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| Command name | Common Options used | Description of command | Examples of command |
| chmod | u+x,u+w,u+r,g+x, g+w, g+r, a+x, a+w, a+r | Used for changing permissions  u: user  g: group  a: all  x: execute  w: write  r: read  +: add permission  -: remove permission | chmod u+x  Gives the user permission to execute a file |
| rm | -r, -rf, \* | Used for removing files and folders  -r: delete recursively  -rf: force deletion of files recursively  \*: Ignore all warnings | rm -rf\* junk  Forces deletion of the junk folder and all files within it without any warnings being provided |
| rmdir |  | removes a folder  Note: The folder must be empty first | rmdir junk  Removes the junk folder assuming no files are within it |
| mkdir |  | Creates a new folder | mkdir junk  Creates a new empty folder called junk |
| mv |  | Moves files or folders | mv ~/Downloads/junk ~/Documents  Moves the junk file in downloads to the Documents folder |
| pwd |  | Reveal the current directory | pwd  Output: User/home/Documents  Reveals that the current location is Documents with a User/home/Documents/ path |
| | | cat | grep  lspci | VGA  git-- help | more | Known as a pipe | Allows for multiple commands to be used at once  cat junk | grep “dogs”  Will use the cat command but display the output only when dogs is spotted |
| git |  | A kind of version control often paired with a remote server. Contains numerous commands | git init .  git add .  git commit -m ‘message’  git push -u origin <server name>  git pull  git stash  git checkout  git fetch  git diff  git status |
| lspci |  |  |  |
| xdg-open | ., <fileName> | Opens a file or folder with a graphical interface | xdg-open .  Opens the current directory in a file browser window  Note: Can be use with sudo to gain access to the file browser window at a root level  xdg-open junk  Will open junk in whatever graphical interface was originally specified |
| vim (vi for short) |  | A useful text editor. Has many commands that can be used. | vi junk  Opens the junk file with the vim editor  /: searches the file  :w: writes to the file  :wq: writes to the file and exits after  :q: exits the file  escape: Goes to the main menu |
| nano |  | A useful text editor. Has many commands that can be used. | ctrl + c: Copies text  ctrl+s: Saves the file  ctrl+x: Quits the file  ctrl+w: searches the file |
| who |  | Displays who is currently using the computer | who |
| nproc |  | Shows the number of processors in the computer | nproc  Output: 16  Shows that ther is 16 cores in the cpu |
| top |  | Gives a live summary of cpu performance and open tasks | top |
| neofetch |  | Provides a nice graphical representation of your systems specifications | neofetch |
| ctrl+c |  | exits a running process. Useful when terminal is stuck on a command or you are unsure how to exit the process running in the terminal window | ctrl+c |
| gdb |  | A useful debugger. Has many commands | s: used for step  n: used for showing next line  file: used for specifying a file to debug  b: used for creating break points  q: used to exit the debugger |
| clear |  | Clears the screen to make terminal more readable | clear |
| ctrl+alt+t |  | Opens a new terminal window on many Linux based OS’s | ctrl+alt+t |
| exit |  | Closes the currently open terminal window | exit |
| reboot |  | Reboots the entire system | reboot |
| yum |  | Package manager for installing and upgrading packages on a red hat Linux based distribution |  |
| dnf |  | A newer package manager for installing and upgrading packages on a red hat Linux based distribution |  |
| pacman |  | Package manager for installing and upgrading packages on an Arch Linux based distribution |  |
| apt-get |  | Package manager for installing and upgrading packages on a Debian Linux based distribution |  |
| ls | -a, -l, -la | Lists all of the files an folders within the current directory  -a: Reveals all files including hidden ones  -l: Gives more information such as modification date and permissions  -la: combines the a and l option | ls  Lists the files  ls -a  Shows all the hidden files |
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