50 Linux Commands

Basic Commands

1. **ls** - List the files and directories in the current directory.
   Usage: `ls`
2. **cd** - Change the current directory.
   Usage: `cd <directory_name>`
3. **mkdir** - Create a new directory.
   Usage: `mkdir <directory_name>`
4. **rmdir** - Remove an empty directory.
   Usage: `rmdir <directory_name>`
5. **pwd** - Print the current working directory.
   Usage: `pwd`
6. **cp** - Copy files or directories.
   Usage: `cp <source> <destination>`
   Example: `cp example.txt backup/`
7. **mv** - Move or rename files or directories.
   Usage: `mv <source> <destination>`
   Example: `mv example.txt backup/`
8. **rm** - Remove files or directories.
   Usage: `rm <file_name>`
9. **touch** - Create a new empty file or update the timestamp of an existing file.
   Usage: `touch <file_name>`
10. **cat** - Concatenate and display file contents.
    Usage: `cat <file_name>`

Manuals and Processes

11. **man** - Display the manual for a command.
    Usage: `man <command_name>`
12. **htop** - Interactive process viewer and system monitor.
    Usage: `htop`
13. **top** - Display system resource usage and running processes.
    Usage: `top`
14. **ps** - Display information about running processes.
    Usage: `ps aux`
15. **kill** - Terminate a process by its PID.
    Usage: `kill <PID>`

Permissions and Ownership

16. **chmod** - Change file or directory permissions.
    Usage: `chmod <permissions> <file_name>`
    Example: `chmod 700 file.txt`
17. **chown** - Change the ownership of a file or directory.
    Usage: `chown <owner> <file_name>`
    Example: `chown new_owner example.txt`

Archiving and Compression

18. **tar** - Create or extract compressed archive files.
    Usage: `tar <options> <archive_name> <file(s)>`
    Example: `tar cf archive.tar file1 file2`
19. **gzip** - Compress files.
    Usage: `gzip <file_name>`
20. **gunzip** - Decompress files.
    Usage: `gunzip <file_name.gz>`

Networking

21. **ping** - Test network connectivity.
    Usage: `ping <IP_or_domain>`
    Example: `ping 8.8.8.8`
22. **ssh** - Securely connect to a remote server.
    Usage: `ssh <user>@<host>`
23. **scp** - Securely copy files between systems.
    Usage: `scp <source> <destination>`
    Example: `scp myfile.txt user@remote:/home/user/`
24. **ifconfig** - Display or configure network interfaces.
    Usage: `ifconfig`
25. **netstat** - Display network connection information.
    Usage: `netstat`
26. **route** - View or configure routing tables.
    Usage: `route`

System Services

27. **systemctl** - Control system services.
    Usage:
    - Start service: `systemctl start <service>`
    - Stop service: `systemctl stop <service>`
    - Check status: `systemctl status <service>`
28. **service** - Manage system services (older alternative to `systemctl`).
    Usage: `service <service_name> <action>`
    Example: `service apache2 start`

User Management

29. **useradd** - Add a new user.
    Usage: `useradd <username>`
30. **passwd** - Set or change a user's password.
    Usage: `passwd <username>`
31. **userdel** - Delete a user.
    Usage: `userdel <username>`

32. **su** - Switch user.

    Usage: `su <username>`

33. **sudo** - Execute commands with elevated privileges.

    Usage: `sudo <command>`

File Systems

34. **df** - Display disk space usage.

    Usage: `df`

35. **du** - Display disk usage of files or directories.

    Usage: `du`

36. **mount** - Mount a filesystem.

    Usage: `sudo mount <device> <mount_point>`

    Example: `sudo mount /dev/sdb1 /mnt/usb`

37. **umount** - Unmount a filesystem.

    Usage: `sudo umount <mount_point>`

System Info

38. **date** - Display or set the system date and time.

    Usage: `date`

39. **whoami** - Display the current user.

    Usage: `whoami`

40. **uname** - Display system information.

    Usage: `uname`

    Example: `uname -a`

41. **history** - Display command history.

    Usage: `history`

42. **uptime** - Show how long the system has been running.

    Usage: `uptime`

Utilities

43. **echo** - Display text or variables.

    Usage: `echo <text>`

    Example: `echo 'Hello, World!'`

44. **tee** - Write output to both a file and the terminal.

    Usage: `command | tee <file>`

    Example: `ls | tee file.txt`

45. **locate** - Find files on the system.

    Usage: `locate <file_name>`

46. **sort** - Sort lines of text in a file or input.

    Usage: `sort <file>`

47. **uniq** - Remove duplicate lines from a file or input.

    Usage: `uniq <file>`

48. **head** - Display the first few lines of a file.

    Usage: `head <file>`

49. **tail** - Display the last few lines of a file.

    Usage: `tail <file>`

50. **finger** - Display detailed user information.

    Usage: `finger <username>`

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