**Day5 - Assignment 3:** Write 30 Linux commands with example.

Certainly! Heres a list of 30 important Linux commands with their definitions, syntax, and examples:

1. ls

- Definition: Lists directory contents.

- Syntax: ‘ls [options] [file(s) or directory]’

- Example: ‘ls -l /home/user’

2. cd

- Definition: Changes the current directory.

- Syntax: ‘cd [directory]’

- Example: ‘cd /var/www/html’

3. pwd

- Definition: Prints the current working directory.

- Syntax: ‘pwd’

- Example: ‘pwd’

4. mkdir

- Definition: Creates a new directory.

- Syntax: ‘mkdir [options] directory\_name’

- Example: ‘mkdir myfolder’

5. rmdir

- Definition: Removes empty directories.

- Syntax: ‘rmdir [options] directory\_name’

- Example: ‘rmdir myfolder’

6. cp

- Definition: Copies files and directories.

- Syntax: ‘cp [options] source\_file(s) destination’

- Example: ‘cp file1.txt /home/user’

7. mv

- Definition: Moves or renames files and directories.

- Syntax: ‘mv [options] source destination’

- Example: ‘mv file1.txt /home/user’

8. rm

- Definition: Removes (deletes) files or directories.

- Syntax: ‘rm [options] file(s)’

- Example: ‘rm file1.txt’

9. touch

- Definition: Updates the access and modification times of files or creates empty files.

- Syntax: ‘touch [options] filename(s)’

- Example: ‘touch file.txt’

10. cat

- Definition: Concatenates and displays the content of files.

- Syntax: ‘cat [options] file(s)’

- Example: ‘cat file.txt’

11. less

- Definition: Views the content of files interactively.

- Syntax: ‘less [options] file(s)’

- Example: ‘less file.txt’

12. head

- Definition: Outputs the first part of files.

- Syntax: ‘head [options] file(s)’

- Example: ‘head -n 10 file.txt’

13. tail

- Definition: Outputs the last part of files.

- Syntax: ‘tail [options] file(s)’

- Example: ‘tail -n 20 file.txt’

14. grep

- Definition: Searches for patterns in files.

- Syntax: ‘grep [options] pattern [file(s)]’

- Example: ‘grep "error" logfile.txt’

15. find

- Definition: Searches for files in a directory hierarchy.

- Syntax: ‘find [path...] [expression]’

- Example: ‘find /home/user -name "\*.txt"‘

16. chmod

- Definition: Changes file permissions.

- Syntax: ‘chmod [options] mode file(s)’

- Example: ‘chmod 644 file.txt’

17. chown

- Definition: Changes file owner and group.

- Syntax: ‘chown [options] new\_owner:new\_group file(s)’

- Example: ‘chown user:group file.txt’

18. sudo

- Definition: Executes a command with superuser privileges.

- Syntax: ‘sudo [command]’

- Example: ‘sudo apt-get update’

19. su

- Definition: Switches user ID or becomes another user.

- Syntax: ‘su [options] [user]’

- Example: ‘su user’

20. ps

- Definition: Displays information about running processes.

- Syntax: ‘ps [options]’

- Example: ‘ps aux’

21. kill

- Definition: Sends a signal to terminate processes.

- Syntax: ‘kill [options] pid(s)’

- Example: ‘kill -9 1234’

22. top

- Definition: Displays real-time information about running processes.

- Syntax: ‘top’

- Example: ‘top’

23. df

- Definition: Reports file system disk space usage.

- Syntax: ‘df [options] [file(s)]’

- Example: ‘df -h’

24. du

- Definition: Estimates file space usage.

- Syntax: ‘du [options] [file(s)]’

- Example: ‘du -sh /home/user’

25. tar

- Definition: Archives files into a tarball.

- Syntax: ‘tar [options] [file(s)]’

- Example: ‘tar -czvf archive.tar.gz directory’

26. zip/unzip

- Definition (zip): Packages and compresses files into a zip archive.

- Syntax (zip): ‘zip [options] zipfile files’

- Example: ‘zip -r archive.zip directory’

- Definition (unzip): Extracts files from a zip archive.

- Syntax (unzip): ‘unzip [options] zipfile’

- Example: ‘unzip archive.zip’

27. wget

- Definition: Downloads files from the web.

- Syntax: ‘wget [options] [URL(s)]’

- Example: ‘wget https://example.com/file.zip’

28. ssh

- Definition: Connects to a remote SSH server.

- Syntax: ‘ssh [user@]hostname [command]’

- Example: ‘ssh user@hostname’

29. scp

- Definition: Securely copies files between hosts.

- Syntax: ‘scp [options] source destination’

- Example: ‘scp file.txt user@hostname:/remote/path’

30. man

- Definition: Displays the manual for commands.

- Syntax: ‘man [command]’

- Example: ‘man ls’