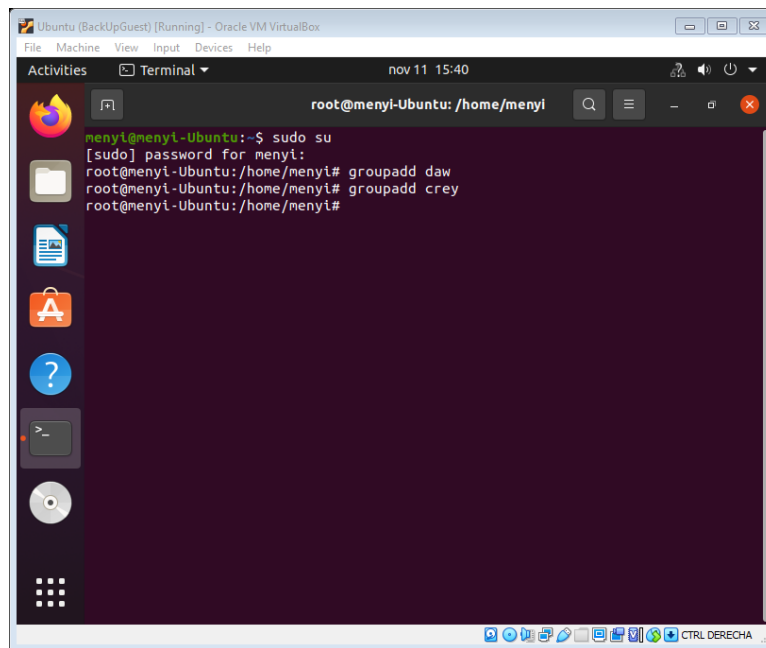


UNIT 03: Linux systems administration # Exercise 03

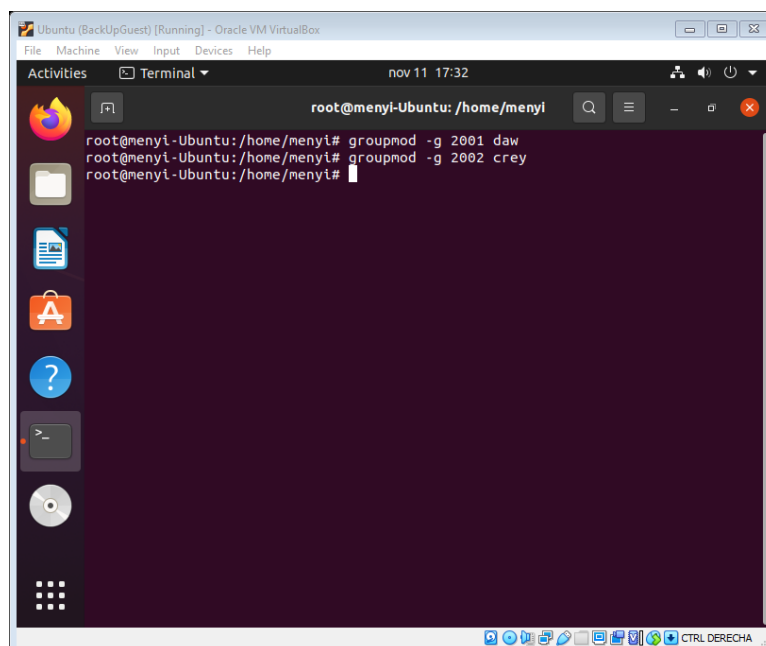
A# USERS AND GROUPS MANAGEMENT

1. Add two new groups named “daw” and “crey”



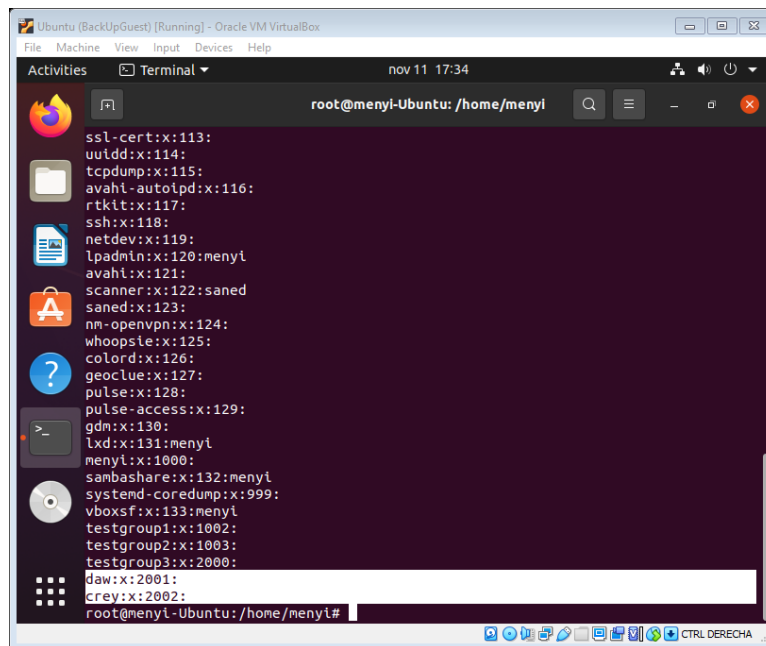
```
menyi@menyi-Ubuntu:~$ sudo su
[sudo] password for meny:
root@menyi-Ubuntu:/home/menyi# groupadd daw
root@menyi-Ubuntu:/home/menyi# groupadd crey
root@menyi-Ubuntu:/home/menyi#
```

2. Change “daw” and “crey” GIDS to 2001 and 2002, respectively.



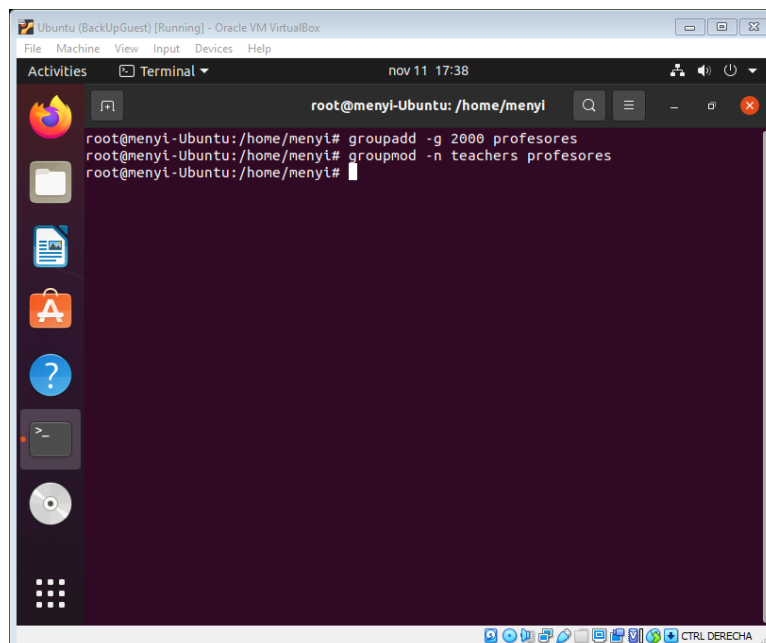
```
root@menyi-Ubuntu:/home/menyi# groupmod -g 2001 daw
root@menyi-Ubuntu:/home/menyi# groupmod -g 2002 crey
root@menyi-Ubuntu:/home/menyi#
```

To check the groups.
Execute > **cat /etc/group**



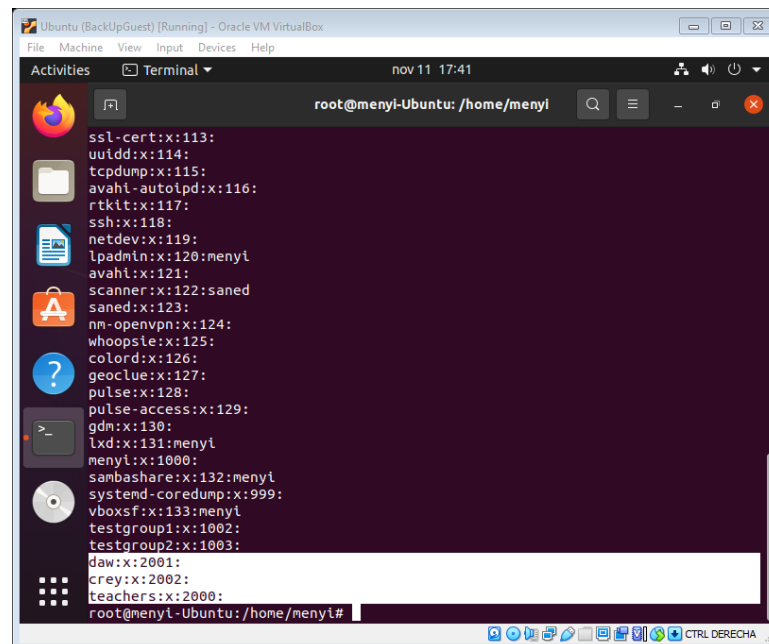
```
root@menyi-Ubuntu: /home/menyl# cat /etc/group
ssl-cert:x:113:
uuidd:x:114:
tcpdump:x:115:
avahi-autotp:x:116:
rtkit:x:117:
ssh:x:118:
netdev:x:119:
lpadmin:x:120:menyl
avahi:x:121:
scanner:x:122:saned
saned:x:123:
nm-openvpn:x:124:
whoopster:x:125:
colord:x:126:
geoclue:x:127:
pulse:x:128:
pulse-access:x:129:
gdm:x:130:
lxd:x:131:menyl
menyl:x:1000:
smbshare:x:132:menyl
systemd-coredump:x:999:
vboxsf:x:133:menyl
testgroup1:x:1002:
testgroup2:x:1003:
testgroup3:x:2000:
daw:x:2001:
grey:x:2002:
root@menyl-Ubuntu: /home/menyl#
```

3. Create a new group called “profesores” with GID of 2000. Then, modify the group name to teachers



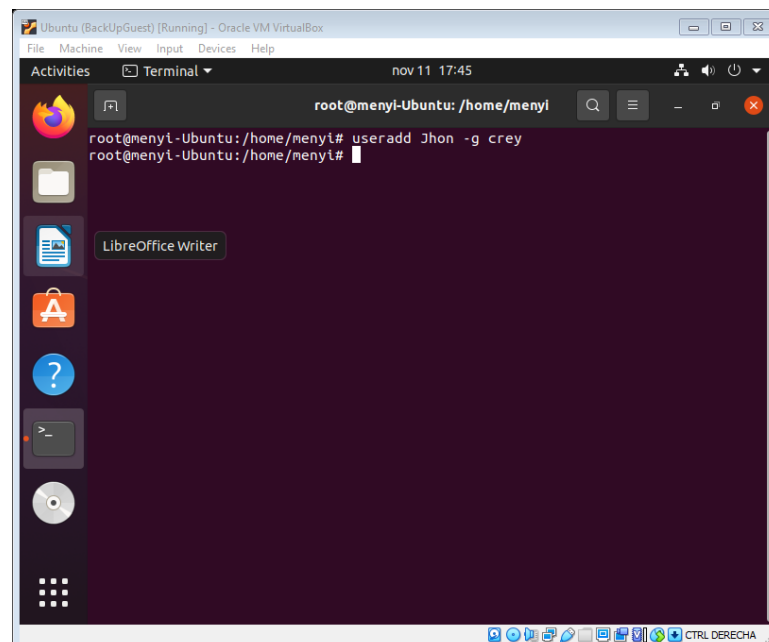
```
root@menyl-Ubuntu: /home/menyl# groupadd -g 2000 profesores
root@menyl-Ubuntu: /home/menyl# groupmod -n teachers profesores
root@menyl-Ubuntu: /home/menyl#
```

4. Verify that you have correctly created the groups named “daw”, “crey” and “teachers”
Execute **> cat /etc/group**



```
root@menyi-Ubuntu: /home/menyl# cat /etc/group
ssl-cert:x:113:
uuidd:x:114:
tcpdump:x:115:
avahi-autoipd:x:116:
rtkit:x:117:
ssh:x:118:
netdev:x:119:
lpadmin:x:120:menyl
avahi:x:121:
scanner:x:122:saned
saned:x:123:
nm-openvpn:x:124:
whoopster:x:125:
colord:x:126:
geoclue:x:127:
pulse:x:128:
pulse-access:x:129:
gdm:x:130:
lxd:x:131:menyl
menyl:x:1000:
smbshare:x:132:menyl
systemd-coredump:x:999:
vboxsf:x:133:menyl
testgroup1:x:1002:
testgroup2:x:1003:
daw:x:2001:
crey:x:2002:
teachers:x:2000:
root@menyi-Ubuntu: /home/menyl#
```

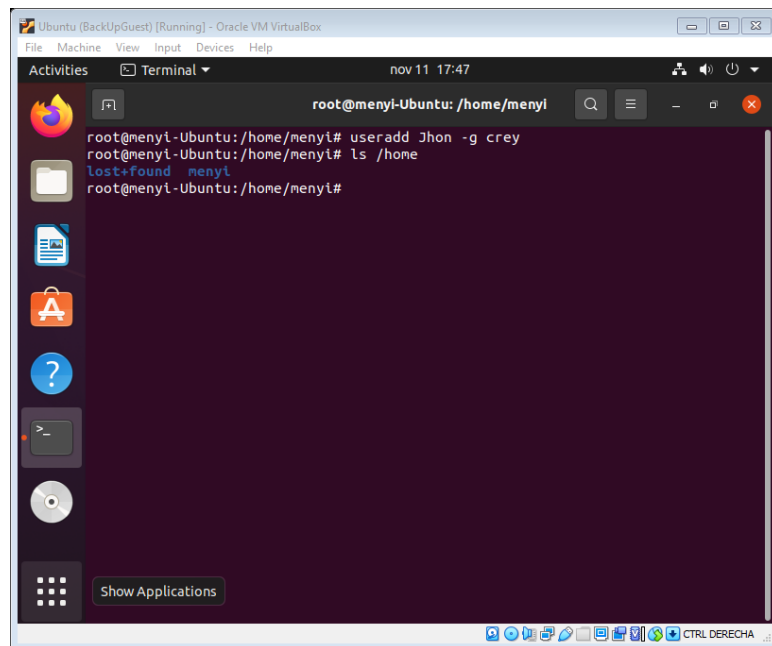
5. Add a new user named “john” whose primary group is “crey”.



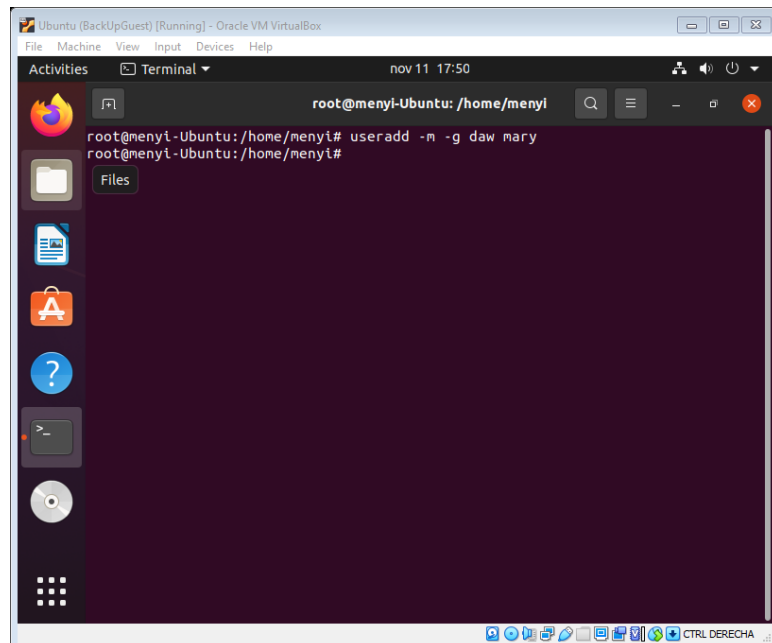
```
root@menyi-Ubuntu: /home/menyl# useradd Jhon -g crey
root@menyi-Ubuntu: /home/menyl#
```

Execute **> ls /home**

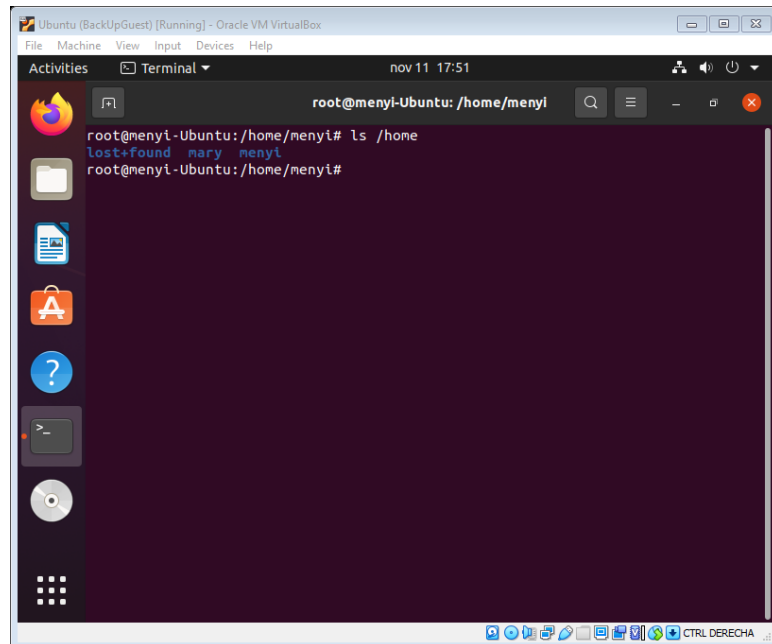
Has the home directory been created with the default command? No, it doesn't.



6. Add a new user named “mary”, whose primary group is “daw” and the home directory /home/mary

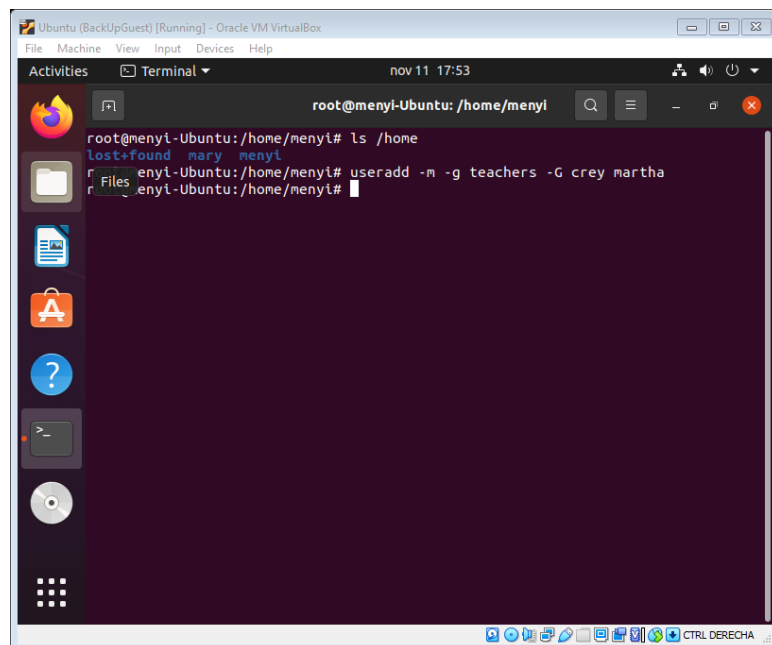


Execute **> ls /home**



A screenshot of a terminal window titled "Ubuntu (BackUpGuest) [Running] - Oracle VM VirtualBox". The terminal shows the command `ls /home` being executed. The output is `lost+found mary menyi`. The prompt is `root@menyi-Ubuntu: /home/menyi#`. The terminal window has a dark background and a sidebar with application icons on the left.

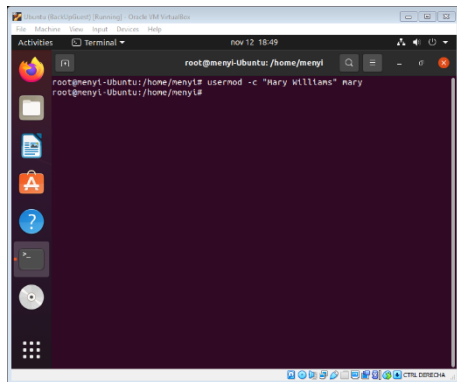
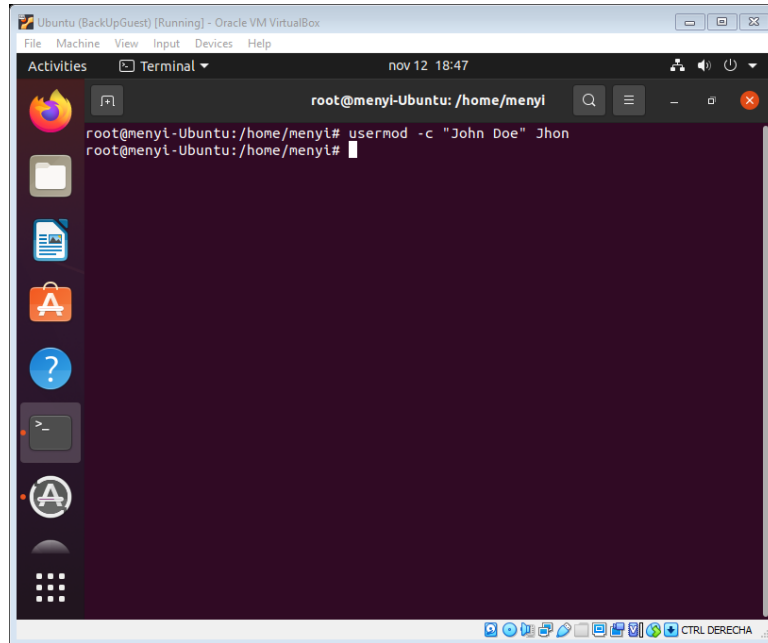
7. Add a new user named "martha", whose primary group is "teachers", the home directory /home/martha and belonging to the secondary group "crey"



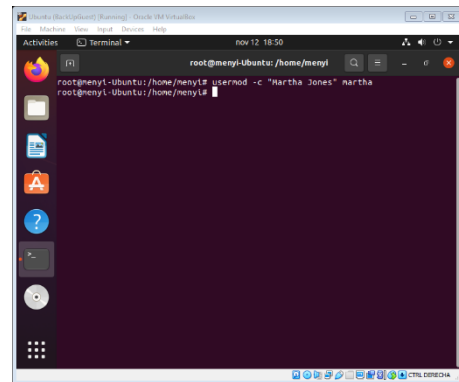
A screenshot of a terminal window titled "Ubuntu (BackUpGuest) [Running] - Oracle VM VirtualBox". The terminal shows the command `useradd -m -g teachers -G crey martha` being executed. The output is `Files _enyi-Ubuntu: /home/menyi#`. The prompt is `root@menyi-Ubuntu: /home/menyi#`. The terminal window has a dark background and a sidebar with application icons on the left.

8. Add the following names to the users that you have just created:

a) John= "John Doe"



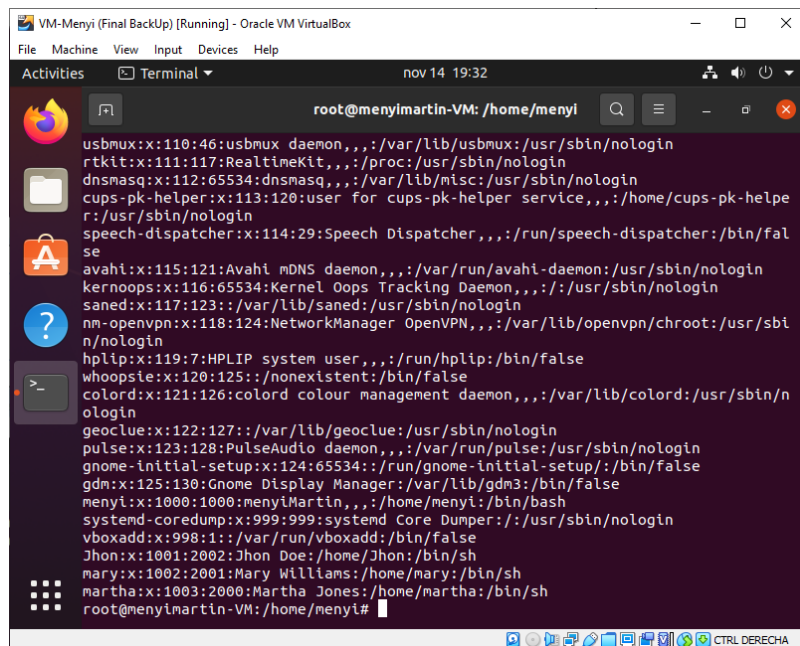
Mary = "Mary Williams"



Martha = "Martha Jones"

9. How could you check that you have created all the users with the right primary groups?

Execute **> cat /etc/passwd**



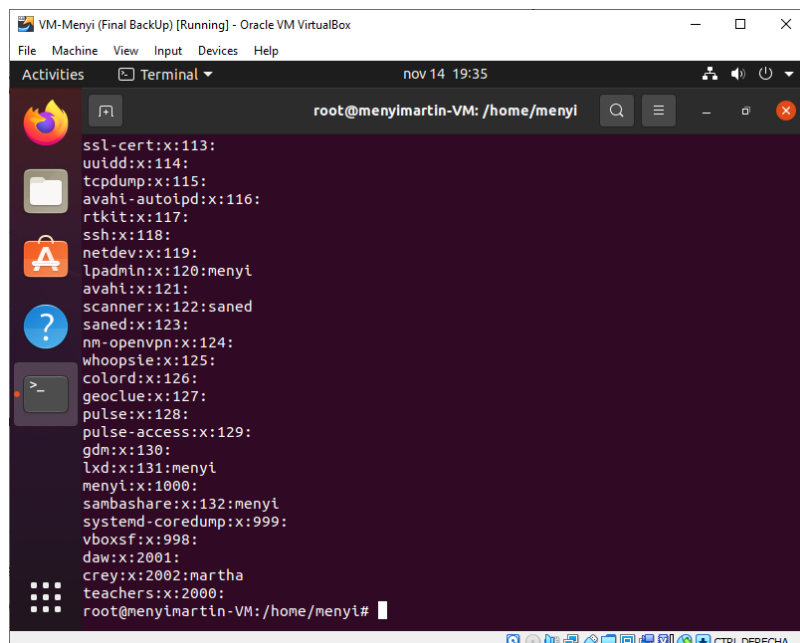
```

root@menyimartin-VM: /home/menyi
usbmux:x:110:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
rtkit:x:111:117:RealtimeKit,,,:/proc:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
cups-pk-helper:x:113:120:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
speech-dispatcher:x:114:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
avahi:x:115:121:Avahi mDNS daemon,,,:/var/run/avahi-daemon:/usr/sbin/nologin
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,,:/usr/sbin/nologin
saned:x:117:123:/:/var/lib/saned:/usr/sbin/nologin
nm-openvpn:x:118:124:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
hplip:x:119:7:HPLIP system user,,,:/run/hplip:/bin/false
whoopste:x:120:125:/:nonexistent:/bin/false
colord:x:121:126:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
geoclue:x:122:127:/:/var/lib/geoclue:/usr/sbin/nologin
pulse:x:123:128:PulseAudio daemon,,,:/var/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:124:65534:/:run/gnome-initial-setup:/bin/false
gdm:x:125:130:Gnome Display Manager:/var/lib/gdm3:/bin/false
menyi:x:1000:1000:menyiMartin,,,:/home/menyi:/bin/bash
systemd-coredump:x:999:999:systemd Core Dumper:/:/usr/sbin/nologin
vboxadd:x:998:1:/:/var/run/vboxadd:/bin/false
Jhon:x:1001:2002:Jhon Doe:/home/Jhon:/bin/sh
mary:x:1002:2001:Mary Williams:/home/mary:/bin/sh
martha:x:1003:2000:Martha Jones:/home/martha:/bin/sh
root@menyimartin-VM: /home/menyi#

```

10. Verify if crey and daw groups have martha as a member

Execute **> cat /etc/group**



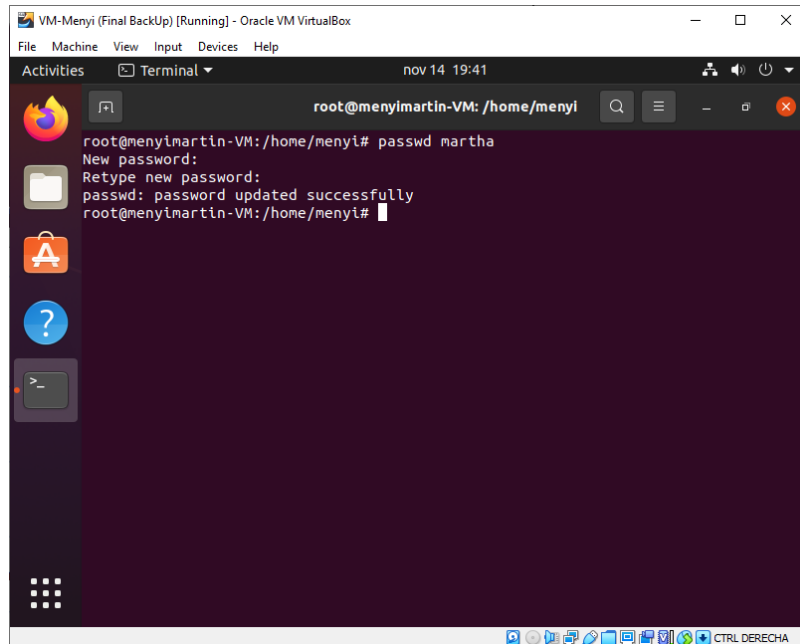
```

root@menyimartin-VM: /home/menyi
ssl-cert:x:113:
uidd:x:114:
tcpdump:x:115:
avahi-autoipd:x:116:
rtkit:x:117:
ssh:x:118:
netdev:x:119:
lpadmin:x:120:menyi
avahi:x:121:
scanner:x:122:saned
saned:x:123:
nm-openvpn:x:124:
whoopste:x:125:
colord:x:126:
geoclue:x:127:
pulse:x:128:
pulse-access:x:129:
gdm:x:130:
lxd:x:131:menyi
menyi:x:1000:
sambashare:x:132:menyi
systemd-coredump:x:999:
vboxsf:x:998:
daw:x:2001:
crey:x:2002:martha
teachers:x:2000:
root@menyimartin-VM: /home/menyi#

```

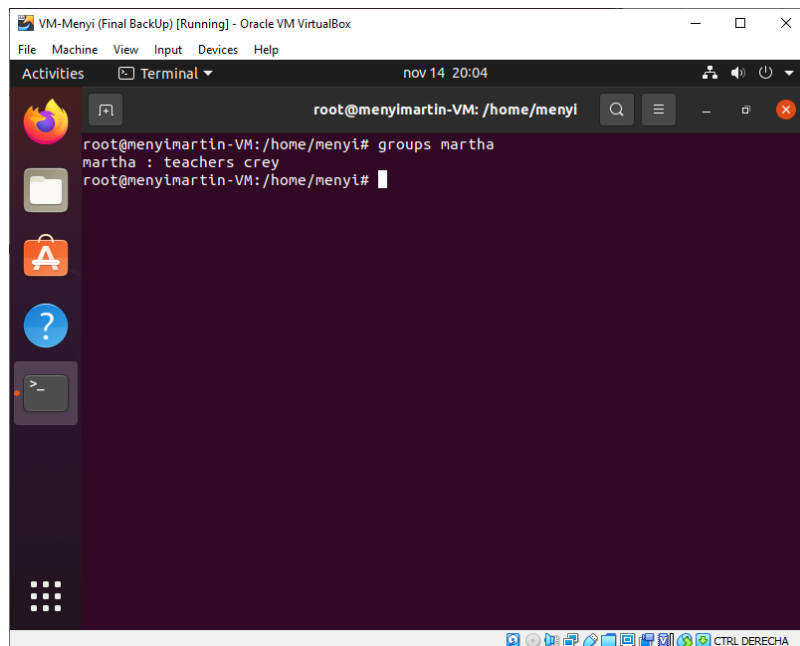
11. Can you log in with any of the users you have created?
No because they don't have a password yet.

12. Set the password "martha22" for the user "martha"



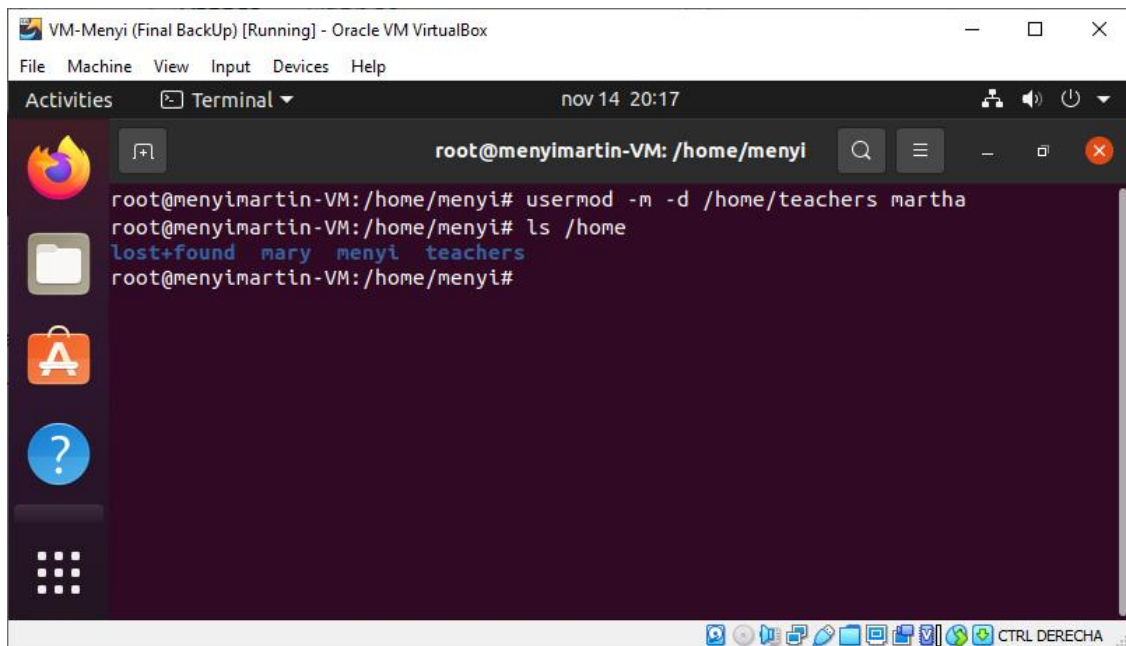
```
VM-Menyi (Final BackUp) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal nov 14 19:41
root@menyimartin-VM: /home/menyi
root@menyimartin-VM:/home/menyi# passwd martha
New password:
Retype new password:
passwd: password updated successfully
root@menyimartin-VM:/home/menyi#
```

13. Display on the shell prompt the groups to which Martha belongs

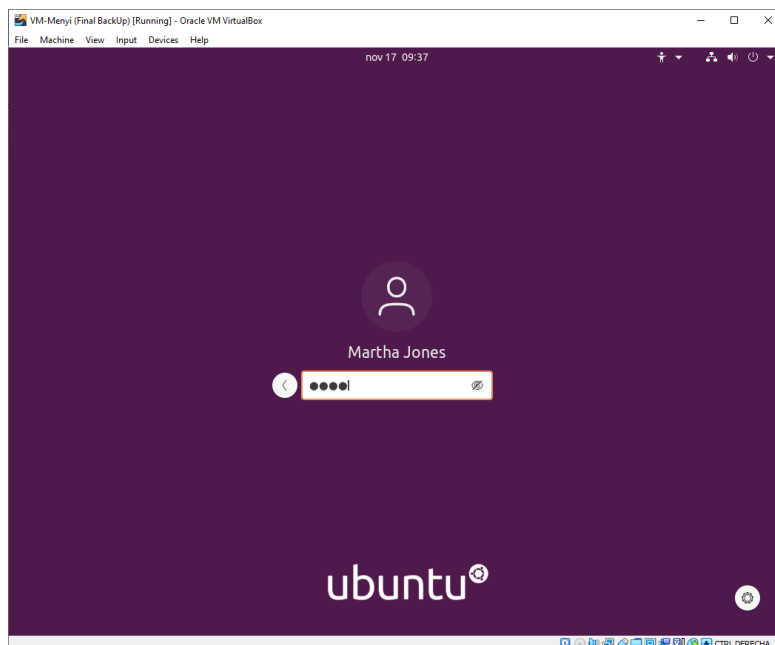


```
VM-Menyi (Final BackUp) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal nov 14 20:04
root@menyimartin-VM: /home/menyi
root@menyimartin-VM:/home/menyi# groups martha
martha : teachers crey
root@menyimartin-VM:/home/menyi#
```


14. Create a directory named “teachers” in “/home”. Then, assign the directory “/home/teachers” to the user martha (you can do all the steps typing just one command).

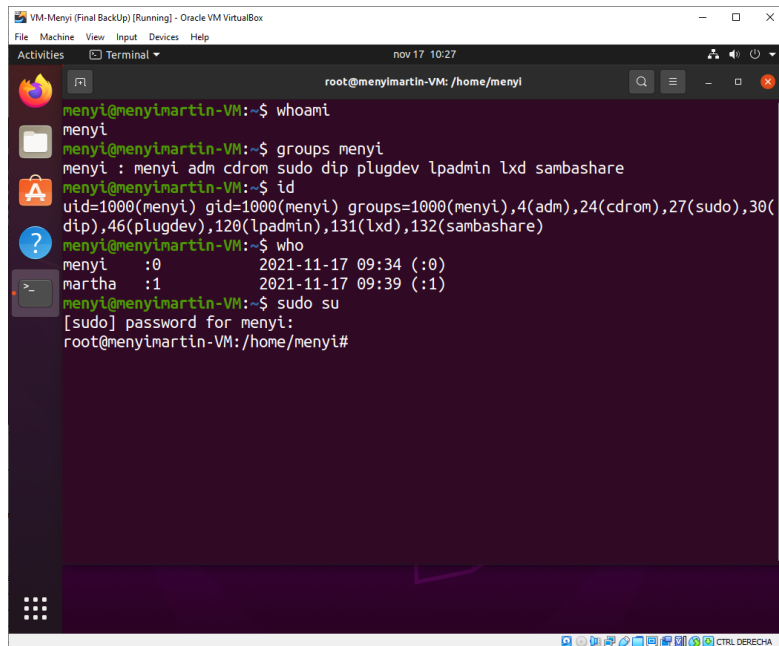


15. Now, log in as user “martha”



Run the command “cd \$SHOME” and check that the home directory is “/home/teachers”

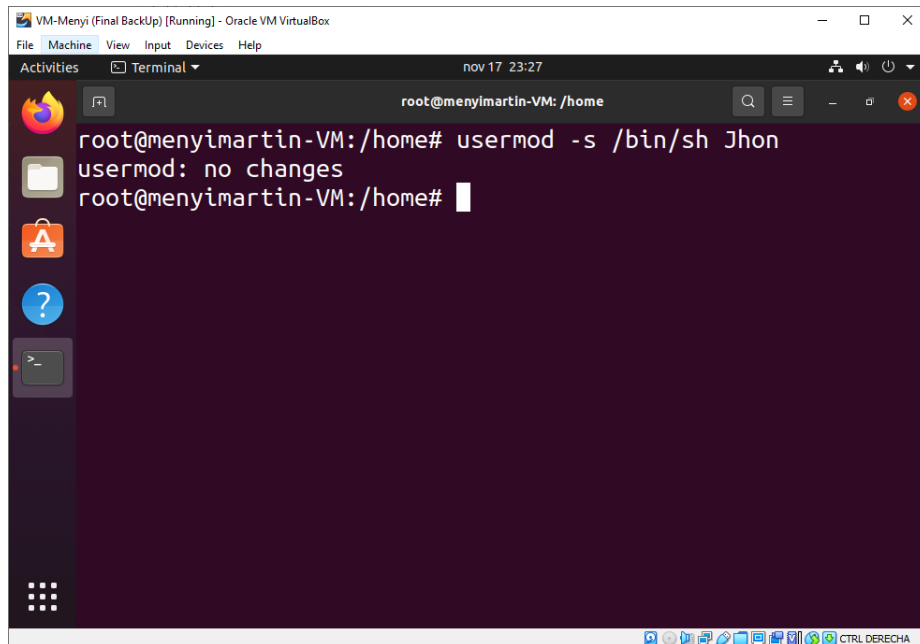
16. Go back to the root shell



```
VM-Menyi (Final Backup) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal nov 17 10:27
root@menyimartin-VM: /home/menyi

menyi@menyimartin-VM:~$ whoami
menyi
menyi@menyimartin-VM:~$ groups meny
menyi : meny adm cdrom sudo dip plugdev lpadmin lxd sambashare
menyi@menyimartin-VM:~$ id
uid=1000(menyi) gid=1000(menyi) groups=1000(menyi),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),120(lpadmin),131(lxd),132(sambashare)
menyi@menyimartin-VM:~$ who
menyi      :0                2021-11-17 09:34 (:0)
martha    :1                2021-11-17 09:39 (:1)
menyi@menyimartin-VM:~$ sudo su
[sudo] password for meny:
root@menyimartin-VM: /home/menyi#
```

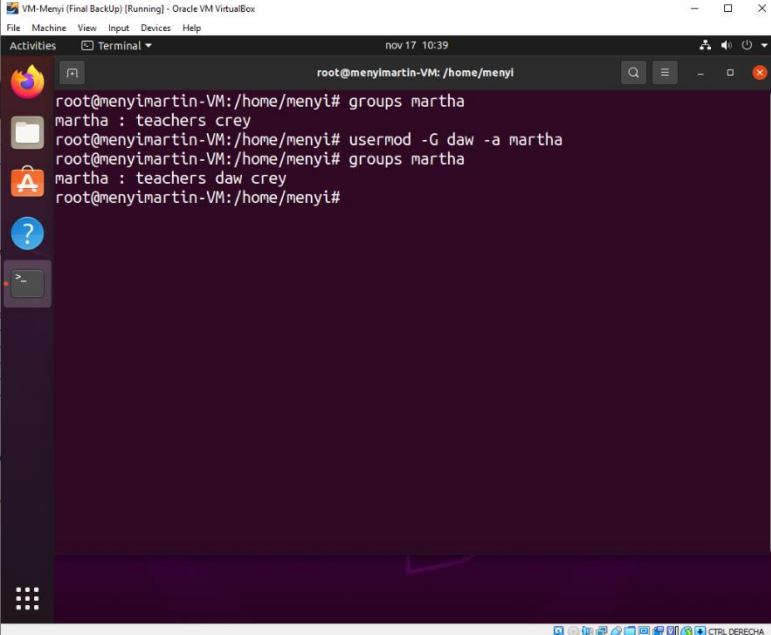
17. Change the shell of the user named “john” to “sh”



```
VM-Menyi (Final Backup) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal nov 17 23:27
root@menyimartin-VM: /home

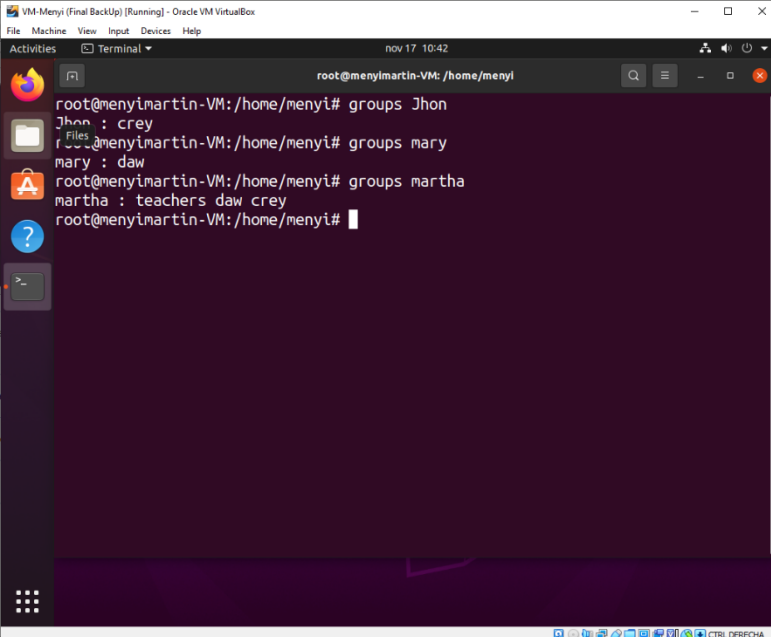
root@menyimartin-VM: /home# usermod -s /bin/sh Jhon
usermod: no changes
root@menyimartin-VM: /home#
```

18. Add the user “martha” to the secondary group “daw” without removing the already assigned secondary groups



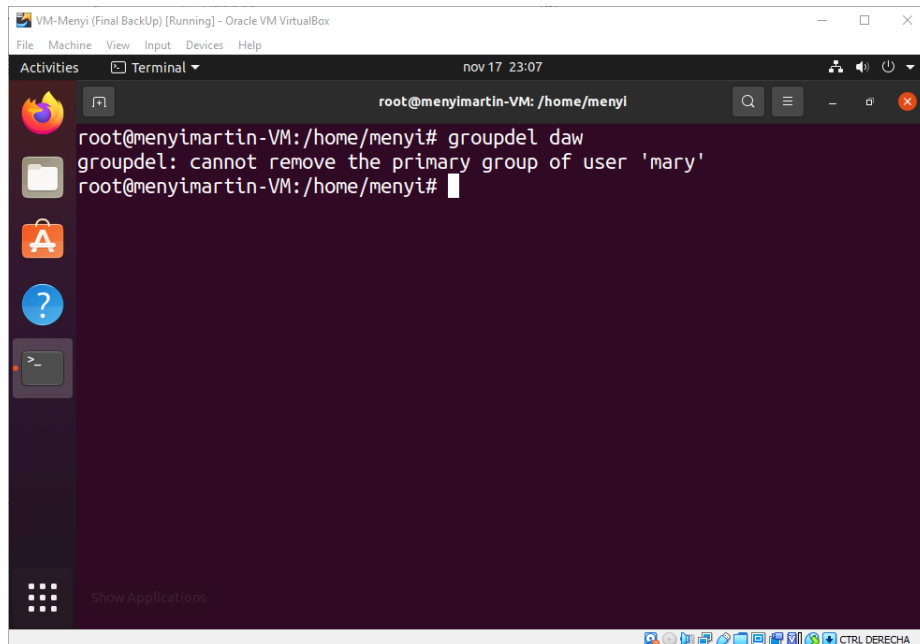
```
VM-Menyi (Final Backup) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal nov 17 10:39
root@menyimartin-VM: /home/menyi
root@menyimartin-VM:/home/menyi# groups martha
martha : teachers crey
root@menyimartin-VM:/home/menyi# usermod -G daw -a martha
root@menyimartin-VM:/home/menyi# groups martha
martha : teachers daw crey
root@menyimartin-VM:/home/menyi#
```

19. Run a command to print the following information for each user: Jhon | mary | martha



```
VM-Menyi (Final Backup) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal nov 17 10:42
root@menyimartin-VM: /home/menyi
root@menyimartin-VM:/home/menyi# groups Jhon
Jhon : crey
root@menyimartin-VM:/home/menyi# groups mary
mary : daw
root@menyimartin-VM:/home/menyi# groups martha
martha : teachers daw crey
root@menyimartin-VM:/home/menyi#
```

20. Delete all the groups you have created.

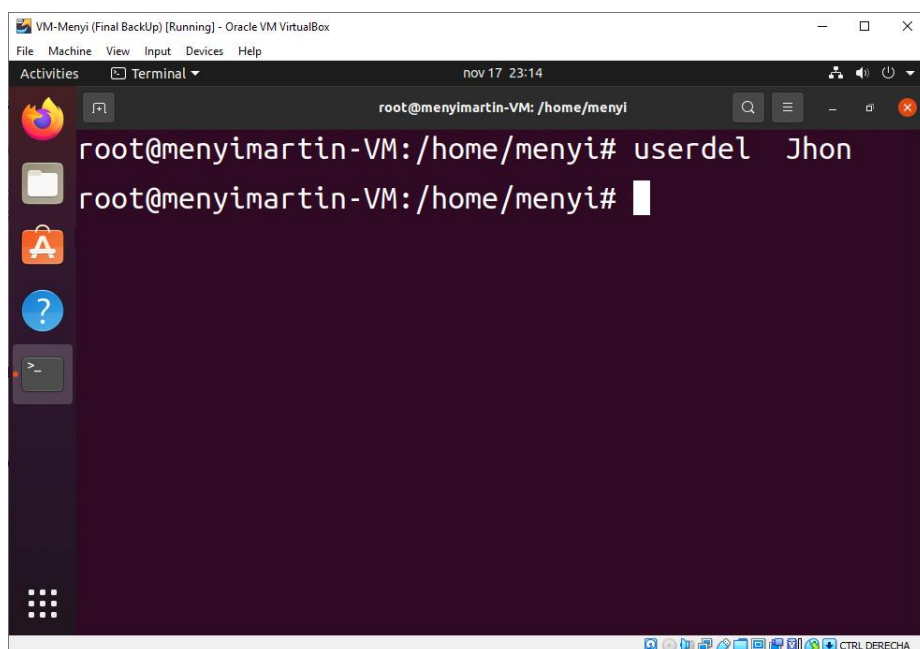


The screenshot shows a terminal window titled "VM-Menyi (Final BackUp) [Running] - Oracle VM VirtualBox". The terminal prompt is "root@menyimartin-VM: /home/menyi". The user has entered the command "groupdel daw". The terminal output shows an error: "groupdel: cannot remove the primary group of user 'mary'". The prompt returns to "root@menyimartin-VM: /home/menyi#".

Could you delete them? No Why? Because groups (primary) with users can't be removed

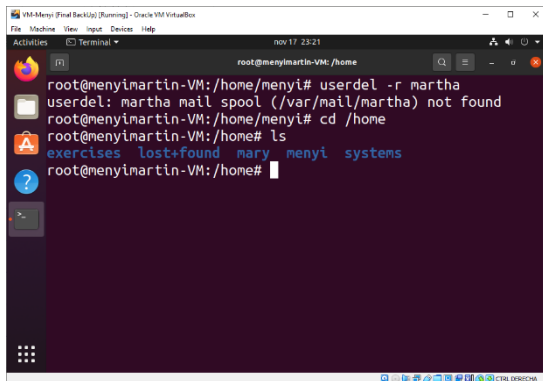
21. Delete all the users you have created, including the files and directories inside the home.

❖ User: **John** no file created inside the home directory



The screenshot shows a terminal window titled "VM-Menyi (Final BackUp) [Running] - Oracle VM VirtualBox". The terminal prompt is "root@menyimartin-VM: /home/menyi". The user has entered the command "userdel Jhon". The terminal output shows the command being executed successfully, and the prompt returns to "root@menyimartin-VM: /home/menyi#".

- ❖ User: **martha** created with directory inside the home directory

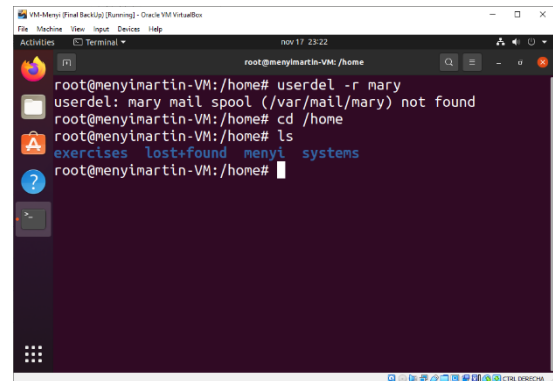


```

root@menyimartin-VM:/home# userdel -r martha
userdel: martha mail spool (/var/mail/martha) not found
root@menyimartin-VM:/home# cd /home
root@menyimartin-VM:/home# ls
exercises lost+found mary menyi systems
root@menyimartin-VM:/home#

```

- ❖ User: **mary** created with directory inside the home directory

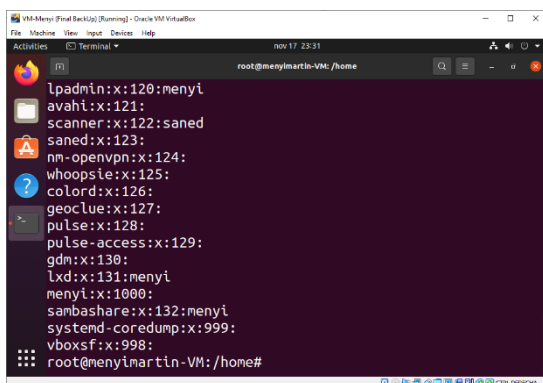


```

root@menyimartin-VM:/home# userdel -r mary
userdel: mary mail spool (/var/mail/mary) not found
root@menyimartin-VM:/home# cd /home
root@menyimartin-VM:/home# ls
exercises lost+found menyi systems
root@menyimartin-VM:/home#

```

All users have been removed
Execute > cat /etc/passwd |

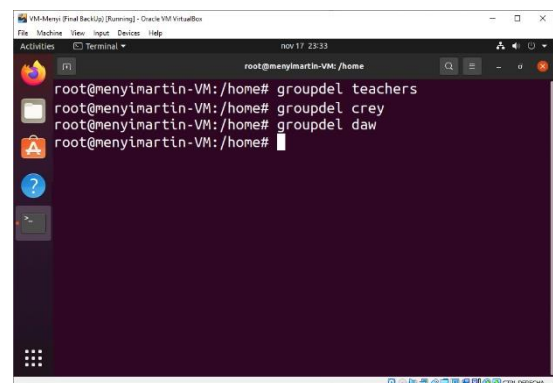


```

lpadmin:x:120:menyi
avahi:x:121:
scanner:x:122:saned
saned:x:123:
nm-openvpn:x:124:
whoopsie:x:125:
colord:x:126:
geoclue:x:127:
pulse:x:128:
pulse-access:x:129:
gdm:x:130:
lxd:x:131:menyi
menyi:x:1000:
sambashare:x:132:menyi
systemd-coredump:x:999:
vboxsf:x:998:
root@menyimartin-VM:/home#

```

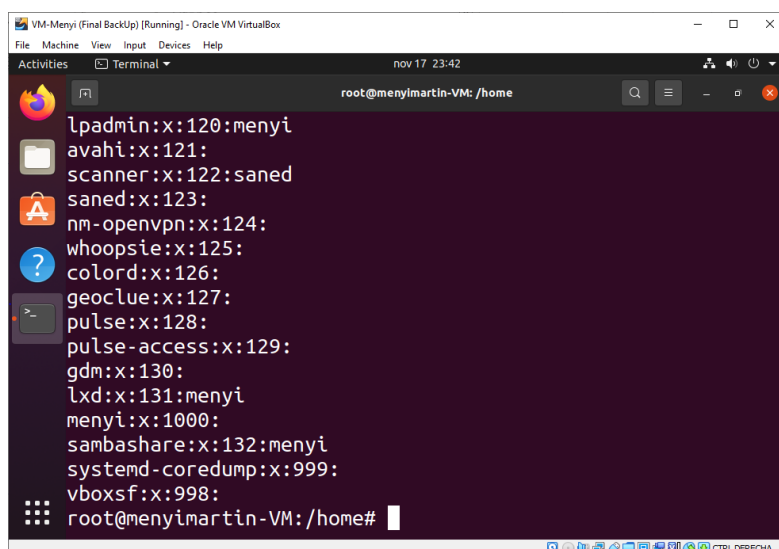
22. Try again to delete the groups
Execute> cat /etc/group



```

root@menyimartin-VM:/home# groupdel teachers
root@menyimartin-VM:/home# groupdel crey
root@menyimartin-VM:/home# groupdel daw
root@menyimartin-VM:/home#

```



```

lpadmin:x:120:menyi
avahi:x:121:
scanner:x:122:saned
saned:x:123:
nm-openvpn:x:124:
whoopsie:x:125:
colord:x:126:
geoclue:x:127:
pulse:x:128:
pulse-access:x:129:
gdm:x:130:
lxd:x:131:menyi
menyi:x:1000:
sambashare:x:132:menyi
systemd-coredump:x:999:
vboxsf:x:998:
root@menyimartin-VM:/home#

```