Linux Command Line Cheat Sheet

A quick reference guide to essential Linux command line shortcuts and commands for efficient navigation and system management.

Basic Navigation

Essential Navigation Shortcuts

`cd`	Change directory to home directory.
`cd <directory>`	Change directory to `<directory>`.
`cd ..`	Move one directory up.
`cd -`	Go to the previous directory.
`pwd`	Print working directory (current directory path).
`ls`	List files and directories in the current directory.
`ls -l`	List files with detailed information (permissions, size, date).
`ls -a`	List all files, including hidden files (files starting with `.`).
`ls -t`	Sort files by modification time (newest first).

File and Directory Management

`mkdir <directory>`	Create a new directory named `<directory>`.
`rmdir <directory>`	Remove an empty directory.
`rm -r <directory>`	Recursively remove a directory and its contents (use with caution!).
`touch <file>`	Create an empty file or update the timestamp of an existing file.
`cp <source> <destination>`	Copy a file or directory from `<source>` to `<destination>`.
`mv <source> <destination>`	Move or rename a file or directory.
`rm <file>`	Remove a file.
`ln -s <source> <link>`	Create a symbolic link named `<link>` pointing to `<source>`.
`find . -name "<filename>"`	Finds file with the filename from the current directory.

Shell Shortcuts and Commands

Command Line Editing

Ctrl + A	Move cursor to the beginning of the line.
Ctrl + E	Move cursor to the end of the line.
Ctrl + K	Cut the line from the cursor position to the end.
Ctrl + U	Cut the line from the cursor position to the beginning.
Ctrl + Y	Paste the last cut text (yank).
Ctrl + R	Search command history.
Ctrl + W	Cut the word before the cursor.
Alt + F	Move cursor forward one word.
Alt + B	Move cursor backward one word.

Process Management

Ctrl + C	Terminate the current process.
Ctrl + Z	Suspend the current process (send it to the background).
`fg`	Bring the last suspended process to the foreground.
`bg`	Run the last suspended process in the background.
`jobs`	List all background jobs.
`kill %<job_number>`	Kill a specific background job.
`ps`	Display currently running processes.
`top`	Display dynamic real-time view of running processes.
`kill <pid>`	Kill a process by its process ID (PID).

System Information and Control

System Information

`uname -a`	Display kernel information.
`uptime`	Show how long the system has been running.
`df -h`	Display disk space usage.
`free -m`	Display memory usage.
`whoami`	Display the current username.
`date`	Display the current date and time.
`cal`	Display the calendar.
`history`	Display command history.
`echo $<variable>`	Display the value of the variable.

System Control

`sudo shutdown -h now`	Shut down the system immediately (requires sudo).
`sudo reboot`	Reboot the system (requires sudo).
`exit`	Close the current terminal.
Ctrl + D	Close the current terminal (alternative to `exit`).
`passwd`	Change user password.
`clear`	Clear the terminal screen.
`logout`	Logs out the current user.

File Operations and Permissions

File Content Viewing

`cat <file>`	Display the entire content of a file.
`less <file>`	View file content page by page. Use arrow keys to navigate, `q` to quit.
`head <file>`	Display the first 10 lines of a file.
`tail <file>`	Display the last 10 lines of a file.
`tail -f <file>`	Display the last 10 lines and follow the file for new content (useful for log files).
`nl <file>`	Display file content with line numbers.

File Permissions

`chmod <permissions> <file>`	Change file permissions. `<permissions>` can be in octal (e.g., `755`) or symbolic (e.g., `u+rwx,go+rx`).
`chown <user>:<group> <file>`	Change file ownership. `user` is the new owner, `group` is the new group.
`umask`	Show the current umask value. This determines default file permissions for newly created files and directories.
`sudo chmod 777 <file>`	Grants read, write, and execute permissions to everyone (use with extreme caution).
`sudo chown <user>:<group> <file>`	Example to change file owner and group of file.
`stat <file>`	Displays status and details about the file.