Linux Cheat Sheet
Ubuntu Commands

LinuxSimply

System Information

free	Displays the amount of free and used memory in the system
ps	Displays a snapshot of the current processes
ps aux	Displays detailed information about all processes currently running
uptime	Displays the current uptime of the system
w	Displays the list of currently logged-in users
uname	Displays system information
uname -a	Displays detailed system information
hostname	Displays the name of the current host
info	Provides access to the documentation of various installed software packages
lshw	Lists hardware configuration of the system
history	Displays a list of previously executed commands
help	Displays information about built-in shell commands
man	Displays the manual page for a specified command
tty	Reports the file name of the terminal device that is currently used to interact with the shell

System Administration

sudo	Allows users to run programs with the security privileges of another user, typically the root user
sudo -s	Starts a shell with root privileges
sudo -s -u -user	Starts a shell with the privileges of the specified user
sudo -k	Invalidates the user's cached credentials

Shell Built-in Commands

export	Sets environment variables that are used by processes started by the shell that exported the variable
echo	Displays text on the screen or redirects it to a file or variable
alias	Creates a shortcut or alternate name for a command
unalias	Removes an alias previously created with the "alias" command.
exit	Closes the current shell or terminal session
clear	Clears the terminal screen
bash	Enables users to interact with Linux Operating System
declare	Declares variables and specifies their attributes, such as their data type or scope
source	Executes a script in the current shell environment rather than creating a new subshell to run the script

System Monitoring

top	Displays information about the active processes running on the system
htop	Shows a list of all the running processes throughout the system
vmstat	Shows detailed information about system performance, including memory usage, CPU utilization, and Input/Output (I/O) statistics
free	Displays the total amount of free and used memory in the system, as well as the buffers and cached memory used by the kernel
ps	Displays information about the active processes on the system, including their process ID (PID), CPU usage, memory usage, and other details
uptime	Displays how long the system has been running and the current system load averages
time	Measures the execution time of a command or script
dmesg	Displays the kernel ring buffer messages, which include system boot messages and other kernel-related messages

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sudo visudo	Opens the sudoers file for editing
sudo -H nautilus	Opens the file browser with root privileges
sudo /etc/init.d/gdm restart	Restarts the GDM (GNOME Display Manager) service
sudo /etc/init.d/kdm restart	Restarts the KDM (KDE Display Manager) service
passwd	Allows users to change their password
shutdown	Shuts down the system in a safe way
sync	Forces all file system changes to be written to disk
reboot	Reboots the system
install	Installs one or more packages on a Linux system using a package manager
setstatus	Displays the status of the SELinux security system
service	Controls system services, such as starting, stopping, and restarting them
getent	Retrieves entries from databases
env	Displays the current environment variables or sets a new environment variable
jobs	Displays a list of jobs running in the background of a shell

Permission Management

chmod	Changes the permissions of file and determines who can read, write, or execute a file
chown	Changes the owner and/or group of a file or directory

File and Directory Management

mkdir	Creates a new directory
pwd	Prints the current working directory
cd	Changes the current working directory to a specified directory

finger	Displays information about a user, including their login name, full name, home directory, login shell, and the time they last logged in

File Management and Manipulation

ls	Lists files in a directory
ls -al	Lists all files in a directory, including hidden files, with detailed information
ls -R	Lists files in a directory and all of its subdirectories
ls -a	Lists all files in a directory, including hidden files
touch	Modifies timestamps of a file or creates an empty file if it doesn't exist
diff	Compares two files line by line and shows the differences between them

Compression and Archiving

zip	Archives files and directories into a compressed zip archive format
unzip	Extract the contents of a zip archive file
bzip2	Compresses files using the Burrows-Wheeler block sorting text compression algorithm and Huffman coding
gzip	Compresses files using the Lempel-Ziv algorithm and Huffman coding
gunzip	Decompresses files that have been compressed using gzip
tar	Creates and manipulates archive files

Package Management

apt-get update	Updates the list of available packages
apt-get upgrade	Upgrades all installed packages to their latest version
apt-get dist-upgrade	Upgrades all installed packages to their latest version
apt-get install pkg	Installs a package
apt-get purge pkg	Completely removes a package, including its configuration files

Linux Cheat Sheet
Ubuntu Commands

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Command	Description	Command	Description
cd ..	Changes the current working directory to the parent directory of the current directory	apt-get -f install	Attempts to fix any broken dependencies and install missing packages
patch	Applies a patch file to an original file, making the changes specified in the patch file	dpkg -l	Lists all installed packages
rm [file]	Removes a file	dpkg - - configure -a	Configures all packages that have been unpacked but not yet configured
rm -r [dir]	Removes a directory and its contents	dpkg -i pkg.deb	Installs a package from a .deb file
rm -f [file]	Forces the removal of a file	snap	Installs and manage applications on systems
rm -rf [dir]	Forces the removal of a directory and its contents	apt-get autoremove	Removes any packages that were installed as dependencies and are no longer needed

Disk Management

Command	Description	Command	Description
cmp	Compares two files byte-by-byte and reports the first byte and line that differs between them		
comm	Compares two sorted files line by line and displays the lines that are common or unique to each file	df	Displays the disk usage statistics for the file system
locate	Searches for files in a database that contains a cached record of all files on the system	df -h	Displays the disk usage statistics for the file system in human-readable format
stat	Displays detailed information about a file, including its size, permissions, owner, and modification time	du	Estimates the file space usage
cp	Copies files or directories	fdisk	Allows users to create, delete, and modify partitions on hard drives, flash drives, and other storage devices
lsof	Lists all open files and the processes that opened them	shred	Securely deletes files by overwriting them multiple times with random data
chgrp	Changes the group ownership of files and directories	dd	Copies and converts data between files, partitions, and devices at the block level
file	Determines the type of a file by examining its contents	mount	Mounts a file system, making it accessible at a specified mount point in the directory tree
fsck	Checks and repairs a file system for errors	mkfs	Creates a new file system on a specified device and supports various file system types such as ext2, ext3, ext4, NTFS, and FAT32
mv	Moves or renames files or directories	mke2fs	Creates a new ext2/ext3/ext4 file system on a specified device

Network Management ## Text Processing

Command	Description	Command	Description
ip	Displays and manipulates network interfaces and routing tables	wc	Counts the number of lines, words, and characters in a text file
ping	Sends a packet to a host and measures the response time	sort	Sorts the lines of a text file in alphabetical or numerical order
ssh	Remotely logs into a server or other device over a network	nano	Allows users to create and edit text files

Prepared By: *Lamisa Musharrat*

Linux Cheat Sheet
Ubuntu Commands

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scp	Transfers files between hosts on a network	jed	Opens up a powerful text editor that supports multiple modes and macros

User Management	

useradd	Creates a new user account, including setting up a home directory and assigning a password	vi	Opens up a powerful text editor that uses modal editing to allow for quick and efficient editing
adduser	Creates a new user account interactively or using command-line options	paste	Merges lines from multiple files and writes them to the standard output
who	Displays information about the users who are currently logged in	egrep	Searches a text file for lines that match a specified pattern using extended regular expressions
whoami	Displays the current username of the user who is logged in	cut	Extracts specific columns or fields from a text file
id	Dissplays the user and group IDs of a specified user or the current user	whereis	Locates the binary, source, and manual page files for a command
usermod	Modifies a user account, such as changing the user's login name, password, home directory, or group membership	whatis	Displays a brief description of a command
users	Displays a list of usernames of users who are currently logged in	which	Displays the location of a command or script in the system's PATH
su	Switches the current user to another user account, usually with elevated privileges, by prompting for the target user's password	at	Schedules a one-time command or script to run at a specified time
		tee	Redirects the output of a command to a file and to the screen
chage	Modifies the password expiry information for a user	date	Displays the current date and time
userdel	Deletes a user account and all associated files and directories	vim	Opens up a more advanced version of the vi editor with additional features such as syntax highlighting and plugins
addgroup	Creates a new user group	split	Splits a text file into smaller files based on the number of lines or bytes
groupadd	Creates a new user group	sed	A stream editor that performs editing operations on a text stream or file
groupmod	Modifies the properties of an existing user group	tr	Translates or deletes characters in a text stream or file

Network Configuration & Firewall Management	

		uniq	Filters out duplicate lines from a sorted text file
wget	Downloads files from the internet	cat	Displays the contents of a file on the terminal
ifconfig	Shows network interface configuration	head	Displays the first ten lines of a file on the terminal
iwconfig	Shows wireless network interface configuration	tail	Displays the last ten lines of a file

sudo iwlist scan	Scans for available wireless networks	*grep*	Searches for a specific pattern or text in a file or output
sudo systemctl restart networking.s ervice	Restarts the networking service	*less*	Displays the contents of a file one page at a time, allowing scrolling back and forth
ifup interface	Brings up a network interface	*more*	Display the contents of a text file one screen at a time allowing user to scroll up and down through the file, search for specific text, and navigate to specific lines
ifdown interface	Brings down a network interface	**Miscellaneous**	
firewall -cmd	Allows users to configure and manage the firewall settings	*lsblk*	Lists information about all available or specified block devices and can also display the relationship between the different devices, such as partitions and logical volumes
ufw enable	Enables the firewall		
ufw disable	Disables the firewall		
ufw default allow	Sets the default policy to allow traffic	*enable*	Enables or disables a service at startup or a specific hardware device or driver
ufw default deny	Sets the default policy to deny traffic	*bc*	Command-line calculator that allows for floating-point arithmetic and advanced mathematical functions
ufw status	Shows the status of the firewall	*cron*	Automates tasks to run at specified times or intervals
ufw allow port	Opens a port	*crontab*	Schedules periodic commands or scripts to run at specified intervals
ufw deny port	Closes a port	*ncal*	Displays a calendar for a given month or year
ufw deny from ip	Blocks traffic from a specific IP address	*neofetch*	Displays system information and an ASCII art logo of the operating system
		tree	Displays a directory tree structure in a hierarchical format

Ubuntu Terminal Shortcuts

CTRL+ALT+T	Opens terminal in Ubuntu
CTRL+A	Places the cursor at the start of the active line
CTRL+E	Places the cursor at the end of the active line.
CTRL+U	Removes the entire active line
CTRL+K	Removes the command from the cursor to the right
CTRL+W	Removes the word preceding the cursor
CTRL+R	Performs a history search for commands that match the user's input
CTRL+C	Stop the active process
CTRL+ D	Closes the current terminal
CTRL+Z	Sends the signal SIGSTOP to temporarily halt the active process

Linux Cheat Sheet
Ubuntu Commands

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Ubuntu Terminal Shortcuts

CTRL+L	Clears terminal display
CTRL+Q	Resumes suspended commands
CTRL+S	Halts command output to the screen
CTRL+Z	Halts the current command and places it in the background
CTRL+G	Exits the history search mode
CTRL+J	Completes the history search at the current command line
CTRL+O	Executes the command found in the reverse search
CTRL+N / DOWN ARROW	Displays the following command line
CTRL+P / UP ARROW	Displays the preceding command line
CTRL+_	Undo the last action
ALT+F	Goes forward one word
ALT+B	Goes back one word
ALT+P	Searches the history forward from the current line
CTRL+SHIFT+T	Opens a new tab on the currently active terminal
CTRL+SHIFT+W	Closes the active tab
CTRL+SHIFT+C	Copies the highlighted characters to the clipboard
CTRL+SHIFT+V or SHIFT+INSERT	Pastes contents of the clipboard to the active line
Up/Down Arrow keys	Allows to quickly execute previous commands multiple times
TAB	Completes the typing command
CTRL+B / LEFT ARROW	Moves cursor position one character backward
CTRL+F / RIGHT ARROW	Moves cursor position one character forward
CTRL+XX	Switches between the current cursor position and the start line
CTRL+]+A	Moves the cursor forward to next character of A
ALT+CTRL+]+A	Backs the cursor to the preceding character of A