Lab 1

- **cat**: Show the contents of a file at once.
- **more**: Show the contents of a file one screen at a time, then waits for you to press the spacebar to see more.

Q3. What is the difference between rm and rmdir using man?

- **rm**: Removes files or directories.
- **rmdir**: Removes *empty* directories only

Q4. Create the hierarchy under your home directory:

```
                                mohamed@dell: ~/docs
mohamed@dell:~$ mkdir dir1 docs
mohamed@dell:~$ ls ~
Desktop  docs       Downloads  Pictures  snap       Videos
dir1     Documents  Music      Public    Templates
mohamed@dell:~$ cd dir1
mohamed@dell:~/dir1$ mkdir dir11 dir12
mohamed@dell:~/dir1$ ls
dir11  dir12
mohamed@dell:~/dir1$ cd dir11
mohamed@dell:~/dir1/dir11$ touch file1
mohamed@dell:~/dir1/dir11$ ls
file1
mohamed@dell:~/dir1/dir11$ cd ~
mohamed@dell:~$ cd docs/
mohamed@dell:~/docs$ touch mycv
mohamed@dell:~/docs$ ls
mycv
mohamed@dell:~/docs$
```

a. Remove dir11 in one-step. What did you notice? And how did you overcome that?

There is nothing happened because I used **(rm -r dir1/dir11)** instead of **(rmdir dir1/dir11)**, which deleted empty directories only.

```
mohamed@dell:~$ rm -r dir1/dir11
mohamed@dell:~$ ls
Desktop  docs       Downloads  Pictures  snap       Videos
dir1     Documents  Music      Public    Templates
```

The hierarchy became has one branch **(docs > mycv)**

The absolute path > **/home/dell/docs/mycv**
The relative path > **docs/mycv**

```
mohamed@dell:~$ ls
Desktop  Documents  Music      Pictures  snap       Videos
docs     Downloads  mypasswd   Public    Templates
mohamed@dell:~$ mv mypasswd oldpasswd
mohamed@dell:~$ ls
Desktop  Documents  Music      Pictures  snap       Videos
docs     Downloads  oldpasswd  Public    Templates
mohamed@dell:~$
```

Q7. You are in /usr/bin, list four ways to go to your home directory

1) use this command > **cd ~**
2) use this command > **cd**
3) use this command >**cd $HOME**
4) use this command >**cd /home/mohamed** [user_name]

Q9. Display the first 4 lines of `/etc/passwd`

```
mohamed@dell: ~
mohamed@dell:~$ head -4 /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
mohamed@dell:~$
```

Q10. Display the last 7 lines of /etc/passwd

```
mohamed@dell: ~
mohamed@dell:~$ tail -7 /etc/passwd
polkitd:x:987:987:User for polkitd:/:/usr/sbin/nologin
rtkit:x:117:119:RealtimeKit,,,:/proc:/usr/sbin/nologin
colord:x:118:120:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
gnome-initial-setup:x:119:65534::/run/gnome-initial-setup/:/bin/false
gdm:x:120:121:Gnome Display Manager:/var/lib/gdm3:/bin/false
nm-openvpn:x:121:122:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
mohamed:x:1000:1000:mohamed:/home/mohamed:/bin/bash
mohamed@dell:~$
```