

1. Linux Commands

1. **root@277d4ce30328:/#**
root -> current user
277d4ce30328 -> host name of the server
2. Shell -> Takes the linux commands and interprets it for the OS and tells what to execute
3. **ls** -> list all the files and folders in a particular folder
4. **mkdir** -> create new folder
5. **cd** -> change directory
6. **cd ..** -> go one folder back
7. **cd** -> if type only cd it goes to home.
8. **whereis python3** -> tells where the python3 executables are located
9. **open .** -> opens folder in GUI mode
10. **open /usr/bin** -> opens that particular directory in GUI
11. **/usr/bin/python3** -> this will also run python3 executables
12. **echo \$PATH** -> all our executable files are searched here when we type any command
13. **echo** -> for printing on screen
14. **ls -a** -> show all the hidden files
15. **cat file_name** -> displays content of the a particular file
16. **vim bashrc** -> open bashrc file and you can edit the content
17. **:wq** -> save and exit the file
18. **:q** -> dont save and exit the file
19. **i** -> insert in the file and you can start writing
20. **pwd** -> which directory currently i am now in (print working directory)
21. **ls -l** -> it shows all the user and group owners and permissions of files
22. **ls -al** -> list all the hidden files as well as there owner and group permissions
23. **ls -R** -> list all the sub directories recursively in a particular folder
24. **cat > Hello** -> creates Hello file and then you can type content in it and press cltr+C and exit
25. **CLTR+C** -> to exit out a particular process
26. **cat file_1 file_2 > file_3** -> copy contents of file_1 and file_2 and put it in file_3
27. **cat file_1 file_2** -> display file_1 and file_2 contents
28. **echo "Hello world" > file.txt** -> put Hello World in file.txt
29. **man** -> to know the information about a particular command eg - man echo
30. **cat file.txt | tr a-z A-Z > upper.txt** -> take all the content of file.txt and translate all the characters from lower to uppercase and store it in upper.txt
31. pipe (|) -> output of the first command will act as an input to the second command
32. redirect (>) -> redirect the output
33. **** -> add new command in new line

34. **touch abc.txt** -> create abc text file
35. **cp file.txt copy_file.txt** -> copy the contents of file.txt and put it in new copy_file.txt
36. **mv names.txt random** -> move names.txt file inside random folder
37. **mv file.txt newName.txt** -> rename file.txt to newName.txt
38. **rm file.txt** -> remove the file
39. **cp -R test random** -> copy all the files and folder of test directory to random directory recursively
40. **mv test new_test** -> rename folder test to new_test
41. **rm -R random** -> delete folder random and everything in it
42. **sudo** -> to execute the command as an administrator
43. **df** -> system disk space usage.
44. **df -m** -> to check in mb
45. **df -h** -> in human readable format.
46. **du** -> disk usage statistics
47. **head file.txt** -> show the first 10 lines of file.txt
48. **head -n 4 file.txt** -> show only 4 lines of file.txt
49. **tail file.txt** -> display last 10 lines of file.txt
50. **tail -n 2 file.txt** -> display bottom 2 lines of file.txt
51. **diff file1.txt file2.txt** -> compare both files line by line and show lines that doesn't match
52. **locate "*docker"** -> locate all files that end with docker
53. **locate abc.txt** -> locates abc.txt files and shows the path
54. **find . -type d** -> find all the directories in the current directories
55. **find . -type f** -> find all the files in the current directories
56. **find . -type f -name "two.txt"** -> find in the current directories two.txt file
57. 3 types of permission -> read, write, execute
58. 3 types -> user, group, other
59. **chmod u=rwx,g=rx,o=r upper.txt** -> change modification of upper.txt user should have all the 3 permissions and group should have read and execute permission and other should have only read permissions.
60. 4 -> read , 2-> write , 1 -> execute 0 -> no permission
61. **chmod 657 upper.txt** -> user has read and write permission(4+2) , group has read and execute permission (4+1), other have all 3 permission(4+2+1)
62. **whoami** -> who is logged in, the user.
63. **sudo chown root upper.txt** -> change the owner of upper.txt to the root
64. **grep "Google" upper.txt** -> check wheather Google is present in upper.txt or not
65. **grep -i "google" upper.txt** -> not case sensitive, it will still show Google is present or not
66. **grep -n "Google" name.txt** -> in which line Google is present in name.txt
67. **history** -> history of all the commands used

68. **history | grep "chown"** -> list of the all the commands used that contained chown
69. **ctrl + a** -> move the cursor to the start of the line
70. **ctrl + e** -> move the cursor to the end of the line
71. **ctrl + k** -> remove everything from the right side of the cursor
72. **ctrl + u** -> remove the full command from that line
73. **TAB** -> autocomplete command
74. **clear** -> clear terminal
75. **git add .;git commit -m "message";git push origin main** -> run multiple commands on same line using semi-colon(;)
76. **sort companies.txt** -> sort the contents of the file
77. **sort -r companies.txt** -> sort the contents of the file in the reverse order
78. **jobs** -> processes started by shell
79. **ping www.google.com** -> to check network connectivity between two host
80. **wget url** -> to download any file from internet
81. **top** -> to check all the processes running(% cpu usage, memory, ports,threads etc)
82. **uname** -> to check which kernel you are using.
83. **zip files.txt companies.txt** -> zip your companies.txt file into files.txt
84. **zip files2.txt companies.txt file.txt** -> zip both file companies and file into one files2.txt
85. **unzip [files2.zip](#)** -> unzip [files2.zip](#)
86. **useradd Jones** -> add user Jones
87. **passwd Jones** -> set the password for the user Jones
88. **userdel Jones** -> delete User
89. **cat /etc/os-release** -> info about os
90. **lscpu** -> cpu details
91. **free** -> free memory
92. **vmstat** -> virtual memory
93. **lsdf** - list all the open files.
94. **nslookup google.com** -> IP address of a domain name
95. **netstat** - active listening ports
96. **ifconfig** - The ifconfig command is used for displaying current network configuration information
97. **ps aux** - all the processes
98. **rm -r !(names.txt)** -> remove all the files except names.txt.