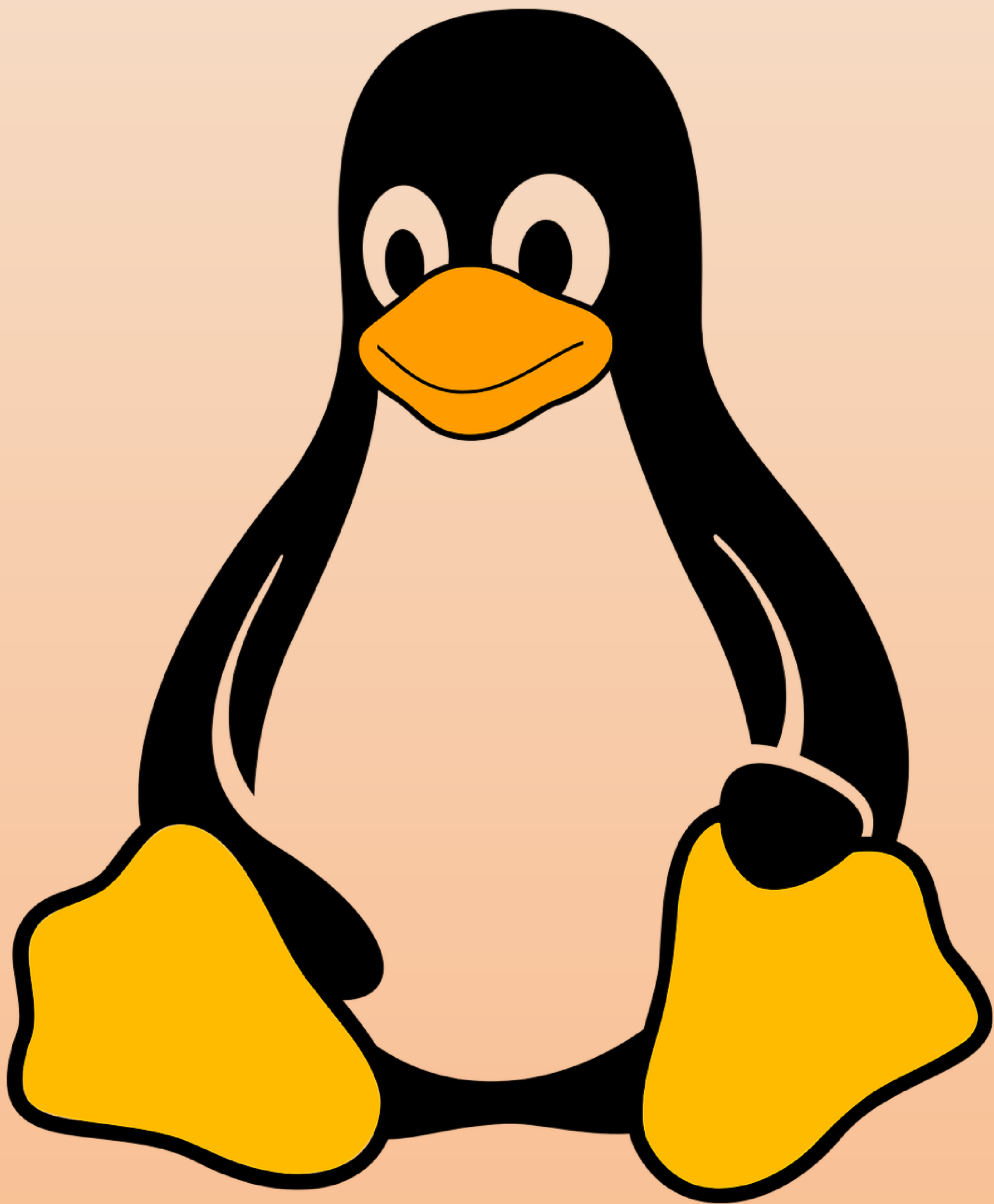


LINUX CHEAT SHEET

BY NAVEEN VERMA



Linux Cheat Sheet

System Information

- **lsb_release -a** : Get the version of Ubuntu.
- **uname -a** : Show system and kernel information.
- **df -h** : Show the storage units in the system.
- **date** : Show the current date and time.

File and Directory Operations

- **List Files and Directories**
 - **ls** : List all the files/directories in the present working directory.
 - **ls -a** : List all files/directories, including hidden ones.
 - **ls -l** : Show all permissions, owner, group, and time of creation of files/directories.
 - **pwd** : Show the present working directory.
- **Create, Copy, Move, and Delete**
 - **mkdir <directory name>** : Create a directory.
 - **mkdir <directory names>** : Create multiple directories by providing names separated by spaces.
 - **mkdir -p <directory path>** : Create directories with the specified path.
 - **mkdir <directory{1..10}>** : Create directories within the specified range.
 - **touch <file_name>** : Create a file.
 - **touch <file_names>** : Create multiple files by providing names separated by spaces.
 - **touch <file_name{1..10}>** : Create files within the specified range.
 - **rm** : Remove files.
 - **rm -r** : Recursively remove a directory.
 - **cp <source> <destination>** : Copy files/directories from one directory to another.
 - **mv <source> <destination>** : Move files/directories from one directory to another.
 - **mv <current_filename> <desired_filename>** : Rename a file.

File Viewing and Editing

- **Display Content**
 - **cat <file_name>** : Display the content of a file.
 - **head <file_name>** : Display the first 10 lines of a file.

- **tail <file_name>** : Display the last 10 lines of a file.
- **head -n <number> <file_name>** : Display the specified number of lines from the top of a file.
- **tail -n <number> <file_name>** : Display the specified number of lines from the bottom of a file.
- **Edit Files**
 - **vim <file_name>** : Open a file in the Vim editor.
 - **nano <file_name>** : Open a file in the Nano editor.
 - **sed 'script' <file_name>** : Edit files without opening and display the changed output.

Navigation

- **cd** : Change directory to the base location.
- **cd ..** : Move back one directory.
- **cd <path to a directory>** : Move directly to the specified directory.
- **cd /** : Move to the root directory.

User and Group Management

- **User Operations**
 - **whoami** : Show the username.
 - **sudo useradd -m <username>** : Add a new user.
 - **sudo passwd <username>** : Add a password for a user.
 - **su <username>** : Switch to a different user.
 - **sudo su** : Switch to the super user.
 - **sudo userdel <username>** : Delete a user.
- **Group Operations**
 - **sudo groupadd <groupname>** : Add a new group.
 - **sudo groupdel <group_name>** : Delete a group.
 - **sudo usermod -aG <groupname> <user>** : Add a user to a group.
 - **sudo gpasswd -M <user1,user2,user3>** : Add multiple users to a group.
 - **sudo gpasswd -d <user> <group_name>** : Remove a user from a group.

Permissions and Ownership

- **Changing Permissions**
 - **chmod u+x <file_name>** : Add executable permission to the owner.
 - **chmod g+r <file_name>** : Add read permission to the group.
 - **chmod o+rw <file_name>** : Add read and write permissions to others.
- **Setting Permissions with Numeric Values**

- **chmod 700 <filename>** : Gives read, write, and execute permissions to the owner, and no permissions to the group and others.
- **Numeric values:**
 - **0** : No permission.
 - **1** : Execute.
 - **2** : Write.
 - **3** : Execute + Write.
 - **4** : Read.
 - **5** : Read + Execute.
 - **6** : Read + Write.
 - **7** : Read + Write + Execute.
- **Changing Ownership**
 - **chown <user> <file_name/directory>** : Change ownership.
 - **chgrp <group_name> <file_name/directory>** : Change group ownership.

System Management

- **Package Management**
 - **sudo apt-get update** : Update the system's package index files.
 - **sudo apt-get upgrade** : Upgrade the system packages.
 - **sudo apt-get install <tool/app>** : Install a tool/app.
 - **sudo apt purge <application>** : Remove an application.
- **Service Management**
 - **systemctl <option> <service_name>** : Start, stop, or check the status of a service.
 - **service <service_name> status** : Check the status of a service.

Search and Find

- **grep <word> <file_name/directory>** : Search for a pattern or string in a file or directory and display it.
- **find <directory> <option> <filename>** : Find files based on name, permission, user, group, etc.
- **awk '/<word>/' <file_name>** : Pattern searching and processing the output as needed.

History and Help

- **history** : List all previously used commands.
- **man <command>** : Display the manual for the specified command