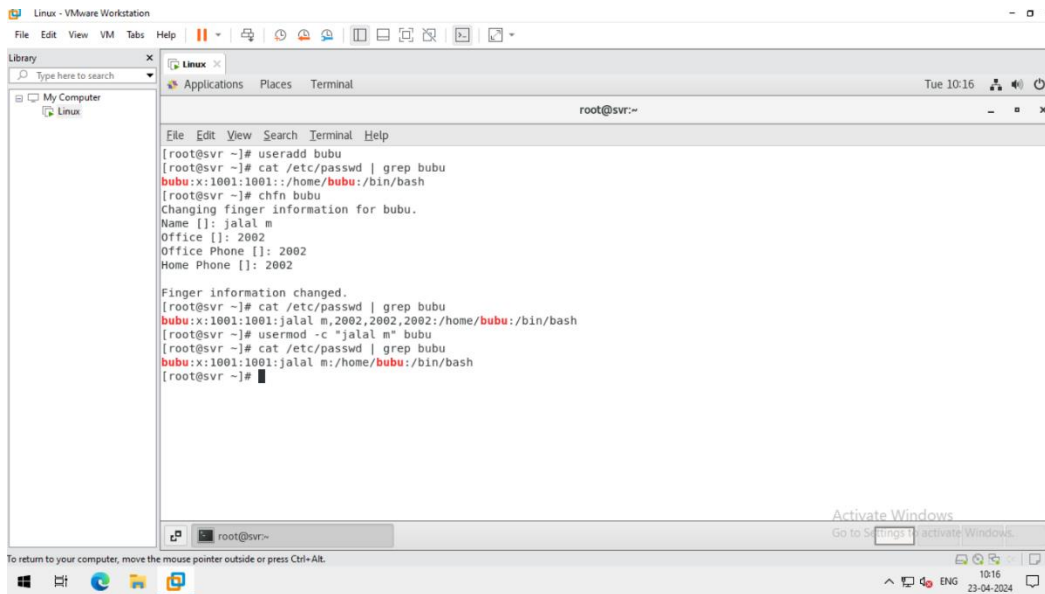


LINUX(day-3)

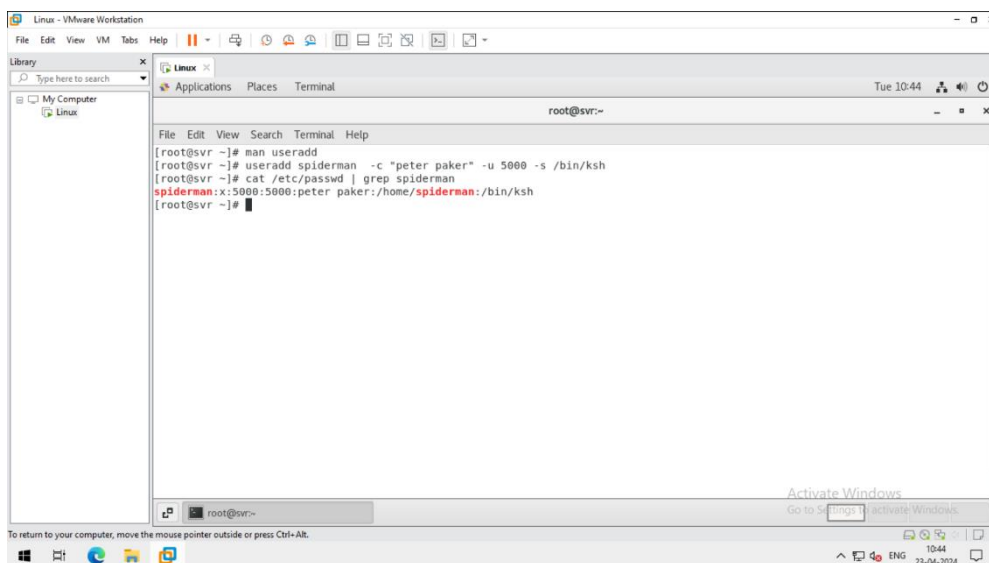
1. Use “useradd” command



```
root@svr:~# useradd bubu
[root@svr ~]# cat /etc/passwd | grep bubu
bubu:x:1001:1001:/home/bubu:/bin/bash
[root@svr ~]# chfn bubu
Changing finger information for bubu.
Name []: jalal m
Office []: 2002
Office Phone []: 2002
Home Phone []: 2002

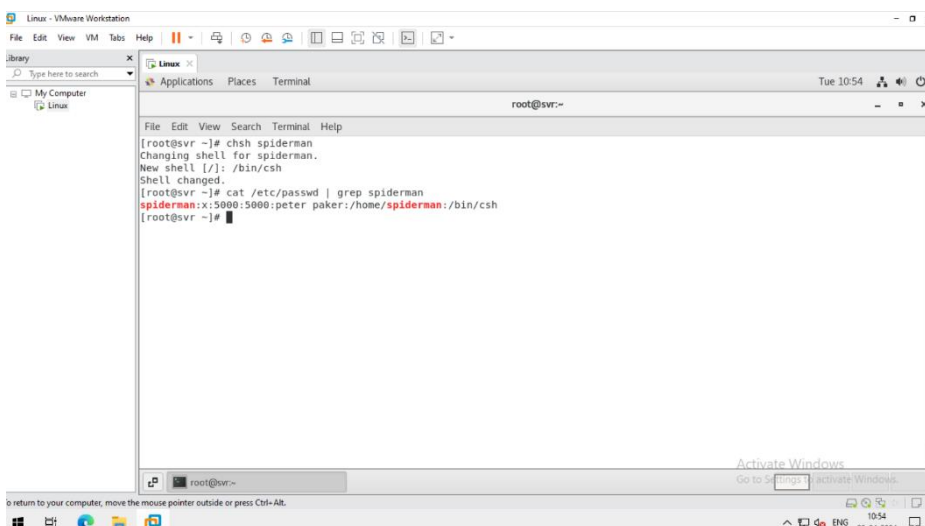
Finger information changed.
[root@svr ~]# cat /etc/passwd | grep bubu
bubu:x:1001:1001:jalal m,2002,2002,2002:/home/bubu:/bin/bash
[root@svr ~]# usermod -c "jalal m" bubu
[root@svr ~]# cat /etc/passwd | grep bubu
bubu:x:1001:1001:jalal m:/home/bubu:/bin/bash
[root@svr ~]#
```

- ## 2. Task-1 Create a user with details – username : Spiderman
- Comment : “peter paker”
 - Uid: 5000
 - Details : /bin/ksh



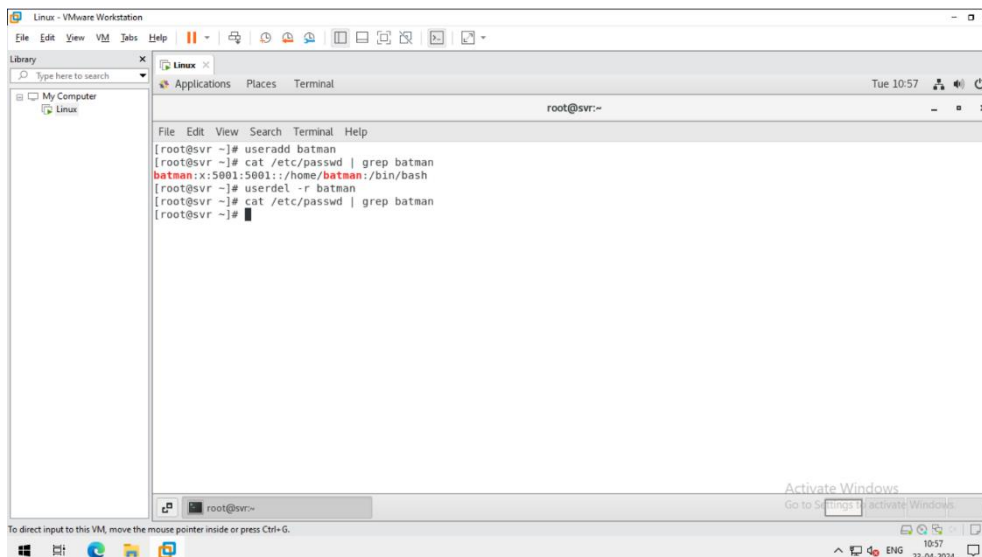
```
root@svr:~# man useradd
root@svr ~]# useradd spiderman -c "peter paker" -u 5000 -s /bin/ksh
root@svr ~]# cat /etc/passwd | grep spiderman
spiderman:x:5000:5000:peter paker:/home/spiderman:/bin/ksh
root@svr ~]#
```

3. Modify user



```
root@svr:~# chsh spiderman
Changing shell for spiderman.
New shell [//]: /bin/csh
Shell changed.
root@svr ~]# cat /etc/passwd | grep spiderman
spiderman:x:5000:5000:peter paker:/home/spiderman:/bin/csh
root@svr ~]#
```

4. Delate user

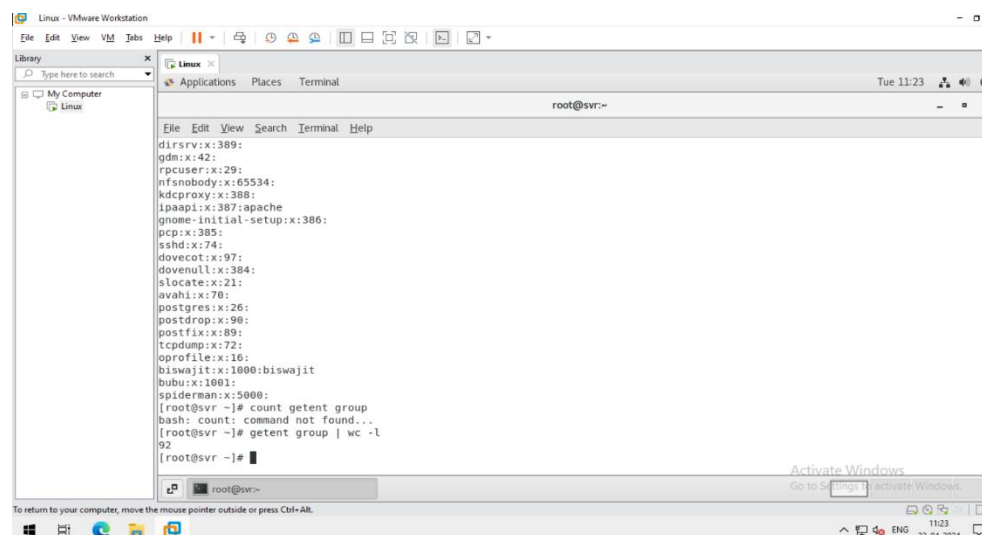


```
Linux - VMware Workstation
File Edit View VM Jobs Help
Library
Type here to search
My Computer
Linux
Applications Places Terminal
Tue 10:57
root@svr:~# useradd batman
root@svr ~# cat /etc/passwd | grep batman
batman:x:5001:5001:/home/batman:/bin/bash
root@svr ~# userdel -r batman
root@svr ~# cat /etc/passwd | grep batman
root@svr ~#
```

Activate Windows
Go to Settings to activate Windows.

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

5. Count the number of group present in system

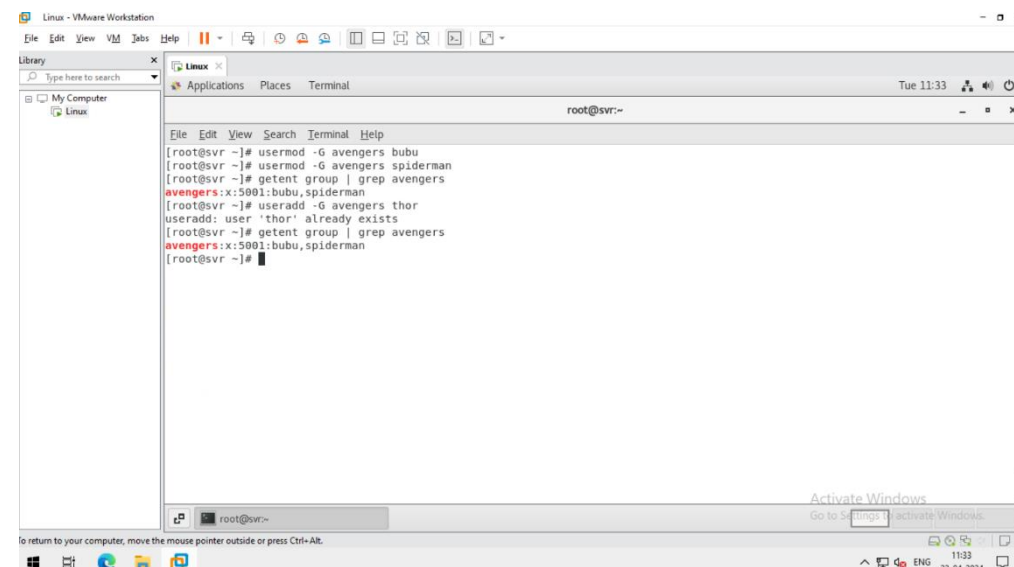


```
Linux - VMware Workstation
File Edit View VM Jobs Help
Library
Type here to search
My Computer
Linux
Applications Places Terminal
Tue 11:23
root@svr:~#
dircsv:x:389:
gdm:x:42:
rpcuser:x:29:
nfsnobody:x:65534:
kdcproxy:x:388:
ipaapl:x:397:apache
gnome-initial-setup:x:386:
pcp:x:385:
sshd:x:74:
dovecot:x:97:
dovecot:x:384:
slocate:x:21:
avahi:x:70:
postgres:x:26:
postdrop:x:90:
postfix:x:89:
tcpdump:x:72:
oprofile:x:16:
biswajit:x:1000:biswajit
bubu:x:1001:
spiderman:x:5000:
root@svr ~# count getent group
bash: count: command not found...
root@svr ~# getent group | wc -l
92
root@svr ~#
```

Activate Windows
Go to Settings to activate Windows.

To return to your computer, move the mouse pointer outside or press Ctrl+Alt.

6. Add user in group

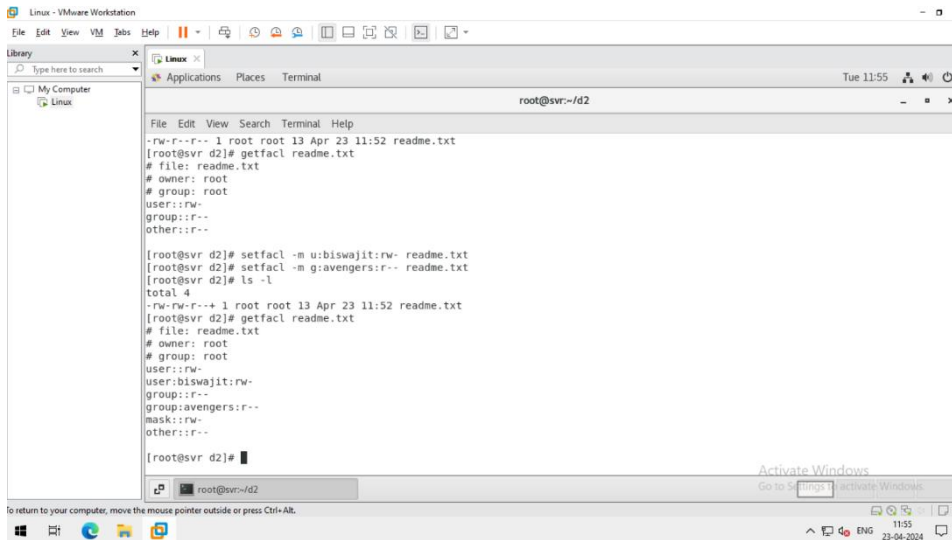


```
Linux - VMware Workstation
File Edit View VM Jobs Help
Library
Type here to search
My Computer
Linux
Applications Places Terminal
Tue 11:33
root@svr:~#
root@svr ~# usermod -G avengers bubu
root@svr ~# usermod -G avengers spiderman
root@svr ~# getent group | grep avengers
avengers:x:5001:bubu,spiderman
root@svr ~# useradd -G avengers thor
useradd: user 'thor' already exists
root@svr ~# getent group | grep avengers
avengers:x:5001:bubu,spiderman
root@svr ~#
```

Activate Windows
Go to Settings to activate Windows.

To return to your computer, move the mouse pointer outside or press Ctrl+Alt.

7. ACL (Access Control List)



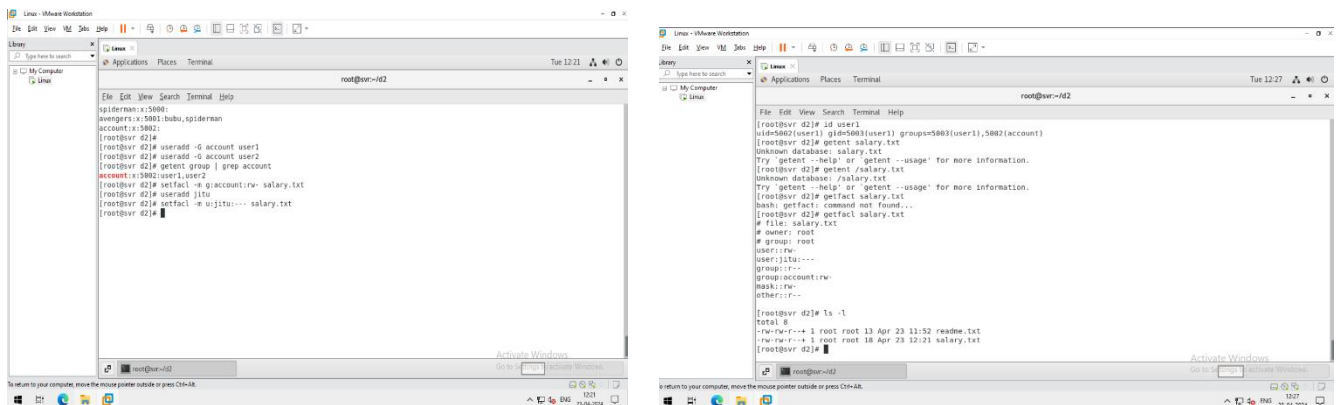
```
File Edit View Search Terminal Help
root@svr:~/d2

-rw-r--r-- 1 root root 13 Apr 23 11:52 readme.txt
[root@svr d2]# getfacl readme.txt
# file: readme.txt
# owner: root
# group: root
user::rw-
group::r--
other::r--

[root@svr d2]# setfacl -m u:biswajit:rw- readme.txt
[root@svr d2]# setfacl -m g:avengers:r-- readme.txt
[root@svr d2]# ls -l
total 4
-rw-rw-r-- 1 root root 13 Apr 23 11:52 readme.txt
[root@svr d2]# getfacl readme.txt
# file: readme.txt
# owner: root
# group: root
user::rw-
user:biswajit:rw-
group::r--
group:avengers:r--
mask::rw-
other::r--

[root@svr d2]#
```

8. ACL task



```
File Edit View Search Terminal Help
root@svr:~/d2

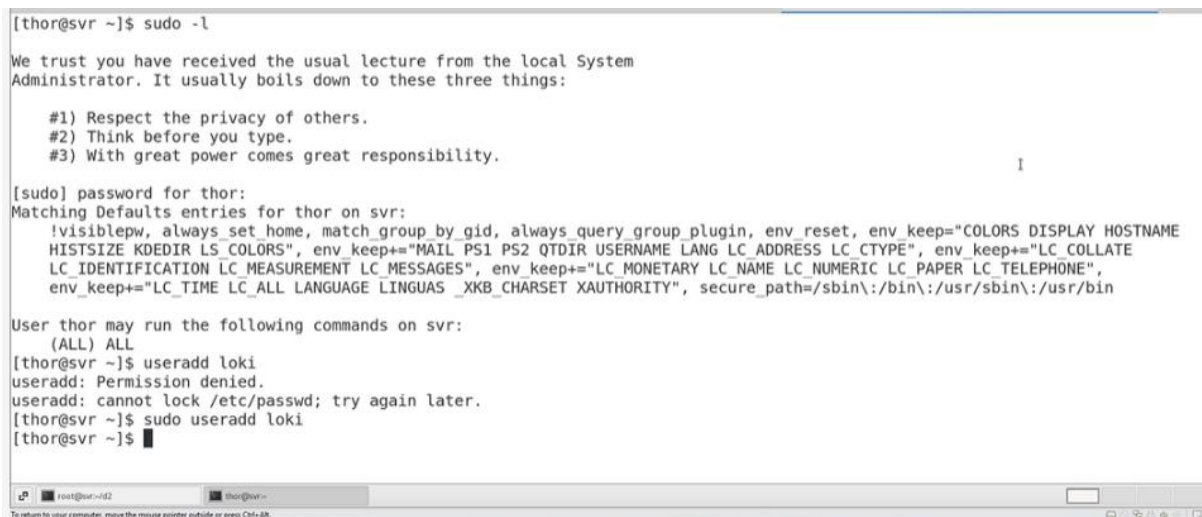
spiderman:s580:
avengers:s580:biswajit,spiderman
account:s580:
[root@svr d2]#
[root@svr d2]# useradd -s /bin/bash account user1
[root@svr d2]# useradd -s /bin/bash account user2
[root@svr d2]# getent group | grep account
account:s580:user1,user2
[root@svr d2]# useradd -s /bin/bash account:rw- salary.txt
[root@svr d2]# useradd jitu
[root@svr d2]# setfacl -m u:jitu:rw- salary.txt
[root@svr d2]#

File Edit View Search Terminal Help
root@svr:~/d2

[root@svr d2]# id user1
uid=5802(user1) gid=5803(user1) groups=5803(user1),5802(account)
[root@svr d2]# getent salary.txt
unknown database: salary.txt
Try 'getent --help' or 'getent --usage' for more information.
[root@svr d2]# getent /salary.txt
unknown database: /salary.txt
Try 'getent --help' or 'getent --usage' for more information.
[root@svr d2]# getfacl salary.txt
bash: getfacl: command not found...
[root@svr d2]# getfacl salary.txt
# file: salary.txt
# owner: root
# group: root
user::rw-
user:jitu:---
group::r--
group:account:rw-
mask::rw-
other::r--

[root@svr d2]# ls -l
total 8
-rw-rw-r-- 1 root root 13 Apr 23 11:52 readme.txt
-rw-rw-r-- 1 root root 18 Apr 23 12:21 salary.txt
[root@svr d2]#
```

9. Sudo user



```
[thor@svr ~]$ sudo -l

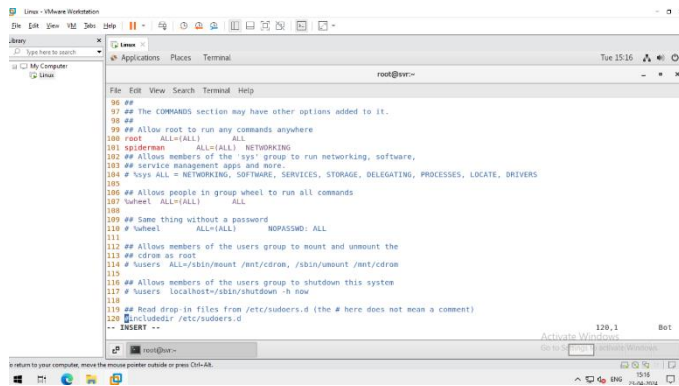
We trust you have received the usual lecture from the local System
Administrator. It usually boils down to these three things:

    #1) Respect the privacy of others.
    #2) Think before you type.
    #3) With great power comes great responsibility.

[sudo] password for thor:
Matching Defaults entries for thor on svr:
!visiblepw, always_set_home, match_group_by_gid, always_query_group_plugin, env_reset, env_keep="COLORS DISPLAY HOSTNAME HISTSIZE KODIR LS_COLORS", env_keep+="MAIL PS1 PS2 QTDIR USERNAME LANG LC_ADDRESS LC_CTYPE", env_keep+="LC_COLLATE LC_IDENTIFICATION LC_MEASUREMENT LC_MESSAGES", env_keep+="LC_MONETARY LC_NAME LC_NUMERIC LC_PAPER LC_TELEPHONE", env_keep+="LC_TIME LC_ALL LANGUAGE LINGUAS _XKB_CHARSET XAUTHORITY", secure_path=/sbin\:/bin\:/usr/sbin\:/usr/bin

User thor may run the following commands on svr:
    (ALL) ALL
[thor@svr ~]$ useradd loki
useradd: Permission denied.
useradd: cannot lock /etc/passwd; try again later.
[thor@svr ~]$ sudo useradd loki
[thor@svr ~]$
```

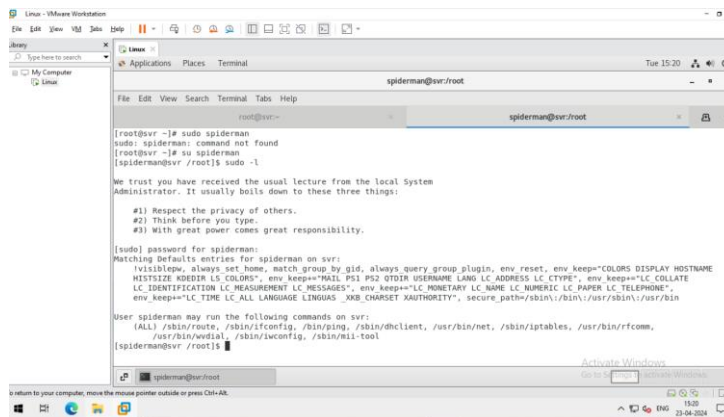
10. Add existing user in SUDO



```
File Edit View Search Terminal Help
root@svr:~# cat /etc/sudoers
##
## This file controls who can run the suid bit programs.
##
## Allow root to run any commands anywhere
100 root    ALL=(ALL)    ALL
101 spiderman ALL=(ALL) NETWORKING
102 ## Allow members of the 'sys' group to run networking, software,
103 ## service management apps and more...
104 # Sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
105
106 ## Allow people in group wheel to run all commands
107 wheel    ALL=(ALL)    ALL
108
109 ## Same thing without a password
110 # wheel    ALL=(ALL)    NOPASSWD: ALL
111
112 ## Allow members of the users group to mount and unmount the
113 ## cdrom as root
114 # users    ALL=/sbin/mount /mnt/cdrom, /sbin/umount /mnt/cdrom
115
116 ## Allow members of the users group to shutdown this system
117 # users    localhost=/sbin/shutdown -h now
118
119 ## Read drop-in files from /etc/sudoers.d (the # here does not mean a comment)
120 #includedir /etc/sudoers.d
-- INSERT --
```

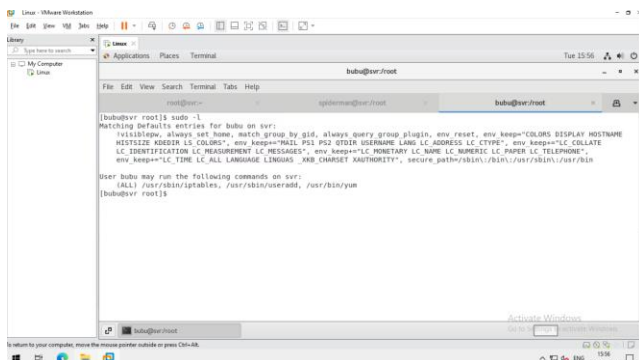
```
21
22
23 ## Command Aliases
24 ## These are groups of related commands...
25
26 ## Networking
27 Cmd_Alias NETWORKING = /sbin/route, /sbin/ifconfig, /bin/ping, /sbin/dhclient, /usr/bin/net, /sbin/iptables, /usr/bin/rfcomm, /usr/bin/wvdial, /sbin/lwconfig, /sbin/mii-tool
28
29 ## Installation and management of software
30 # Cmd_Alias SOFTWARE = /bin/rpm, /usr/bin/up2date, /usr/bin/yum
31
32 ## Services
33 # Cmd_Alias SERVICES = /sbin/service, /sbin/chkconfig, /usr/bin/systemctl start, /usr/bin/systemctl stop, /usr/bin/systemctl r
ctl reload, /usr/bin/systemctl restart, /usr/bin/systemctl status, /usr/bin/systemctl enable, /usr/bin/systemctl disable
34
35 ## Updating the locate database
36 # Cmd_Alias LOCATE = /usr/bin/updatedb
37
38 ## Storage
39 # Cmd_Alias STORAGE = /sbin/fdisk, /sbin/sfdisk, /sbin/parted, /sbin/partprobe, /bin/mount, /bin/umount
40
41 ## Delegating permissions
-- INSERT --
```

27,1 19%



```
File Edit View Search Terminal Tabs Help
spiderman@svr:root
root@svr:~# cat /etc/sudoers
##
## This file controls who can run the suid bit programs.
##
## Allow root to run any commands anywhere
100 root    ALL=(ALL)    ALL
101 spiderman ALL=(ALL) NETWORKING
102 ## Allow members of the 'sys' group to run networking, software,
103 ## service management apps and more...
104 # Sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
105
106 ## Allow people in group wheel to run all commands
107 wheel    ALL=(ALL)    ALL
108
109 ## Same thing without a password
110 # wheel    ALL=(ALL)    NOPASSWD: ALL
111
112 ## Allow members of the users group to mount and unmount the
113 ## cdrom as root
114 # users    ALL=/sbin/mount /mnt/cdrom, /sbin/umount /mnt/cdrom
115
116 ## Allow members of the users group to shutdown this system
117 # users    localhost=/sbin/shutdown -h now
118
119 ## Read drop-in files from /etc/sudoers.d (the # here does not mean a comment)
120 #includedir /etc/sudoers.d
-- INSERT --
```

11. Adding user with custom permissions



```
File Edit View Search Terminal Tabs Help
bubu@svr:root
root@svr:~# cat /etc/sudoers
##
## This file controls who can run the suid bit programs.
##
## Allow root to run any commands anywhere
100 root    ALL=(ALL)    ALL
101 spiderman ALL=(ALL) NETWORKING
102 ## Allow members of the 'sys' group to run networking, software,
103 ## service management apps and more...
104 # Sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
105
106 ## Allow people in group wheel to run all commands
107 wheel    ALL=(ALL)    ALL
108
109 ## Same thing without a password
110 # wheel    ALL=(ALL)    NOPASSWD: ALL
111
112 ## Allow members of the users group to mount and unmount the
113 ## cdrom as root
114 # users    ALL=/sbin/mount /mnt/cdrom, /sbin/umount /mnt/cdrom
115
116 ## Allow members of the users group to shutdown this system
117 # users    localhost=/sbin/shutdown -h now
118
119 ## Read drop-in files from /etc/sudoers.d (the # here does not mean a comment)
120 #includedir /etc/sudoers.d
-- INSERT --
```

```
# USER_ALIAS AUPHNS = JSMLIN, BIKEM

Cmd_Alias CUSTOMCMD = /usr/sbin/iptables, /usr/sbin/useradd, /usr/bin/yum

## Command Aliases
## These are groups of related commands...

## Networking
Cmd_Alias NETWORKING = /sbin/route, /sbin/ifconfig, /bin/ping, /sbin/dhclient, /usr/bin/net, /sbin/iptables, /usr/bin/rfcomm, /usr/bin/wvdial, /sbin/lwconfig, /sbin/mii-tool

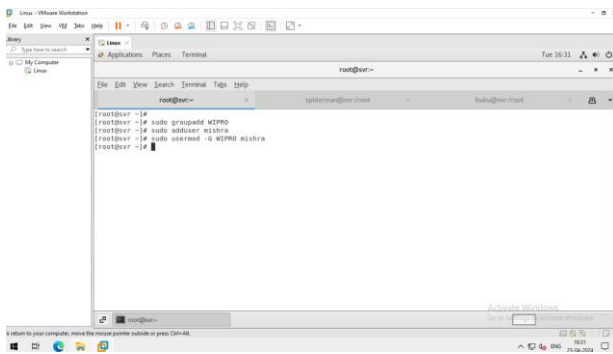
## Installation and management of software
Cmd_Alias SOFTWARE = /bin/rpm, /usr/bin/up2date, /usr/bin/yum

## Services
# Cmd_Alias SERVICES = /sbin/service, /sbin/chkconfig, /usr/bin/systemctl start, /usr/bin/systemctl stop, /usr/bin/systemctl r
eload, /usr/bin/systemctl restart, /usr/bin/systemctl status, /usr/bin/systemctl enable, /usr/bin/systemctl disable

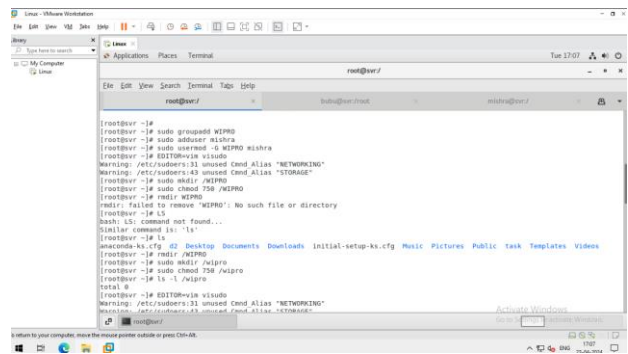
## Updating the locate database
# Cmd_Alias LOCATE = /usr/bin/updatedb
:WQ!
```

Activate Windows

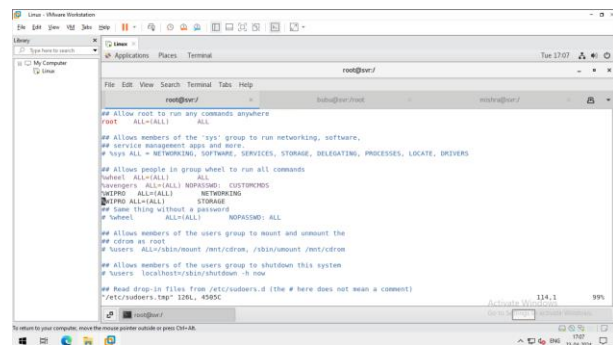
12. Task :- Create a group "WIPRO". Create a user with your last name and add this user to WIPRO group. Give WIPRO group networking and storage permissions and verify. Also, create a new folder "/wipro" & allow the access of read & execution on this group and verify.
- has context menu



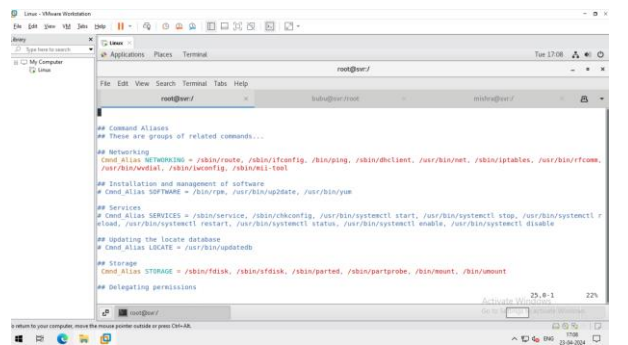
```
root@wipro:~# sudo groupadd WIPRO
root@wipro:~# sudo adduser misra
root@wipro:~# sudo usermod -G WIPRO misra
root@wipro:~#
```



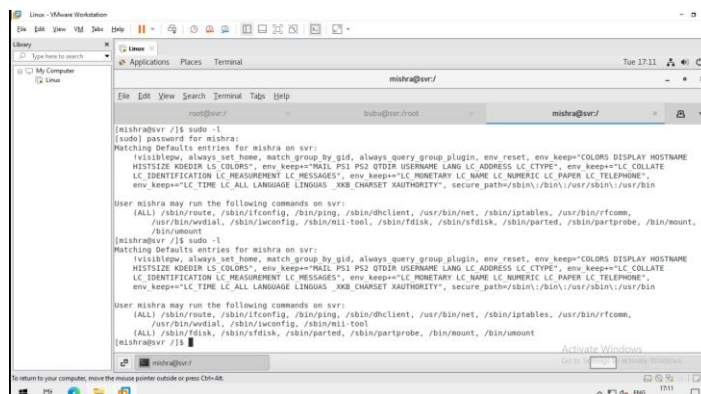
```
misra@wipro:~$ sudo mkdir /wipro
misra@wipro:~$ sudo chown 750 /wipro
misra@wipro:~$ ls -l /wipro
total 0
misra@wipro:~$
```



```
root@wipro:~# sudo chmod 750 /wipro
root@wipro:~#
```



```
misra@wipro:~$ ls -l /wipro
total 0
misra@wipro:~$
```



```
misra@wipro:~$ ls -l /wipro
total 0
misra@wipro:~$
```