**Vi Editor commands**

1. :q! = quit and changes remain unsaved.

2. :w = to save and keep editing the file

3. yy = copy the line

4. p = paste the line

5. o= open a new line under current line.

6. O = open a new line above current line.

7. :num= displays current line number.

8. A — Append to the end of the line.

9. a — Append after the cursor’s current position.

10. I — Insert text at the beginning of the current line.

11. b — Go to the beginning of the word.

12. e — Go to the end of the word.

13. x — Delete a single character.

14. dd — Delete an entire line.

15. Xdd — Delete X number of lines.( Where X is count of lines which you want to delete.)

16. start, end d – It is used to delete range of line (Eg. 5-10 lines where start is 5 and end is 10).

16. G — go to last line of the file.

17. g— Go to first line of the file.

18. h — Move left one character.

19.j— Move down one line.

20.k — Move up one line.

21.l— Move right one character.

**Linux commands**

##Learning Linux commands

completed commands

1. date = To see the date of particular command.

1. date +%D = date

2. time +%T = time

3. hours in minutes = +%H:%M

2. clear = to clear the screen.

1. clear -x : clear screen but can scroll previous things.

3. cal = To check the calender.

1. cal -y : calender of previous year

2. cal -3 : calender of(last month,present month,next month)

4.exit =exit from terminal

5.pwd = To see the present working directory.

6.mkdir = To create new directory

7.rmdir = to delete the directory which is empty.

rmdir -r or rm -r = It is used to delete the directory which contains files .

8. ll = long listing of directory.

9. ls = list the directory.

1.ls -lt -

If you want more information about files and folders in current directory then u can use this command

2. ls -ltr -

If you want more information about files and folders in current directory then u can use this command(In reverse order)

 3. ls -lth -

 If you want more information about files and folders in current directory then u can use this command(gives the result in readable format)

4. ls -lrth = It gives detail information about file in long list, readable, time bound format.

5. ls -lart =It gives Author name along with permissions of the file and display file information and shows hidden files(.) also.

| **Options** | **Description** |
| --- | --- |
| **-l** | known as a long format that displays detailed information about files and directories. |
| **-a** | Represent all files Include hidden files and directories in the listing. |
| **-t** | Sort files and directories by their last modification time, displaying the most recently modified ones first. |
| **-r** | known as reverse order which is used to reverse the default order of listing. |
| **-S** | Sort files and directories by their sizes, listing the largest ones first. |
| **-R** | List files and directories recursively, including subdirectories. |
| **-i** | known as inode which displays the index number (inode) of each file and directory. |
| **-g** | known as group which displays the group ownership of files and directories instead of the owner. |
| **-h** | Print file sizes in human-readable format (e.g., 1K, 234M, 2G). |
| **-d** | List directories themselves, rather than their contents. |

**### Display One File Per Line Using `ls -1**

ls -1

10.less file\_name - If u want to read a file then  u can use this command ( we can use for larger files)

 if u want to go to the end of the file then press   shift+g

If u want to go to the first line of the file then press    p

To come out of that file press  q

11**.**more file\_name - If u want to read the content then u can use this command

it prints the content of the file directly on the terminal

12. cat filename = It displays file content on the terminal.

13.rm = To delete the file.

14.mkdir -p fruits/apples : to create multiple nested folders

15. cd .. : to go back to home directory

cd ../ = To go back to the previous folder. (Eg. root/apple/sweet if want to go to apple from sweet directory then use this command.)

16. cd/etc : to use absolute paths

17.passwd = to change the password.

18.printenv : print values & environment variables.

19. ping www.google.com: ping the specific nework host on the local network.(Test network connectivity)

20. history = to check history.

21. less : to print content of file.

22. 1.cp filename foldername = If you want to copy the file into folder.

2. cp foldername/filename = If you want to copy the file of one folder to another folder

3. cp filename newfilename = It creates copy of the file.

23. To move the files to another directory use mv filename foldername

24. mv directoryname/filename(source) directory(destination) Eg.(mv Test2/s2.txt Test1) to move files from one directory to another directory

25.whoami = information about currenly logged in user.

Login name of the user

User terminal

Date & Time of login

Remote host name of the user

26. id = It display the user identification(the real and effective user and group IDs) information

27.group = displays the group which user belongs to.

28. finger: Used to check the information of any currently logged in users. i.e, It displays users login time, tty

(name), idle time, home directory, shell name etc.

29.to create copy if that file.

first create the directory,file and then create copy of that file using cp file1 file2

30. cat filename - it simply prints the content of the directory on the terminal.

31. less filename - it takes you into the file and display the file contents.

32. touch dirctory filename - to create files in the directory.

touch filename{1..n} = To create multiple files in a directory (where n is the count upto which you want to create directory).

**$ mkdir createmultiplefile**

**$ cd createmultiplefile**

After getting into the **‘createmultiplefile’** directory, execute the below command, which will create a total of 10 regular files in the current directory.

**$ touch filename{1..10}**

33. To create multiple files into a new single file. Create or extract compressed archieve files.

Steps:

create folder and add 2 files into it.

tar -cf archive.tar file1 file2

tar -xf archive.tar

tar -tf archive.tar (to see files present in that zip file )

tar= used to create and extract archieve files in linux

34. ln = to create link to another files. ln original file name of newly created file. eg (ln jai meera) hard link (content of both the files will be same even if the files are deleted).

soft link: ln -s filename newly created file name ( but it originl file is deleted then it also deletes the content of linked file.)

35. open = used to open the file.

36. sort filename = to sort the file in particular order. (Case Sensitive)

sort -r filename = to sort file in reverse order.

## **Memory commands**##

1. free = It gives information about the memory i.e how much is occupied and how much is free, shared, catche memory etc.
2. top = It gives detailed information about the How much memory is occupied.
3. df = It gives information about free and occupied memory in hard disk.
4. du = It prints disk usage of files ,folders its size.
5. htop = This is an interactive command as it gives information about how many memory, cpu, process  is used by each file.

37.chmod : It is used to change file permissions.(Read write execute). There are 3 types of users (owner,group,public)

syntax : chmod numeric code <filename>[ can use chmod calculator]

* 1 if has execution permission
* 2 if has write permission
* 4 if has read permission

This gives us 4 combinations:

* 0 no permissions
* 1 can execute
* 2 can write
* 3 can write, execute
* 4 can read
* 5 can read, execute
* 6 can read, write
* 7 can read, write and execute

38.chown = change the owner of the file

syntax chown <newuser> filename

1. sudo apt update = It updates the package directory.
2. sudo apt install <package name> = It is used to install the packages

39. gzip <filename>– Used to compress files.

40. gunzip <filename> – Used to decompress compressed files.

41. ifconfig = Used to display and configure network interfaces.

42. netstat = It shows network connection information.

43. route = view or configure network routing tables.

44. ps = It gives info about currently running process

45. kill = used to terminate irrelevant or unresponsive process.

First run top command and will get process ID and then run the kill command.

46. useradd = It is used to add the user.

47.userdel = It is used to delete the user.

48.systemctel = control system services and tools.

49. system =control system service.

50. mount /unmount = mount or unmount a file system.

51. sudo = Execute a command as another user with certain privileges.

52. su = It is used to switch to another user.

53.which = Locates the particular file in the system.

54.uniq= remove duplicate files.

55. file <filename>= It tells what type of file it is.(image,text file etc).

56. stat <dirName> =Gives detail info about directory like device details, Access, Modify details and changes.

57. Tilde expansion = It tells current users home directory.