Managing Users and Groups
Nicolas Lauzon

1. **Log as root**

2. **Add a new user named alexa and set her password**

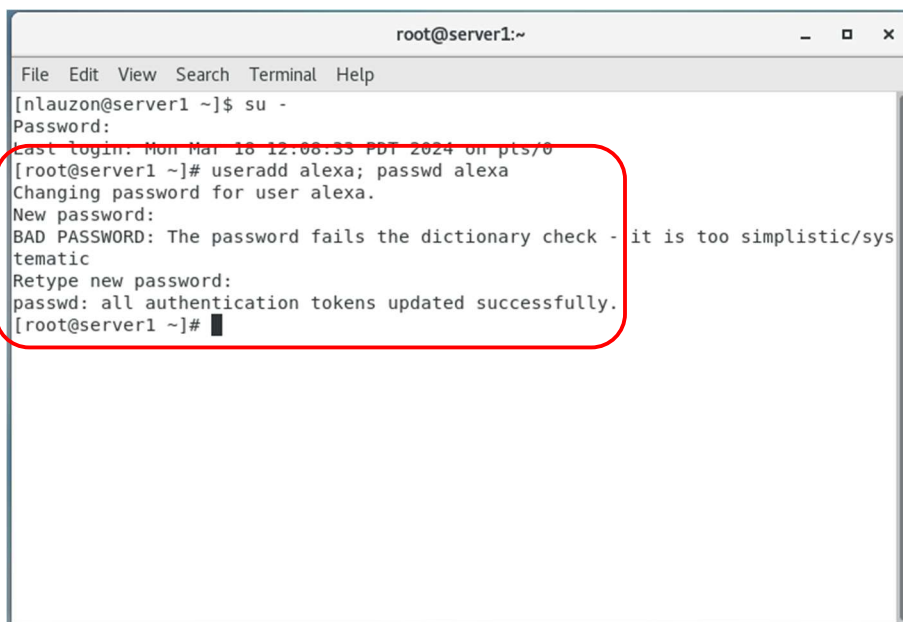3. **Add a new user named maria including her full name Maria Smith and set her password**
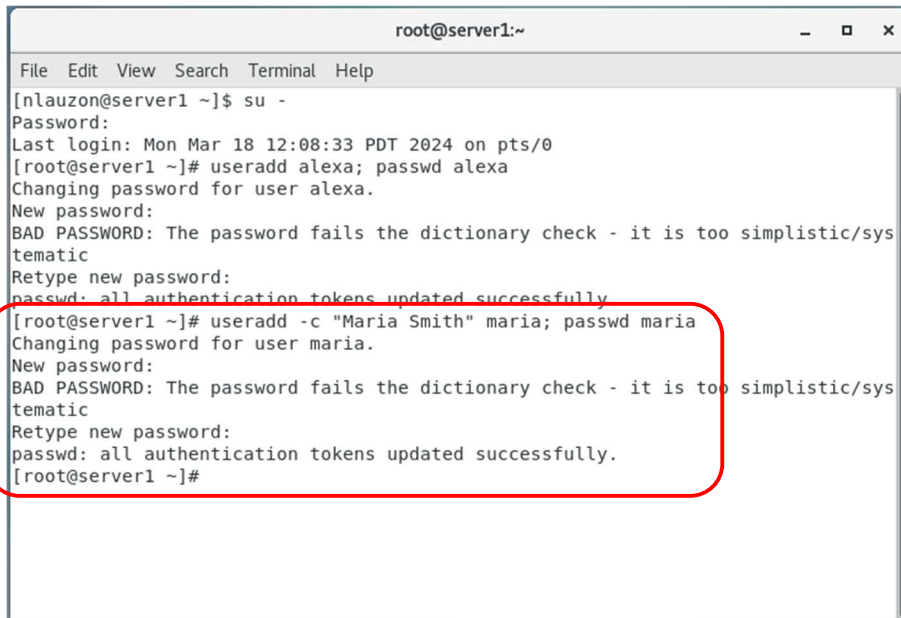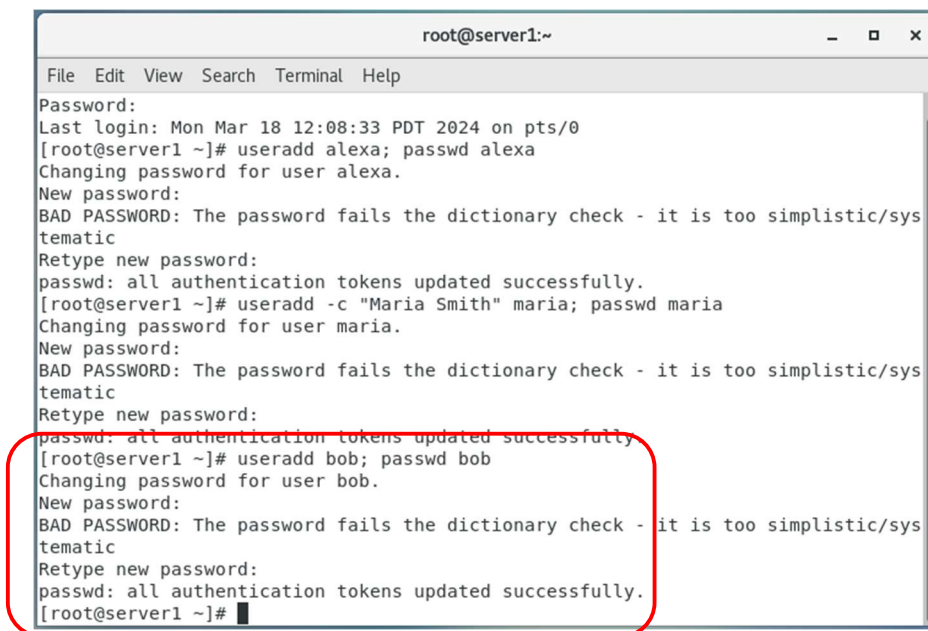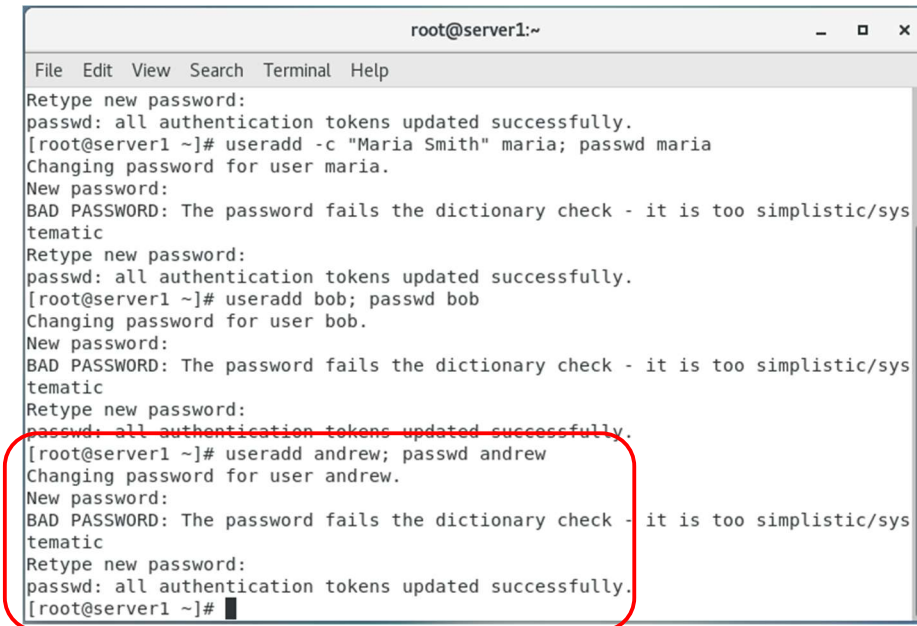
```
                            root@server1:~              _  ▢  ✕

 File  Edit  View  Search  Terminal  Help
[nlauzon@server1 ~]$ su -
Password:
Last login: Mon Mar 18 12:08:33 PDT 2024 on pts/0
[root@server1 ~]# useradd alexa; passwd alexa
Changing password for user alexa.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/sys
tematic
Retype new password:
passwd: all authentication tokens updated successfully
[root@server1 ~]# useradd -c "Maria Smith" maria; passwd maria
Changing password for user maria.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/sys
tematic
Retype new password:
passwd: all authentication tokens updated successfully.
[root@server1 ~]#
```

4. **Add a new user named bob and set his password**

```
                            root@server1:~              _  ▢  ✕

 File  Edit  View  Search  Terminal  Help
Password:
Last login: Mon Mar 18 12:08:33 PDT 2024 on pts/0
[root@server1 ~]# useradd alexa; passwd alexa
Changing password for user alexa.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/sys
tematic
Retype new password:
passwd: all authentication tokens updated successfully.
[root@server1 ~]# useradd -c "Maria Smith" maria; passwd maria
Changing password for user maria.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/sys
tematic
Retype new password:
passwd: all authentication tokens updated successfully
[root@server1 ~]# useradd bob; passwd bob
Changing password for user bob.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/sys
tematic
Retype new password:
passwd: all authentication tokens updated successfully.
[root@server1 ~]# ▮
```

5. Add a new user named andrew and set his password

```
                              root@server1:~                    _  □  ✕

File  Edit  View  Search  Terminal  Help
Retype new password:
passwd: all authentication tokens updated successfully.
[root@server1 ~]# useradd -c "Maria Smith" maria; passwd maria
Changing password for user maria.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/sys
tematic
Retype new password:
passwd: all authentication tokens updated successfully.
[root@server1 ~]# useradd bob; passwd bob
Changing password for user bob.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/sys
tematic
Retype new password:
passwd: all authentication tokens updated successfully.
[root@server1 ~]# useradd andrew; passwd andrew
Changing password for user andrew.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/sys
tematic
Retype new password:
passwd: all authentication tokens updated successfully.
[root@server1 ~]# █
```

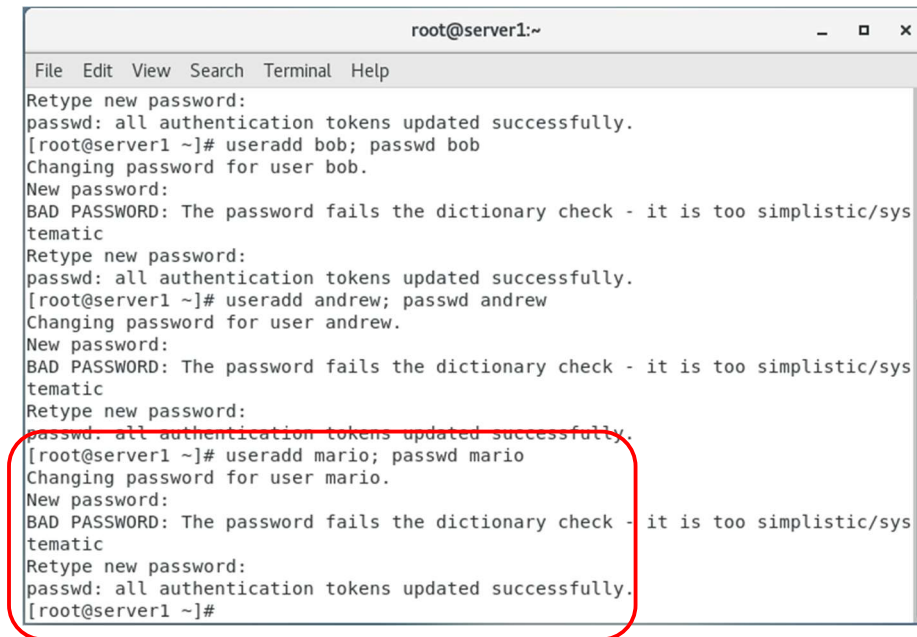## 6. Add a new user named mario and set his password

```
                              root@server1:~                    _  □  ✕

File  Edit  View  Search  Terminal  Help
Retype new password:
passwd: all authentication tokens updated successfully.
[root@server1 ~]# useradd bob; passwd bob
Changing password for user bob.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/sys
tematic
Retype new password:
passwd: all authentication tokens updated successfully.
[root@server1 ~]# useradd andrew; passwd andrew
Changing password for user andrew.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/sys
tematic
Retype new password:
passwd: all authentication tokens updated successfully.
[root@server1 ~]# useradd mario; passwd mario
Changing password for user mario.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/sys
tematic
Retype new password:
passwd: all authentication tokens updated successfully.
[root@server1 ~]#
```

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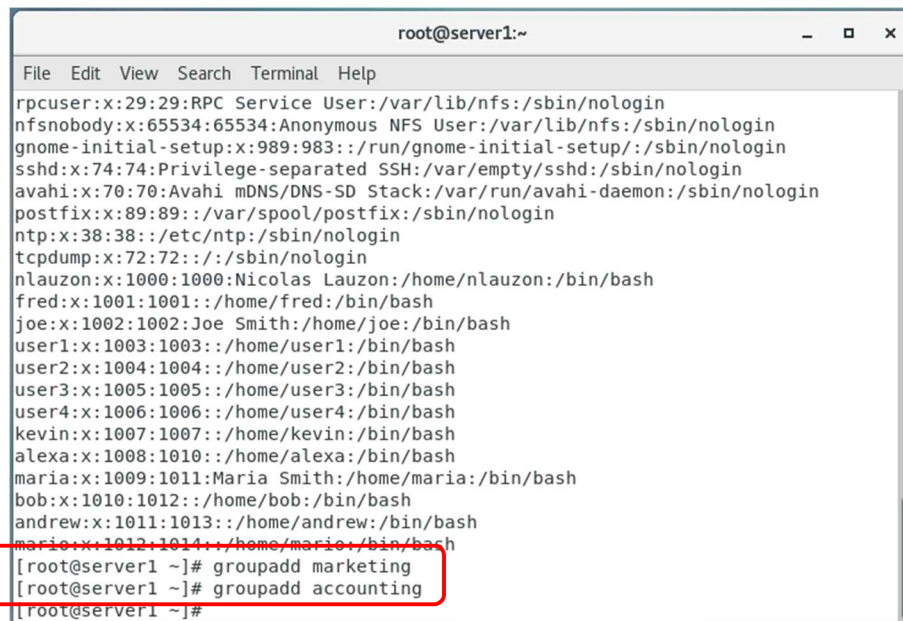## 7. Verify the list of users

Simply using cat /etc/passwd:

```
                         root@server1:~                    _  □  ×

 File  Edit  View  Search  Terminal  Help

gdm:x:42:42::/var/lib/gdm:/sbin/nologin
saned:x:990:984:SANE scanner daemon user:/usr/share/sane:/sbin/nologin
rpcuser:x:29:29:RPC Service User:/var/lib/nfs:/sbin/nologin
nfsnobody:x:65534:65534:Anonymous NFS User:/var/lib/nfs:/sbin/nologin
gnome-initial-setup:x:989:983::/run/gnome-initial-setup/:/sbin/nologin
sshd:x:74:74:Privilege-separated SSH:/var/empty/sshd:/sbin/nologin
avahi:x:70:70:Avahi mDNS/DNS-SD Stack:/var/run/avahi-daemon:/sbin/nologin
postfix:x:89:89::/var/spool/postfix:/sbin/nologin
ntp:x:38:38::/etc/ntp:/sbin/nologin
tcpdump:x:72:72::/:/sbin/nologin
nlauzon:x:1000:1000:Nicolas Lauzon:/home/nlauzon:/bin/bash
fred:x:1001:1001::/home/fred:/bin/bash
joe:x:1002:1002:Joe Smith:/home/joe:/bin/bash
user1:x:1003:1003::/home/user1:/bin/bash
user2:x:1004:1004::/home/user2:/bin/bash
user3:x:1005:1005::/home/user3:/bin/bash
user4:x:1006:1006::/home/user4:/bin/bash
kevin:x:1007:1007::/home/kevin:/bin/bash
alexa:x:1008:1010::/home/alexa:/bin/bash
maria:x:1009:1011:Maria Smith:/home/maria:/bin/bash
bob:x:1010:1012::/home/bob:/bin/bash
andrew:x:1011:1013::/home/andrew:/bin/bash
mario:x:1012:1014::/home/mario:/bin/bash
[root@server1 ~]#
```

8. Create two groups: marketing and accounting

```
                         root@server1:~                    _  □  ×

 File  Edit  View  Search  Terminal  Help

rpcuser:x:29:29:RPC Service User:/var/lib/nfs:/sbin/nologin
nfsnobody:x:65534:65534:Anonymous NFS User:/var/lib/nfs:/sbin/nologin
gnome-initial-setup:x:989:983::/run/gnome-initial-setup/:/sbin/nologin
sshd:x:74:74:Privilege-separated SSH:/var/empty/sshd:/sbin/nologin
avahi:x:70:70:Avahi mDNS/DNS-SD Stack:/var/run/avahi-daemon:/sbin/nologin
postfix:x:89:89::/var/spool/postfix:/sbin/nologin
ntp:x:38:38::/etc/ntp:/sbin/nologin
tcpdump:x:72:72::/:/sbin/nologin
nlauzon:x:1000:1000:Nicolas Lauzon:/home/nlauzon:/bin/bash
fred:x:1001:1001::/home/fred:/bin/bash
joe:x:1002:1002:Joe Smith:/home/joe:/bin/bash
user1:x:1003:1003::/home/user1:/bin/bash
user2:x:1004:1004::/home/user2:/bin/bash
user3:x:1005:1005::/home/user3:/bin/bash
user4:x:1006:1006::/home/user4:/bin/bash
kevin:x:1007:1007::/home/kevin:/bin/bash
alexa:x:1008:1010::/home/alexa:/bin/bash
maria:x:1009:1011:Maria Smith:/home/maria:/bin/bash
bob:x:1010:1012::/home/bob:/bin/bash
andrew:x:1011:1013::/home/andrew:/bin/bash
mario:x:1012:1014::/home/mario:/bin/bash
[root@server1 ~]# groupadd marketing
[root@server1 ~]# groupadd accounting
[root@server1 ~]#
```

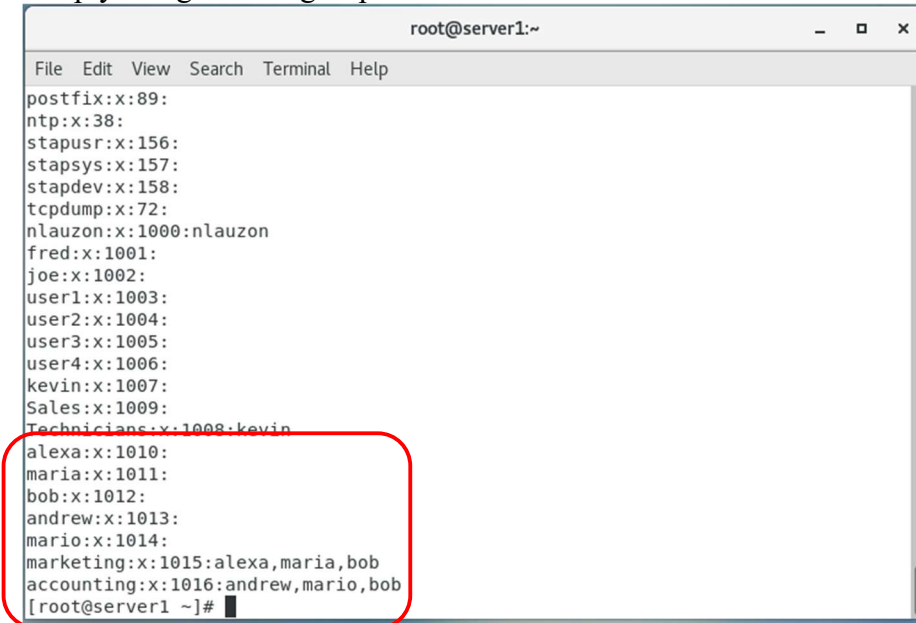## 9. Add the users alexa , maria and bob to the marketing group

```
                              root@server1:~                    _  □  ×

 File  Edit  View  Search  Terminal  Help
stapusr:x:156:
stapsys:x:157:
stapdev:x:158:
tcpdump:x:72:
nlauzon:x:1000:nlauzon
fred:x:1001:
joe:x:1002:
user1:x:1003:
user2:x:1004:
user3:x:1005:
user4:x:1006:
kevin:x:1007:
Sales:x:1009:
Technicians:x:1008:kevin
alexa:x:1010:
maria:x:1011:
bob:x:1012:
andrew:x:1013:
mario:x:1014:
marketing:x:1015:
accounting:x:1016:
[root@server1 ~]# gpasswd -M alexa,maria,bob marketing
[root@server1 ~]# gpasswd -M andrew,mario,bob accounting
[root@server1 ~]#
```
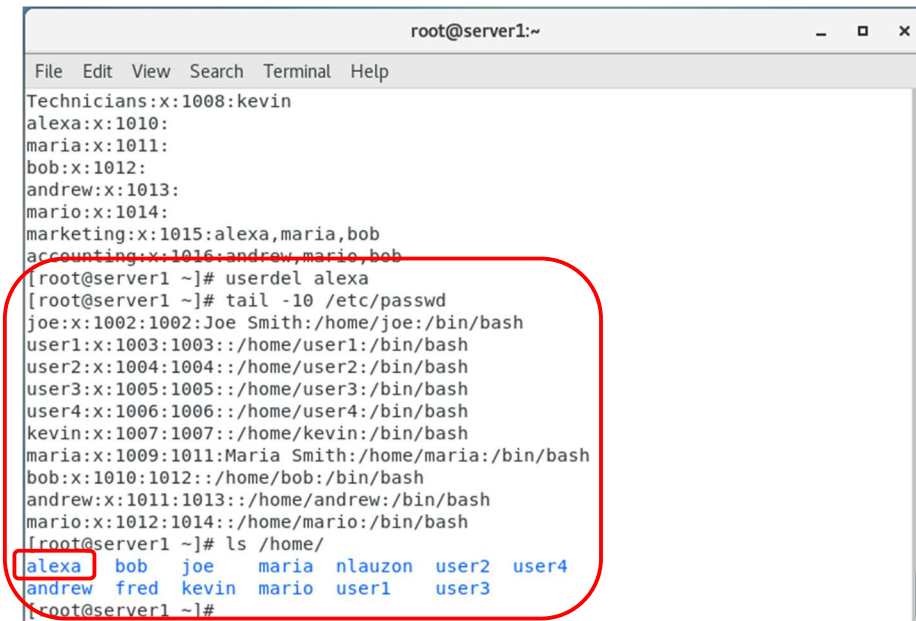
10. Add the users andrew , mario and bob to the accounting group.

```
                              root@server1:~                    _  □  ×

 File  Edit  View  Search  Terminal  Help
stapusr:x:156:
stapsys:x:157:
stapdev:x:158:
tcpdump:x:72:
nlauzon:x:1000:nlauzon
fred:x:1001:
joe:x:1002:
user1:x:1003:
user2:x:1004:
user3:x:1005:
user4:x:1006:
kevin:x:1007:
Sales:x:1009:
Technicians:x:1008:kevin
alexa:x:1010:
maria:x:1011:
bob:x:1012:
andrew:x:1013:
mario:x:1014:
marketing:x:1015:
accounting:x:1016:
[root@server1 ~]# gpasswd -M alexa,maria,bob marketing
[root@server1 ~]# gpasswd -M andrew,mario,bob accounting
[root@server1 ~]#
```

11. Verify the list of groups

Simply using cat /etc/group:

```
                          root@server1:~                    _  ▫  ✕

 File  Edit  View  Search  Terminal  Help
postfix:x:89:
ntp:x:38:
stapusr:x:156:
stapsys:x:157:
stapdev:x:158:
tcpdump:x:72:
nlauzon:x:1000:nlauzon
fred:x:1001:
joe:x:1002:
user1:x:1003:
user2:x:1004:
user3:x:1005:
user4:x:1006:
kevin:x:1007:
Sales:x:1009:
Technicians:x:1008:kevin
alexa:x:1010:
maria:x:1011:
bob:x:1012:
andrew:x:1013:
mario:x:1014:
marketing:x:1015:alexa,maria,bob
accounting:x:1016:andrew,mario,bob
[root@server1 ~]# █
```

12. Delete the user account of alexa and verify that her home directory has not been removed

```
                          root@server1:~                    _  ▫  ✕

 File  Edit  View  Search  Terminal  Help
Technicians:x:1008:kevin
alexa:x:1010:
maria:x:1011:
bob:x:1012:
andrew:x:1013:
mario:x:1014:
marketing:x:1015:alexa,maria,bob
accounting:x:1016:andrew,mario,bob
[root@server1 ~]# userdel alexa
[root@server1 ~]# tail -10 /etc/passwd
joe:x:1002:1002:Joe Smith:/home/joe:/bin/bash
user1:x:1003:1003::/home/user1:/bin/bash
user2:x:1004:1004::/home/user2:/bin/bash
user3:x:1005:1005::/home/user3:/bin/bash
user4:x:1006:1006::/home/user4:/bin/bash
kevin:x:1007:1007::/home/kevin:/bin/bash
maria:x:1009:1011:Maria Smith:/home/maria:/bin/bash
bob:x:1010:1012::/home/bob:/bin/bash
andrew:x:1011:1013::/home/andrew:/bin/bash
mario:x:1012:1014::/home/mario:/bin/bash
[root@server1 ~]# ls /home/
alexa    bob    joe     maria  nlauzon  user2   user4
andrew   fred   kevin   mario  user1    user3
[root@server1 ~]#
```

13. Delete the user account and the home directory of mario and verify that both the account and the home directory of mario have been deleted

```
                          root@server1:~                    _  □  ×

 File  Edit  View  Search  Terminal  Help
kevin:x:1007:1007::/home/kevin:/bin/bash
maria:x:1009:1011:Maria Smith:/home/maria:/bin/bash
bob:x:1010:1012::/home/bob:/bin/bash
andrew:x:1011:1013::/home/andrew:/bin/bash
mario:x:1012:1014::/home/mario:/bin/bash
[root@server1 ~]# ls /home/
alexa   bob    joe    maria   nlauzon  user2  user4
andrew  fred   kevin  mario   user1    user3
[root@server1 ~]# userdel -r mario
[root@server1 ~]# tail -10 /etc/passwd
fred:x:1001:1001::/home/fred:/bin/bash
joe:x:1002:1002:Joe Smith:/home/joe:/bin/bash
user1:x:1003:1003::/home/user1:/bin/bash
user2:x:1004:1004::/home/user2:/bin/bash
user3:x:1005:1005::/home/user3:/bin/bash
user4:x:1006:1006::/home/user4:/bin/bash
kevin:x:1007:1007::/home/kevin:/bin/bash
maria:x:1009:1011:Maria Smith:/home/maria:/bin/bash
bob:x:1010:1012::/home/bob:/bin/bash
andrew:x:1011:1013::/home/andrew:/bin/bash
[root@server1 ~]# ls /home/
alexa   bob    joe    maria   user1    user3
andrew  fred   kevin  nlauzon  user2  user4
[root@server1 ~]#
```

14. Change the full name of maria to Maria Clark and verify the change

```
                          root@server1:~                    _  □  ×

 File  Edit  View  Search  Terminal  Help
user1:x:1003:1003::/home/user1:/bin/bash
user2:x:1004:1004::/home/user2:/bin/bash
user3:x:1005:1005::/home/user3:/bin/bash
user4:x:1006:1006::/home/user4:/bin/bash
kevin:x:1007:1007::/home/kevin:/bin/bash
maria:x:1009:1011:Maria Smith:/home/maria:/bin/bash
bob:x:1010:1012::/home/bob:/bin/bash
andrew:x:1011:1013::/home/andrew:/bin/bash
[root@server1 ~]# ls /home/
alexa   bob    joe    maria   user1    user3
andrew  fred   kevin  nlauzon  user2  user4
[root@server1 ~]# usermod -c "Maria Clark" maria
[root@server1 ~]# tail -10 /etc/passwd
fred:x:1001:1001::/home/fred:/bin/bash
joe:x:1002:1002:Joe Smith:/home/joe:/bin/bash
user1:x:1003:1003::/home/user1:/bin/bash
user2:x:1004:1004::/home/user2:/bin/bash
user3:x:1005:1005::/home/user3:/bin/bash
user4:x:1006:1006::/home/user4:/bin/bash
kevin:x:1007:1007::/home/kevin:/bin/bash
maria:x:1009:1011:Maria Clark:/home/maria:/bin/bash
bob:x:1010:1012::/home/bob:/bin/bash
andrew:x:1011:1013::/home/andrew:/bin/bash
[root@server1 ~]#
```
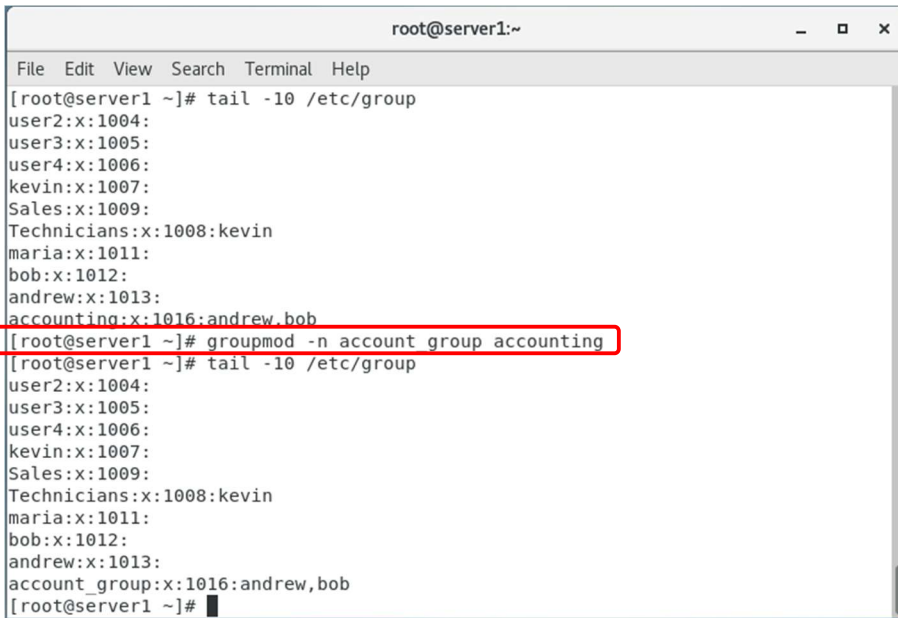
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15. Verify who are the users members of the groups marketing and accounting

```
root@server1:~                                    _  □  ×

File  Edit  View  Search  Terminal  Help
[root@server1 ~]# usermod -c "Maria Clark" maria
[root@server1 ~]# tail -10 /etc/passwd
fred:x:1001:1001::/home/fred:/bin/bash
joe:x:1002:1002:Joe Smith:/home/joe:/bin/bash
user1:x:1003:1003::/home/user1:/bin/bash
user2:x:1004:1004::/home/user2:/bin/bash
user3:x:1005:1005::/home/user3:/bin/bash
user4:x:1006:1006::/home/user4:/bin/bash
kevin:x:1007:1007::/home/kevin:/bin/bash
maria:x:1009:1011:Maria Clark:/home/maria:/bin/bash
bob:x:1010:1012::/home/bob:/bin/bash
andrew:x:1011:1013::/home/andrew:/bin/bash
[root@server1 ~]# tail -10 /etc/group
user3:x:1005:
user4:x:1006:
kevin:x:1007:
Sales:x:1009:
Technicians:x:1008:kevin
maria:x:1011:
bob:x:1012:
andrew:x:1013:
marketing:x:1015:maria,bob
accounting:x:1016:andrew,bob
[root@server1 ~]#
```

16. Delete the group marketing and verify the delete
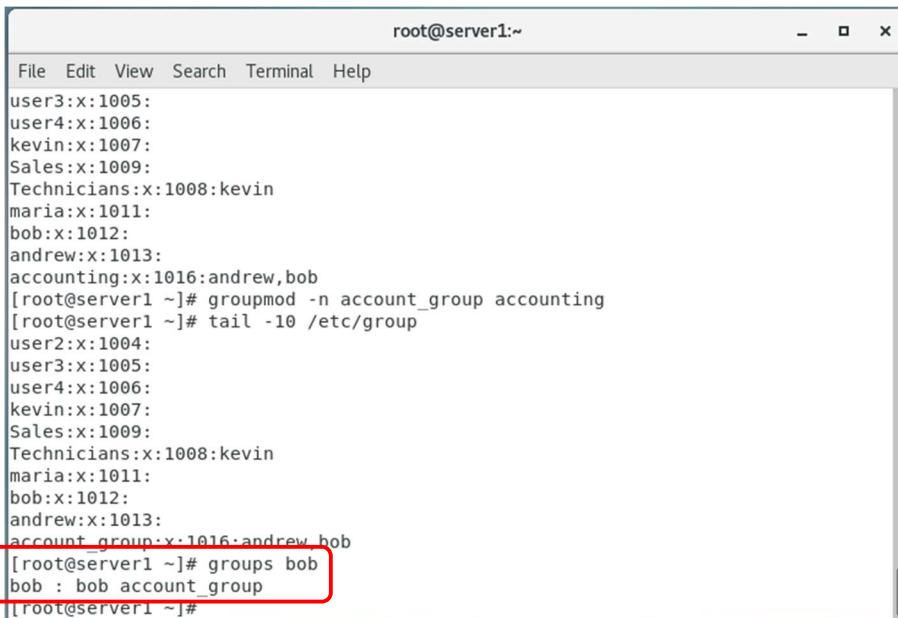
```
root@server1:~                                    _  □  ×

File  Edit  View  Search  Terminal  Help
[root@server1 ~]# tail -10 /etc/group
user3:x:1005:
user4:x:1006:
kevin:x:1007:
Sales:x:1009:
Technicians:x:1008:kevin
maria:x:1011:
bob:x:1012:
andrew:x:1013:
marketing:x:1015:maria,bob
accounting:x:1016:andrew,bob
[root@server1 ~]# groupdel marketing
[root@server1 ~]# tail -10 /etc/group
user2:x:1004:
user3:x:1005:
user4:x:1006:
kevin:x:1007:
Sales:x:1009:
Technicians:x:1008:kevin
maria:x:1011:
bob:x:1012:
andrew:x:1013:
accounting:x:1016:andrew,bob
[root@server1 ~]#
```

17. Change the name of the group accounting to account_group and verify the change

```
root@server1:~                                    _  □  ×

File  Edit  View  Search  Terminal  Help
[root@server1 ~]# tail -10 /etc/group
user2:x:1004:
user3:x:1005:
user4:x:1006:
kevin:x:1007:
Sales:x:1009:
Technicians:x:1008:kevin
maria:x:1011:
bob:x:1012:
andrew:x:1013:
accounting:x:1016:andrew.bob
[root@server1 ~]# groupmod -n account_group accounting
[root@server1 ~]# tail -10 /etc/group
user2:x:1004:
user3:x:1005:
user4:x:1006:
kevin:x:1007:
Sales:x:1009:
Technicians:x:1008:kevin
maria:x:1011:
bob:x:1012:
andrew:x:1013:
account_group:x:1016:andrew,bob
[root@server1 ~]# ▮
```

18. Verify to which group the user bob belongs

```
root@server1:~                                    _  □  ×

File  Edit  View  Search  Terminal  Help
user3:x:1005:
user4:x:1006:
kevin:x:1007:
Sales:x:1009:
Technicians:x:1008:kevin
maria:x:1011:
bob:x:1012:
andrew:x:1013:
accounting:x:1016:andrew,bob
[root@server1 ~]# groupmod -n account_group accounting
[root@server1 ~]# tail -10 /etc/group
user2:x:1004:
user3:x:1005:
user4:x:1006:
kevin:x:1007:
Sales:x:1009:
Technicians:x:1008:kevin
maria:x:1011:
bob:x:1012:
andrew:x:1013:
account_group:x:1016:andrew,bob
[root@server1 ~]# groups bob
bob : bob account_group
[root@server1 ~]#
```

19. Remove the user bob from the group account_group

```
root@server1:~
File  Edit  View  Search  Terminal  Help
user4:x:1006:
kevin:x:1007:
Sales:x:1009:
Technicians:x:1008:kevin
maria:x:1011:
bob:x:1012:
andrew:x:1013:
account_group:x:1016:andrew,bob
[root@server1 ~]# groups bob
bob : bob account_group
[root@server1 ~]# gpasswd -d bob account_group
Removing user bob from group account_group
[root@server1 ~]# tail -10 /etc/group
user2:x:1004:
user3:x:1005:
user4:x:1006:
kevin:x:1007:
Sales:x:1009:
Technicians:x:1008:kevin
maria:x:1011:
bob:x:1012:
andrew:x:1013:
account_group:x:1016:andrew
[root@server1 ~]#
```

20. Change the password of the users maria and bob

```
root@server1:~
File  Edit  View  Search  Terminal  Help
[nlauzon@server1 ~]$ su -
Password:
Last login: Mon Mar 18 15:52:31 PDT 2024 on pts/0
[root@server1 ~]# passwd maria
Changing password for user maria.
New password:
BAD PASSWORD: The password fails the dictionary check - it is based on a diction
ary word
Retype new password:
passwd: all authentication tokens updated successfully.
[root@server1 ~]# passwd bob
Changing password for user bob.
New password:
BAD PASSWORD: The password fails the dictionary check - it is based on a diction
ary word
Retype new password:
passwd: all authentication tokens updated successfully.
[root@server1 ~]#
```

21. Log as maria or bob

22. Change your password

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23. Exit then login again as maria or bob to verify the password change