

# LAB 1 Admin1

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

cat

- **Purpose:** Displays the entire content of a file.
- **Behavior:** Outputs all file content to the terminal at once.
- **Use Case:** Ideal for small files or when you need to concatenate and display multiple files

A terminal window titled 'esraatark@localhost:~/Documents' with search, menu, and close icons. The prompt is '[esraatark@localhost Documents]\$' and the command 'cat file' has been entered. The output is a large block of Lorem Ipsum text displayed all at once.

```
[esraatark@localhost Documents]$ cat file

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla a ante eu erat ve
hacula egestas. Proin ut dui ac felis tempor placerat. Aenean vel nunc nec odio
volutpat lobortis. Curabitur a vulputate mi. Quisque sollicitudin nulla vel maur
is viverra, ac vehicula erat tristique. In hac habitasse platea dictumst. Morbi
vel mauris nec metus eleifend posuere. Sed malesuada arcu eu eros tincidunt, ege
t vestibulum urna tristique.

Vestibulum ac tincidunt turpis. Integer sit amet tincidunt sapien. Aliquam erat
volutpat. Mauris ut tortor quis ligula sodales venenatis sit amet sed felis. Nul
la eget mauris lorem. Suspendisse potenti. Cras nec sem orci. Sed ut sapien sit
amet orci sodales eleifend in non dui. Sed auctor orci vel ante varius, nec soda
les urna tempor. Nam euismod, magna at scelerisque volutpat, libero arcu volutpa
t metus, vel fermentum nisi nunc in nunc. Ut fringilla nisi at nisi malesuada, e
t bibendum odio tincidunt.

Praesent nec libero fringilla, fermentum purus sed, tempor tortor. Vivamus ac ip
sum et odio euismod tincidunt. Sed et tincidunt eros. Donec in mollis enim, sed
venenatis libero. Nam volutpat arcu id nisi vulputate, a tempor metus consectetu
r. Cras malesuada sem sed mi pharetra, non varius sapien gravida. Pellentesque h
abitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.
Etiam feugiat felis at turpis dictum scelerisque. Sed gravida felis in tortor fe
rmentum, sed tempus enim malesuada.
```

more

- **Purpose:** Allows viewing file content one screen at a time.
- **Behavior:** Displays content page by page, useful for larger files.
- **Use Case:** Better for reading large files interactively

```
esraatark@localhost:~/Documents — more file

[esraatark@localhost Documents]$ more file

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla a ante eu erat ve
hicula egestas. Proin ut dui ac felis tempor placerat. Aenean vel nunc nec odio
volutpat lobortis. Curabitur a vulputate mi. Quisque sollicitudin nulla vel maur
is viverra, ac vehicula erat tristique. In hac habitasse platea dictumst. Morbi
vel mauris nec metus eleifend posuere. Sed malesuada arcu eu eros tincidunt, ege
t vestibulum urna tristique.

Vestibulum ac tincidunt turpis. Integer sit amet tincidunt sapien. Aliquam erat
volutpat. Mauris ut tortor quis ligula sodales venenatis sit amet sed felis. Nul
la eget mauris lorem. Suspendisse potenti. Cras nec sem orci. Sed ut sapien sit
amet orci sodales eleifend in non dui. Sed auctor orci vel ante varius, nec soda
les urna tempor. Nam euismod, magna at scelerisque volutpat, libero arcu volutpa
t metus, vel fermentum nisi nunc in nunc. Ut fringilla nisi at nisi malesuada, e
t bibendum odio tincidunt.

Praesent nec libero fringilla, fermentum purus sed, tempor tortor. Vivamus ac ip
sum et odio euismod tincidunt. Sed et tincidunt eros. Donec in mollis enim, sed
venenatis libero. Nam volutpat arcu id nisi vulputate, a tempor metus consectetu
r. Cras malesuada sem sed mi pharetra, non varius sapien gravida. Pellentesque h
abitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.
Etiam feugiat felis at turpis dictum scelerisque. Sed gravida felis in tortor fe
rmentum, sed tempus enim malesuada.
--More--(50%)
```

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

```
esraatark@localhost:~/Documents — man rm

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 pro-
  ceed with the entire operation. If the response is not affirmative, the entire com-
  mand 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 --interactive=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
  Remove (unlink) the FILE(s).

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

```
esraatark@localhost:~/Documents — man rmdir
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

    --help display this help and exit
Manual page rmdir(1) line 1 (press h for help or q to quit)
```

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

```
[esraatark@localhost admin1]$ ls -R
.:
dir1 docs

./dir1:
dir11 dir12

./dir1/dir11:
file1

./dir1/dir12:

./docs:
mycv
```

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

```
[esraatark@localhost admin1]$ rmdir dir1/dir11
rmdir: failed to remove 'dir1/dir11': Directory not empty
```

```
[esraatark@localhost admin1]$ rm -r dir1/dir11
```

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

```
[esraatark@localhost admin1]$ rmdir -p dir1/dir12
```

The dir1 also removed.

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

Absolute: mycv is file here

```
[esraatark@localhost docs]$ pwd
/home/esraatark/admin1/docs
[esraatark@localhost docs]$ ls
mycv
```

Relative:mycv1 is directory here

```
[esraatark@localhost docs]$ cd mycv1
[esraatark@localhost mycv1]$
```

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

```
[esraatark@localhost ~]$ ls
admin1 Desktop Documents Downloads Music Pictures Public Templates Videos
[esraatark@localhost ~]$ cp /etc/passwd mypasswd
[esraatark@localhost ~]$ ls
admin1 Desktop Documents Downloads Music mypasswd Pictures Public Templates Videos
```

6. Rename this new file to be oldpasswd?

```
[esraatark@localhost ~]$ mv mypasswd passwd
[esraatark@localhost ~]$ ls
admin1 Desktop Documents Downloads Music passwd Pictures Public Templates Videos
```

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

```
[esraatark@localhost bin]$ cd ~
[esraatark@localhost ~]$ pwd
/home/esraatark
```

```
[esraatark@localhost bin]$ cd
[esraatark@localhost ~]$ pwd
/home/esraatark
```

```
[esraatark@localhost bin]$ cd /home/esraatark
[esraatark@localhost ~]$ pwd
/home/esraatark
```

```
[esraatark@localhost bin]$ cd $home
[esraatark@localhost ~]$ pwd
/home/esraatark
```

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

```
[esraatark@localhost ~]$ head -n 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
[esraatark@localhost ~]$
```

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

```
[esraatark@localhost ~]$ tail -n 4 /etc/passwd
chrony:x:981:981:chrony system user:/var/lib/chrony:/sbin/nologin
sshd:x:74:74:Privilege-separated SSH:/usr/share/empty.sshd:/usr/sbin/nologin
tcpdump:x:72:72:::/sbin/nologin
esraatark:x:1000:1000:esraa tark :/home/esraatark:/bin/bash
[esraatark@localhost ~]$
```

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

```
[esraatark@localhost ~]$ man passwd;man 5 passwd
[esraatark@localhost ~]$
```

## 11&12.Display the man page of the passwd file.

```
esraatark@localhost:~ — man passwd
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 service would be:

    #
    # passwd service entry that does strength checking of
    # a proposed password before updating it.
    #
    passwd password requisite pam_cracklib.so retry=3
    passwd password required pam_unix.so use_authtok
    #

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

11.

```
esraatark@localhost:~ — 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 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 superuser 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 applications, or configurable (for example using the "nullok" or "nonull" arguments to pam_unix(8)).

    If the encrypted password in /etc/passwd is "*NP*" (without the quotes), the shadow record should be obtained from an NIS+ server.

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.

```
[esraatark@localhost ~]$ man -k passwd
passwd: nothing appropriate.
```

```
[esraatark@localhost ~]$ sudo mandb
Processing manual pages under /usr/share/man/overrides...
Updating index cache for path '/usr/share/man/overrides/man3'. Wait...done.
Checking for stray cats under /usr/share/man/overrides...
Checking for stray cats under /var/cache/man/overrides...
Processing manual pages under /usr/share/man...
Updating index cache for path '/usr/share/man/man3'. Wait...
Updating index cache for path '/usr/share/man/man1'. Wait....
mandb: warning: /usr/share/man/man1/dfu-tool.1.gz: whatis parse for dfu-tool(1) failed

Updating index cache for path '/usr/share/man/man8'. Wait...mandb: can't open /usr/share/man/man8/nss-resolve.8: No such file or directory
mandb: warning: /usr/share/man/man8/libnss_resolve.so.2.8.gz: bad symlink or ROFF '.so' request
Updating index cache for path '/usr/share/man/man3type'. Wait...done.
Checking for stray cats under /usr/share/man...
```

```
[esraatark@localhost ~]$  
[esraatark@localhost ~]$ man -k passwd  
chgpaswd (8) - update group passwords in batch mode  
chpasswd (8) - update passwords in batch mode  
fgetpwent_r (3) - get passwd file entry reentrantly  
getpwent_r (3) - get passwd file entry reentrantly  
gpaswd (1) - administer /etc/group and /etc/gshadow  
grub2-mkpasswd-pbkdf2 (1) - generate hashed password for GRUB  
lpaswd (1) - Change group or user password  
openssl-paswd (1openssl) - compute password hashes  
pam_localuser (8) - require users to be listed in /etc/passwd  
passwd (1) - update user's authentication tokens  
passwd (1openssl) - OpenSSL application commands  
passwd (5) - password file  
passwd2des (3) - RFS password encryption  
pwhistory_helper (8) - Helper binary that transfers password hashes from passwd or shadow to ...  
smbpasswd (5) - The Samba encrypted password file  
[esraatark@localhost ~]$
```

**Esraa tark mohammed foda**

**OS**

**Group2**