Linux Cheat Sheet for Engineers

File System Operations

- **ls: List Directory Contents**
- **cd: Change directory**
- **pwd: Print name of current directory**
- **mkdir: Make directories**
- **cp: Copy files and directories**
- **mv: Move/rename files and directories**
- **rm: Remove files or directories**
- **touch: Create an empty file**
- **cat: Display file content**
- **nano: Text editor for creating /editing files**

File Permissions

- **chmod: Change file permissions**
- **chown: Change file owner and group**
- **chgrp: Change group ownership of files**

System information

- **uname: Print system information**
- **df: disk space usage**
- **free: Display amount of free and memory**
- **hostname: set the system's hostname**

File Permissions

- **chmod: Change file permissions**
- **chown: Change file owner and group**
- **chgrp: Change group ownership of files**

Process management

- **ps: To display the currently working processes**
- **top: Display all running process**
- **kill: Terminate a process**
- **killall: Terminate processes by name**

Shell Scripting

- **bash: GNU Bourne-again shell**
- **shell: Original Unix shell**
- **awk: pattern scanning and processing language**
- **sed: Stream editor for filtering & transforming text**

File Transfer

- **scp: Secure Copy (remote file Copy Program)**
- **rsync: Remote file svnc**

Networking

- **ifconfig: Configure Networking interface**
- **ping: Test network Connectivity**
- **netstat: pront network connections, etc**
- **iptables: packet filtering and NAT**

Package Management

- **apt-get: Package handling utility (Debian-based)**
- **yum/dnf: Package handling utility(RPM-based)**
- **dpkg: Package manager for Debian-based-system**
- **rpm: Package manager for RPM-based systems**

User and Group Management

- **useradd: Create a new user**
- **usermod: modify a user account**
- **userdel: Delete a user account**
- **groupadd: Create a new group**
- **groupmod: Modify a group**
- **groupdel: Delete a group**

System Services

- **systemctl: Control the systemed system**
- **service: run a system v init script**
- **chkconfig: Updates and queries runlevel information for system services**