Read the file /etc/passwd and notice the different fields. Extract your info from it.

```
tcpdump:x:72:72::/:/sbin/nologin
ahmed:x:1000:1000:ahmed:/home/ahmed:/bin/bash
[ahmed@server ~]$
```

1) The username is "ahmed".

2) The UID and GID are both 1000.

3) The comment field is "ahmed".

4) The home directory is /home/ahmed.

5) The default shell is /bin/bash.

What is the different between cat and more command

Feature	cat	more
Display	Shows entire file at once	Shows one screen of content at a time
Navigation	No navigation options	Allows scrolling with Space, Enter
Use case	Small files or concatenation	Large files for easy reading

What is the difference between rm and rmdir using man?

Rm : Removes (deletes) files and directories.

```
NAME
       rm - remove files or directories

SYNOPSIS
       rm [OPTION]... [FILE]...

DESCRIPTION
       This  manual page documents the GNU version of rm.  rm removes
each specified file.  By default, it does not re-
```

Rmdir : Removes (deletes) empty directories.

```
NAME
        rmdir - remove empty directories

SYNOPSIS
        rmdir [OPTION]... DIRECTORY...

DESCRIPTION
        Remove the DIRECTORY(ies), if they are empty.
```
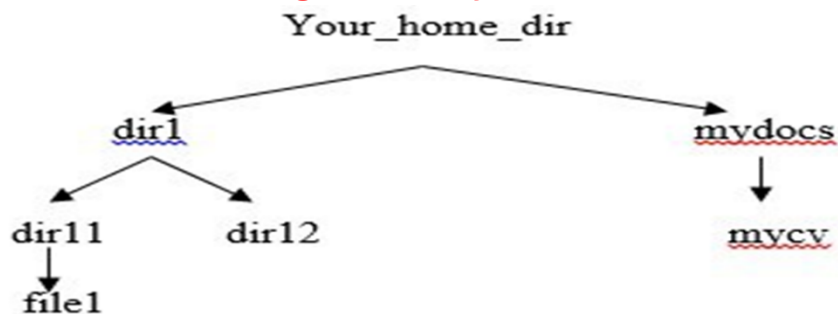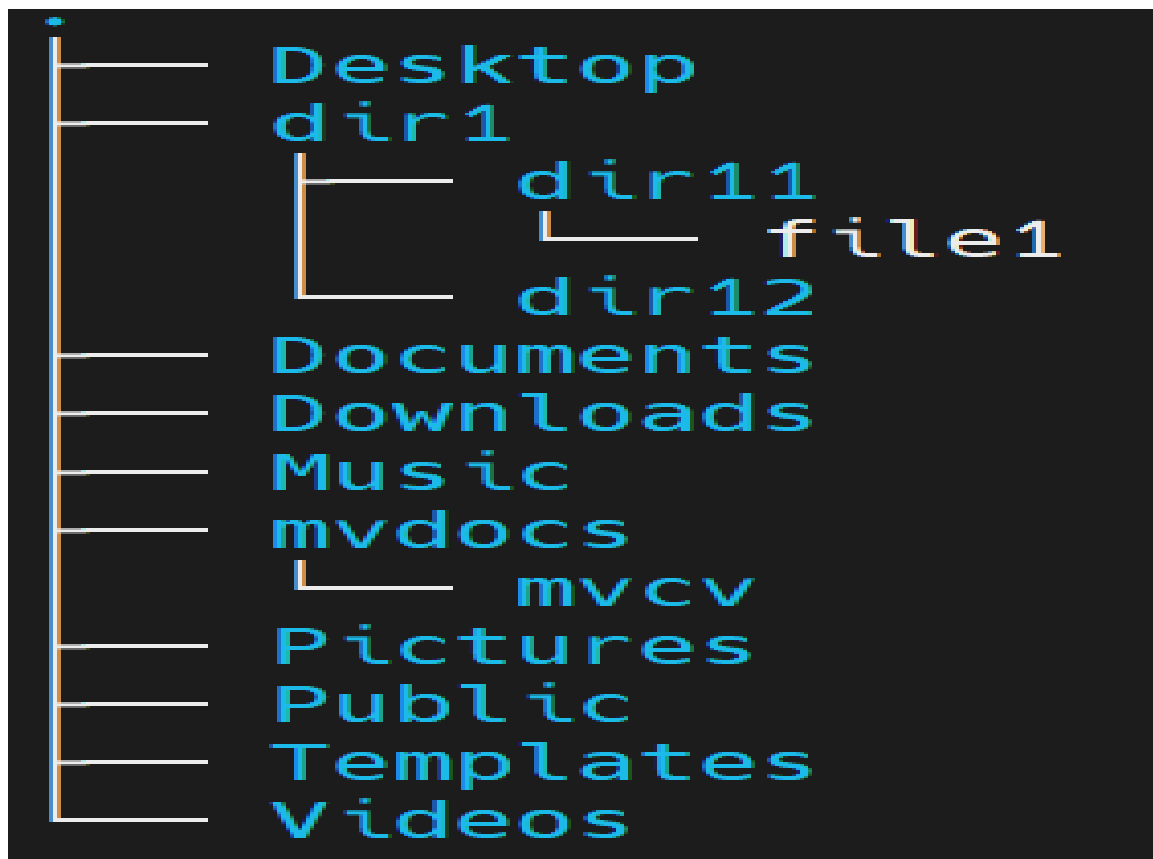
Create the following hierarchy:


```
[ahmed@server ~]$ mkdir dir1 mvdocs
[ahmed@server ~]$ cd dir 1
-bash: cd: too many arguments
[ahmed@server ~]$ cd dir1
[ahmed@server dir1]$ mkdir dir11 dir12
[ahmed@server dir1]$ cd dir11
[ahmed@server dir11]$ touch file1
[ahmed@server dir11]$ cd ./
[ahmed@server dir11]$ cd ..
[ahmed@server dir1]$ cd ../
[ahmed@server ~]$ cd mvdocs/
[ahmed@server mvdocs]$ mkdir mvcv
```

```
i
├─────── Desktop
├─────── dir1
│           ├────── dir11
│           │          └────── file1
│           └────── dir12
├─────── Documents
├─────── Downloads
├─────── Music
├─────── mvdocs
│           └────── mvcv
├─────── Pictures
├─────── Public
├─────── Templates
└─────── Videos
```

Remove dir11 in one step. What do you notice? And how to overcomethat?

```
[ahmed@server ~]$
[ahmed@server ~]$ rmdir dir1/dir11
rmdir: failed to remove 'dir1/dir11': Directory not empty
[ahmed@server ~]$ 
```

To overcome over add -r

```
[ahmed@server ~]$ rm -r dir1/dir11
[ahmed@server ~]$ tree
.
├── Desktop
├── dir1
│   └── dir12
├── Documents
├── Downloads
├── Music
├── mvdocs
│   └── mvcv
├── Pictures
├── Public
├── Templates
└── Videos
```

Then remove dir12 using rmdir –p command. State what happened to thehierarchy (Note: you are in your home dir).

Dir1 and dir12 are deleted

```
[ahmed@server ~]$ rmdir -p dir1/dir12
[ahmed@server ~]$ tree
.
├── Desktop
├── Documents
├── Downloads
├── Music
├── mvdocs
│   └── mvcv
├── Pictures
├── Public
├── Templates
└── Videos
```

The output of the command pwd was /home/myuser. Write the absoluteand relative path for the file mycv

Relative : ./file1/mycv

Absolute: /home/ahmed/file1/mycv

```
[ahmed@server ~]$ pwd
/home/ahmed
[ahmed@server ~]$ ls -l ./file1/mycv
-rwxrwxrwx. 1 ahmed ahmed 0 Nov 12 15:54 ./file1/mycv
[ahmed@server ~]$ ls -l /home/ahmed/file1/mycv
-rwxrwxrwx. 1 ahmed ahmed 0 Nov 12 15:54 /home/ahmed/file1/mycv
[ahmed@server ~]$ 
```

You are in /usr/bin, list four ways to go to your home directory.
   1) Cd
   2) cd ~
   3) cd $HOME
   4) cd /home/username

Copy the passwd file to your home directory making its name is mypasswd.

```
[ahmed@server ~]$ ls
Desktop  Documents  Downloads  file1  Music  mvdocs  Pictures  Public  Templates  Videos
[ahmed@server ~]$ cp /etc/passwd   ~
[ahmed@server ~]$ ls
Desktop  Documents  Downloads  file1  Music  mvdocs  passwd  Pictures  Public  Templates  Videos
[ahmed@server ~]$ mv passwd mypasswd
[ahmed@server ~]$ ls
Desktop  Documents  Downloads  file1  Music  mvdocs  mypasswd  Pictures  Public  Templates  Videos
[ahmed@server ~]$
```

Rename this new file to be oldpasswd.

```
[ahmed@server ~]$ ls
Desktop  Documents  Downloads  file1  Music  mvdocs  mypasswd  Pictures  Public  Templates  Videos
[ahmed@server ~]$ mv mypasswd oldpasswd
[ahmed@server ~]$ ls
Desktop  Documents  Downloads  file1  Music  mvdocs  oldpasswd  Pictures  Public  Templates  Videos
[ahmed@server ~]$
```

List Linux commands in /usr/bin that start with letter "w"

```
[ahmed@server ~]$ cd /usr/bin/
[ahmed@server bin]$ ls w*
w        wall    watchgnupg  wc     wget    whatis.man-db  which     who      wir
wait     watch   wavpack     wdctl  whatis  whereis        whiptail  whoami   wnc
[ahmed@server bin]$
```

Display the first 4 lines of /etc/passwd

```
[ahmed@server ~]$ 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
[ahmed@server ~]$
```

Display the last 7 lines of /etc/passwd

```
[ahmed@server ~]$ tail -n 7 /etc/passwd
cockpit-wsinstance:x:984:983:User for cockpit-ws instances:/nonexisting:/sbin/nologin
gnome-initial-setup:x:983:982::/run/gnome-initial-setup/:/sbin/nologin
sshd:x:74:74:Privilege-separated SSH:/usr/share/empty.sshd:/usr/sbin/nologin
chrony:x:982:981:chrony system user:/var/lib/chrony:/sbin/nologin
dnsmasq:x:981:980:Dnsmasq DHCP and DNS server:/var/lib/dnsmasq:/usr/sbin/nologin
tcpdump:x:72:72::/:/sbin/nologin
ahmed:x:1000:1000:ahmed:/home/ahmed:/bin/bash
[ahmed@server ~]$
```

Display the users who are logged now to the system.

```
[ahmed@server ~]$ w
 16:20:17 up  1:24,  3 users,  load average: 0.07, 0.03, 0.00
USER     TTY       LOGIN@   IDLE   JCPU   PCPU WHAT
ahmed    seat0     14:57    0.00s  0.00s  0.00s /usr/libexec/gdm-wayland-se
ahmed    tty2      14:57    1:23m  0.03s  0.03s /usr/libexec/gnome-session-
ahmed    pts/0     15:57    1.00s  0.20s  0.03s w
[ahmed@server ~]$ whoami
ahmed
[ahmed@server ~]$
```

Display the man pages of passwd the command and the file sequentially in one command.

```
[ahmed@server ~]$ man 1 passwd
[ahmed@server ~]$ man 5 passw
No manual entry for passw in section 5
[ahmed@server ~]$
```

Display a list of all the commands that contain the keyword passwd in their man page

```
[ahmed@server ~]$ man -K passwd
--Man-- next: gpasswd(1) [ view (return) | skip (Ctrl-D) | quit (Ctrl-C) ]
```