1) Display the first 4 lines of /etc/passwd
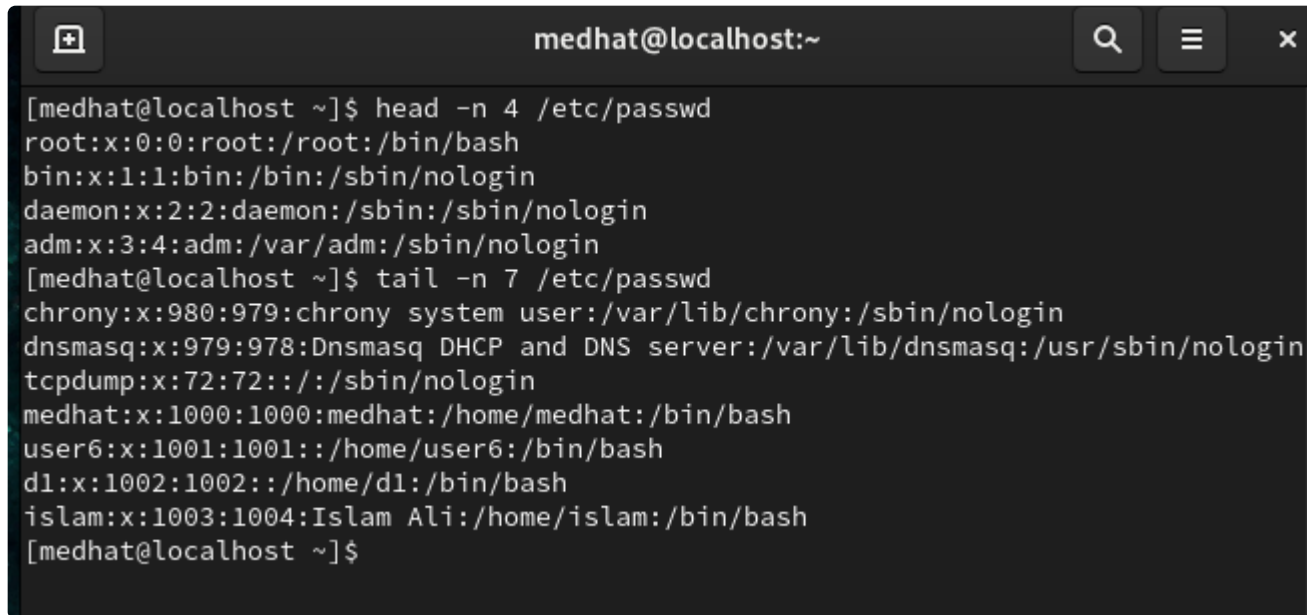
2) Display the last 7 lines of /etc/passwd

```
[medhat@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
[medhat@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
tcpdump:x:72:72::/:/sbin/nologin
medhat:x:1000:1000:medhat:/home/medhat:/bin/bash
user6:x:1001:1001::/home/user6:/bin/bash
d1:x:1002:1002::/home/d1:/bin/bash
islam:x:1003:1004:Islam Ali:/home/islam:/bin/bash
[medhat@localhost ~]$
```

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

- **If the directory is empty**: The command `rmdir dir11` will succeed without any warning
- **if the directory contains files**
  - running rm results in an error
  - running rm -r will succeed and the directory and all its contents will be removed

4) Count the words in the /etc/passwd

5) Count the lines in /etc/ passwd

```
medhat@localhost:~/dir1

[medhat@localhost dir1]$ man wc
[medhat@localhost dir1]$ wc -w /etc/passwd
94 /etc/passwd
[medhat@localhost dir1]$ man wc
[medhat@localhost dir1]$ wc -l /etc/passwd
40 /etc/passwd
[medhat@localhost dir1]$ ▊
```

6) Using vi/vim write your CV in a file mycv. Your CV should include your name, age, school, college, experience, ... at least 7 lines

```
medhat@localhost:~/dir1 — vim mycv

Name : Medhat
Age  : 23
School : Fakous military secondary school
College : Zagazig university
Degree : Computer Engineering, Graduated with honors
Exprience : Worked on Embedded Systems and Data Engineering
Interests : Programming and Data Engineering
~
~
```

7) Open mycv file using vim command then : Without using arrows state how to :

- **Move the cursor down one line at a time.**
  - use j
- **Move the cursor up one line at a time.**
  - use k
- **Search for the word age**

- /Age

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

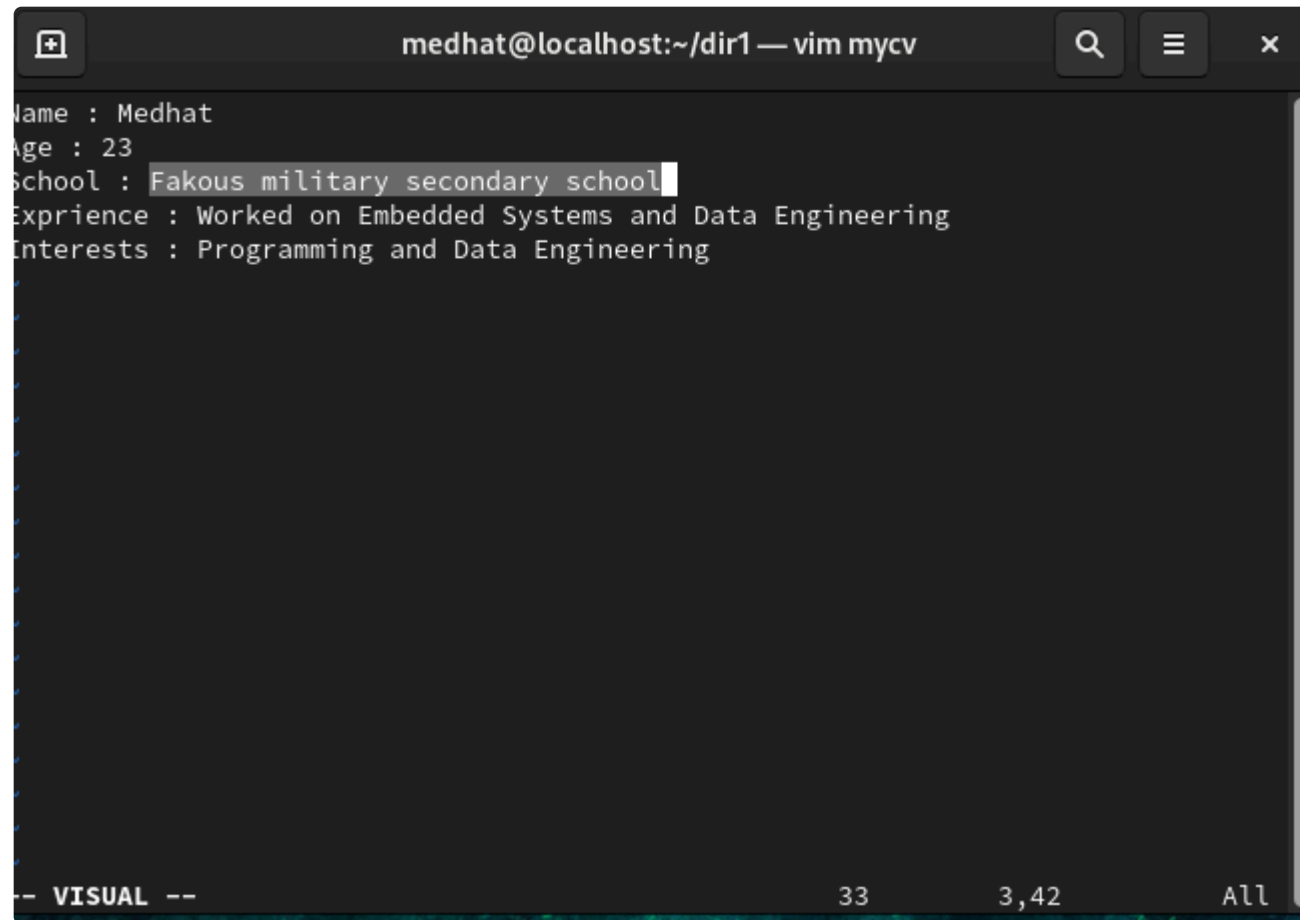- **Delete the line you are on and line 5.**
  - :,5d

```
医  医                    medhat@localhost:~/dir1 — vim mycv                Q  ≡  ✕

Name : Medhat
Age : 23
School : Fakous military secondary school
College : Zagazig university
Degree : Computer Engineering, Graduated with honors
Exprience : Worked on Embedded Systems and Data Engineering
Interests : Programming and Data Engineering
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:,5d
```
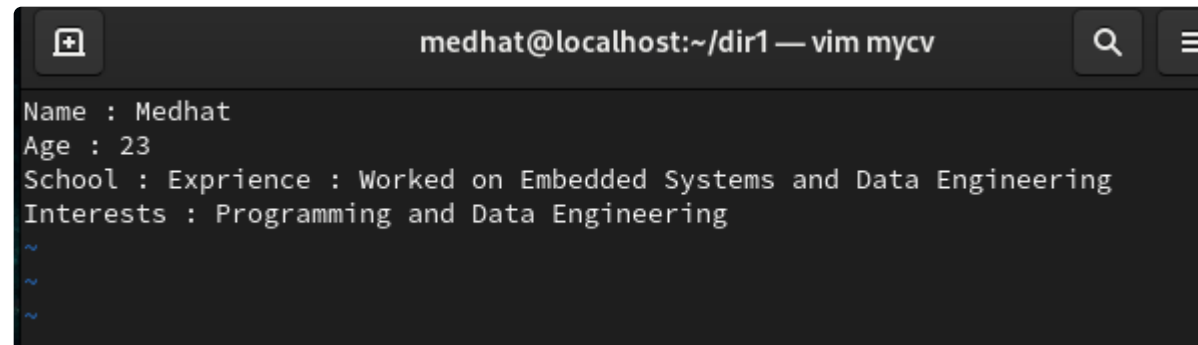
```
medhat@localhost:~/dir1 — vim mycv                    Q    ≡    ✕

Name : Medhat
Age : 23
School : Fakous military secondary school
Exprience : Worked on Embedded Systems and Data Engineering
Interests : Programming and Data Engineering
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2 fewer lines; before #4  2 seconds ago            1,1              All
```

- **How to step to the end of the line and change to writing mode in one step.**
  - use A
- **copy line 2 to the end of the file**
  - :2,$y

- **delete the school's name using the visual mode**

Terminal window (top):

```
medhat@localhost:~/dir1 — vim mycv

Name : Medhat
Age : 23
School : Fakous military secondary school
Exprience : Worked on Embedded Systems and Data Engineering
Interests : Programming and Data Engineering




-- VISUAL --                                    33          3,42              All
```


Terminal window (bottom):

```
medhat@localhost:~/dir1 — vim mycv

Name : Medhat
Age : 23
School : Exprience : Worked on Embedded Systems and Data Engineering
Interests : Programming and Data Engineering
~
~
~
~
```

- **Enable numbering lines in vim**

```
medhat@localhost:~/dir1 — vim mycv

  1 Name : Medhat
  2 Age : 23
  3 School : Fakous military secondary school
  4 College : Zagazig university
  5 Degree : Computer Engineering, Graduated with honors
  6 Exprience : Worked on Embedded Systems and Data Engineering
  7 Interests : Programming and Data Engineering
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:set number                                          4,1              All
```

8) create a new file named myfile under your home directory

- **Give permission rw to user Islam without changing the owner or the other's permission**

- **Create a user named intern**
  - sudo useradd intern
- **Prevent user intern from accessing myfile**

```
[medhat@localhost ~]$ setfacl -m u:intern:--- myfile
[medhat@localhost ~]$ su - intern
Password:
Password:
su: Authentication failure
[medhat@localhost ~]$ passwd intern
passwd: Only root can specify a user name.
[medhat@localhost ~]$ sudo passwd intern
Changing password for user intern.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[medhat@localhost ~]$ su - intern
Password:
[intern@localhost ~]$ ls
[intern@localhost ~]$ cd /home/medhat/myfile
-bash: cd: /home/medhat/myfile: Permission denied
[intern@localhost ~]$ 
```