

## 1. Install CentOS /RHEL

DONE

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

Cat :display the entire content of a file directly to the terminal at once (in one go)

More :display the entire content of a file on screen at a time and allow you to scroll through the content of the file

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

rm : used to remove files if I use -r will remove directory

rmdir: To remove empty directories

## 4. Create the following hierarchy under your home directory:

```
nour@nour-virtual-machine:~$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  snap  Templates  Videos
nour@nour-virtual-machine:~$ pwd
/home/nour
nour@nour-virtual-machine:~$ mkdir docs
nour@nour-virtual-machine:~$ ls
Desktop  Documents  Music  Public  Templates
docs     Downloads  Pictures  snap    Videos
nour@nour-virtual-machine:~$
nour@nour-virtual-machine:~$ cd docs
nour@nour-virtual-machine:~/docs$ touch mycv
nour@nour-virtual-machine:~/docs$ ls
mycv
nour@nour-virtual-machine:~/docs$ cd ..
nour@nour-virtual-machine:~$ mkdir dir1
nour@nour-virtual-machine:~$ cd dir1
nour@nour-virtual-machine:~/dir1$ mkdir dir11
nour@nour-virtual-machine:~/dir1$ mkdir dir12
nour@nour-virtual-machine:~/dir1$ ls
dir11  dir12
nour@nour-virtual-machine:~/dir1$ cd dir11
nour@nour-virtual-machine:~/dir1/dir11$ touch file1
nour@nour-virtual-machine:~/dir1/dir11$ ls
file1
```

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

```
nour@nour-virtual-machine:~$ rmdir dir11
rmdir: failed to remove 'dir11': No such file or directory
nour@nour-virtual-machine:~$
```

```
nour@nour-virtual-machine:~/dir1$ rm -r dir11
nour@nour-virtual-machine:~/dir1$ ls
dir12
nour@nour-virtual-machine:~/dir1$
```

If I use rmdir will encounter error because it designed to remove empty directories and dir11 contain file in it so it not empty to overcome that I use rm -r dir11 ,this command will recursively remove the directory and all contents.

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

```
nour@nour-virtual-machine:~/dir1$ rmdir -p dir12
nour@nour-virtual-machine:~/dir1$ cd dir1
bash: cd: dir1: No such file or directory
nour@nour-virtual-machine:~/dir1$ ls
dir11
nour@nour-virtual-machine:~/dir1$ cd dir1
```

dir 12 is empty so will removed along with its parent directories and the entire hierarchy .

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

absolute path for mycv : ' /home/nour/dir1/dir12/mycv '

relative path for mycv: 'nour/dir1/dir12/mycv '

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

First command will creat a copy of the file in my home

6. Rename this new file to be oldpasswd.

Second command in the image will rename it

```
nour@nour-virtual-machine:~$ cd
nour@nour-virtual-machine:~$ pwd
/home/nour
nour@nour-virtual-machine:~$ cp /etc/passwd ~/mypasswd
nour@nour-virtual-machine:~$ mv ~/mypasswd ~/oldpasswd
nour@nour-virtual-machine:~$
```

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

```
nour@nour-virtual-machine:/$ cd ~
nour@nour-virtual-machine:~$ cd ../../
nour@nour-virtual-machine:/$ cd
nour@nour-virtual-machine:~$ cd /home/nour
nour@nour-virtual-machine:~$
```

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

```
nour@nour-virtual-machine:~$ ls w*
WOW

word:

WWW:
```

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

```
nour@nour-virtual-machine:~$ head -n 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
nour@nour-virtual-machine:~$
```

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

```
nour@nour-virtual-machine:~$ tail -7 /etc/passwd
colord:x:123:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
geoclue:x:124:131::/var/lib/geoclue:/usr/sbin/nologin
pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:126:65534::/run/gnome-initial-setup:/bin/false
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
nour:x:1000:1000:nour,,,:/home/nour:/bin/bash
```

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

```
PASSWD(1)                                User Commands                                PASSWD(1)

NAME
    passwd - change user password

SYNOPSIS
    passwd [options] [LOGIN]

DESCRIPTION
    The passwd command changes passwords for user accounts. A normal user may only change the password for their own account, while the superuser may change the password for any account. passwd also changes the account or associated password validity period.

    Password Changes
    The user is first prompted for their old password, if one is present. This password is then encrypted and compared against the stored password. The user has only one chance to enter the correct password. The superuser is permitted to bypass this step so that forgotten passwords may be changed.

    After the password has been entered, password aging information is checked to see if the user is permitted to change the password at this
    Manual page passwd(1) line 1 (press h for help or q to quit)
```

12.Display the man page of the passwd file

```
PASSWD(5)                                File Formats and Conversions                                PASSWD(5)

NAME
    passwd - the password file

DESCRIPTION
    /etc/passwd contains one line for each user account, with seven fields
    delimited by colons (":"). These fields are:

    • login name

    • optional encrypted password

    • numerical user ID

    • numerical group ID

    • user name or comment field

    • user home directory

    • optional user command interpreter

final          dual page passwd(5) line 1 (press h for help or q to quit)
```

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

```
nour@nour-virtual-machine:~$ man -k passwd
nour@nour-virtual-machine:~$ man -k pass
apg (1) - generates several random passwords
chage (1) - change user password expiry information
chpasswd (8) - update group passwords in batch mode
chpasswd (8) - update passwords in batch mode
cpg (8) - copy with locking the given file to the password or gr...
cppw (8) - copy with locking the given file to the password or gr...
cracklib-check (8) - Check passwords using libcrack2
create-cracklib-dict (8) - Check passwords using libcrack2
expiry (1) - check and enforce password expiration policy
gpasswd (1) - administer /etc/group and /etc/gshadow
gpg-check-pattern (1) - Check a passphrase on stdin against the patternfile
gpg-preset-passphrase (1) - Put a passphrase into gpg-agent's cache
grpconv (8) - convert to and from shadow passwords and groups
grpunconv (8) - convert to and from shadow passwords and groups
```