

Basic UNIX Commands



Biru Rajak

Coordinator, Computer Sc. Dept.

Asansol Girls' College

BCA Coordinator, KNU (Add. Charge)

birurajak@gmail.com

man

- Manual Pages
- Contains information about almost everything
 - Other Commands
 - System Calls
 - C Library Functions

Syntax:

man <command name>

Example:

```
% man ls
```

which

- Displays a path name of a command
- Searches a path environmental variable for the command and displays the absolute path

Syntax:

`which <command name/app>`

Example:

`% which sh` (shows which sh is actually in use)

whereis

- Display all locations of a command (or some other binary, man page, or a source file).
- Searches all directories to find commands that match the argument

Syntax:

whereis <command name>

Example:

```
% whereis sh
```

passwd

- Change your login password.

Syntax:

```
passwd
```

```
passwd <username>
```

Example:

```
% passwd is-05
```

date

- Displays dates in various formats

Example :

`% date` (in IST)

`% date -u` (in GMT)

clear

- To clear the screen

Syntax:

`% clear` OR,
`ctrl + L`

alias

- Defines a new name for a command

Syntax:

```
alias <newcommand>='<oldcommand>'
```

Example:

```
% alias dt='date'
```

```
% dt
```


history

- Display a history of recently used commands

Syntax:

history <option>

Example:

```
%history 10
```

exit/logout

- Exit from your login session.

Example :

% exit

% logout

shutdown

- Causes system to shutdown or reboot
- May require super-user privileges

Example:

<code>% shutdown -h now</code>	<code>(stop)</code>
<code>% shutdown -r now</code>	<code>(reboot)</code>



File Management Commands

ls

- Lists directory contents

Syntax:

ls <option>

Examples:

% ls (lists all files except those starting with a ".")

% ls -a

% ls -l

% ls -al

cat

- Takes a copy of a file and sends it to the standard output

Syntax:

```
cat <filename>
```

Example:

```
% cat link.txt
```

more

- Display contents of large files page by page or scroll line by line up and down.

Syntax:

```
more <option> <filename>
```

Examples:

```
% more -a.txt    (press enter to see next page content)
```

```
% more -s a.txt  (squeeze multiple space line into single)
```

less

- It is used for search navigation.

Syntax:

open the file with

% less <filename> then at end of file

Example:

/<pattern> (want to search)-Forward

?<pattern> (want to search)-Forward

cp

- Copies files/directories

Syntax:

```
% cp [options] <source> <destination>
```

Example:

```
% cp a.txt b.txt
```

(Useful option: `-i` to prevent overwriting existing files and prompt the user to confirm)

mv

- Moves or renames files/directories

Syntax:

```
% mv <source> <destination>
```

(The <source> file gets removed)

Example:

```
% mv b.txt d.txt
```

rm

- Removes file(s) and/or directories.

Syntax:

```
% rm <options> <filename>
```

Example:

```
% rm d.txt
```

diff

- Compares file and, shows where they differ.

Syntax:

```
% diff <filename1> <filename2>
```

Example:

```
% diff a.txt b.txt
```

find

- Searching a file in a directory tree

Syntax:

```
%find <option> <filename>
```

Example:

```
% find -name "a.txt"
```

cd

- Changes your current directory to a new one.

Syntax:

```
cd <dirname>
```

Example:

```
% cd /usr/home/example
```

mkdir

- Creates a directory

Syntax:

```
% mkdir <dirname>
```

Example:

```
% mkdir etcs lab
```

rmmdir

- Removes a directory

Syntax:

```
% rmmdir <dirname> (empty)
```

```
% rm -r <dirname>
```

Example:

```
% rm -r etcs
```


WC

- Tells you how many lines, words, and characters there are in a file

Syntax:

```
% wc filename
```

Example:

```
% wc a.txt (line words char)
```

pwd

- Displays the present working directory, i.e. your current directory.

Example:

```
% pwd
```

chown

- To change the owner and owning group of files

Syntax:

- `chown <owner/user> <filename>`
- `chown <owner-user:owner-group > <filename>`

Example:

```
% chown is-05 file.txt
```

chmod

- To change permissions of files or directories

Syntax:

```
% chmod options permissions filename
```

Example:

```
% chmod 644 file.htm
```

grep

- To print lines of input matching a specified pattern

Syntax:

```
% grep <option> <pattern> <file>
```

Example:

```
% grep chope a.txt
```



User/Group Management Commands

useradd

- To add a new user

Syntax:

```
useradd <username>
```

Example:


```
# useradd xyz
```

userdel

- To delete a user

Syntax:

```
% userdel <username>
```

Some Other Commands

zip

- Compresses files, so that they take up much less space

Syntax:

```
% zip -r <filenames.zip> <file1> <file2>
```

Example:

```
% zip -r foo.zip a.txt b.txt etc
```

unzip

- Uncompress the files compressed by gzip

Syntax:

```
% unzip <-options> filename  
(zipfile name without extension)
```

Example:

```
% unzip -r foo
```

who

- Tells you who's logged on, and where they're coming from.

Example:

% who

whoami

- Displays the same information as who, but only for the terminal session from where the command was issued.

Example:

```
% whoami
```

last

- Tells you when the user last logged on and off and from where.

Syntax:

`% last -1 username`

(Without any options, **last** will give you a list of everyone's logins)

echo

- Displays a line of text

Syntax:

```
echo <option> <string>
```

Example:

```
% echo Hello, World!
```

```
% x=10
```

```
% echo The value of x is $x.
```

ps

- Displays information about a selection of the active processes.
- Contains lots of information about them including the process ID

Syntax:

```
% ps [-options]
```


kill

- Kills (ends) the processes with the ID given

Syntax:

```
% kill <PID>
```

ifconfig

- To see the IP Address

Syntax:

```
% ifconfig <option>
```

Example:

```
% ifconfig -a
```

telnet

- To connect to a remote host

Syntax:

```
% telnet [-options] <hostname/ipaddress>
```

Example:

```
% telnet myhost.com
```

ftp

- To download/upload files from/to a remote host which is set up as an ftp-server

Syntax:

```
% ftp <hostname/ipaddress>
```

Example:

```
% ftp 172.31.128.116
```