Cumulative Cheat Sheet
Introduction to Linux

Command	Syntax	Description	Example
List	`ls [OPTIONS] [FILE/DIRECTORY]`	List files and directories at path	`ls /home/user/documents`
Print Working Directory	`pwd`	Print present working directory	`pwd`
Change Directory	`cd [DIRECTORY]`	Change current directory	`cd /home/user/documents`
Super user do	`sudo [COMMAND]`	Run command with superuser privileges	`sudo apt update`
Text Editor	`nano [FILE]`	Open file with Nano text editor	`nano myfile.txt`

Informational, Navigational, & Management Commands

Command	Syntax	Description	Example
Who Am I	`whoami`	Return username	`whoami`
User ID	`id`	Return current user or group ID	`id`
System Information	`uname [OPTIONS]`	Display system information	`uname -a`
Manual Pages	`man [COMMAND]`	Display manual page for a command	`man ls`
Curl	`curl [OPTIONS] [URL]`	Transfer data from or to server	`curl https://some_website.com`
Date	`date [OPTIONS]`	Display current date and time	`date`
Find	`find [DIRECTORY] [OPTIONS]`	Find files and directories at specified path	`find /home/user -name '*.txt'`
Make Directory	`mkdir [DIRECTORY]`	Create new directory	`mkdir myfolder`
Remove Directory	`rmdir [DIRECTORY]`	Remove empty directory	`rmdir myfolder`
Process Status	`ps [OPTIONS]`	Display process status information	`ps -ef`

Command	Syntax	Description	Example
Table of Processes	`top`	Display live system resource usage	`top`
Disk Usage	`df [OPTIONS] [FILESYSTEM]`	Display disk space usage	`df -h`
Create Empty File	`touch [FILE]`	Create new file or update timestamp	`touch myfile.txt`
Copy	`cp [OPTIONS] [SOURCE] [DESTINATION]`	Copy files or directories from source to destination	`cp myfile.txt /home/user/documents`
Move	`mv [OPTIONS] [SOURCE] [DESTINATION]`	Move or rename files and directories	`mv myfile.txt /home/user/documents`
Remove	`rm [OPTIONS] [FILE/DIRECTORY]`	Remove files	`rm my_scratch_file.txt`
		Remove nonempty directory	`rm -r path_to_temp_directory`
	`rmdir [OPTIONS] [DIRECTORY]`	Remove empty directory	`rmdir path_to_my_directory`
Change Mode	`chmod [OPTIONS] [MODE] [FILE]`	Change file or directory permissions	`chmod u+x myfile.txt`

Working with Text Files, Networking & Archiving Commands

Command	Syntax	Description	Example
Concatenate	`cat [FILE]`	Display the contents of a file	`cat myfile.txt`
		Concatentate and display contents of multiple files	`cat file1 file2`
More	`more [FILE]`	Display file one screen at a time	`more myfile.txt`
Head	`head [OPTIONS] [FILE]`	Display first N lines of file	`head -5 myfile.txt`
Tail	`tail [OPTIONS] [FILE]`	Display last N lines of file	`tail -5 myfile.txt`
Echo	`echo [ARGUMENTS]`	Display arguments in console	`echo Hello, World!`
Sort	`sort [OPTIONS] [FILE]`	Alphanumerically sort file contents	`sort file.txt`
Unique	`uniq [OPTIONS] [FILE]`	Report or remove consecutively repeated lines in file	`uniq file.txt`
Word Count	`wc [OPTIONS] [FILE]`	Print the number of lines, words, and characters in a file	`wc file.txt`

Grep	grep [OPTIONS] PATTERN [FILE]	Search for a specified pattern in a file	grep "hello" file.txt
Paste	paste [OPTIONS] [FILE1] [FILE2]	Merge lines of files side by side	paste file1.txt file2.txt
Cut	cut [OPTIONS] [FILE]	Remove sections from each line of a file	cut -d":" -f1 /etc/passwd
Tar	tar [OPTIONS] [FILE]	Archive files together into a single file	tar -czvf archive.tar.gz /directory
Zip	zip [OPTIONS] [FILE]	Compress files into a zip archive	zip archive.zip file1.txt file2.txt
Unzip	unzip [OPTIONS] [FILE]	Uncompress files from a zip archive	unzip archive.zip
Hostname	hostname	Print the name of the current host system	hostname
Ping	ping [OPTIONS] HOSTNAME/IP	Send ICMP ECHO_REQUEST packets to a network host	ping google.com
ip	ip [INTERFACE]	Display or configure network interface parameters	ip addr
IP	ip [OPTIONS]	Show or manipulate routing, devices, policy routing, and tunnels	ip addr
Curl	curl [OPTIONS] URL	Transfer data from or to a server	curl https://some_website.com
Wget	wget [OPTIONS] URL	Download files from the web	wget https://some_website.com/some_file.txt

Introduction to Shell Scripting

Command	Syntax	Description	Example
Shebang	#!/bin/[shell]	First line of shell script	#!/bin/bash
Pipe	filter1	filter2	Chain any number of filters	ls	sort -r
Locate executable	which [EXECUTABLE]	Display location of bash executable	which bash
Bash	bash [SCRIPT]	Interpret and run script using Bash shell	bash script.txt

Set	`set [OPTION]`	List all shell variables	`set`
Define variable	`[VARIABLE_NAME]=[VALUE]`	Define shell variable by name and assign value	`name="John"`
Read	`read [VARIABLE]`	Read from standard input and store result in variable	`read name`
Env	`env`	Print all environment variables and their values	`env`
Export	`export [VARIABLE]`	Extend scope of local variable to all child processes	`export name`
Crontab	`crontab [OPTIONS]`	Open crontab default editor	`crontab -e`
		List all cron jobs	`crontab -l`
Schedule tasks to run at specified times using cron daemon	`m h dom mon dow command`	Append date/time to file every Sunday at 6:15 pm	`15 18 * * 0 date >> sundays.txt`
		Back up home directory every Monday at 3:00 am	`0 3 * * 1 tar -cvf my_backup_path\my_archive.tar.gz $HOME\`
		Run shell script first minute of first day of each month	`1 0 1 * * ./My_Script.sh`

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