

Assignment No. - 02

Aim :- To study basic Unix commands

Theory :-

File operations :-

3 types of access permissions for files and directories :-
read, write and execute.

- 1) chmod : changing file access permissions
- 1) can view access permissions of all files and directories in your current working directories by typing `ls -l`.

`chmod` changes the permissions of each given file according to mode, where mode describes the permissions to modify.

Mode can be specified with octal numbers or with letters.

Numeric mode :-

- 400 - Read by owner only
- 040 - Read by group only
- 004 - Read by anyone
- 200 - Write by owner only
- 020 - Write by group only
- 002 - Write by anyone.
- 100 - Execute by owner only
- 010 - Execute by group only
- 001 - Execute by anyone.
- 444 - Allow read permission to owner and group(all)
- 777 - Allow everyone to read, write and execute.

eg. `$ chmod 400 sample.txt`

Symbolic mode :-

Multiple symbolic operations can be given, separated by commas. A combination of letters 'ugo' controls which users access to the file will be changed :-

u - user owning it

g - other users in the files group

o - other users not in the files group

a - all users.

Operator + causes the permissions selected to be added, - causes them to be removed.

= makes them the only permissions of the file.

eg. `$ chmod a-x sample.txt.`

2. `chgrp` :-

To change group ownership of each given file to group (which can be either a group name or a numeric group id or to match the same group as an existing reference file).

eg. `$ chgrp oracleadmin /usr/database`

3. `chown` :-

To change owner, change user and/or group ownerships of each given file to a new owner. It can also change ownership to match the user/group of an existing reference file.

eg. \$ chown user1 sample.txt
(change owner)

\$ chown :group1 file.txt
(change group)

\$ chown user1:group1 file.txt

4. unmask

This command is used to set the default file permissions. These permissions are read, write and execute permission for owner, group and others.
eg. unmask 022

VI Editor

Editing files using the screen-oriented text-editor vi is one of the best ways.

1. Create filename:-
\$ vi testfile

2. Opens an existing file in read-only mode.
vi -R filename
view filename

3. Insert at ~~cur~~ cursor : i

4. Inserts texts after cursor location :- a

5. Creates a new line for text entry below cursor location:-
O.

6. Deletes the character under the cursor location - . x

7. Removes contents of line, leaving you in insert mode: cc

8. yy - copies the current line

9. Puts the copied text after cursor: p

— x — x —