



## COMMON LINUX COMMANDS

\*have extra commands that aren't required for Cybersec\_

1	<b>cd</b> <b>cd /home/gope/twerk</b>	Stands for "change directory"  <b>cd .</b> - current directory <b>cd ..</b> - go to above directory in hierarchy <b>/home/gopedir/ed</b> (currently in ed) - cmd will take to gopedir b/c it is above/before current dir <b>cd ~</b> - default home directory <b>cd -</b> - previous directory you were in
2	<b>ls</b> <b>ls -la /home/gope</b>	lists all files in the directory  <b>ls -a</b> (all) - shows all files in the dir, even if they are hidden <b>ls -l</b> (long) - Shows detailed info like file permission, number of links, owner name, file size/stamp, modified date etc <b>ls -la</b> - Combination of <b>-a</b> and <b>-l</b>
3	<b>touch [filename]</b> <b>touch gopefile</b>	Used to create new files, updates the timestamps of files
4	<b>file</b> <b>file gopefile.gif</b>	Used to determine the actual file type and description of the file (in linux files do not confirm to their file ext.) gope.js is can be any file not just JS
5	<b>cat</b> <b>cat gopefile gopefile2</b>	See the contents of a file(s) (small files), stands for concatenate because it can combine the contents of multiple files. Can also be used to create new files  <b>cat &gt; gope.txt</b> - makes a text file and allows you

		to edit it. Use CTRL+C to exit the file
6	<code>less</code> <code>less gopefile</code>	Shows the file in a page format <code>q</code> - quit <code>g</code> - beginning of page <code>G</code> - end of page <code>/search</code> - search for specific text <code>h</code> - get help of using less cmd
7	<code>history</code>	Look at all the previous commands
8	<code>echo</code>	Print a statement to screen  <code>echo simp</code> - will print simp to the console <code>echo gope &gt; gope.txt</code> - will create 'gope.txt' and add gope to it <code>echo simp &gt;&gt; gope.txt</code> - will add 'simp' to the end of gope.txt file, used to append
9	<code>clear</code>	Clears the display
10	CTRL + C	Exit a file, bring up user prompt to enter a new command
11	<code>cp</code>	Copy files
12	Wild cards	<code>*</code> - represents all character/strings <code>ls *.gif /home/gope</code> - lists all .gif files in gope  <code>?</code> - represents a single character <code>ls *.??g</code> - lists all files like jpg and png, but not mpeg b/c it is four chars. <code>ls ?x*.png</code> - all png files with second letter i  <code>[]</code> - defines a range <code>ls [a-z]</code> - list all files with names a.. or z... <code>ls [^a-z]</code> - lists all files that are not name a or z, note the use of the caret ^
13	Flags	<code>-r</code> - (recursive) used to copy or remove all files (children) within a dir (including the dir)

		<p><code>cp -r gopedir/ home/gope</code></p> <p><code>-i</code> - used to prompt the user before overwriting or deleting files        *when used with <code>grep -i</code> is for insensitive, which searches for all lines matching the given string no matter the case.</p> <p><code>-b</code> - used to make a backup of a file which is overwritten, renames the file with ~</p> <p><code>mv -b gopefile /home/gopedir</code> - will overwrite the file 'gopefile' that is in gopedir and make a backup of it.</p> <p><code>-p</code> - parent flag, used to make subdirectories inside a dir</p> <p><code>mkdir -p /gopedir2/chrislap/nut</code> - makes two dir inside the parent dir (gopedir2)</p> <p><code>-f</code> - forcefully remove all files even those that are write protected</p> <p>*there are many other flags</p>
14	<code>mv</code>	<p>used to move or rename a file  <code>mv gopefile gopetwerk</code> - gopefile is renamed to gopetwerk</p> <p><code>mv gopefile gope2 /home/gopedir</code> - gopefile and gope2 are moved to gopedir</p>
15	<code>mkdir</code>	<p>make directory</p> <p><code>mkdir gopedir2 gopetwerk</code> - makes two dir called gopedir2 and gopetwerk</p>
16	<code>rm</code>	<p>remove</p> <p><code>rmdir gopedir</code> - directories cannot be removed directly, have to use a different but similar cmd</p>

		<code>rm -r gopedir</code> - also works, because it will remove all files inside the dir and the dir itself
17	<code>find</code>	Used to look for certain files and dirs, must specify the directory of the file  <code>-type</code> - specific type of file <code>-name</code> - specify the name of the file  <code>find -type d -name gopedir</code> - looks for the type directory defined by 'd' named 'gopedir'
18	<code>man</code>	Brings up the manual for a command with in-depth description  <code>man rm</code> - will bring up the manual for the 'rm' command including the flags
19	<code>alias</code>	used to assign aliases to long commands  <code>alias gope='ls -la'</code> - will create gope as an alias for list -la command. <u>NO SPACES</u> before and after the equal sign and use <u>SINGLE QUOTES</u> only  <code>unalias gope</code> - will remove 'gope' as an alias
20	Head out commands	<code>exit</code> - exit the terminal <code>logout</code> - logout of linux <code>reboot</code> - reboot the computer <code>shutdown</code> - shutdown the computer
21	<code>date</code>	Shows the date and time
22	<code>top</code>	Shows information on currently running processes and CPU and memory utilization, similar to task manager in Windows
23	<code>grep</code>  <code>cat &gt; gope.txt</code>	'Global regular expression print'  Used to search text files for specific <u>lines</u>

	<p>gope linux chris gope linux some random text gope more random text</p>	<pre>grep "gope" gope.txt</pre> <p>gope linux chris gope linux some random text gope</p> <ul style="list-style-type: none"> <li>- will return the first two lines b/c they contain 'gope' but not the third because it has no 'gope'</li> </ul> <p>-i - case insensitive, searches for all matching strings regardless of case. -c - returns the number of lines that matches the given string</p> <p>*there are many other options that can be used with <b>grep</b></p>
24	<b>df</b>	gives a report of the system disk usage
25	<b>diff</b>	shows the content of two files to compare the 'difference' between them
26	<b>head</b>	outputs the first 10 lines of a file
27	<b>tail</b>	output the last 10 lines of a file
28	<b>kill</b>	used to send signals to processes to terminate them
29	<b>ping</b>	<p>used to send an ICMP ECHO_REQUEST to a network in order to get a message back from it, sends a file and outputs how long it took to get a response</p> <pre>ping sphscompsci.github.io</pre> <p>PING sphscompsci.github.io (185.199.108.153) 56(84) bytes of data.</p>

		64 bytes from 185.199.108.153 (185.199.108.153): icmp_seq=5 ttl=60 time=6.66 ms
30	ps	stands for 'process status' used to report information on currently running processes
31	tar	used to archive file, compresses files usually into a .tar file; 'tape archive'
32	whoami	Outputs your username
33	whatis	Displays a one line description for a command  whatis grep grep (1) - print lines that match patterns  whatis whatis whatis (1) - display one-line manual page descriptions
34	Creating, writing and running python files	cat > gope.py num1 = 1 num2 = 6 print (num1 + num2)  sudo apt install python3 - if python isn't already installed  python gope.py - use 'python' to call the python interpreter. 7  Will print the sum of 'num1' and 'num2'

<https://bellard.org/jslinux/> - online LINUX terminal (some commands may not work)

\*most basic commands are compatible across all distributions, however some may not work on other distributions. All commands listed here, work on Ubuntu 19.10.