

Week Report 4

Practice in the presentation The Linux File System:

practice 1

```
rrventura@cis106:~$ pwd
/home/rrventura
rrventura@cis106:~$ cd /home/\$uSER/Downloads/
bash: cd: /home/$uSER/Downloads/: No such file or directory
rrventura@cis106:~$ cd /home/$uSER/Downloads/
bash: cd: /home//Downloads/: No such file or directory
rrventura@cis106:~$ cd /home/$USER/Downloads
rrventura@cis106:~/Downloads$ pwd
/home/rrventura/Downloads
rrventura@cis106:~/Downloads$ cd ..
rrventura@cis106:~$ cd ../../
rrventura@cis106:/$ pwd
/
rrventura@cis106:/$ cd -
/home/rrventura
rrventura@cis106:~$
```

practice 2

```

rrventura@cis106:~$ https://cis106.com/assets/practicels.tar.xz
bash: https://cis106.com/assets/practicels.tar.xz: No such file or directory
rrventura@cis106:~$ tar xvf practicels.tar.xz
tar (child): practicels.tar.xz: Cannot open: No such file or directory
tar (child): Error is not recoverable: exiting now
tar: Child returned status 2
tar: Error is not recoverable: exiting now
rrventura@cis106:~$ cd practicels/
bash: cd: practicels/: No such file or directory
rrventura@cis106:~$ ls
backup  cis106  Desktop  Documents  Downloads  exe  file1  game  games  index.html  lab4files  logs  movies  Music  newFile  pictures  Pictures  Public  snap  Templates  tesxt  Videos
rrventura@cis106:~$ ls -la
total 220
drwxrwxr-x 2 rrventura rrventura 77824 Mar 14 18:45 backup
drwxrwxr-x 6 rrventura rrventura 4096 Mar 3 23:22 cis106
drwxr-xr-x 2 rrventura rrventura 4096 Feb 26 19:17 Desktop
drwxr-xr-x 2 rrventura rrventura 4096 Mar 14 18:10 Documents
drwxr-xr-x 2 rrventura rrventura 4096 Mar 15 21:39 Downloads
-rw-rw-r-- 1 rrventura rrventura 0 Mar 14 18:32 exe
-rw-rw-r-- 2 rrventura rrventura 62 Mar 14 18:56 file1
drwxrwxr-x 4 rrventura rrventura 4096 Mar 14 18:32 game
drwxrwxr-x 2 rrventura rrventura 4096 Mar 14 18:32 games
-rw-rw-r-- 1 rrventura rrventura 0 Mar 14 18:10 index.html
drwxrwxr-x 2 rrventura rrventura 4096 Feb 22 2022 lab4files
drwxrwxr-x 2 rrventura rrventura 77824 Mar 14 18:43 logs
drwxrwxr-x 2 rrventura rrventura 4096 Mar 7 18:41 movies
drwxr-xr-x 2 rrventura rrventura 4096 Feb 13 23:03 Music
-rw-rw-r-- 2 rrventura rrventura 62 Mar 14 18:56 newFile
-rw-rw-r-- 1 rrventura rrventura 0 Mar 14 18:17 pictures
drwxr-xr-x 3 rrventura rrventura 4096 Mar 1 21:55 Pictures
drwxr-xr-x 2 rrventura rrventura 4096 Feb 13 23:03 Public
drwx----- 5 rrventura rrventura 4096 Feb 16 21:12 snap
drwxr-xr-x 2 rrventura rrventura 4096 Feb 13 23:03 Templates
drwxrwxr-x 3 rrventura rrventura 4096 Mar 7 18:58 tesxt
drwxr-xr-x 2 rrventura rrventura 4096 Feb 13 23:03 Videos

```

```

rrventura@cis106:~$ ls -lh
total 220K
drwxrwxr-x 2 rrventura rrventura 76K Mar 14 18:45 backup
drwxrwxr-x 6 rrventura rrventura 4.0K Mar 3 23:22 cis106
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 26 19:17 Desktop
drwxr-xr-x 2 rrventura rrventura 4.0K Mar 14 18:10 Documents
drwxr-xr-x 2 rrventura rrventura 4.0K Mar 15 21:39 Downloads
-rw-rw-r-- 1 rrventura rrventura 0 Mar 14 18:32 exe
-rw-rw-r-- 2 rrventura rrventura 62 Mar 14 18:56 file1
drwxrwxr-x 4 rrventura rrventura 4.0K Mar 14 18:32 game
drwxrwxr-x 2 rrventura rrventura 4.0K Mar 14 18:32 games
-rw-rw-r-- 1 rrventura rrventura 0 Mar 14 18:10 index.html
drwxrwxr-x 2 rrventura rrventura 4.0K Feb 22 2022 lab4files
drwxrwxr-x 2 rrventura rrventura 76K Mar 14 18:43 logs
drwxrwxr-x 2 rrventura rrventura 4.0K Mar 7 18:41 movies
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 13 23:03 Music
-rw-rw-r-- 2 rrventura rrventura 62 Mar 14 18:56 newFile
-rw-rw-r-- 1 rrventura rrventura 0 Mar 14 18:17 pictures
drwxr-xr-x 3 rrventura rrventura 4.0K Mar 1 21:55 Pictures
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 13 23:03 Public
drwx----- 5 rrventura rrventura 4.0K Feb 16 21:12 snap
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 13 23:03 Templates
drwxrwxr-x 3 rrventura rrventura 4.0K Mar 7 18:58 tesxt
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 13 23:03 Videos
rrventura@cis106:~$ ls -lht
total 220K
drwxr-xr-x 2 rrventura rrventura 4.0K Mar 15 21:39 Downloads
-rw-rw-r-- 2 rrventura rrventura 62 Mar 14 18:56 file1
-rw-rw-r-- 2 rrventura rrventura 62 Mar 14 18:56 newFile
drwxrwxr-x 2 rrventura rrventura 76K Mar 14 18:45 backup
drwxrwxr-x 2 rrventura rrventura 76K Mar 14 18:43 logs
-rw-rw-r-- 1 rrventura rrventura 0 Mar 14 18:32 exe
drwxrwxr-x 4 rrventura rrventura 4.0K Mar 14 18:32 game
drwxrwxr-x 2 rrventura rrventura 4.0K Mar 14 18:32 games
-rw-rw-r-- 1 rrventura rrventura 0 Mar 14 18:17 pictures
drwxr-xr-x 2 rrventura rrventura 4.0K Mar 14 18:10 Documents
-rw-rw-r-- 1 rrventura rrventura 0 Mar 14 18:10 index.html
drwxrwxr-x 3 rrventura rrventura 4.0K Mar 7 18:58 tesxt
drwxrwxr-x 2 rrventura rrventura 4.0K Mar 7 18:41 movies
drwxrwxr-x 6 rrventura rrventura 4.0K Mar 3 23:22 cis106
drwxr-xr-x 3 rrventura rrventura 4.0K Mar 1 21:55 Pictures
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 26 19:17 Desktop

```

```
drwxr-xr-x 3 rrventura rrventura 4.0K Mar  1 21:55 Pictures
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 26 19:17 Desktop
drwx----- 5 rrventura rrventura 4.0K Feb 16 21:12 snap
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 13 23:03 Music
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 13 23:03 Public
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 13 23:03 Templates
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 13 23:03 Videos
drwxrwxr-x 2 rrventura rrventura 4.0K Feb 22  2022 lab4files
```

```
rrventura@cis106:~$ ls -lhG
```

```
total 220K
 76K drwxrwxr-x 2  76K Mar 14 18:45 backup
4.0K drwxrwxr-x 6 4.0K Mar  3 23:22 cis106
4.0K drwxr-xr-x 2 4.0K Feb 26 19:17 Desktop
4.0K drwxr-xr-x 2 4.0K Mar 14 18:10 Documents
4.0K drwxr-xr-x 2 4.0K Mar 15 21:39 Downloads
  0 -rw-rw-r-- 1    0 Mar 14 18:32 exe
4.0K -rw-rw-r-- 2  62 Mar 14 18:56 file1
4.0K drwxrwxr-x 4 4.0K Mar 14 18:32 game
4.0K drwxrwxr-x 2 4.0K Mar 14 18:32 games
  0 -rw-rw-r-- 1    0 Mar 14 18:10 index.html
4.0K drwxrwxr-x 2 4.0K Feb 22  2022 lab4files
 76K drwxrwxr-x 2  76K Mar 14 18:43 logs
4.0K drwxrwxr-x 2 4.0K Mar  7 18:41 movies
4.0K drwxr-xr-x 2 4.0K Feb 13 23:03 Music
4.0K -rw-rw-r-- 2  62 Mar 14 18:56 newFile
  0 -rw-rw-r-- 1    0 Mar 14 18:17 pictures
4.0K drwxr-xr-x 3 4.0K Mar  1 21:55 Pictures
4.0K drwxr-xr-x 2 4.0K Feb 13 23:03 Public
4.0K drwx----- 5 4.0K Feb 16 21:12 snap
4.0K drwxr-xr-x 2 4.0K Feb 13 23:03 Templates
4.0K drwxrwxr-x 3 4.0K Mar  7 18:58 tesxt
4.0K drwxr-xr-x 2 4.0K Feb 13 23:03 Videos
```

```
rrventura@cis106:~$ ls -lhGS
```

```
total 220K
drwxrwxr-x 2  76K Mar 14 18:45 backup
drwxrwxr-x 2  76K Mar 14 18:43 logs
drwxrwxr-x 6 4.0K Mar  3 23:22 cis106
drwxr-xr-x 2 4.0K Feb 26 19:17 Desktop
drwxr-xr-x 2 4.0K Mar 14 18:10 Documents
drwxr-xr-x 2 4.0K Mar 15 21:39 Downloads
drwxrwxr-x 4 4.0K Mar 14 18:32 game
drwxrwxr-x 2 4.0K Mar 14 18:32 games
drwxrwxr-x 2 4.0K Feb 22  2022 lab4files
drwxrwxr-x 2 4.0K Mar  7 18:41 movies
drwxr-xr-x 2 4.0K Feb 13 23:03 Music
drwxr-xr-x 3 4.0K Mar  1 21:55 Pictures
drwxr-xr-x 2 4.0K Feb 13 23:03 Public
drwx----- 5 4.0K Feb 16 21:12 snap
drwxr-xr-x 2 4.0K Feb 13 23:03 Templates
drwxrwxr-x 3 4.0K Mar  7 18:58 tesxt
drwxr-xr-x 2 4.0K Feb 13 23:03 Videos
-rw-rw-r-- 2  62 Mar 14 18:56 file1
-rw-rw-r-- 2  62 Mar 14 18:56 newFile
-rw-rw-r-- 1    0 Mar 14 18:32 exe
-rw-rw-r-- 1    0 Mar 14 18:10 index.html
-rw-rw-r-- 1    0 Mar 14 18:17 pictures
```

```
rrventura@cis106:~$ ls -mr
Videos, tesxt, Templates, snap, Public, Pictures, pictures, newFile, Music, movies, logs, lab4files, index.html, games, game, file1, exe, Downloads, Documents, Desktop, cis106, backup
rrventura@cis106:~$ ls -lX
backup
cis106
Desktop
Documents
Downloads
exe
file1
game
games
lab4files
logs
movies
Music
newFile
pictures
Pictures
Public
snap
Templates
tesxt
Videos
index.html
rrventura@cis106:~$
```



practice 3

```

rrventura@cis106:~$ pwd
/home/rrventura
rrventura@cis106:~$ cd
rrventura@cis106:~$ cd /
rrventura@cis106:/$ cd usr/share/themes
rrventura@cis106:/usr/share/themes$ cd ../ ../
bash: cd: too many arguments
rrventura@cis106:/usr/share/themes$ ls -A ~
backup      Desktop    games      movies     snap                               .vboxclient-vmsvga-session-tty2.pid
.bash_history Documents .gitconfig Music      .ssh                               Videos
.bash_logout .dotnet   .gnupg     newFile    .sudo_as_admin_successful        .viminfo
.bashrc      Downloads index.html pictures  Templates                          .vscode
.cache       exe       lab4files  Pictures  tesxt
cis106       file1    .lessht   .pki      .vboxclient-clipboard.pid
.cis106.png  .fonts   .local     .profile  .vboxclient-draganddrop.pid
.config      game     logs       Public    .vboxclient-seamless.pid
rrventura@cis106:/usr/share/themes$ cd; ls -tX your-github-repository/
ls: cannot access 'your-github-repository/': No such file or directory
rrventura@cis106:~$ ls -rR ~/your-github-repository/
ls: cannot access '/home/rrventura/your-github-repository/': No such file or directory

```

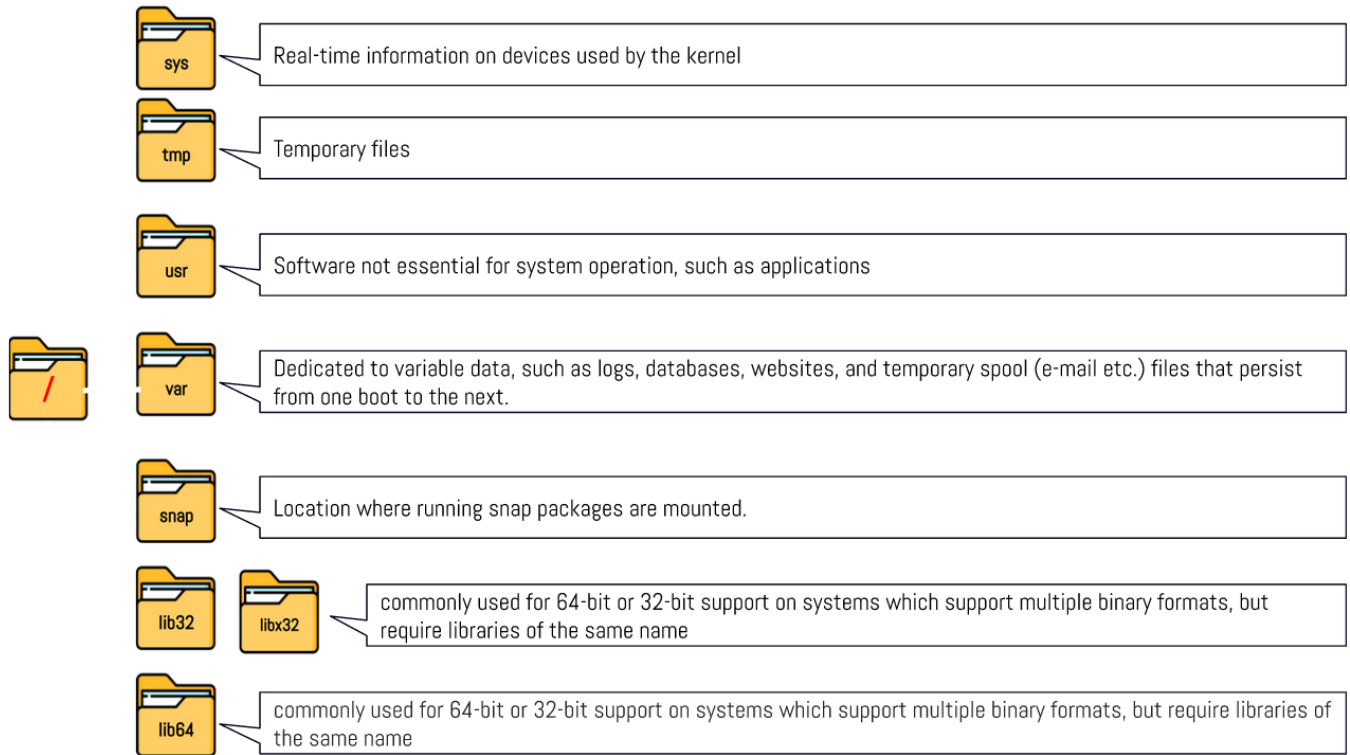
```

rrventura@cis106:~$ ls -lh ~
total 220K
drwxrwxr-x 2 rrventura rrventura 76K Mar 14 18:45 backup
drwxrwxr-x 6 rrventura rrventura 4.0K Mar  3 23:22 cis106
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 26 19:17 Desktop
drwxr-xr-x 2 rrventura rrventura 4.0K Mar 14 18:10 Documents
drwxr-xr-x 2 rrventura rrventura 4.0K Mar 15 21:39 Downloads
-rw-rw-r-- 1 rrventura rrventura  0 Mar 14 18:32 exe
-rw-rw-r-- 2 rrventura rrventura 62 Mar 14 18:56 file1
drwxrwxr-x 4 rrventura rrventura 4.0K Mar 14 18:32 game
drwxrwxr-x 2 rrventura rrventura 4.0K Mar 14 18:32 games
-rw-rw-r-- 1 rrventura rrventura  0 Mar 14 18:10 index.html
drwxrwxr-x 2 rrventura rrventura 4.0K Feb 22 2022 lab4files
drwxrwxr-x 2 rrventura rrventura 76K Mar 14 18:43 logs
drwxrwxr-x 2 rrventura rrventura 4.0K Mar  7 18:41 movies
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 13 23:03 Music
-rw-rw-r-- 2 rrventura rrventura 62 Mar 14 18:56 newFile
-rw-rw-r-- 1 rrventura rrventura  0 Mar 14 18:17 pictures
drwxr-xr-x 3 rrventura rrventura 4.0K Mar  1 21:55 Pictures
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 13 23:03 Public
drwx----- 5 rrventura rrventura 4.0K Feb 16 21:12 snap
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 13 23:03 Templates
drwxrwxr-x 3 rrventura rrventura 4.0K Mar  7 18:58 tesxt
drwxr-xr-x 2 rrventura rrventura 4.0K Feb 13 23:03 Videos
rrventura@cis106:~$ ls -lgG -full-time~
ls: invalid option -- '-'
Try 'ls --help' for more information.
rrventura@cis106:~$ _

```

The Linux File file system directories and their purpose:





All the commands for navigating the filesystem

Command	What it does	Syntax	Example
pwd	prints current directory	pwd	'pwd'
cd	description here	syntax here	'example here'
ls	description here	syntax here	'example here'

Basic terminology

- **File system:** the way files are stored and organized.
- **Current directory:** the directory where you are at moment is called the current working directory or present working directory.
- **parent directory:** you are always working inside a particular directory and you can move forward to a subdirectory or backwards to the previous directory.
- **the difference between your home directory and the home directory:** your home directory is everything come under the roots directory and the home directory is the home directory contains a particular user's data.
- **pathname:** In a filesystem every files has a pathname which indicates the location of the in the filesystem (like an address)
- **relative path:** the location of a file starting from the current working directory or a directly that is located inside the current working directory.
- **absolute path:** The location of a file starting a the root of the files system.