# Linux [ Searching Files . VI Editor basic uses , Group Management , File ownership , Permission Modification ]

**Linux file system :**    **1.Locate ( most powerfull command )**
                            **2. Find**


$ **sudo apt install mlocate** ( if not present locate command )
$ **locate file1.txt**  ( to search the file path )
result of locate command depends on the db
$ **sudo updatedb** ( to update the db)
$ **cd /var/lib/mlocate (location of db )**
$ **cd ~** ( switch to the root dir )
< using find command >


- Go to the perticular dir
$ **find -name file2.txt**
$ **find -name \*txt ( to view all .txt file in perticular dir )**
$  **find -name \*pdf ( to view all .pdf  file in perticular dir )**


## Search Within File

**'grep'** command is used for searching some line/word  in perticular file

$ **grep mango fruits.txt**  ( find mango word in fruits.txt file )

$ **grep -A2 apple fruits.txt (** to get  above 2 lines of apple word **)**


## VI Editor basic uses

command mode -----> insert
                    <------ ESC
last fine mode

$ **vi  fish.txt**
once you fire above command , press **'i'** to goto insert mode
now write something in file , once your writing is completed
press **'ESC'**
press **'ZZ'** or **:qw** to close the operations

for more details goto <vi cheatsheet >
<https://ryanstutorials.net/linuxtutorial/cheatsheetvi.php>

# Group Management

**$ cat  etc/group**  ( to see all groups )
**$ sudo groupadd yanky** ( to create group 'yanky' )
**$ sudo groupdel yanky**  ( to delete group 'yanky')(never delete the group directly it's not goodpractice )
**$ sudo usermod -a -G mark tom** ( for modification of group mark &assigningtom to that group ) where , mark : Group_name , tom : user_name
**$ history**
*$ sudo groupadd -g 7777 developer* ( to add developer group with code 7777 , code can be anything )
**$ cat etc / group**

**$ sudo userdel user_name**   ( to delete the perticular user )

$ **history > history.text**  (to save the hisrory in history.txt file )

# I/O streams :

**Datastream --> flow of data**

**1.Input stream : input provided by the user**
**2.Output stream : ouput**
**3.Error  : all the errors ( for any type of input is there is error )**

# File Ownership :

**$ cat  etc / passwd (** to get all users info **)**
**$ ls – l**     (list dir )
**$ sudo chown user_name filename**  ( to give access of perticular file to perticular user)

**$ sudo chown user_name : group_name filename** ( to give access of perticular file to perticular user with changed group )

> we can change the owner as well as Group of the file
> we can change the permission for perticular user for file .
> Eg : suppose if there is 'sample.txt' and origional user is 'mac' so i can chnage the owner of this file to 'shubham' & give only read permission to 'mac' & non-readable permission to other users.
> only owner can change the permissions


**$ su user2 ( switch from user1 to user2 )**
**$ su john**
**$ chmod 040 file7.txt ( changing the permission of file7 )**
**$ sudo chgrp group_name filename ( change the group of file )**
**$ sudo chown new_owner_name filename ( change the owner of file )**

**$ cat /etc / passwd ( to see the user details )**