

## 1.1 Basic Linux commands

- **man command\_name** : Gets online help for command name.

1.

```
130905628@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.

```
130905628@oslab-23:~$ man wc
```

```
[1]+  Stopped                  man wc
```

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

```
130905628@oslab-23:~$ passwd 130905628
```

Changing password for 130905628.

(current) UNIX password:

Enter new UNIX password:

Retype new UNIX password:

passwd: password updated successfully

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

```
130905628@oslab-23:~$ pwd
/home/130905628
```

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

```
130905628@oslab-23:~$ ls
Desktop  Downloads  Music  Public  Videos
Documents examples.desktop Pictures Templates
```

```
130905628@oslab-23:~$ ls -x
Desktop  Documents  Downloads  examples.desktop  Music  Pictures  Public
Templates  Videos
```

```
130905628@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.**

```
130905628@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.**

```
130905628@oslab-23:~$ mv file.txt newfile.txt
130905628@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.**

```
130905628@oslab-23:~$ mv newfile.txt Documents
130905628@oslab-23:~$ ls
Desktop  Downloads  Music  Public  Videos
Documents examples.desktop Pictures Templates
```

- **mv old\_directory name new\_directory\_name: Renames a directory.**

```
130905628@oslab-23:~$ mv Documents My_Documents
130905628@oslab-23:~$ ls
Desktop  examples.desktop My_Documents  Public  Videos
Downloads Music      Pictures    Templates
```

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

```
130905628@oslab-23:~$ rm newfile.txt
130905628@oslab-23:~$ ls
Desktop  examples.desktop  My_Documents  Public  Videos
Downloads Music          Pictures      Templates
```

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

```
130905628@oslab-23:~$ mkdir Documents
130905628@oslab-23:~$ ls
Desktop  Downloads  Music  Pictures  Templates
Documents examples.desktop  My_Documents  Public  Videos
```

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

```
130905628@oslab-23:~$ rmdir Documents
130905628@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.**

```
130905628@oslab-23:~/My_Documents$ cd /home/130905628
130905628@oslab-23:~$
```

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

```
130905628@oslab-23:~/My_Documents$ cp newfile.txt /home/130905628
```

- **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.**

```
130905628@oslab-23:~$ chmod 644 newfile.txt ; ls -l newfile.txt
-rw-r--r-- 1 130905628 130905628 299 Jan 12 09:44 newfile.txt
130905628@oslab-23:~$ chmod 666 newfile.txt ; ls -l newfile.txt
-rw-rw-rw- 1 130905628 130905628 299 Jan 12 09:44 newfile.txt
130905628@oslab-23:~$ chmod go-r newfile.txt ; ls -l newfile.txt
-rw--w--w- 1 130905628 130905628 299 Jan 12 09:44 newfile.txt
130905628@oslab-23:~$ chmod a-x newfile.txt ; ls -l newfile.txt
-rw--w--w- 1 130905628 130905628 299 Jan 12 09:44 newfile.txt
130905628@oslab-23:~$ chmod o+wx newfile.txt ; ls -l newfile.txt
-rw--w--wx 1 130905628 130905628 299 Jan 12 09:44 newfile.txt
```

- **ps: Process status report.**

```
130905628@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.**

130905628@oslab-23:~\$ ps

PID	TTY	TIME	CMD
6025	pts/9	00:00:00	bash
6041	pts/9	00:00:00	ps

130905628@oslab-23:~\$ kill 6025

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

130905628@oslab-23:~\$ more newfile.txt^C

130905628@oslab-23:~\$

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

130905628@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.**

130905628@oslab-23:~\$ grep "how times using style STYLE: full-iso," newfile.txt  
how times using style STYLE: full-iso, long-iso, iso,

130905628@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  
130905628@oslab-23:~\$