

# Lab 4 submission

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## Question 1

```
lab4.md - cis106 - Visual Studio Code
acastillo28530@Cis106: /snap/firefox

acastillo28530@Cis106:~$ pwd
/home/acastillo28530
acastillo28530@Cis106:~$ cd /usr/share/themes/
acastillo28530@Cis106:/usr/share/themes$ pwd
/usr/share/themes
acastillo28530@Cis106:/usr/share/themes$ cd /
acastillo28530@Cis106:/$ cd /snap/firefox/
acastillo28530@Cis106:/snap/firefox$
```

```
lab4.md - cis106 - Visual Studio Code
acastillo28530@Cis106: ~/Documents

acastillo28530@Cis106:/$ cd
acastillo28530@Cis106:~$ pwd
/home/acastillo28530
acastillo28530@Cis106:~$ cd Downloads/
acastillo28530@Cis106:~/Downloads$ cd ../../
acastillo28530@Cis106:/home$ pwd
/home
acastillo28530@Cis106:/home$ ls
acastillo28530
acastillo28530@Cis106:/home$ cd acastillo28530/
.cache/      Downloads/  Music/      snap/       .vscode/
cis106/      .fontconfig/ Pictures/    .ssh/
.config/     .gnupg/    .pki/      Templates/
Desktop/     .local/    Projects/   .thunderbird/
Documents/   .mozilla/  Public/     Videos/
acastillo28530@Cis106:/home$ cd acastillo28530/Do
Documents/ Downloads/
acastillo28530@Cis106:/home$ cd acastillo28530/Documents/
acastillo28530@Cis106:~/Documents$
```

## Question 2

```

acastillo28530@Cis106:/usr/share$ cd /usr/share/
acastillo28530@Cis106:/usr/share$ ls /home/acastillo28530/lab4files/
countries.json  document.docx  helloWorld.c  sample.xls  Ubuntu.pdf
csvfile.csv     globe.avi      Linux.pdf     Tux.png     website.html
acastillo28530@Cis106:/usr/share$ cd /home/acastillo28530/lab4files/
acastillo28530@Cis106:~/lab4files$ ls -l
total 6580
-rw-rw-r-- 1 acastillo28530 acastillo28530  20471 Feb 22  2022 countries.json
-rw-rw-r-- 1 acastillo28530 acastillo28530 284042 Feb 22  2022 csvfile.csv
-rw-rw-r-- 1 acastillo28530 acastillo28530 764176 Feb 22  2022 document.docx
-rw-rw-r-- 1 acastillo28530 acastillo28530 742478 Feb 22  2022 globe.avi
-rw-rw-r-- 1 acastillo28530 acastillo28530    76 Feb 22  2022 helloWorld.c
-rw-rw-r-- 1 acastillo28530 acastillo28530 2600138 Feb 22  2022 Linux.pdf
-rw-rw-r-- 1 acastillo28530 acastillo28530   8704 Feb 22  2022 sample.xls
-rw-rw-r-- 1 acastillo28530 acastillo28530  42777 Feb 22  2022 Tux.png
-rw-rw-r-- 1 acastillo28530 acastillo28530 2114053 Feb 22  2022 Ubuntu.pdf
-rw-rw-r-- 1 acastillo28530 acastillo28530  137453 Feb 22  2022 website.html
acastillo28530@Cis106:~/lab4files$

```

```

total 6.5M
-rw-rw-r-- 1 acastillo28530 acastillo28530  20K Feb 22  2022 countries.json
-rw-rw-r-- 1 acastillo28530 acastillo28530 278K Feb 22  2022 csvfile.csv
-rw-rw-r-- 1 acastillo28530 acastillo28530 747K Feb 22  2022 document.docx
-rw-rw-r-- 1 acastillo28530 acastillo28530 726K Feb 22  2022 globe.avi
-rw-rw-r-- 1 acastillo28530 acastillo28530   76 Feb 22  2022 helloWorld.c
-rw-rw-r-- 1 acastillo28530 acastillo28530 2.5M Feb 22  2022 Linux.pdf
-rw-rw-r-- 1 acastillo28530 acastillo28530 8.5K Feb 22  2022 sample.xls
-rw-rw-r-- 1 acastillo28530 acastillo28530  42K Feb 22  2022 Tux.png
-rw-rw-r-- 1 acastillo28530 acastillo28530 2.1M Feb 22  2022 Ubuntu.pdf
-rw-rw-r-- 1 acastillo28530 acastillo28530 135K Feb 22  2022 website.html
acastillo28530@Cis106:~/lab4files$ ls -lhs
total 6.5M
-rw-rw-r-- 1 acastillo28530 acastillo28530 2.5M Feb 22  2022 Linux.pdf
-rw-rw-r-- 1 acastillo28530 acastillo28530 2.1M Feb 22  2022 Ubuntu.pdf
-rw-rw-r-- 1 acastillo28530 acastillo28530 747K Feb 22  2022 document.docx
-rw-rw-r-- 1 acastillo28530 acastillo28530 726K Feb 22  2022 globe.avi
-rw-rw-r-- 1 acastillo28530 acastillo28530 278K Feb 22  2022 csvfile.csv
-rw-rw-r-- 1 acastillo28530 acastillo28530 135K Feb 22  2022 website.html
-rw-rw-r-- 1 acastillo28530 acastillo28530  42K Feb 22  2022 Tux.png
-rw-rw-r-- 1 acastillo28530 acastillo28530  20K Feb 22  2022 countries.json
-rw-rw-r-- 1 acastillo28530 acastillo28530 8.5K Feb 22  2022 sample.xls
-rw-rw-r-- 1 acastillo28530 acastillo28530   76 Feb 22  2022 helloWorld.c

```

```
acastillo28530@Cis106:~/lab4files$ ls -lhSgGt
total 6.5M
1972446 -rw-rw-r-- 1 2.5M Feb 22 2022 Linux.pdf
1972448 -rw-rw-r-- 1 2.1M Feb 22 2022 Ubuntu.pdf
1972451 -rw-rw-r-- 1 747K Feb 22 2022 document.docx
1972452 -rw-rw-r-- 1 726K Feb 22 2022 globe.avi
1972450 -rw-rw-r-- 1 278K Feb 22 2022 csvfile.csv
1972455 -rw-rw-r-- 1 135K Feb 22 2022 website.html
1972447 -rw-rw-r-- 1 42K Feb 22 2022 Tux.png
1972449 -rw-rw-r-- 1 20K Feb 22 2022 countries.json
1972454 -rw-rw-r-- 1 8.5K Feb 22 2022 sample.xls
1972453 -rw-rw-r-- 1 76 Feb 22 2022 helloWorld.c
acastillo28530@Cis106:~/lab4files$ ls -Xr
sample.xls  Ubuntu.pdf  countries.json  document.docx  helloWorld.c
Tux.png     Linux.pdf   website.html   csvfile.csv    globe.avi
acastillo28530@Cis106:~/lab4files$
```

### Question 3

```

acastillo28530@Cis106:/home$ cd ../
acastillo28530@Cis106:/$ cd /etc/
acastillo28530@Cis106:/etc$ tree ~/lab4files/
/home/acastillo28530/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
acastillo28530@Cis106:/etc$ cd ~/Downloads/
acastillo28530@Cis106:~/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
└── [-rw-rw-r-- 134K] ../lab4files/website.html

0 directories, 10 files
acastillo28530@Cis106:~/Downloads$

```

```

acastillo28530@Cis106:~/Downloads$ tree -tug ../lab4files/
[acastillo28530 acastillo28530] ../lab4files/
├── [acastillo28530 acastillo28530] Linux.pdf
├── [acastillo28530 acastillo28530] Tux.png
├── [acastillo28530 acastillo28530] Ubuntu.pdf
├── [acastillo28530 acastillo28530] sample.xls
├── [acastillo28530 acastillo28530] globe.avi
├── [acastillo28530 acastillo28530] document.docx
├── [acastillo28530 acastillo28530] csvfile.csv
├── [acastillo28530 acastillo28530] countries.json
├── [acastillo28530 acastillo28530] website.html
└── [acastillo28530 acastillo28530] helloWorld.c

0 directories, 10 files
acastillo28530@Cis106:~/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, --online        display one entry per line
  -l, --long          display extended file metadata as a table
  -G, --grid          display entries as a grid (default)
  -x, --across        sort the grid across, rather than downwards
  -R, --recurse       recurse into directories
  -T, --tree          recurse into directories as a tree

```

```

-F, --classify      display type indicator by file names
--colo[u]r=WHEN    when to use terminal colours (always, auto, never)
--colo[u]r-scale    highlight levels of file sizes distinctly
--icons            display icons
--no-icons         don't display icons (always overrides --icons)

FILTERING AND SORTING OPTIONS
-a, --all          show hidden and 'dot' files
-d, --list-dirs    list directories as files; don't list their contents

```

```

acastillo28530@Cis106:~/Downloads$ exa ~/lab4files/-l
"/home/acastillo28530/lab4files/-l": No such file or directory (os error 2)
acastillo28530@Cis106:~/Downloads$ exa ~/lab4files/ -l
.rw-rw-r-- 20k acastillo28530 22 Feb 14:16 countries.json
.rw-rw-r-- 284k acastillo28530 22 Feb 14:15 csvfile.csv
.rw-rw-r-- 764k acastillo28530 22 Feb 14:13 document.docx
.rw-rw-r-- 742k acastillo28530 22 Feb 14:12 globe.avi
.rw-rw-r-- 76 acastillo28530 22 Feb 14:18 helloWorld.c
.rw-rw-r-- 2.6M acastillo28530 22 Feb 14:10 Linux.pdf
.rw-rw-r-- 8.7k acastillo28530 22 Feb 14:12 sample.xls
.rw-rw-r-- 43k acastillo28530 22 Feb 14:10 Tux.png
.rw-rw-r-- 2.1M acastillo28530 22 Feb 14:11 Ubuntu.pdf
.rw-rw-r-- 137k acastillo28530 22 Feb 14:16 website.html
acastillo28530@Cis106:~/Downloads$ exa ~/lab4files/ -lh
Permissions Size User Date Modified Name
.rw-rw-r-- 20k acastillo28530 22 Feb 14:16 countries.json
.rw-rw-r-- 284k acastillo28530 22 Feb 14:15 csvfile.csv
.rw-rw-r-- 764k acastillo28530 22 Feb 14:13 document.docx
.rw-rw-r-- 742k acastillo28530 22 Feb 14:12 globe.avi
.rw-rw-r-- 76 acastillo28530 22 Feb 14:18 helloWorld.c
.rw-rw-r-- 2.6M acastillo28530 22 Feb 14:10 Linux.pdf
.rw-rw-r-- 8.7k acastillo28530 22 Feb 14:12 sample.xls
.rw-rw-r-- 43k acastillo28530 22 Feb 14:10 Tux.png
.rw-rw-r-- 2.1M acastillo28530 22 Feb 14:11 Ubuntu.pdf
.rw-rw-r-- 137k acastillo28530 22 Feb 14:16 website.html
acastillo28530@Cis106:~/Downloads$

```

![[q3.4](q3.4.png)