



LinuxLab01

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

- cat ⇒ displays file contents, show all the pages at a time.
- more ⇒ shows page by page, only one page at a time.

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

- rm: used to remove the directory and its content.
- rmdir: used to remove the empty directory.

4. Create the hierarchy under your home directory:

```
afnan@cloud:~  
File Edit View Search Terminal Help  
[afnan@cloud ~]$ mkdir docs  
[afnan@cloud ~]$ touch docs/mycv  
[afnan@cloud ~]$ mkdir dir1  
[afnan@cloud ~]$ mkdir dir1/dir11  
[afnan@cloud ~]$ touch dir1/dir11/file1  
[afnan@cloud ~]$ mkdir dir1/dir12  
[afnan@cloud ~]$
```

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

- rmdir

we can't delete dir11 using command "rmdir because dir11 is not an empty directory.

```
[afnan@cloud ~]$ cd dir1
[afnan@cloud dir1]$ rmdir dir11
rmdir: failed to remove 'dir11': Directory not empty
[afnan@cloud dir1]$
```

To overcome that we use the command (rm -r dir11)

- rm

```
[afnan@cloud dir1]$ rm -r dir11
[afnan@cloud dir1]$
```

6. Then remove dir12 using rmdir -p command. State what happened to the hierarchy

(Note: you are in your home directory).

```
[afnan@cloud ~]$ rmdir -p dir1/dir12
[afnan@cloud ~]$ ls
Desktop  Documents  Music      Pictures   Templates
docs     Downloads  mydocs     Public     Videos
[afnan@cloud ~]$
```

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

```
[afnan@cloud ~]$ cp /etc/passwd mypasswd
[afnan@cloud ~]$ ls
Desktop  Documents  Music      mypasswd  Public      Videos
docs     Downloads  mydocs     Pictures  Templates
```

8. Rename this new file to be oldpasswd.

```
[afnan@cloud ~]$ mv mypasswd oldpasswd
[afnan@cloud ~]$ ls
Desktop  Documents  Music      oldpasswd  Public      Videos
docs     Downloads  mydocs     Pictures   Templates
```

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

- Absolute path: /home/afnan/docs/mycv
- Relative path: ./docs/mycv

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

```
[afnan@cloud ~]$ cd /usr/bin
[afnan@cloud bin]$ cd ~/
[afnan@cloud ~]$
```

```
[afnan@cloud bin]$ cd
[afnan@cloud ~]$ cd /usr/bin
[afnan@cloud bin]$ cd ~
[afnan@cloud ~]$
```

```
[afnan@cloud bin]$ cd
[afnan@cloud ~]$ cd /usr/bin
[afnan@cloud bin]$ cd
[afnan@cloud ~]$
```

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

```
[afnan@cloud ~]$ cd /usr/bin
[afnan@cloud bin]$ ls w*
w      watchgnupg  wget      whiptail  wnck-urgency-monitor  wvtag
wait   wavpack        whatis    who        word-list-compress    wvunpack
wall   wc             whereis   whoami     write
watch  wdctl         which     withsctp   wvgain
[afnan@cloud bin]$
```

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

```
[afnan@cloud bin]$ head -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
[afnan@cloud bin]$
```

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

```
[afnan@cloud bin]$ tail -7 /etc/passwd
gdm:x:42:42:./var/lib/gdm:/sbin/nologin
clevis:x:977:976:Clevis Decryption Framework unprivileged user:/var/cache/clevis:/sbin/nologin
gnome-initial-setup:x:976:975:./run/gnome-initial-setup:/sbin/nologin
pesign:x:975:974:Group for the pesign signing daemon:/var/run/pesign:/sbin/nologin
sshd:x:74:74:Privilege-separated SSH:/var/empty/sshd:/sbin/nologin
tcpdump:x:72:72:./sbin/nologin
afnan:x:1000:1000:Afnan:/home/afnan:/bin/bash
[afnan@cloud bin]$
```

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

```
[afnan@cloud ~]$ man -a passwd
```

```
afnan@cloud:~  
File Edit View Search Terminal Help  
PASSWD(1) User utilities PASSWD(1)  
  
NAME  
passwd - update user's authentication tokens  
  
SYNOPSIS  
passwd [-k] [-l] [-u [-f]] [-d] [-e] [-n mindays] [-x maxdays] [-w  
warndays] [-i inactivedays] [-S] [--stdin] [-?] [--usage] [username]  
  
DESCRIPTION  
The passwd utility is used to update user's authentication token(s).  
  
This task is achieved through calls to the Linux-PAM and Libuser API.  
Essentially, it initializes itself as a "passwd" service with Linux-PAM  
and utilizes configured password modules to authenticate and then  
update a user's password.  
  
A simple entry in the global Linux-PAM configuration file for this ser-  
vice would be:  
  
#  
# passwd service entry that does strength checking of  
# a proposed password before updating it.  
Manual page passwd(1) line 1 (press h for help or q to quit)
```

15.Display the man page of the passwd file.

```
[afnan@cloud ~]$ man 5 passwd  
[afnan@cloud ~]$
```

```
afnan@cloud:~  
File Edit View Search Terminal Help  
PASSWD(5) Linux Programmer's Manual PASSWD(5)  
  
NAME  
passwd - password file  
  
DESCRIPTION  
The /etc/passwd file is a text file that describes user login accounts  
for the system. It should have read permission allowed for all users  
(many utilities, like ls(1) use it to map user IDs to usernames), but  
write access only for the superuser.  
  
In the good old days there was no great problem with this general read  
permission. Everybody could read the encrypted passwords, but the  
hardware was too slow to crack a well-chosen password, and moreover the  
basic assumption used to be that of a friendly user-community. These  
days many people run some version of the shadow password suite, where  
/etc/passwd has an 'x' character in the password field, and the  
encrypted passwords are in /etc/shadow, which is readable by the supe-  
ruser only.  
  
If the encrypted password, whether in /etc/passwd or in /etc/shadow, is  
an empty string, login is allowed without even asking for a password.  
Note that this functionality may be intentionally disabled in applica-  
Manual page passwd(5) line 1 (press h for help or q to quit)
```

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

```
[afnan@cloud ~]$ man -k passwd
```