

# Linux lab3

## Name :Israa Mohamed Gaber

- 1) Display the first 4 lines of /etc/passwd

[igaber@localhost Documents]\$ head -n 4 /etc/passwd

```
[igaber@localhost ~]$ head -n 4 /etc/passwd
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:/sbin/nologin
daemon:x:2:2:daemon:/sbin:/sbin/nologin
adm:x:3:4:adm:/var/adm:/sbin/nologin
```

- 2) Display the last 7 lines of /etc/passwd

[igaber@localhost ~]\$ tail -n 7 /etc/passwd

```
[igaber@localhost ~]$ tail -n 7 /etc/passwd
chrony:x:980:979:chrony system user:/var/lib/chrony:/sbin/nologin
dnsmasq:x:979:978:Dnsmasq DHCP and DNS server:/var/lib/dnsmasq:/usr/sbin/nologin
cephdump:x:72:72:/sbin/nologin
igaber:x:1000:1000:israa mohamed gaber:/home/igaber:/bin/bash
user1:x:1001:1002:/home/user1:/bin/bash
islam:x:1002:1003:Islam Ali:/home/islam:/bin/bash
salma:x:1004:1004:sooooooooooooooooooooo:/home/salma:/bin/bash
```

- 3) Remove dir11 in one step. What did you notice?

[igaber@localhost ~]\$ sudo rm -r dir11/dirl

Ls -l dir1

Can't remove because contain files

```
[igaber@localhost ~]$ sudo rm -r dir11
[sudo] password for igaber:
rm: cannot remove 'dir11':
```

- 4) Count the words in the /etc/passwd

[igaber@localhost ~]\$ wc -w /etc/passwd

```
[igaber@localhost ~]$ wc -w /etc/passwd
96 /etc/passwd
```

- 5) Count the lines in /etc/passwd

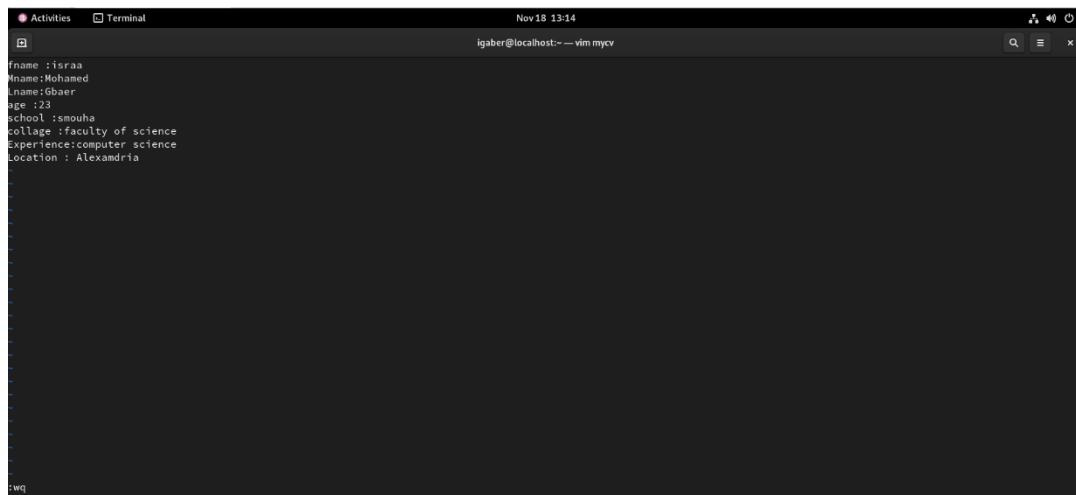
[igaber@localhost ~]\$ wc -l /etc/passwd

```
[igaber@localhost ~]$ wc -l /etc/passwd
40 /etc/passwd
```

- 6) Using vi/vim write your CV in a file mycv. Your CV should include your name, age, school, college, experience, ...

[igaber@localhost ~]\$ vim mycv

```
[igaber@localhost ~]$ vim mycv
```



```
fname :israa
lname:Mohamed
name:Gbaer
age :23
school :smouha
collage :faculty of science
Experience:computer science
Location : Alexandria
```

7) Open mycv file using vim command then:

Without using arrows state how to:

**a) Move the cursor down one line at a time.**

[igaber@localhost ~]\$ vim mycv

press esc then use i

**b) Move the cursor up one line at a time.**

using k or Using 'ctrl + p'

**c) Search for the word age**

using /age

Note after / name of think you want

After search we use :noh to remove highlight

**d) Step to line 4 (assuming that you are in line 1 and the file is more than 5 lines).**

Mention number before G

4G

first number of line and G for go

**e) Delete the line you are on and line 5.**

Standing on line 2, use the command "dd" to delete the current line, followed by ":5d" to delete line 5.

U for undo

**f) How to step to the end of the line and change to writing mode in one step.**

using A

**g) copy line 2 to the end of the file**

Go to line 2

2G

Yank the line

yy

Move to the end of the file

G

Paste the lines

P

## h) delete the school name using the visual mode

Go to the line containing the school's name.

Enter visual mode:

v

Highlight the school's name, then press:

d

## i) Enable numbering lines in vim

:set number

## 8) [igaber@localhost ~]\$ touch ~/myfile

```
[igaber@localhost ~]$ touch ~/myfile
[igaber@localhost ~]$
```

a) first to check islam is exist or not

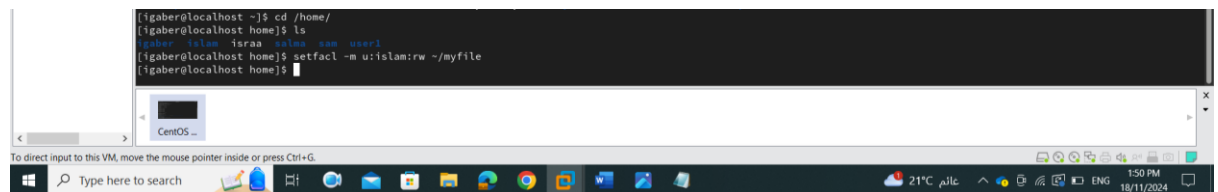
[igaber@localhost ~]\$ cd /home/

[igaber@localhost home]\$ ls

igaber islam israa salma sam user1

then make permission

[igaber@localhost home]\$ setfacl -m u:islam:rw ~/myfile



The screenshot shows a terminal window with the following commands and output:

```
[igaber@localhost ~]$ cd /home/
[igaber@localhost home]$ ls
igaber islam israa salma sam user1
[igaber@localhost home]$ setfacl -m u:islam:rw ~/myfile
[igaber@localhost home]$
```

## b) Create a user named intern

[igaber@localhost home]\$ sudo useradd intern

[sudo] password for igaber:

[igaber@localhost home]\$ ls

igaber intern islam israa salma sam user1



The screenshot shows a terminal window with the following commands and output:

```
[igaber@localhost home]$ setfacl -m u:intern:--- ~/myfile
[igaber@localhost home]$ sudo useradd intern
[sudo] password for igaber:
[igaber@localhost home]$ ls
igaber intern islam israa salma sam user1
[igaber@localhost home]$
```

## c) Prevent user intern from accessing myfile

[igaber@localhost home]\$ setfacl -m u:intern:--- ~/myfile

[igaber@localhost home]\$ ls -l



The screenshot shows a terminal window with the following commands and output:

```
[igaber@localhost home]$ setfacl -m u:intern:--- ~/myfile
[igaber@localhost home]$ ls -l
total 12
drwx----- 16 igaber igaber 4096 Nov 18 13:44 igaber
drwx-----  2 intern intern 78 Nov 18 13:51 intern
drwx-----  3 islam islam 78 Nov 11 19:40 islam
-rw-----  1 root root 35 Nov 16 20:20 israa
drwx-----  4 salma salma 126 Nov 16 21:55 salma
drwx----- 14 1003 30001 4096 Nov 11 21:46 sam
drwx-----  3 user1 user1 78 Nov 11 19:05 user1
[igaber@localhost home]$
```

7) Display the number of users who are currently logged in to the system.

[igaber@localhost home]\$ who | wc -l

```
[igaber@localhost home]$ who | wc -l
```

8) A) Display lines 7 to line 10 of /etc/passwd file

[igaber@localhost home]\$ sed -n '7,10p' /etc/passwd

or

[igaber@localhost ~]\$ head -n 10 /etc/passwd |tail -n 4 /etc/passwd

Use head or tail only

```
[igaber@localhost home]$ sed -n '7,10p' /etc/passwd
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown
halt:x:7:0:halt:/sbin:/sbin/halt
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin
operator:x:11:0:operator:/root:/sbin/nologin
[igaber@localhost home]$
```

b) Change the permissions of oldpasswd file to give the owner read and write permissions and for group write and execute and execute only for the others (using chmod in 2 different ways)

**Change your default permissions to be as above.**

Unmask 046

c) File: -rw-r--r-- (644)

Directory: drwxr-xr-x (755)

d)

[igaber@localhost home]\$ umask

0022

[igaber@localhost home]\$ umask 0077

[igaber@localhost home]\$ mkdir testdir

mkdir: cannot create directory 'testdir': Permission denied

[igaber@localhost home]\$ touch testfile

touch: cannot touch 'testfile': Permission denied

[igaber@localhost home]\$ ls -ld testdir testfile

ls: cannot access 'testdir': No such file or directory

ls: cannot access 'testfile': No such file or directory

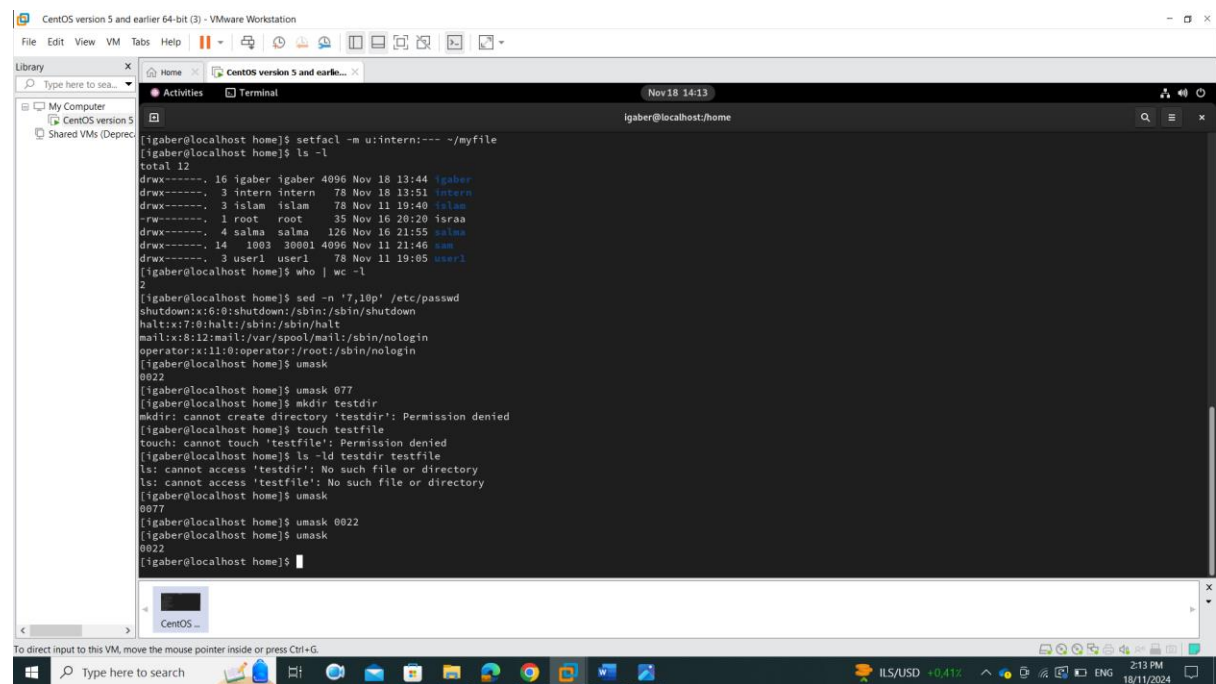
return mask to original

[igaber@localhost home]\$ umask 0022

[igaber@localhost home]\$ umask

0022

wrong



```
[igaber@localhost home]$ setfacl -m u:intern:--- ~/myfile
[igaber@localhost home]$ ls -l
total 12
drwx----- 16 igaber igaber 4096 Nov 18 13:44 igaber
drwx----- 3 intern intern 78 Nov 18 13:51 intern
drwx----- 3 islam islam 78 Nov 11 19:40 islam
-rw----- 1 root root 35 Nov 16 20:20 israa
drwx----- 4 salma salma 128 Nov 16 21:55 salma
drwx----- 14 1003 30001 4096 Nov 11 21:46 sam
drwx----- 3 user1 user1 78 Nov 11 19:05 user1
[igaber@localhost home]$ who | wc -l
2
[igaber@localhost home]$ sed -n '7,10p' /etc/passwd
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown
halt:x:7:0:halt:/sbin:/sbin/halt
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin
operator:x:11:0:operator:/root:/sbin/nologin
[igaber@localhost home]$ umask
0022
[igaber@localhost home]$ umask 077
[igaber@localhost home]$ mkdir testdir
mkdir: cannot create directory 'testdir': Permission denied
[igaber@localhost home]$ touch testfile
touch: cannot touch 'testfile': Permission denied
[igaber@localhost home]$ ls -ld testdir testfile
ls: cannot access 'testdir': No such file or directory
ls: cannot access 'testfile': No such file or directory
[igaber@localhost home]$ umask
0077
[igaber@localhost home]$ umask 0022
[igaber@localhost home]$ umask
0022
[igaber@localhost home]$
```

right

