

Week Report 4

Practice from the presentation the Linux filesystem:

Practice 1

```
jsamaan@cis106: ~$ pwd
/home/jsamaan
jsamaan@cis106:~$ cd /home/jsamaan/Downloads/
jsamaan@cis106:~/Downloads$ pwd
/home/jsamaan/Downloads
jsamaan@cis106:~/Downloads$ cd ..
jsamaan@cis106:~$ cd ../../
jsamaan@cis106:/$ pwd
/
jsamaan@cis106:/$ cd -
/home/jsamaan
jsamaan@cis106:~$
```

Practice 2

```
jsamaan@cis106:~$ wget https://cis106.com/assets/practicels.tar.xz&sa=D&source=editors&ust=1698285526006259&usg=AOvVaw0UxMuvCnzCf31IQ80Yq4Ks
[1] 7391
[2] 7392
[3] 7393
[4] 7394
jsamaan@cis106:~$
Redirecting output to 'wget-log.3'.
tar xJf practicels.tar.xz
[1] Done          wget https://cis106.com/assets/practicels.tar.xz
[2] Done          sa=D
[3] Done          source=editors
[4] Done          ust=1698285526006259
jsamaan@cis106:~$ cd /practicels/
bash: cd: /practicels/: No such file or directory
jsamaan@cis106:~$ cd /practicels/
jsamaan@cis106:~/practicels$ ls
book.txt      history-debian.pdf  movie.mp4      song.mp3      tux-penguin.gif
countries.xml  homework.docx       people.csv     tux-nobg.png
jsamaan@cis106:~/practicels$ ls -a
.               countries.xml      movie.mp4      tux-nobg.png
..              history-debian.pdf people.csv     tux-penguin.gif
.               book.txt           homework.docx  song.mp3
jsamaan@cis106:~/practicels$ ls -l
total 2932
-rw-rw-r-- 1 jsamaan jsamaan 1043 Feb 27 2022 book.txt
-rw-rw-r-- 1 jsamaan jsamaan 23972 Feb 27 2022 countries.xml
-rw-rw-r-- 1 jsamaan jsamaan 163057 Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 jsamaan jsamaan 111303 Feb 22 2022 homework.docx
-rw-rw-r-- 1 jsamaan jsamaan 1570024 Feb 27 2022 movie.mp4
-rw-rw-r-- 1 jsamaan jsamaan 284042 Feb 27 2022 people.csv
-rw-rw-r-- 1 jsamaan jsamaan 764176 Feb 27 2022 song.mp3
-rw-rw-r-- 1 jsamaan jsamaan 21314 Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 jsamaan jsamaan 44299 Jan 31 2020 tux-penguin.gif
jsamaan@cis106:~/practicels$ ls -lh
total 2.9M
-rw-rw-r-- 1 jsamaan jsamaan 1.1K Feb 27 2022 book.txt
-rw-rw-r-- 1 jsamaan jsamaan 24K Feb 27 2022 countries.xml
-rw-rw-r-- 1 jsamaan jsamaan 160K Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 jsamaan jsamaan 109K Feb 22 2022 homework.docx
-rw-rw-r-- 1 jsamaan jsamaan 1.5M Feb 27 2022 movie.mp4
-rw-rw-r-- 1 jsamaan jsamaan 278K Feb 27 2022 people.csv
-rw-rw-r-- 1 jsamaan jsamaan 747K Feb 27 2022 song.mp3
-rw-rw-r-- 1 jsamaan jsamaan 21K Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 jsamaan jsamaan 44K Jan 31 2020 tux-penguin.gif
jsamaan@cis106:~/practicels$ ls -lht
total 2.9M
-rw-rw-r-- 1 jsamaan jsamaan 24K Feb 27 2022 countries.xml
-rw-rw-r-- 1 jsamaan jsamaan 278K Feb 27 2022 people.csv
-rw-rw-r-- 1 jsamaan jsamaan 747K Feb 27 2022 song.mp3
-rw-rw-r-- 1 jsamaan jsamaan 1.5M Feb 27 2022 movie.mp4
-rw-rw-r-- 1 jsamaan jsamaan 160K Feb 27 2022 history-debian.pdf
-rw-rw-r-- 1 jsamaan jsamaan 21K Feb 27 2022 tux-nobg.png
-rw-rw-r-- 1 jsamaan jsamaan 1.1K Feb 27 2022 homework.docx
-rw-rw-r-- 1 jsamaan jsamaan 44K Jan 31 2020 tux-penguin.gif
jsamaan@cis106:~/practicels$ ls -lhgs
total 2.9M
4.0K -rw-rw-r-- 1 1.1K Feb 27 2022 book.txt
24K -rw-rw-r-- 1 24K Feb 27 2022 countries.xml
160K -rw-rw-r-- 1 160K Feb 27 2022 history-debian.pdf
112K -rw-rw-r-- 1 109K Feb 22 2022 homework.docx
1.5M -rw-rw-r-- 1 1.5M Feb 27 2022 movie.mp4
280K -rw-rw-r-- 1 278K Feb 27 2022 people.csv
748K -rw-rw-r-- 1 747K Feb 27 2022 song.mp3
24K -rw-rw-r-- 1 21K Feb 27 2022 tux-nobg.png
44K -rw-rw-r-- 1 44K Jan 31 2020 tux-penguin.gif
jsamaan@cis106:~/practicels$ ls -nr
tux-penguin.gif tux-nobg.png song.mp3 people.csv movie.mp4 homework.docx
history-debian.pdf countries.xml book.txt
jsamaan@cis106:~/practicels$ ls -ix
book.txt countries.xml history-debian.pdf homework.docx movie.mp4
people.csv song.mp3 tux-nobg.png tux-penguin.gif
jsamaan@cis106:~/practicels$
```

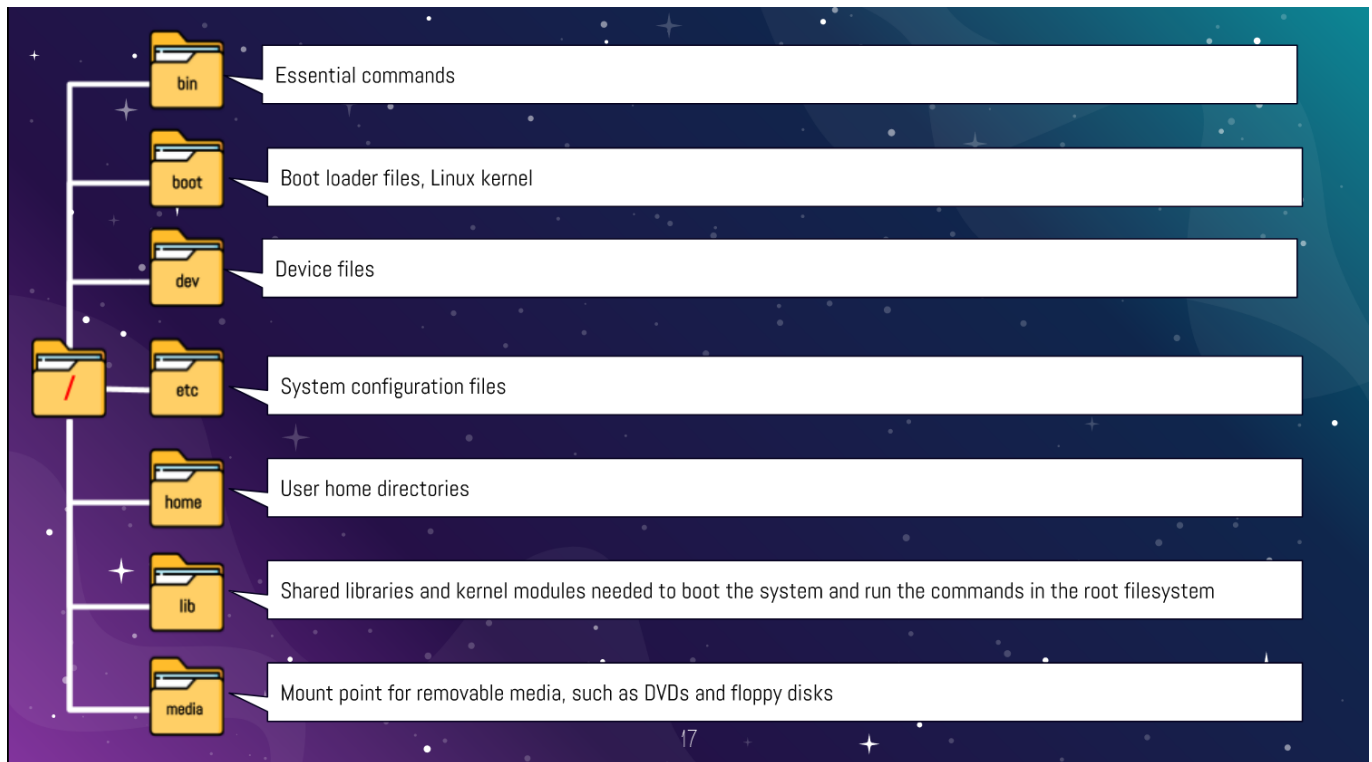
Practice 3

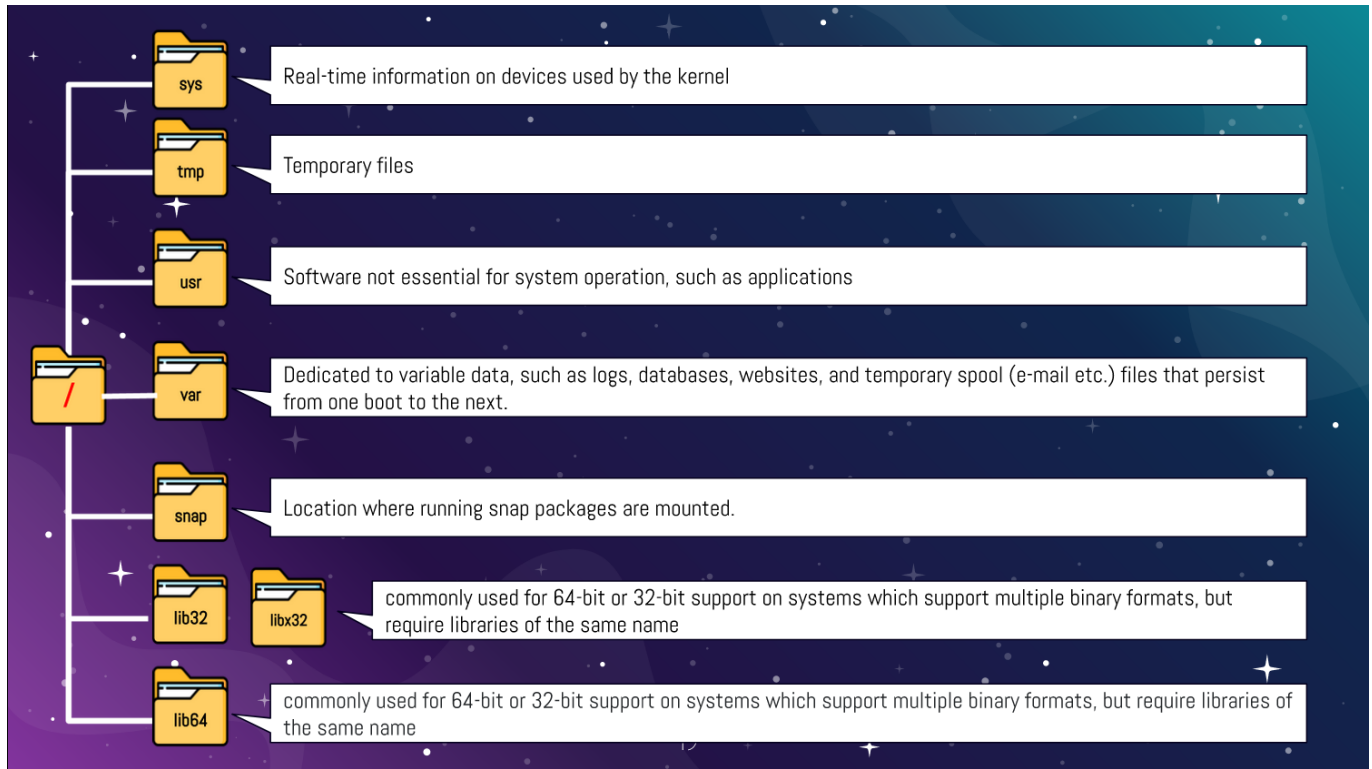
```

jsamaan@cis106:/$ pwd
/
jsamaan@cis106:/$ cd
jsamaan@cis106:/$ cd /
jsamaan@cis106:/$ cd /usr/share/themes/
jsamaan@cis106:/usr/share/themes$ cd ../../
jsamaan@cis106:/usr$ ls -A -
.bash_history
.bash_logout
.bashrc
.ccache
.cis106
.cis106.png
.config
.Desktop
.Documents
.dotnet
.Downloads
.Foxit
.gitcommands.txt
.gitconfig
.gnupg
.lab4files
.lessshst
.igames
.local
.mozilla
.Music
.Pictures
.pkt
.practicels
.practicels.tar.xz
.profile
.Public
.snap
.ssh
.sudo_as_admin_successful
.templates
.thunderbird
'url?q=https:%2F%2Fcis106.com%2Fassets%2Fpracticels.tar.xz.1'
'url?q=https:%2F%2Fcis106.com%2Fassets%2Fpracticels.tar.xz.1'
'url?q=https:%2F%2Fcis106.com%2Fassets%2Fpracticels.tar.xz.2'
.vboxclient-clipboard-tty2-control.pid
.vboxclient-clipboard-tty2-service.pid
.vboxclient-draganddrop-tty2-control.pid
.vboxclient-draganddrop-tty2-service.pid
.vboxclient-hostversion-tty2-control.pid
.vboxclient-seamless-tty2-control.pid
jsamaan@cis106:~$ ls -lh ~
total 2.3M
drwxrwxr-x 6 jsamaan jsamaan 4.0K Oct 11 23:25 cis106
drwxr-xr-x 3 jsamaan jsamaan 4.0K Oct 25 21:48 Desktop
drwxr-xr-x 2 jsamaan jsamaan 4.0K Oct 11 20:21 Documents
drwxr-xr-x 2 jsamaan jsamaan 4.0K Oct 25 21:47 Downloads
-rw-rw-r-- 1 jsamaan jsamaan 91 Oct 2 16:28 gitcommands.txt
drwxrwxr-x 2 jsamaan jsamaan 4.0K Feb 22 2022 lab4files
drwxr-xr-x 2 jsamaan jsamaan 4.0K Oct 2 14:10 Music
drwxr-xr-x 2 jsamaan jsamaan 4.0K Oct 11 18:58 Pictures
drwxrwxr-x 2 jsamaan jsamaan 4.0K Feb 27 2022 practicels
-rw-rw-r-- 1 jsamaan jsamaan 2.2M Oct 14 11:22 practicels.tar.xz
drwxr-xr-x 2 jsamaan jsamaan 4.0K Oct 2 14:10 Public
drwx----- 5 jsamaan jsamaan 4.0K Oct 2 15:06 snap
drwxr-xr-x 2 jsamaan jsamaan 4.0K Oct 2 14:10 Templates
-rw-rw-r-- 1 jsamaan jsamaan 1.5K Oct 25 21:39 'url?q=https:%2F%2Fcis106.com%2Fassets%2Fpracticels.tar.xz.1'
-rw-rw-r-- 1 jsamaan jsamaan 1.5K Oct 25 21:42 'url?q=https:%2F%2Fcis106.com%2Fassets%2Fpracticels.tar.xz.1'
-rw-rw-r-- 1 jsamaan jsamaan 1.5K Oct 25 21:43 'url?q=https:%2F%2Fcis106.com%2Fassets%2Fpracticels.tar.xz.2'
drwxr-xr-x 2 jsamaan jsamaan 4.0K Oct 2 14:10 Videos
-rw-rw-r-- 1 jsamaan jsamaan 693 Oct 25 21:39 wget-log
-rw-rw-r-- 1 jsamaan jsamaan 697 Oct 25 21:42 wget-log.1
-rw-rw-r-- 1 jsamaan jsamaan 697 Oct 25 21:43 wget-log.2
-rw-rw-r-- 1 jsamaan jsamaan 565 Oct 25 21:46 wget-log.3
jsamaan@cis106:~$ ls -lgG -full-time ~
ls: invalid option -- '-'
Try 'ls --help' for more information.
jsamaan@cis106:~$ ls -lgG -full-time ~
ls: invalid option -- '-'
Try 'ls --help' for more information.
jsamaan@cis106:~$ ls -lgG -full-time ~

```

The Linux filesystem directories and their purpose:





All the commands for navigating the filesystem:

Command	What it does	Syntax	Example
pwd	prints current directory	pwd	'pwd'
cd	current directory	cd	'cd'
ls	list files	ls	'ls'

Basic Terminology:

- **File system:** The way in which files are named and where they are put for storage and retrieval.
- **Current directory:** Where all the commands are being executed.
- **parent directory:** A directory that contains more folders (subdirectories).
- **the difference between your home directory and the home directory:** The base of the file tree versus your home directory is within the home directory.
- **pathname:** The location of a file or other items in a hierarchy.
- **relative path:** Link that points to a file location on the page where the link is located.
- **absolute path:** Starts from the root and describes every step you must take through the file system.