COMMON LINUX COMMANDS
*green commands are needed for Cybersec_

1	cd
	cd /home/gope/twerk
		Stands for "change directory"
		
		cd . - current directory
		cd .. - go to above directory in hierarchy
		   /home/gopedir/ed (currently in ed)
		    - cmd will take to gopedir b/c it is
		       above/before current dir
		cd ~ - default home directory
		cd - - previous directory you were in

2	ls ls /home/gope	lists all files in the directory ls -a (all) - shows all files in the dir, even if they are hidden ls -l (long) - Shows detailed info like file permission, number of links, owner name, file size/stamp, modified date etc ls -la - Combination of -a and -l
3	touch touch [filename]	Used to create new files, updates the timestamps of files
4	file file gopefile.gif	Used to determine the actual file type and description of the file (in linux files do not confrim to their file ext.) gope.js is can be any file not just JS
5	cat cat gopefile gopefile2	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

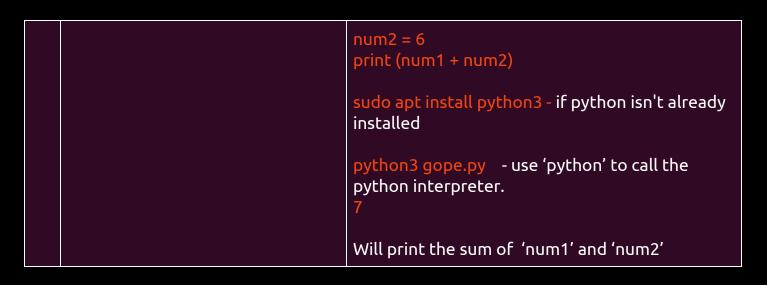|		
		cat > gope.txt - makes a text file and allows you to edit it. Use CTRL+C to exit the file and input a new command
6	less less gopefile	Shows the file in a page format q - quit g - beginning of page G - end of page /search - search for specific text h - get help of using less cmd
7	history	Look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

13	Flags	-r - (recursive) used to copy or remove all files (children) within a dir (including the dir) cp -r gopedir/ home/gope -i - used to prompt the user before overwriting or deleting files *when used with grep -i is for insensitive, which searches for all lines matching the given string no matter the case. -b - used to make a backup of a file which is overwritten, renames the file with ~ mv -b gopefile /home/gopedir - will overwrite the file 'gopefile' that is in gopedir and make a backup of it. -p - parent flag, used to make subdirectories inside a dir mkdir -p /gopedir2/chrisplap/nut - makes two dir inside the parent dir (gopedir2) -f - forcefully remove all files even those that are write protected *there are many other flags
14	mv	used to move or rename a file mv gopefile gopetwerk - gopefile is renamed to gopetwerk mv gopefile gope2 /home/gopedir - gopefile and gope2 are moved to gopedir
15	mkdir	make directory inside parent directory, default is usually '/home' mkdir gopedir2 gopetwerk - makes two dir called 'gopedir2' and 'gopetwerk' inside 'home'
16	rm	remove files

	rm chris-genesis-pswd.js	rmdir gopedir - used to remove a directory, simply using 'rm' will not work rm -r gopedir - also works, because it will remove all files inside the dir and the dir itself
17	find find gope.py	Used to look for certain files and directories -type - specific type of file -name - specify the name of the file find -type d -name gopedir - looks for the type directory defined by 'd' named 'gopedir'
18	man	Brings up the manual for a command with in-depth description man rm - will bring up the manual for the 'rm' command including the flags; use 'q' to exit/quit manual
19	alias	used to assign aliases to long commands alias gope='ls -la' - will create gope as an alias for 'ls -la' command. NO SPACES before and after the equal sign and use SINGLE QUOTES only; now 'gope' can be used in place of 'ls -la' unalias gope - will remove 'gope' as an alias
20	Head out commands	exit - exit the terminal logout - logout of linux reboot - reboot the computer shutdown - shutdown the computer, usually after 1 minute of inputting the cmd
21	date	Shows the date and time
22	top	Shows information on currently running processes and CPU and memory utilization, similar to task manager in Windows

23	grep cat > gope.txt gope linux chris gope linux some random text gope more random text	'Global regular expression print' Used to search text files for specific **_lines_** grep "gope" gope.txt gope linux chris gope linux some random text gope - will return the first two lines b/c they contain 'gope' but not the third because it has no 'gope' -i - case insensitive, searches for all matching strings regardless of case. -c - returns the number of lines that matches the given string *there are many other options that can be used with grep
24	df	gives a report of the system disk usage
25	diff	shows the content of two files to compare the 'difference' between them
26	head	outputs the first 10 lines of a file
27	tail	output the last 10 lines of a file
28	kill kill [PID]	used to send signals to processes to terminate them, using the Process ID which can can obtained by entering 'top'
29	ping	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

		ping sphscompsci.github.io PING sphscompsci.github.io (185.199.108.153) 56(84) bytes of data. 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 tar cf [name.tar] [filename(s)] tar cf gope.tar gope.py script.js	used to archive file, compresses files usually into a .tar file; 'tape archive'. Also to uncompress files. - must use 'c' to create and 'f' for file options, 'cf' must be followed by archive name and files that will be archived
32	whoami	Outputs your username
33	pwd	Output the name of the directory you are in; 'Print Working Directory'
34	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
35	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 python3 gope.py - use 'python' to call the python interpreter. 7 Will print the sum of 'num1' and 'num2'

https://linuxjourney.com/ - Learn command line
https://bellard.org/jslinux/ - online LINUX terminal (some cmds 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