

Linux Command Cheat Sheet

File Commands

- `ls` - Directory listing
- `ls -l` - Long listing format
- `ls -a` - List all files including hidden files
- `cd /path/to/directory` - Change directory
- `pwd` - Display the current working directory
- `mkdir directory_name` - Create a new directory
- `rmdir directory_name` - Remove an empty directory
- `rm file_name` - Remove a file
- `rm -r directory_name` - Remove a directory and its contents recursively
- `touch file_name` - Create or update a file
- `cat file_name` - Concatenate and display the file content
- `more file_name` - View file content page by page
- `less file_name` - Improved viewing of file content over `more`
- `cp source_file target_file` - Copy files from source to target
- `mv old_name new_name` - Rename or move a file/directory

SSH (Secure Shell)

- `ssh user@host` - Connect to host as user
- `ssh -p port user@host` - Connect using a specific port
- `ssh-keygen -t rsa` - Generate RSA key pair
- `ssh-copy-id user@host` - Copy your key to the remote server for password-less login

Searching

- `grep pattern files` - Search for a pattern in files
- `grep -r pattern dir` - Recursively search for a pattern in a directory
- `find dir -name name*` - Find files starting with name in a directory
- `locate file_name` - Find files by name (uses a database)

Process Management

- `ps aux` - Display your currently active processes
- `ps aux | grep process_name` - Find a process named process_name
- `top` - Display all running processes

- `kill pid` - Kill a process with a given PID
- `killall process_name` - Kill all processes named `process_name`
- `bg` - List stopped or background jobs; resume a stopped job in the background
- `fg` - Bring the most recent job to the foreground

File Permissions

- `chmod +x file_name` - Make a file executable
- `chmod 755 file_name` - Set read and execute permissions for owner and read for others
- `chown user:group file_name` - Change file owner and group

Networking

- `ifconfig` - Display all network interfaces and IP addresses
- `ping host` - Send ICMP echo request to host
- `traceroute host` - Display the route packets take to a network host
- `netstat -tulnp` - Display listening ports and their applications

Archiving and Compression

- `tar cf archive_name.tar files` - Create a tar archive containing files
- `tar xf archive_name.tar` - Extract files from a tar archive
- `gzip file_name` - Compress a file and rename it to `file.gz`
- `gunzip file.gz` - Decompress `file.gz` back to the original

System Info and Management

- `uname -a` - Show system and kernel info
- `df -h` - Display free disk space in a human-readable form
- `du -sh directory_name` - Show disk usage of a directory in human-readable form
- `free -m` - Show free and used memory in MB

Misc Commands

- `man command_name` - Show manual for a command
- `echo "text"` - Display a message on the screen
- `date` - Display the current date and time
- `uptime` - Show how long the system has been running