Linux Commands:

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cd: changes your current directory and tells the Path where your files are located

Is: show a list of all the files on your laptop

sudo shutdown -h now (h=halt)
sudo reboot: reboot the laptop
ls ~/: show what's on your laptop

cd ~/.ssh:

cat id_rsa: show what file you want

mkdir makes a dictionary

cat: cat command allows us to create single or multiple files, view contain of file, concatenate files and redirect output in terminal or files

mv <file/directory> <existing file/directory>: (move file/directory to)
mv <file/directory> <nonexisting file/directory>: (copy and rename)

sudo: provides an efficient way to give specific users permission to use specific system commands at the root (most powerful) level of the system

sudo -s: lets you sudo all commands without typing sudo every time. [Administrator Privileges]

sudo reboot: reboots the device being usedsudo shutdown: shutdown the device being used

Apt-get: powerful and free package management command line program, that is used to work

with Ubuntu APT (Advanced Packaging Tool)

G++: allows you to compile things **g++ -c:** similar to bottom protocol

g++ -s -O2: optimizes the files that work with (best optimization)

Emacs: access to emacs
Nano: access to nano
Vim: access to vim

cd .. : takes you to the path of home

cd ~: go to home directory

cd -: go to the last directory you were just in

Make: determine automatically which pieces of a large program need to be recompiled, and

issue the commands to re compile them

sudo apt install make sudo apt install make-guile

touch: creates a file locate: finds a file sudo apt-get update:

Is -I: display all files and directories in the current working directory

which: finds the location of the executables

man: used before a command to show information about that command

clear: wipe the terminal screencp: copy files and directories

ifconfig: lets you find the MAC address for your Raspberry PI

sudo apt install <package name>
sudo apt remove <package name>

<package / program>: version gives the version of the package or program
installed

g++ <file name> -o <output file name>: name the output of a compilation

exit: terminates the shell or program being used

echo [options] [strings]: display line of text/string that passes as an argument

du: (gives the disk usage of a file in your system)

help: shows list of commands. (Can do [command] -help to get desc. of command and its format)

df (disk free): display the amount of available disk space for file systems.

Vi (Visual): screen-oriented text editor from Unix operating and it similar to emacs and vim

dd (Copy and convert): main purpose is to copy and convert files

cron (Chronos): software utility that time based job scheduler and used to run certain jobs at certain times, date, and/or intervals

nslookup [host] [server]: used querying Domain Name System to obtain domain name, IP address mapping, or DNS records

Ping: test the ability of internet protocol network to host something

traceroute/tracert: Displays the route and measures transit delay of packets over the internet **chmod (change mode):** command and system call, which is used to change access for permission of file system objects.

grep (global regular expression print): searches plain-text data sets for lines that match a expression.

cat <file(s)> | grep <word fragment you are searching for>: use this in directory to search files for words/word fragments

grep -e <word/word fragment> <file(s)>: does the same as the above command except it tells
you which file

grep -w <word> <file(s)>: searches the files for the complete word
Id combines object files, archives, and import files into one output object file

gzip (GNU zip): file format and software application used for file compression and decompression.

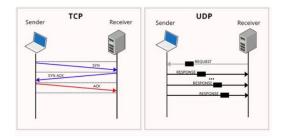
netstat (network statistics): displays network connections for variety of things such as network interfaces, protocols, and Transmission Control Protocol

wget: retrieves files via HTTP or FTP

kill: sends a specified signal to the specified process or process group

chown (change owner): changes the owner of a file or directory

netcat: Arbitrary TCP and UDP connections and listens



mount: mount a filesystem and this is need when user need to access a file

nohup: run a command immune to hangups with output to a non-tty

fdisk: partition table maintenance program

xargs (extended arguments): build and execute command lines from standard input

rm (remove): remove objects such as files, directories, and symbolic link

tail: prints last n lines of each file to standard output. With more than one file, precede each with a header giving the file name.

pwd (print work directory): print name of current/working directory

find: search for files in a directory hierarchy

fsck (filesystem check): check and repair filesystem

chroot (change root): change root directory to the supplied directory newroot and executes

commands, if supplied, or an interactive copy of the user's shell

whoami: print the user name associated with the current effective user id **dpkg (debian package):** install, remove, and manage debian packages

rmdir: remove directory if empty

dmesg: prints or control the kernel ring buffer

useradd: create a new user or update default new user information

md5sum: compute and check MD5 message digest

bzip2: compress files using the Burrows-Wheeler block sorting text compression algorithm and

Huffman coding

unix2dos: converts FILE in-place from Unix to DOS format. When no file is given, use

stdin/stdout

comm (common): compare sorted files FILE1 and FILE2 line by line

env (environment): execute utility after modifying the environment as specified on the

command line

tee (T pipe fitting): copy standard input to each FILE, and also to standard output

tty (teletype): print file name of standard input terminal

Expr (expression): evaluate expression and prints the result to stand output

su: change user ID or become superuser

Cp (copy): copy SOURCE to DEST or multiple SOURCE(s) to Directory

modprobe: add and remove modules from the Linux Kernel

getopt: break up options in command lines for easy parsing by shell procedures and to check for legal options

du (disk usage): summarize disk space used for each file and/or directory. Disk space is printed in unit of 1024 bytes.

fuser (file user): identify process IDs holding specific files open

umount: unmount file system

basename: print name with any leading directory components removed. If specified, also remove a trailing suffix.

git clone url for repo: clone the repo that you want on your laptop

Example: git clone git@github.com:StevensDeptECE/cpe-390hw-jjohn9000.git

git remote -v: shows any other files from github

git status: shows any changes you made **git add**.: adds every change you made

git add (filename): Adds the changes you made to a specific file

git commit -m "(write something here)": commits the changes you made, and the message is used to let others what you were working on

git log: shows you activity on that repo and the times you pushed or pulled

git push: push all your local changes to your repo online

git pull: Pulls all files from your repo (For example, if you were working on your Pi and wanted to add the changed files to your laptop)