIS106VirtualBox:/etc$ cd ~/Downloads/
saymaakter@CIS106VirtualBox:~/Downloads$ tree -fph ../lab4files/
[drwxrwxr-x 4.0K] ../lab4files
├── [-rw-rw-r-- 20K] ../lab4files/countries.json
├── [-rw-rw-r-- 277K] ../lab4files/csvfile.csv
├── [-rw-rw-r-- 746K] ../lab4files/document.docx
├── [-rw-rw-r-- 725K] ../lab4files/globe.avi
├── [-rw-rw-r-- 76] ../lab4files/helloWorld.c
├── [-rw-rw-r-- 2.5M] ../lab4files/Linux.pdf
├── [-rw-rw-r-- 8.5K] ../lab4files/sample.xls
├── [-rw-rw-r-- 42K] ../lab4files/Tux.png
└── [-rw-rw-r-- 2.0M] ../lab4files/Ubuntu.pdf

1 / 1  +  [?] [?]  Tilix: saymaakter@CIS106VirtualBox: ~/Downloads  Q  ≡  -  □  ×

1: saymaakter@CIS106VirtualBox: ~/Downloads  v  AI  □  ×

saymaakter@CIS106VirtualBox:~/Downloads$ tree -tug ../lab4files/
[saymaakter saymaakter] ../lab4files/
├── [saymaakter saymaakter] Linux.pdf
├── [saymaakter saymaakter] Tux.png
├── [saymaakter saymaakter] Ubuntu.pdf
├── [saymaakter saymaakter] sample.xls
├── [saymaakter saymaakter] globe.avi
├── [saymaakter saymaakter] document.docx
├── [saymaakter saymaakter] csvfile.csv
├── [saymaakter saymaakter] countries.json
├── [saymaakter saymaakter] website.html
└── [saymaakter saymaakter] helloWorld.c

0 directories, 10 files
saymaakter@CIS106VirtualBox:~/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 / 1 + [Tilix: saymaakter@CIS106VirtualBox: ~/Downloads] [Search] [Menu] [Close]

1: saymaakter@CIS106VirtualBox: ~/Downloads [Close] [X]

saymaakter@CIS106VirtualBox:~/Downloads$ exa ~/lab4files/ -l
.rw-rw-r-- 20k saymaakter 22 Feb 14:16 countries.json
.rw-rw-r-- 284k saymaakter 22 Feb 14:15 csvfile.csv
.rw-rw-r-- 764k saymaakter 22 Feb 14:13 document.docx
.rw-rw-r-- 742k saymaakter 22 Feb 14:12 globe.avi
.rw-rw-r-- 76 saymaakter 22 Feb 14:18 helloWorld.c
.rw-rw-r-- 2.6M saymaakter 22 Feb 14:10 Linux.pdf
.rw-rw-r-- 8.7k saymaakter 22 Feb 14:12 sample.xls
.rw-rw-r-- 43k saymaakter 22 Feb 14:10 Tux.png
.rw-rw-r-- 2.1M saymaakter 22 Feb 14:11 Ubuntu.pdf
.rw-rw-r-- 137k saymaakter 22 Feb 14:16 website.html
saymaakter@CIS106VirtualBox:~/Downloads$ exa ~/lab4files/ -lh
Permissions Size User Date Modified Name
.rw-rw-r-- 20k saymaakter 22 Feb 14:16 countries.json
.rw-rw-r-- 284k saymaakter 22 Feb 14:15 csvfile.csv
.rw-rw-r-- 764k saymaakter 22 Feb 14:13 document.docx
.rw-rw-r-- 742k saymaakter 22 Feb 14:12 globe.avi
.rw-rw-r-- 76 saymaakter 22 Feb 14:18 helloWorld.c
.rw-rw-r-- 2.6M saymaakter 22 Feb 14:10 Linux.pdf
.rw-rw-r-- 8.7k saymaakter 22 Feb 14:12 sample.xls
.rw-rw-r-- 43k saymaakter 22 Feb 14:10 Tux.png
.rw-rw-r-- 2.1M saymaakter 22 Feb 14:11 Ubuntu.pdf
.rw-rw-r-- 137k saymaakter 22 Feb 14:16 website.html
saymaakter@CIS106VirtualBox:~/Downloads$
```

Question 4 Challenge Question

```
[+ [Tilix: saymaakter@CIS106VirtualBox: ~] [Search] [Menu] [Close]

saymaakter@CIS106VirtualBox:~$ pwd
/home/saymaakter
saymaakter@CIS106VirtualBox:~$ cd
saymaakter@CIS106VirtualBox:~$
```