Exercises about users and groups management

NOTE 1: We have to start a root session to do the exercises

NOTE 2: Take into account that user and group names are CASE SENSITIVE

1. Add two new groups named "daw" and "crey"

```
sofi@sofi-VirtualBox:~$ sudo groupadd daw
[sudo] password for sofi:
sofi@sofi-VirtualBox:~$ sudo groupadd crey

sofi:x:1000:
sambashare:x:132:sofi
systemd-coredump:x:999:
vboxsf:x:998:sofi
example:x:1001:
daw:x:1002:
crey:x:1003:
```

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

```
sofi@sofi-VirtualBox:~$ sudo groupmod -g 2002 crey
sofi@sofi-VirtualBox:~$ sudo groupmod -g 2001 daw
example:x.iour:
daw:x:2001:
crey:x:2002:
```

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

```
sofi@sofi-VirtualBox:~$ sudo groupadd profesores -g 2000
sofi@sofi-VirtualBox:~$ cat /etc/group

sofi@sofi-VirtualBox:~$ sudo groupmod -n teachers profesores
sofi@sofi-VirtualBox:~$ cat /etc/group

teachers:x:2000:
```

4. Verify that you have correctly created the groups named "daw", "crey" and "teachers"

```
sofi@sofi-VirtualBox:~$ tail -3 /etc/group
daw:x:2001:
crey:x:2002:
teachers:x:2000:
```

5. Add a new user named "john" whose primary group is "crey". Has the home directory been created with the default command? sudo useradd -g crey -m john

```
shovashrestha@shovashrestha-VirtualBox:~$ sudo useradd -g crey -m john
 shovashrestha@shovashrestha-VirtualBox:~$ cat /etc/group
  DOVADA . V . 250 . T . . / A DI / L AII / A DOVADA . . / D CIII / LA C
 john:x:1001:1001::/home/john:/bin/sh
 crey:x:1001:
6. Add a new user named "mary", whose primary group is "daw" and the home directory
/home/mary
sudo useradd -g daw -m mary
-M IS FOR AUTOMATICALLY CREATE THE DIRECTORY
 shovashrestha@shovashrestha-VirtualBox:~$ sudo useradd
 shovashrestha@shovashrestha-VirtualBox:~$ cat /etc/group
mary:x:1002:1002::/home/mary:/bin/sh
  daw:x:1002
7. Add a new user named "martha", whose primary group is "teachers", the home directory
/home/martha and belonging to the secondary group "crey"
useradd -g teachers -G crey -m martha
shovashrestha@shovashrestha-VirtualBox:~$ sudo useradd -g teachers -G crey -m martha
    shovashrestha@shovashrestha-VirtualBox:~$ grep martha /etc/passwd
          :x:1003:<mark>1003::/home/</mark>
                                      :/bin/sh
    shovashrestha@shovashrestha-VirtualBox:~$ grep martha /etc/group
teachers:x:1003:
8. Add the following names to the users that you have just created:
a. John= "John Doe"
b. Mary = "Mary Williams"
c. Martha = "Martha Jones"
usermod -c " john Doe" john
usermod -c "Mary Willoams" mary
usermod -c "Martha Jones" martha
   shovashrestha@shovashrestha-VirtualBox:~$ sudo usermod -c "John Doe" john
   shovashrestha@shovashrestha-VirtualBox:~$ sudo usermod -c "Mary Williams" mary
   shovashrestha@shovashrestha-VirtualBox:~$ sudo usermod -c "Martha JOnes" martha
 vuoxauu:x:998:1::/vai/luii/vuoxauu:/utii/latse
 john:x:1001:1001:John Doe:/home/john:/bin/sh
 mary:x:1002:1002:Mary Williams:/home/mary:/bin/sh
```

martha:x:1003:1003:Martha JOnes:/home/martha:/bin/sh

9. How could you check that you have created all the users with the right primary groups? THE FOURTH PLACE IS THE ID OF THE GROUP

IN THE FOLDERS CAT /ETC/PASSWD AND CAT /ETC/GROUP WE COMPARE THE ID AND IT WILL BE THE SOMEONE FOR BOTH OF THEM, THAT WILL MEAN THAT THE USER HAVE THAT PRIMARY GROUP

```
john:x:1001:1001:John Doe:/home/john:/bin/sh
mary:x:1002:1002:Mary Williams:/home/mary:/bin/sh
martha:x:1003:1003:Martha JOnes:/home/martha:/bin/sh
shovashrestha@shovashrestha-VirtualBox:~$ tail -4 /etc/group
vboxsf:x:998:
crey:x:1001:martha
daw:x:1002:
teachers:x:1003:
```

10. Verify if crey and daw groups have martha as a member grep crey /etc/group

IF MARTHA IS IN A PRIMARY GROUP HER NAME WILL NOT APPEAR, WE WILL KNOW ONLY WITH THE /ETC/PASSWD

```
shovashrestha@shovashrestha-VirtualBox:~$ grep crey /etc/group
crey:x:1001:martha
```

- 11. Can you log in with any of the users you have created? NO YOU CAN'T LOG IN UNTIL YOU SET A PASSWORD
- 12. Set the password "martha22" for the user "martha" SECURITY WEY: openssl passwd -creypt martha22 passwd martha

shovashrestha@shovashrestha-VirtualBox:~\$ openssl passwd -crypt martha22
wtjy28IW0M5FU

- 13. Display on the shell prompt the groups to which Martha belongs grep martha /etc/passwd; grep martha /etc/group groups martha
- 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). Linux Management

Users and groups

usermod -d /home/teachers -m martha

WITH THIS COMMAND WE ARE CREATING A NEW DIRECTORY WHO THE OWNER IS MARTHA

15. Now, log in as user "martha". Run the command "cd \$SHOME" and check that the home directory is

"/home/teachers"

login martha

pwd WI WILL SEE THE HOME DIRECTORY WHERE WE ARE

- 16. Go back to the root shell exit
- 17. Change the shell of the user named "john" to "sh" usermod -s /bin/sh john usermod -s /bin/bash john grep john /etc/passwd
- 18. Add the user "martha" to the secondary group "daw" without removing the already assigned secondary groups.

usermod -G daw -a martha

- -a WE USE THIS COMMAND IT MAKE THAT MARTHA WILL BE IN THE GROUP CREY AND DAW IF WE DON'T PUT IT, IN THE GROUP CREY IT WILL NOT APPEAR AND THAT'S NOT WHAT WE WANT MARTHA
- 19. Run a command to print the following information for each user

User	Primary group	Secondary groups
john	crey	
mary	daw	
martha	teachers	crey, daw

20. Delete all the groups you have created. Could you delete them? Why? groupdel -rf

yes because we don't need it but if for some user that is the primary group we should delete first the user.

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

userdel -r test7

22. Try again to delete the groups