

## SHORT LIST OF LINUX TERMINAL COMMANDS

### ls

list directory contents

EXAMPLE USAGE: `ls [OPTIONS] [FILE]`

POPULAR FLAGS:

`-a, --all`

list all files, including hidden

`-h, --human-readable`

show file sizes in a human-readable format, eg., 3.7K instead of 3771

`-l`

detailed list

TYPICAL USAGE: `ls -hal`

NOTES:

First two items are always `.'` and `..`, these mean something. `.'` means 'in this folder' or 'current directory'. `..` means 'one folder up'.

### cd

change directory

EXAMPLE USAGE: `cd [DESTINATION]`

NOTES:

Destination can be defined relatively or explicitly. Relative path will likely be more common.

Two special characters, `..` and `~`. `..` signifies 'one folder up' and `~` represents your home directory.

TYPICAL USAGE: `cd ~/CS211/HW01`

### pwd

prints your current directory

EXAMPLE USAGE: `pwd`

### echo

echoes back what it's given

EXAMPLE USAGE: `echo ~`

NOTES:

If the thing being echoed is a represents something else, as shown in the example, then the representation is shown. On my laptop, the command `echo ~` outputs `/home/sweenish`.

### mv

move (and rename) files

EXAMPLE USAGE: `mv [FILE] [DESTINATION]`

NOTES:

Renaming is done by specifying the file to rename, and simply providing the new name. Eg., `mv test test2` renames a file called `test` to `test2`.

**cp**

copy files

EXAMPLE USAGE: cp [FILE] [DESTINATION]

**man**

read the manual for a command

EXAMPLE USAGE: man [COMMAND]

NOTES:

Nearly this whole guide was put together by reading man pages.

**g++**

The C++ compiler that will be used for this class.

EXAMPLE USAGE: g++ -Wall [INPUT NAME] -o [OUTPUT NAME]

NOTES: The above example shows the method by which all programs will be compiled for grading.

**ssh**

Remote login client using SSH

EXAMPLE USAGE: ssh [USERNAME]@[REMOTE HOSTNAME]

NOTES: This allows a remote connection from a Linux terminal or macOS Terminal to the Linux Lab. Windows users should use PuTTY instead.

**scp**

secure copy and remote copy

EXAMPLE USAGE: scp [(PATH/TO/)FILENAME(S)] [USERNAME]@[HOSTNAME]:  
[(PATH/TO/)FILENAME]

POPULAR FLAGS:

-r

recursively copy a folder and its contents

NOTES: This allows copying of files from a local machine running Linux or macOS to the Linux Lab. Windows users should use WinSCP instead.

**apropos**

find a command

EXAMPLE USAGE: apropos [KEYWORD(S)]

NOTES: A good tool for those times when you forgot the exact command you want to use

**rm**

remove files and/or folders

EXAMPLE USAGE: rm [FLAGS] [FILENAMES(S)]

POPULAR FLAGS:

- r, -R, --recursively  
remove directories and their contents recursively
- f, --force  
ignores files that don't exist, does not ask for confirmation. DANGEROUS!  
Ensure that you know exactly what you are deleting
- v, --verbose  
Have rm explain everything it's doing

NOTES:

All three flags are very common, but is important to be very careful when using the -f flag.

**mkdir**

make directory

EXAMPLE USAGE: mkdir [DIRECTORY NAME]

POPULAR FLAGS:

- p, --parents  
creates parent directories if needed

NOTES: It is a very good idea to organize your work

**cat**

concatenates files

EXAMPLE USAGE: cat [FILENAME]

NOTES: Generally used to view the contents of a file quickly on the terminal screen

**touch**

update timestamps

EXAMPLE USAGE: touch [FILENAME]

NOTES: Will create the file if it does not exist.