

Cat displays all the content of the file
more displays content of the file page by page

What is the difference between rm and rmdir using man?

```
RMDIR(1)                                User Commands                                RMDIR(1)

NAME
    rmdir - remove empty directories

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

DESCRIPTION
    Remove the DIRECTORY(ies), if they are empty.

    --ignore-fail-on-non-empty
        ignore each failure that is solely because a directory
        is non-empty

    -p, --parents
        remove DIRECTORY and its ancestors; e.g., 'rmdir -p a/b/c' is
        similar to 'rmdir a/b/c a/b a'

    -v, --verbose
        output a diagnostic for every directory processed

Manual page rmdir(1) line 1 (press h for help or q to quit)
```

```
RM(1)                                    User Commands                                    RM(1)

NAME
    rm - remove files or directories

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

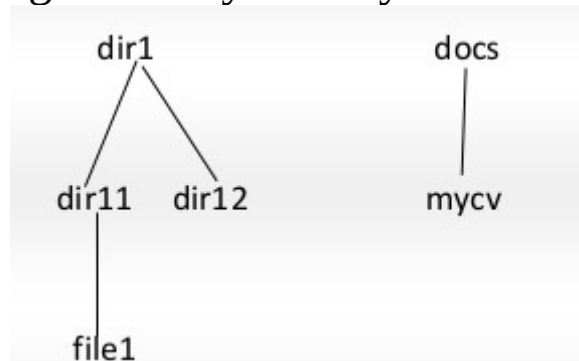
DESCRIPTION
    This manual page documents the GNU version of rm. rm removes each
    specified file. By default, it does not remove directories.

    If the -I or --interactive=once option is given, and there are more
    than three files or the -r, -R, or --recursive are given, then rm
    prompts the user for whether to proceed with the entire operation. If
    the response is not affirmative, the entire command is aborted.

    Otherwise, if a file is unwritable, standard input is a terminal, and
    the -f or --force option is not given, or the -i or --interac-
tive=always option is given, rm prompts the user for whether to remove
    the file. If the response is not affirmative, the file is skipped.

OPTIONS
    Manual page rm(1) line 1 (press h for help or q to quit)
```

Create the following hierarchy under your home directory:



```
mohamed@mohamed-GF62-8RE:/home$ pwd
/home
mohamed@mohamed-GF62-8RE:/home$ sudo mkdir dir1 docs
mohamed@mohamed-GF62-8RE:/home$ cd docs
mohamed@mohamed-GF62-8RE:/home/docs$ touch mycv
touch: cannot touch 'mycv': Permission denied
mohamed@mohamed-GF62-8RE:/home/docs$ sudo touch mycv
mohamed@mohamed-GF62-8RE:/home/docs$ cd /home/dir1
mohamed@mohamed-GF62-8RE:/home/dir1$ sudo mkdir dir11 dir12
mohamed@mohamed-GF62-8RE:/home/dir1$ cd dir11
mohamed@mohamed-GF62-8RE:/home/dir1/dir11$ sudo touch file1
mohamed@mohamed-GF62-8RE:/home/dir1/dir11$ ls
file1
mohamed@mohamed-GF62-8RE:/home/dir1/dir11$
```

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

-Cant remove when not empty

```
mohamed@mohamed-GF62-8RE:/home/dir1/dir11$ cd ..
mohamed@mohamed-GF62-8RE:/home/dir1$ rmdir dir11
rmdir: failed to remove 'dir11': Permission denied
mohamed@mohamed-GF62-8RE:/home/dir1$ sudo rmdir dir11
rmdir: failed to remove 'dir11': Directory not empty
mohamed@mohamed-GF62-8RE:/home/dir1$ sudo rm dir11
rm: cannot remove 'dir11': Is a directory
mohamed@mohamed-GF62-8RE:/home/dir1$ sudo rm -r dir11
mohamed@mohamed-GF62-8RE:/home/dir1$
```

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

It delete dir12 including its sub-directories (dir1).

```
mohamed@mohamed-GF62-8RE:/home/dir1$ ls
dir12
mohamed@mohamed-GF62-8RE:/home/dir1$ cd ..
mohamed@mohamed-GF62-8RE:/home$ sudo rmdir -p dir1/dir12
mohamed@mohamed-GF62-8RE:/home$ ls
docs  mohamed
mohamed@mohamed-GF62-8RE:/home$
```

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

```
mohamed@mohamed-GF62-8RE:~$ pwd
/home/mohamed
mohamed@mohamed-GF62-8RE:~$ ls /home/mohamed/docs
mycv
mohamed@mohamed-GF62-8RE:~$ ls docs
mycv
mohamed@mohamed-GF62-8RE:~$
```

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

```
mohamed@mohamed-GF62-8RE:/etc$ sudo cp passwd /home/mypasswd
[sudo] password for mohamed:
mohamed@mohamed-GF62-8RE:/etc$
```

Rename this new file to be `oldpasswd`.

```
mohamed@mohamed-GF62-8RE:/home$ sudo mv mypasswd oldpasswd
mohamed@mohamed-GF62-8RE:/home$ ls
docs  mohamed  oldpasswd
mohamed@mohamed-GF62-8RE:/home$
```

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

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

```
mohamed@mohamed-GF62-8RE:/home$ cd /bin
mohamed@mohamed-GF62-8RE:/bin$ ls -d w*
w          wc          whereis    whoami      wpa_passphrase
wall       wdctl       which      whoopsie    w.procps
watch      wget        whiptail   whoopsie-preferences write
watchgnupg whatis      who        word-list-compress
mohamed@mohamed-GF62-8RE:/bin$
```

Display the first 4 lines of /etc/passwd

```
mohamed@mohamed-GF62-8RE:/home$ ls
docs mohamed oldpasswd
mohamed@mohamed-GF62-8RE:/home$ head -4 oldpasswd
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
mohamed@mohamed-GF62-8RE:/home$
```

Display the last 7 lines of /etc/passwd

```
mohamed@mohamed-GF62-8RE:/home$ tail -7 oldpasswd
pulse:x:123:128:PulseAudio daemon,,,:/var/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:124:65534:./run/gnome-initial-setup:/bin/false
gdm:x:125:130:Gnome Display Manager:/var/lib/gdm3:/bin/false
sssd:x:126:131:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
mohamed:x:1000:1000:Mohamed,,,:/home/mohamed:/bin/bash
nvidia-persistenced:x:127:134:NVIDIA Persistence Daemon,,,:/nonexistent:/usr/sbin/nologin
systemd-coredump:x:999:999:systemd Core Dumper:/usr/sbin/nologin
mohamed@mohamed-GF62-8RE:/home$
```


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

```
mohamed@mohamed-GF62-8RE:/home$ tail -7 oldpasswd
pulse:x:123:128:PulseAudio daemon,,,:/var/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:124:65534:./run/gnome-initial-setup:/bin/false
gdm:x:125:130:Gnome Display Manager:/var/lib/gdm3:/bin/false
sssd:x:126:131:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
mohamed:x:1000:1000:Mohamed,,,:/home/mohamed:/bin/bash
nvidia-persistenced:x:127:134:NVIDIA Persistence Daemon,,,:/nonexistent:/usr/sbi
n/nologin
systemd-coredump:x:999:999:systemd Core Dumper:/usr/sbin/nologin
mohamed@mohamed-GF62-8RE:/home$
```

Display the man page of the passwd file.

```
mohamed@mohamed-GF62-8RE:/home$ man 5 passwd
mohamed@mohamed-GF62-8RE:/home$ man passwd(5)
bash: syntax error near unexpected token `('
mohamed@mohamed-GF62-8RE:/home$ man 5 passwd
mohamed@mohamed-GF62-8RE:/home$
```

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

```
mohamed@mohamed-GF62-8RE:/home$ man * passwd
No manual entry for docs
No manual entry for mohamed
No manual entry for oldpasswd
mohamed@mohamed-GF62-8RE:/home$ man -k passwd
chpasswd (8) - update group passwords in batch mode
chpasswd (8) - update passwords in batch mode
gpasswd (1) - administer /etc/group and /etc/gshadow
grub-mkpasswd-pbkdf2 (1) - generate hashed password for GRUB
ldappasswd (1) - change the password of an LDAP entry
openssl-passwd (1ssl) - compute password hashes
pam_localuser (8) - require users to be listed in /etc/passwd
passwd (1) - change user password
passwd (1ssl) - compute password hashes
passwd (5) - the password file
update-passwd (8) - safely update /etc/passwd, /etc/shadow and /etc/group
mohamed@mohamed-GF62-8RE:/home$
```