

Name: Nooreldeen Ayman Mohammed Elmobashar  
Track: Open Source  
Branch: ITI Mansoura

---

## 1. Install Linux

Done. Fedora Installed.

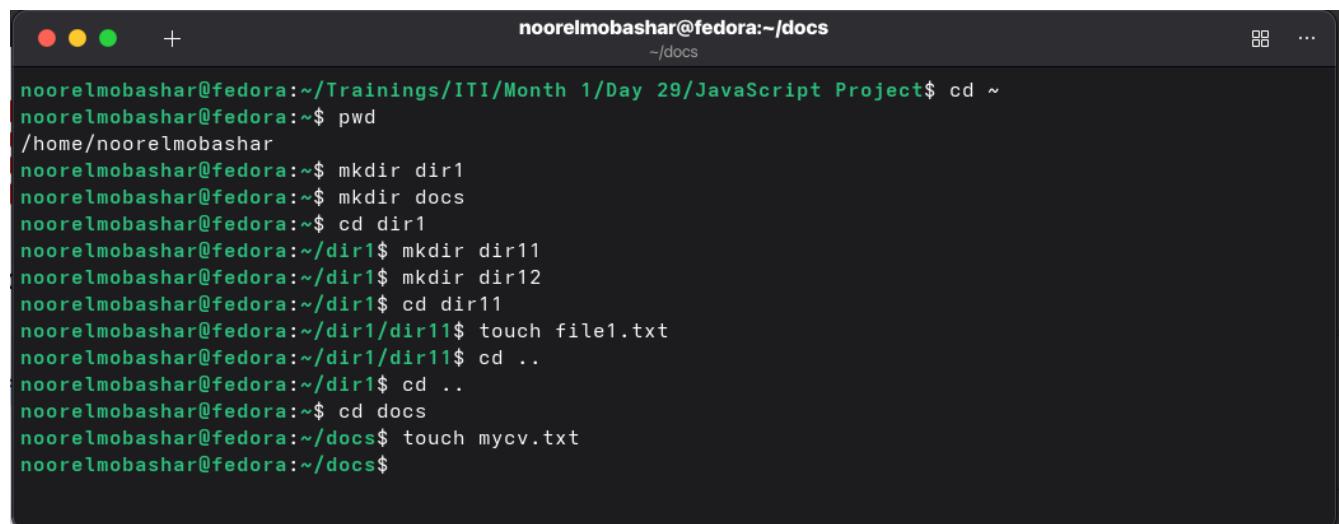
## 2. What is the difference between cat and more?

cat views all the file content in one time.  
more views file content page by page.

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

rm is used to delete files and directories (using flags).  
rmdir only removes empty folders only.

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



The screenshot shows a terminal window with a dark background and light-colored text. At the top, it displays the user's name, host, and current directory: noorelmobashar@fedora:~/docs. The terminal window contains the following command history:

```
noorelmobashar@fedora:~/Trainings/ITI/Month 1/Day 29/JavaScript Project$ cd ~
noorelmobashar@fedora:~$ pwd
/home/noorelmobashar
noorelmobashar@fedora:~$ mkdir dir1
noorelmobashar@fedora:~$ mkdir docs
noorelmobashar@fedora:~$ cd dir1
noorelmobashar@fedora:~/dir1$ mkdir dir11
noorelmobashar@fedora:~/dir1$ mkdir dir12
noorelmobashar@fedora:~/dir1$ cd dir11
noorelmobashar@fedora:~/dir1/dir11$ touch file1.txt
noorelmobashar@fedora:~/dir1/dir11$ cd ..
noorelmobashar@fedora:~/dir1$ cd ..
noorelmobashar@fedora:~$ cd docs
noorelmobashar@fedora:~/docs$ touch mycv.txt
noorelmobashar@fedora:~/docs$
```

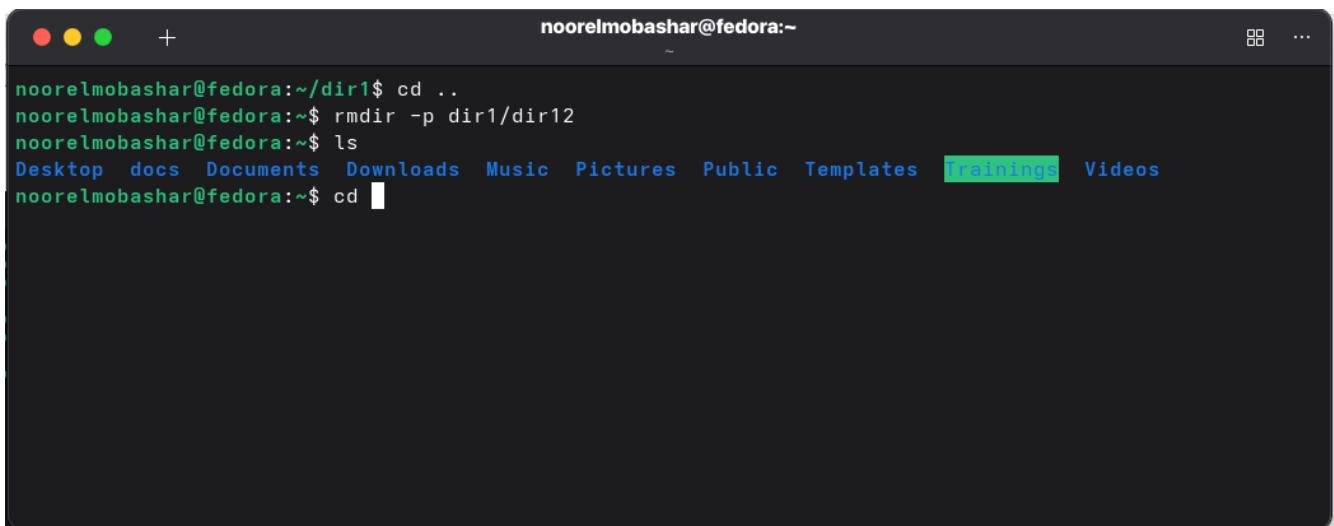
## 4.a Remove dir11 in one-step. What did you notice? And how did you overcome that?

I know that I should use rm -rf dir11 command to delete all the files and directories inside dir11



```
noorelmobashar@fedora:~/docs$ cd ..
noorelmobashar@fedora:~$ cd dir1
noorelmobashar@fedora:~/dir1$ ls
dir11 dir12
noorelmobashar@fedora:~/dir1$ rm -rf dir11
noorelmobashar@fedora:~/dir1$ ls
dir12
noorelmobashar@fedora:~/dir1$
```

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



```
noorelmobashar@fedora:~/dir1$ cd ..
noorelmobashar@fedora:~$ rmdir -p dir1/dir12
noorelmobashar@fedora:~$ ls
Desktop docs Documents Downloads Music Pictures Public Templates Trainings Videos
noorelmobashar@fedora:~$ cd ■
```

I notice that dir12 is removed and its parent is removed also.

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

Absolute Path: /home/noorelmobashar/docs/mycv.txt

Relative Path: docs/mycv.txt

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



```
noorelmobashar@fedora:~/docs$ cp /etc/passwd /home/noorelmobashar
noorelmobashar@fedora:~/docs$ ls
mycv.txt
noorelmobashar@fedora:~/docs$ cd ..
noorelmobashar@fedora:~$ ls
Desktop docs Documents Downloads Music passwd Pictures Public Templates Trainings Videos
noorelmobashar@fedora:~$ mv passwd mypasswd
noorelmobashar@fedora:~$ ls
Desktop docs Documents Downloads Music mypasswd Pictures Public Templates Trainings Videos
noorelmobashar@fedora:~$
```

6. Rename this new file to be oldpasswd.



```
noorelmobashar@fedora:~$ mv mypasswd oldpasswd
noorelmobashar@fedora:~$ ls
Desktop docs Documents Downloads Music oldpasswd Pictures Public Templates Trainings Videos
noorelmobashar@fedora:~$
```

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

1. cd /home/noorelmobashar
2. cd ~
3. cd
4. cd \$HOME

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

```
noorelmobashar@fedora:~$ cd /usr/bin
noorelmobashar@fedora:/usr/bin$ ls w*
w      wavpack    wget      which    wipefs    wmctrl      wpctl    wsdump
wait   wc         wget2     who      wireplumber  wnck-urgency-monitor  wpxec    wpsearch
waitpid  wcurl    whatis   whoami   withsctp   wpa_cli      write    wvgain
wall   wdctl    whatis.man-db whois   wl-copy    wpa_passphrase  wrudf    wvtag
watch  westcos-tool whereis  whois.md wl-paste   wpa_supplicant wsdd    wvunpack
noorelmobashar@fedora:/usr/bin$
```

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

```
noorelmobashar@fedora:~$ head -n 4 oldpasswd
root:x:0:0:Super User:/root:/bin/bash
bin:x:1:1:bin:/bin:/usr/sbin/nologin
daemon:x:2:2:daemon:/sbin:/usr/sbin/nologin
adm:x:3:4:adm:/var/adm:/usr/sbin/nologin
noorelmobashar@fedora:~$
```

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

```
noorelmobashar@fedora:~$ tail -n 7 oldpasswd
gnome-remote-desktop:x:976:976:GNOME Remote Desktop:/var/lib/gnome-remote-desktop:/usr/sbin/nologin
vboxadd:x:974:1::/var/run/vboxadd:/usr/sbin/nologin
sshd:x:74:74:Privilege-separated SSH:/usr/share/empty.sshd:/usr/sbin/nologin
passim:x:973:973:Local Caching Server:/usr/share/empty:/usr/sbin/nologin
tcpdump:x:72:72:tcpdump://:/usr/sbin/nologin
noorelmobashar:x:1000:1000:nooreldeen ayman elmobashar:/home/noorelmobashar:/bin/bash
akmods:x:969:969:User is used by akmods to build akmod packages:/var/cache/akmods:/usr/sbin/nologin
noorelmobashar@fedora:~$
```

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

```
noorelmobashar@fedora:~$ man passwd && man -s5 passwd
```

```
noorelmobashar@fedora:~ -- man passwd
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 regular user can only change the
    password for their own account, while the superuser can change the password for any account.
    The passwd also changes the account or associated password validity period.

    Password Changes
    Manual page passwd(1) line 1 (press h for help or q to quit)
```

```
noorelmobashar@fedora:~ -- man -s5 passwd
passwd(5)                               File Formats 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 pass-
    word, 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
Manual page passwd(5) line 1 (press h for help or q to quit)
```

12. Display the man page of the passwd file.

```
noorelmobashar@fedora:~$ man 5 passwd
```

```
noorelmobashar@fedora:~ -- man 5 passwd
passwd(5)                               File Formats 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 pass-
    word, 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
Manual 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.

```
noorelmobashar@fedora:~$ man -k passwd
```

```
noorelmobashar@fedora:~$ man -k passwd
passwd (1openssl)      - OpenSSL application commands
passwd (5)              - password file
passwd2des (3)          - RFS password encryption
passwdqc.conf (5)        - libpasswdqc configuration file
pwhistory_helper (8)    - Helper binary that transfers password hashes from passwd or shadow to opasswd
selinux_check_passwd_access (3) - query the SELinux policy database in the kernel
smbpasswd (5)            - The Samba encrypted password file
SSL_CTX_get_default_passwd_cb (3openssl) - set or get passwd callback for encrypted PEM file handling
SSL_CTX_get_default_passwd_cb_userdata (3openssl) - set or get passwd callback for encrypted PEM file ...
SSL_CTX_set_default_passwd_cb (3openssl) - set or get passwd callback for encrypted PEM file handling
SSL_CTX_set_default_passwd_cb_userdata (3openssl) - set or get passwd callback for encrypted PEM file ...
SSL_get_default_passwd_cb (3openssl) - set or get passwd callback for encrypted PEM file handling
SSL_get_default_passwd_cb_userdata (3openssl) - set or get passwd callback for encrypted PEM file hand...
SSL_set_default_passwd_cb (3openssl) - set or get passwd callback for encrypted PEM file handling
SSL_set_default_passwd_cb_userdata (3openssl) - set or get passwd callback for encrypted PEM file hand...
noorelmobashar@fedora:~$
```