LINUX COMMANDS

1. File and Directory Management Commands

ls

- ls lists files in the current directory.

ls -l

- -l shows detailed information like permissions, ownership, and file size.

cd /home/user

- cd changes the current directory.

cd ..

- cd .. moves up one directory.

pwd

- Displays the full path of the current directory.

mkdir <new_folder_name>

- It create a new directory

mkdir -p /path/to/multiple/directories

- -p creates parent directories as needed.

touch

- This Command by default creates an empty file.

cp – Copy command

cp <source_file> <destination_file>

- It copies the source file content to destination file

cp -r /path/to/source/ /path/to/destination/

- -r recursively copies directories.

mv – Move or rename command

mv <oldfile_name> <newfile_name>

- It moves the content from one file to another file

mv <file.txt> </path/to/new/location/>

- Renames or moves files and directories.

rm – Remove command

rm –f <file_name>

- It removes or deletes the files

rm -rf <directory_name>

- force remove the files & folders of directory recursively (-f force).

rmdir <empty_folder>

- Removes empty directories.

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2. File Viewing and Editing

cat <file_name>

- Displays the contents of a file.

tac <file_name>

- Display file content in reverse order

less <file_name>

- View file content one screen at a time
- Use arrow keys to scroll, q to quit.

head <file_name>

- View the first 10 lines of a file

head -n 5 <file_name>

- -n specifies the number of lines to display.

tail <file_name>

- View the last 10 lines of a file

tail -n 5 <file_name>

- -n specifies the number of lines to display.

3. File Permissions and Ownership

Change file permissions

chmod 755 <file_name>

- 755 grants read, write, execute for the owner, and read/execute for group and others.

chmod u+x <file_name>

- u+x adds execute permission for the owner.

chown user:group <file_name>

- Changes the owner and group of a file.

chgrp group_name <file_name>

- Changes the group ownership which is associated with a file.

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4. Disk Usage and Storage

df -h

- Display disk space usage
- -h shows human-readable sizes (KB, MB, GB).

du -sh /path/to/directory/

- Estimate file space usage
- -s provides a summary, and -h shows human-readable sizes.

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5. Process Management

ps

- shows the currently running process.

ps -ef

- Displays all processes running on the system.

top

- Shows the real-time, dynamic view of the running processes of a system.

kill <pid>

- Terminate a process PID

kill -9 <pid>

- -9 forces termination.

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6. Networking Commands

ifconfig

- Displays the network interface information.

ping <hostname>

- Test network connection. It tests the reachability & responsiveness of the remote host.

netstat -lntp

- Displays all listening ports and connections.

ssh user@<remote_host_address>

- Securely connect to a remote machine
- Connects to a remote system via SSH.

wget <url>

- Download files from the web

curl <url>

- Downloads the content <url> and displays it in the terminal.

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7. System Information

uname

- Displays kernel and system information.

hostname

- Shows the name of the system host.

hostid

- shows the host id of the system assigned by the OS

uptime

- Shows the elapsed time duration since the machine logged in.

whoami

- Shows the currently logged-in username of the terminal.

last

- Displays a list of recent logins.

date

- Shows the current date and time in UTC format.

history

- lists all the commands executed until now

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8. Package Management

Package management for RedHat

sudo dnf update

- Refresh the list of available packages.
- Check for newer versions of installed software.

sudo dnf install <package_name>

- Installing the packages

sudo dnf remove <package_name>

- removing the package

9. Service Management

sudo systemctl start <service name>

- To start the service

sudo systemctl enable <service name>

- To enable the service

sudo systemctl disable <service name>

- To disable the service

sudo systemctl status <service name>

- check the status of the service

sudo systemctl restart <service name>

- To restart a service