1.1 Basic Linux commands

- **man command_name : Gets online help for command name.**

1.

103050709@oslab-23:~$ man wc

2.

WC(1)   User Commands   WC(1)

NAME
    wc - print newline, word, and byte counts for each file

SYNOPSIS
    wc [OPTION]... [FILE]...
    wc [OPTION]... --files0-from=F

DESCRIPTION
    Print newline, word, and byte counts for each FILE, and a total line if
    more than one FILE is specified. With no FILE, or when FILE is -, read
    standard input. A word is a non-zero-length sequence of characters
    delimited by white space. The options below may be used to select
    which counts are printed, always in the following order: newline, word,
    character, byte, maximum line length.

    -c, --bytes
        print the byte counts

    -m, --chars
        print the character counts

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

3.

103050709@oslab-23:~$ man wc

[1]+ Stopped   man wc

- **passwd : Sets (changes) the password.**

103050709@oslab-23:~$ passwd 103050709
Changing password for 103050709.
(current) UNIX password:
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully

- **pwd : Displays the current working directory.**

103050709@oslab-23:~$ pwd
/home/103050709

- **ls : Lists the contents of a directory.**

103050709@oslab-23:~$ ls
Desktop   Downloads   Music   Public   Videos
Documents examples.desktop Pictures Templates

103050709@oslab-23:~$ ls -x
Desktop   Documents Downloads examples.desktop Music Pictures Public
Templates Videos

103050709@oslab-23:~$ ls -aFx
./   ../   .bash_logout .bashrc   .cache/
.config/   Desktop/   .dmrc   Documents/   Downloads/
examples.desktop .gconf/   .gnome2/   .gnome2_private/ .ICEauthority
.local/   .mozilla/ Music/   Pictures/   .profile
Public/   Templates/ Videos/   .Xauthority   .xsession-errors

- **more file_name : Scrolls through a file. To list the next page, press the space bar. go backwards, press b. To quit from more, press q.**

103050709@oslab-23:~$ more file.txt
how times using style STYLE: full-iso, long-iso, iso,
locale, +FORMAT. FORMAT is interpreted like 'date'; if FORMAT
is FORMAT1<newline>FORMAT2, FORMAT1 applies to non-recent files
and FORMAT2 to recent files; if STYLE is prefixed with 'posix-',
STYLE takes effect only outside the POSIX locale

--More--(100%)

- **mv old_file_ name new_file_name: Renames a file.**

103050709@oslab-23:~$ mv file.txt newfile.txt
103050709@oslab-23:~$ ls
Desktop   Downloads   Music   Pictures Templates
Documents examples.desktop newfile.txt Public   Videos

- **mv file_name directory_name: Moves a file to a directory.**

103050709@oslab-23:~$ mv newfile.txt Documents
103050709@oslab-23:~$ ls
Desktop   Downloads   Music   Public   Videos
Documents examples.desktop Pictures Templates

- **mv old_directory name new_directory_ name: Renames a directory.**

103050709@oslab-23:~$ mv Documents My_Documents
103050709@oslab-23:~$ ls
Desktop   examples.desktop My_Documents Public   Videos
Downloads Music   Pictures   Templates

- **rm file name : Deletes(removes) a file.**

103050709@oslab-23:~$ rm newfile.txt
103050709@oslab-23:~$ ls
Desktop   examples.desktop My_Documents Public   Videos
Downloads Music   Pictures   Templates

- **mkdir directory name: Creates a directory.**

103050709@oslab-23:~$ mkdir Documents
103050709@oslab-23:~$ ls
Desktop   Downloads   Music   Pictures Templates
Documents examples.desktop My_Documents Public   Videos

- **rmdir directory name: Removes a directory.**

103050709@oslab-23:~$ rmdir Documents
103050709@oslab-23:~$ ls
Desktop   examples.desktop My_Documents Pictures Templates
Downloads Music   newfile.txt Public   Videos

- **cd directory name: Changes the current working directory to directory name. If directory name is omitted, the shell is moved to your home directory.**

103050709@oslab-23:~/My_Documents$ cd /home/103050709
103050709@oslab-23:~$

- **cp file name new file name: Copies a file.**
- **cp file name directory name: Copies a file into directory name**

103050709@oslab-23:~/My_Documents$ cp newfile.txt /home/103050709

- **chmod who op-code permission file or directory name: Changes the file access permissions. who: u user, g group, o other users, a all; op-code: + add permission, − remove permission; permission: r read, w write, x execute.**

103050709@oslab-23:~$ chmod 644 newfile.txt ; ls -l newfile.txt
-rw-r--r-- 1 103050709 103050709 299 Jan 12 09:44 newfile.txt
103050709@oslab-23:~$ chmod 666 newfile.txt ; ls -l newfile.txt
-rw-rw-rw- 1 103050709 103050709 299 Jan 12 09:44 newfile.txt
103050709@oslab-23:~$ chmod go-r newfile.txt ; ls -l newfile.txt
-rw--w--w- 1 103050709 103050709 299 Jan 12 09:44 newfile.txt
103050709@oslab-23:~$ chmod a-x newfile.txt ; ls -l newfile.txt
-rw--w--w- 1 103050709 103050709 299 Jan 12 09:44 newfile.txt
103050709@oslab-23:~$ chmod o+wx newfile.txt ; ls -l newfile.txt
-rw--w--wx 1 103050709 103050709 299 Jan 12 09:44 newfile.txt

- **ps: Process status report.**

103050709@oslab-23:~$ ps

```
ps
 PID TTY        TIME CMD
 4975 pts/1   00:00:00 bash
 4990 pts/1   00:00:00 man
 5000 pts/1   00:00:00 pager
 5094 pts/1   00:00:00 man
 5104 pts/1   00:00:00 pager
 5110 pts/1   00:00:00 man
 5120 pts/1   00:00:00 pager
 5827 pts/1   00:00:00 ssh
 5950 pts/1   00:00:00 man
 5960 pts/1   00:00:00 pager
 5966 pts/1   00:00:00 ps
```

- **kill PID: Terminates the process with a process ID PID.**

```
103050709@oslab-23:~$ ps
 PID TTY        TIME CMD
 6025 pts/9   00:00:00 bash
 6041 pts/9   00:00:00 ps
103050709@oslab-23:~$ kill 6025
```

- **Ctrl-c : Terminates a command before it is finished.**

```
103050709@oslab-23:~$ more newfile.txt^C
103050709@oslab-23:~$
```

- **cmp file1 file2: Compares file1 and file2 byte by byte.**

```
103050709@oslab-23:~$ cmp newfile.txt My_Documents/newfile.txt
newfile.txt My_Documents/newfile.txt differ: byte 299, line 6
```

- **grep keyword file(s): Search the file(s) and outputs the lines containing the keyword.**

```
103050709@oslab-23:~$ grep "how times using style STYLE: full-iso," newfile.txt
how times using style STYLE: full-iso, long-iso, iso,

103050709@oslab-23:~$ grep "how times using style STYLE: ful-iso," newfile.txt
```

```
 300, length 64
11:26:22.571363 IP 172.16.59.10 > 172.16.59.109: ICMP echo reply, id 2446, seq 300, length 64
11:26:23.571070 IP 172.16.59.109 > 172.16.59.10: ICMP echo request, id 2446, seq 301, length 64
11:26:23.571357 IP 172.16.59.10 > 172.16.59.109: ICMP echo reply, id 2446, seq 301, length 64
11:26:24.571073 IP 172.16.59.109 > 172.16.59.10: ICMP echo request, id 2446, seq 302, length 64
11:26:24.571370 IP 172.16.59.10 > 172.16.59.109: ICMP echo reply, id 2446, seq 302, length 64
11:26:25.571067 IP 172.16.59.109 > 172.16.59.10: ICMP echo request, id 2446, seq 303, length 64
11:26:25.571373 IP 172.16.59.10 > 172.16.59.109: ICMP echo reply, id 2446, seq 303, length 64
11:26:25.574229 ARP, Request who-has 172.16.59.109 tell 172.16.59.10, length 46
11:26:25.574238 ARP, Reply 172.16.59.109 is-at 6c:f0:49:90:4d:fe (oui Unknown), length 28
^C
523 packets captured
523 packets received by filter
```

0 packets dropped by kernel
103050709@oslab-23:~$