

Lab 1

1. Install CentOS /RHEL

Done

2. What is the difference between cat and more command?

“Cat” command is used for showing the data inside a file.

If the data is so huge that it can't be viewed in one screen, the “Cat” command will show only the last part of data which can fill only one screen.

“More” command is also used for showing the data inside a file.

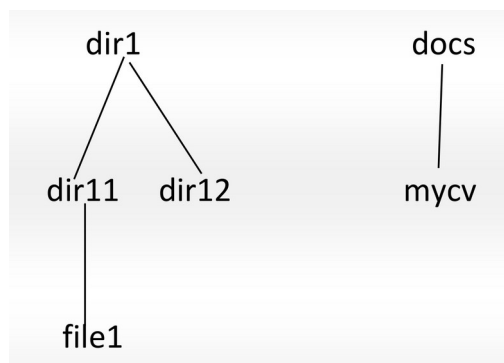
“More” command has the advantage that it can show the whole data inside a file through more than one screen.

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

“rm” removes files or directories. Directories can be removed by adding -r option to the “rm” command

“rmdir” removes empty directories

4. Create the following hierarchy under your home directory:



```
hamza@Hamza-Inspiron-5567: ~  
hamza@Hamza-Inspiron-5567:~$ mkdir dir1  
hamza@Hamza-Inspiron-5567:~$ mkdir docs  
hamza@Hamza-Inspiron-5567:~$ mkdir dir1/dir11  
hamza@Hamza-Inspiron-5567:~$ mkdir dir1/dir12  
hamza@Hamza-Inspiron-5567:~$ touch dir1/dir11/file1  
touch: cannot touch 'dir1/dir11/file1': No such file or directory  
hamza@Hamza-Inspiron-5567:~$ touch dir1/dir11/file1  
hamza@Hamza-Inspiron-5567:~$ touch docs/mycv  
hamza@Hamza-Inspiron-5567:~$
```

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

```
hamza@Hamza-Inspiron-5567: ~  
hamza@Hamza-Inspiron-5567:~$ rmdir dir1/dir11  
rmdir: failed to remove 'dir1/dir11': Directory not empty  
hamza@Hamza-Inspiron-5567:~$ rm -r dir1/dir11  
hamza@Hamza-Inspiron-5567:~$ ls dir1  
dir12  
hamza@Hamza-Inspiron-5567:~$
```

The directory couldn't be removed using "rmdir" because it is not empty. To overcome that, we can use rm -r

- b) Then remove dir12 using rmdir -p command. State what happened to the hierarchy (Note: you are in your home directory).

```
hamza@Hamza-Inspiron-5567: ~  
hamza@Hamza-Inspiron-5567:~$ rmdir -p dir1/dir12  
hamza@Hamza-Inspiron-5567:~$ ls dir1  
ls: cannot access 'dir1': No such file or directory  
hamza@Hamza-Inspiron-5567:~$
```

Both directories "dir12" and its parent directory "dir1" are removed.

- c) The output of the command pwd was /home/user. Write the absolute and relative path for the file mycv

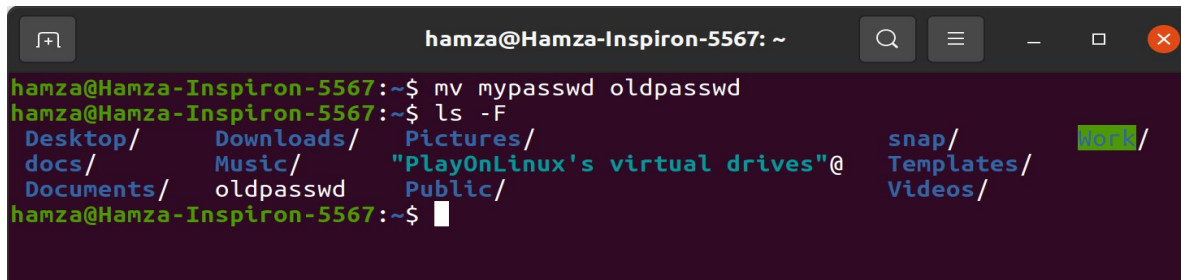
Absolute Path: /home/user/docs/mycv

Relative Path: docs/mycv

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

```
hamza@Hamza-Inspiron-5567: ~  
hamza@Hamza-Inspiron-5567:~$ cp /etc/passwd mypasswd  
hamza@Hamza-Inspiron-5567:~$ ls -F  
Desktop/      Downloads/    Pictures/     snap/         work/  
docs/         Music/       "PlayOnLinux's virtual drives"@ Templates/  
Documents/    mypasswd     Public/       Videos/
```

6. Rename this new file to be oldpasswd.

A terminal window titled 'hamza@Hamza-Inspiron-5567: ~' with standard window controls. The user enters 'mv mypasswd oldpasswd' and then 'ls -F'. The output shows a directory listing with various folders like Desktop, Downloads, Pictures, snap, Templates, and Videos, and files like docs, Music, 'PlayOnLinux's virtual drives', Documents, oldpasswd, and Public. The prompt returns to the user.

```
hamza@Hamza-Inspiron-5567:~$ mv mypasswd oldpasswd
hamza@Hamza-Inspiron-5567:~$ ls -F
Desktop/    Downloads/  Pictures/   snap/       work/
docs/       Music/      "PlayOnLinux's virtual drives"@  Templates/
Documents/  oldpasswd  Public/     Videos/
hamza@Hamza-Inspiron-5567:~$
```

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

- a. `cd ../../ ; cd home ; cd hamza`
- b. `cd ../../home/hamza`
- c. `cd /home/hamza`
- d. `cd ~`

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

`cd /usr/bin; ls w?`

9. Display the first 4 lines of /etc/passwd

`head -4 /etc/passwd`

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

`tail -7 /etc/passwd`

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

`Man -a passwd`

12. Display the man page of the passwd file.

`Man -S5 passwd`

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

`Man -k passwd`