Experiment No:2

**Aim:** To perform various Linux Commands on Terminal

# **Theory:**

**1) man**

NAME

man - an interface to the on-line reference manuals

SYNOPSIS

man [-C file] [-d] [-D] [--warnings[=warnings]] [-R encoding] [-L

locale] [-m system[,...]] [-M path] [-S list] [-e extension] [-i|-I]

[--regex|--wildcard] [--names-only] [-a] [-u] [--no-subpages] [-P

pager] [-r prompt] [-7] [-E encoding] [--no-hyphenation] [--no-justifi‐

cation] [-p string] [-t] [-T[device]] [-H[browser]] [-X[dpi]] [-Z]

[[section] page ...] ...

man -k [apropos options] regexp ...

man -K [-w|-W] [-S list] [-i|-I] [--regex] [section] term ...

man -f [whatis options] page ...

man -l [-C file] [-d] [-D] [--warnings[=warnings]] [-R encoding] [-L

locale] [-P pager] [-r prompt] [-7] [-E encoding] [-p string] [-t]

[-T[device]] [-H[browser]] [-X[dpi]] [-Z] file ...

man -w|-W [-C file] [-d] [-D] page ...

man -c [-C file] [-d] [-D] page ...

man [-?V]

DESCRIPTION:

man is the system's manual pager. Each page argument given to man is

normally the name of a program, utility or function. The manual page

associated with each of these arguments is then found and displayed. A

section, if provided, will direct man to look only in that section of

the manual. The default action is to search in all of the available

sections following a pre-defined order ("1 n l 8 3 2 3posix 3pm 3perl 5

4 9 6 7" by default, unless overridden by the SECTION directive in

/etc/manpath.config), and to show only the first page found, even if

page exists in several sections.

WITHOUT OPTIONS:

151070031@ltsp144:~$ man

What manual page do you want?

OPTIONS:

1) 151070031@ltsp144:~$ man -V

man 2.6.7.1

2) 151070031@ltsp144:~$ man -f grep

grep (1) - print lines matching a pattern

3) 151070031@ltsp144:~/Desktop$ man --usage

Usage: man [-dDfkKlwWciIau7tZ?V] [-C FILE] [-R ENCODING] [-L LOCALE]

[-m SYSTEM] [-M PATH] [-S LIST] [-s LIST] [-e EXTENSION]

[-P PAGER] [-r STRING] [-E ENCODING] [-p STRING] [-T[DEVICE]]

[-H[BROWSER]] [-X[RESOLUTION]] [--config-file=FILE] [--debug]

[--default] [--warnings[=WARNINGS]] [--whatis] [--apropos]

[--global-apropos] [--local-file] [--where] [--path] [--location]

[--where-cat] [--location-cat] [--catman] [--recode=ENCODING]

[--locale=LOCALE] [--systems=SYSTEM] [--manpath=PATH]

[--sections=LIST] [--extension=EXTENSION] [--ignore-case]

[--match-case] [--regex] [--wildcard] [--names-only] [--all]

[--update] [--no-subpages] [--pager=PAGER] [--prompt=STRING]

[--ascii] [--encoding=ENCODING] [--no-hyphenation] [--nh]

[--no-justification] [--nj] [--preprocessor=STRING] [--troff]

[--troff-device[=DEVICE]] [--html[=BROWSER]]

[--gxditview[=RESOLUTION]] [--ditroff] [--help] [--usage]

[--version] [SECTION] PAGE...

**2) ) grep**

NAME

grep, egrep, fgrep, rgrep - print lines matching a pattern

SYNOPSIS

grep [OPTIONS] PATTERN [FILE...]

grep [OPTIONS] [-e PATTERN | -f FILE] [FILE...]

DESCRIPTION

grep searches the named input FILEs (or standard input if no files are

named, or if a single hyphen-minus (-) is given as file name) for lines

containing a match to the given PATTERN. By default, grep prints the

matching lines.

In addition, three variant programs egrep, fgrep and rgrep are

available. egrep is the same as grep -E. fgrep is the same as

grep -F. rgrep is the same as grep -r. Direct invocation as either

egrep or fgrep is deprecated, but is provided to allow historical

applications that rely on them to run unmodified.

Options:

1) -x, --line-regexp

Select only those matches that exactly match the whole line.

(-x is specified by POSIX.)

151070031@ltsp144:~/Desktop$ grep -x vjti ostlab2

vjti

2) -i, --ignore-case

Ignore case distinctions in both the PATTERN and the input

files. (-i is specified by POSIX.)

151070031@ltsp144:~/Desktop$ grep -i SEMESTER ostlab2

semester

3) -v, --invert-match

Invert the sense of matching, to select non-matching lines. (-v

is specified by POSIX.)

151070031@ltsp144:~/Desktop$ grep -v vjti ostlab2

Hello Students

Good morning

students

subjects

college

semester

**3) sort**

NAME

sort - sort lines of text files

SYNOPSIS

sort [OPTION]... [FILE]...

sort [OPTION]... --files0-from=F

DESCRIPTION

Write sorted concatenation of all FILE(s) to standard output.

OPTIONS:

1) -d, --dictionary-order

consider only blanks and alphanumeric characters

151070031@ltsp122:~/Desktop$ sort -d lab

ABCD

HELLO

LAB

TUSHAR

2)-b, --ignore-leading-blanks ignore leading blanks

151070031@ltsp122:~/Desktop$ sort -b lab

ABCD

HELLO

LAB

TUSHAR

3) -r, --reverse : reverse the result of comparisons

151070031@ltsp122:~/Desktop$ sort -r lab

TUSHAR

LAB

HELLO

ABCD

**4) ps**

NAME

ps - report a snapshot of the current processes.

SYNOPSIS

ps [options]

DESCRIPTION

ps displays information about a selection of the active processes. If you want a repetitive update of the selection and the

displayed information, use top(1) instead.

OPTIONS:

1) -e

print each and every process.

151070031@ltsp122:~/Desktop$ ps-e

PID TTY TIME CMD

1 ? 00:00:01 init

2 ? 00:00:00 kthreadd

3 ? 00:00:06 ksoftirqd/0

5 ? 00:00:00 kworker/0:0H

7 ? 00:00:00 rcu\_sched

8 ? 00:00:00 rcu\_bh

9 ? 00:00:00 migration/0

10 ? 00:00:00 watchdog/0

11 ? 00:00:00 watchdog/1

12 ? 00:00:00 migration/1

…….

2) -ejH

To print a process tree.

151070031@ltsp122:~/Desktop$ ps-ejH

PID PGID SID TTY TIME CMD

2 0 0 ? 00:00:00 kthreadd

3 0 0 ? 00:00:06 ksoftirqd/0

5 0 0 ? 00:00:00 kworker/0:0H

7 0 0 ? 00:00:00 rcu\_sched

8 0 0 ? 00:00:00 rcu\_bh

9 0 0 ? 00:00:00 migration/0

10 0 0 ? 00:00:00 watchdog/0

11 0 0 ? 00:00:00 watchdog/1

12 0 0 ? 00:00:00 migration/1

13 0 0 ? 00:00:05 ksoftirqd/1

14 0 0 ? 00:00:00 kworker/1:0

3) --width n

Set screen width.

151070031@ltsp122:~/Desktop$ ps --width 50

PID TTY TIME CMD

2487 pts/5 00:00:00 bash

3078 pts/5 00:00:00 ps

**5) kill**

NAME

kill - send a signal to a process

SYNOPSIS\\

kill [options] <pid> [...]\\

DESCRIPTION

The default signal for kill is TERM. Use -l or -L to list available

signals. Particularly useful signals include HUP, INT, KILL, STOP,

CONT, and 0. Alternate signals may be specified in three ways: -9,

-SIGKILL or -KILL. Negative PID values may be used to choose whole

process groups; see the PGID column in ps command output. A PID of -1

is special; it indicates all processes except the kill process itself

and init

Without Options

151070031@ltsp55:~ killkill: usage: kill [-s sigspec | -n signum | -sigspec] pid | jobspec ... or kill -l [sigspec]\\

\vspace{5mm}

Options

kill -9 -1 : Kill all processes you can kill

kill -l 11 : Translate number 11 into a signal name

kill -L : List the available signal choices in a nice table

kill 123 543 2341 3453 : Send the default signal, SIGTERM, to all those processes

**6) du**

NAME :

du - estimate file space usage

SYNOPSIS :

du [OPTION]... [FILE]...

du [OPTION]... --files0-from=F

DESCRIPTION :

Summarize disk usage of each FILE, recursively for directories.

WITHOUT OPTIONS:

151070031@ltsp219:~$ du

32 ./xcv/obj/Debug

36 ./xcv/obj

36 ./xcv/bin/Debug

40 ./xcv/bin

92 ./xcv

8 ./dftb/obj/Debug

12 ./dftb/obj

12 ./dftb/bin/Debug

16 ./dftb/bin

48 ./dftb

4 ./Music

4 ./Pictures

176 ./Desktop

4 ./.mozilla/firefox/igfwxkjb.default/minidumps

8 ./.mozilla/firefox/igfwxkjb.default/webapps

4 ./.mozilla/firefox/igfwxkjb.default/healthreport

20 ./.mozilla/firefox/igfwxkjb.default/bookmarkbackups

4 ./.mozilla/firefox/igfwxkjb.default/extensions/trash

OPTIONS:

1) –version : output version information and exit

151070031@ltsp219:~$ du --version

du (GNU coreutils) 8.21

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2)—time: show time of the last modification of any file in the directory,

or any of its subdirectories

151070031@ltsp219:~/Desktop$ du --time

176 2017-01-16 08:28 .

3) -s, --summarize : display only a total for each argument

151070031@ltsp219:~/Desktop$ du -s

176 .

**7) top**

NAME :

top - display Linux processes

SYNOPSIS :

top -hv|-bcHiOSs -d secs -n max -u|U user -p pid -o fld -w [cols]

The traditional switches '-' and whitespace are optional.

DESCRIPTION :

The top program provides a dynamic real-time view of a running

system. It can display system summary information as well as a

list of processes or threads currently being managed by the Linux

kernel. The types of system summary information shown and the

types, order and size of information displayed for processes are

all user configurable and that configuration can be made persis‐

tent across restarts.

WITHOUT OPTIONS :

151070031@ltsp219:~/Desktop$ top

top - 08:40:03 up 14 min, 1 user, load average: 0.33, 0.21, 0.15

Tasks: 168 total, 2 running, 166 sleeping, 0 stopped, 0 zombie

%Cpu(s): 0.8 us, 0.3 sy, 0.0 ni, 98.8 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st

KiB Mem: 4052956 total, 1079988 used, 2972968 free, 114072 buffers

KiB Swap: 0 total, 0 used, 0 free. 552804 cached Mem

PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND

1361 root 19 -1 146860 38100 31052 S 2.7 0.9 0:15.56 Xorg

2641 1510700+ 20 0 152724 18748 12256 S 2.3 0.5 0:11.89 gnome-term+

1986 1510700+ 20 0 348140 78708 28436 S 0.7 1.9 0:13.11 compiz

1 root 20 0 4316 2356 1424 S 0.0 0.1 0:00.92 init

2 root 20 0 0 0 0 S 0.0 0.0 0:00.00 kthreadd

3 root 20 0 0 0 0 S 0.0 0.0 0:00.03 ksoftirqd/0

5 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 kworker/0:+

7 root 20 0 0 0 0 S 0.0 0.0 0:00.32 rcu\_sched

8 root 20 0 0 0 0 S 0.0 0.0 0:00.00 rcu\_bh

9 root rt 0 0 0 0 S 0.0 0.0 0:00.00 migration/0

10 root rt 0 0 0 0 S 0.0 0.0 0:00.00 watchdog/0

11 root rt 0 0 0 0 S 0.0 0.0 0:00.00 watchdog/1

12 root rt 0 0 0 0 S 0.0 0.0 0:00.03 migration/1

13 root 20 0 0 0 0 S 0.0 0.0 0:00.02 ksoftirqd/1

14 root 20 0 0 0 0 S 0.0 0.0 0:00.00 kworker/1:0

15 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 kworker/1:+

16 root rt 0 0 0 0 S 0.0 0.0 0:00.00 watchdog/2

OPTIONS:

1) -h | -v :Help/Version : Show library version and the usage prompt, then quit.

151070031@ltsp219:~/Desktop$ top -h

procps-ng version 3.3.9

Usage:

top -hv | -bcHiOSs -d secs -n max -u|U user -p pid(s) -o field -w [cols]

2) -n :Number-of-iterations limit as: -n number

Specifies the maximum number of iterations, or frames, top

should produce before ending.

151070031@ltsp219:~/Desktop$ top -n 2

top - 08:44:22 up 19 min, 1 user, load average: 0.01, 0.11, 0.13

Tasks: 167 total, 1 running, 166 sleeping, 0 stopped, 0 zombie

%Cpu(s): 0.3 us, 1.6 sy, 0.0 ni, 98.1 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st

KiB Mem: 4052956 total, 1071416 used, 2981540 free, 114072 buffers

KiB Swap: 0 total, 0 used, 0 free. 542344 cached Mem

PID USER PR NI VIRT RES SHR S %CPU %MEM TIME+ COMMAND

1361 root 19 -1 147024 38132 31076 S 5.0 0.9 0:19.17 Xorg

2641 1510700+ 20 0 152664 18724 12260 S 1.3 0.5 0:14.59 gnome-term+

1986 1510700+ 20 0 347948 78372 28436 S 0.7 1.9 0:15.47 compiz

3030 1510700+ 20 0 5424 1392 1012 R 0.3 0.0 0:00.01 top

1 root 20 0 4316 2356 1424 S 0.0 0.1 0:00.92 init

2 root 20 0 0 0 0 S 0.0 0.0 0:00.00 kthreadd

3 root 20 0 0 0 0 S 0.0 0.0 0:00.04 ksoftirqd/0

5 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 kworker/0:+

7 root 20 0 0 0 0 S 0.0 0.0 0:00.39 rcu\_sched

8 root 20 0 0 0 0 S 0.0 0.0 0:00.00 rcu\_bh

9 root rt 0 0 0 0 S 0.0 0.0 0:00.00 migration/0

10 root rt 0 0 0 0 S 0.0 0.0 0:00.00 watchdog/0

11 root rt 0 0 0 0 S 0.0 0.0 0:00.00 watchdog/1

12 root rt 0 0 0 0 S 0.0 0.0 0:00.03 migration/1

13 root 20 0 0 0 0 S 0.0 0.0 0:00.03 ksoftirqd/1

14 root 20 0 0 0 0 S 0.0 0.0 0:00.00 kworker/1:0

15 root 0 -20 0 0 0 S 0.0 0.0 0:00.00 kworker/1:+

**8) ssh**

NAME :

ssh — OpenSSH SSH client (remote login program)

SYNOPSIS :

ssh [-1246AaCfgKkMNnqsTtVvXxYy] [-b bind\_address] [-c cipher\_spec]

[-D [bind\_address:]port] [-E log\_file] [-e escape\_char]

[-F configfile] [-I pkcs11] [-i identity\_file]

[-L [bind\_address:]port:host:hostport] [-l login\_name] [-m mac\_spec]

[-O ctl\_cmd] [-o option] [-p port]

[-Q cipher | cipher-auth | mac | kex | key]

[-R [bind\_address:]port:host:hostport] [-S ctl\_path] [-W host:port]

[-w local\_tun[:remote\_tun]] [user@]hostname [command]

DESCRIPTION :

ssh (SSH client) is a program for logging into a remote machine and for

executing commands on a remote machine. It is intended to replace rlogin

and rsh, and provide secure encrypted communications between two

untrusted hosts over an insecure network. X11 connections and arbitrary

TCP ports can also be forwarded over the secure channel.

Options:

1) -V Display the version number and exit.

151070031@ltsp219:~/Desktop$ ssh -V

OpenSSH\_6.6.1p1 Ubuntu-2ubuntu2, OpenSSL 1.0.1f 6 Jan 2014

**9) tail**

NAME

tail - output the last part of files

SYNOPSIS

tail [OPTION]... [FILE]...

DESCRIPTION

Print the last 10 lines of each FILE to standard output. With

more than one FILE, precede each with a header giving the file

name. With no FILE, or when FILE is -, read standard input.

WITHOUT OPTIONS:

151070031@ltsp219:~/Desktop$ tail GradienceDiscent.m

h=x\*theta

alpha=0.01

j=ones(1500,1)

for i=1:1500

temp1=theta(1,1)-alpha\*(x\*theta-y).\*x(:,1)

temp2=theta(2,1)-alpha\*(x\*theta-y).\*x(:,2)

theta=[temp1;temp2]

j(i,1)=sum(power(x\*theta-y,2))/(2\*size(x,1))

end

theta

OPTIONS:

1) -c, --bytes=K : output the last K bytes; alternatively, use -c +K to output bytes starting with the Kth of each file

151070031@ltsp219:~/Desktop$ tail -c 15 ostlab2

lege

semester

2) -n, --lines : output the last K lines, instead of the last 10; or use -n +K to

output lines starting with the Kth

151070031@ltsp219:~/Desktop$ tail -n 3 GradienceDiscent.m

vjti

college

semester

3) --version

output version information and exit

151070031@ltsp219:~/Desktop$ tail --version

tail (GNU coreutils) 8.21

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**10) ip**

NAME

ip - show / manipulate routing, devices, policy routing and tunnels

SYNOPSIS

ip [ OPTIONS ] OBJECT { COMMAND | help }

ip [ -force ] -batch filename

OBJECT := { link | addr | addrlabel | route | rule | neigh | ntable |

tunnel | tuntap | maddr | mroute | mrule | monitor | xfrm |

netns | l2tp | tcp\_metrics }

OPTIONS := { -V[ersion] | -s[tatistics] | -r[esolve] | -f[amily] { inet

| inet6 | ipx | dnet | link } | -o[neline] }

OPTIONS :

1) -V, -Version

Print the version of the ip utility and exit.

151070031@ltsp219:~/Desktop$ ip -V

ip utility, iproute2-ss131122

**11 ) ifconfig**

NAME

ifconfig - configure a network interface

SYNOPSIS

ifconfig [-v] [-a] [-s] [interface]

ifconfig [-v] interface [aftype] options | address ...

DESCRIPTION

Ifconfig is used to configure the kernel-resident network interfaces.

It is used at boot time to set up interfaces as necessary. After that,

it is usually only needed when debugging or when system tuning is

needed.

WITHOUT OPTIONS:

/sbin/ifconfig

eth0 Link encap:Ethernet HWaddr c0:3f:d5:fe:49:56

inet addr:172.18.39.238 Bcast:172.18.39.255 Mask:255.255.255.0

inet6 addr: fe80::c23f:d5ff:fefe:4956/64 Scope:Link

UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1

RX packets:116342 errors:0 dropped:29 overruns:0 frame:0

TX packets:42415 errors:0 dropped:0 overruns:0 carrier:0

collisions:0 txqueuelen:1000

RX bytes:123861972 (123.8 MB) TX bytes:6928727 (6.9 MB)

lo Link encap:Local Loopback

inet addr:127.0.0.1 Mask:255.0.0.0

inet6 addr: ::1/128 Scope:Host

UP LOOPBACK RUNNING MTU:65536 Metric:1

RX packets:93 errors:0 dropped:0 overruns:0 frame:0

TX packets:93 errors:0 dropped:0 overruns:0 carrier:0

collisions:0 txqueuelen:0

RX bytes:7103 (7.1 KB) TX bytes:7103 (7.1 KB)

OPTIONS:

/sbin/ifconfig -V

net-tools 1.60

ifconfig 1.42 (2001-04-13

**12 ) touch**

NAME

touch - change file timestamps

SYNOPSIS

touch [OPTION]... FILE...

DESCRIPTION

Update the access and modification times of each FILE to the current time.

A FILE argument that does not exist is created empty, unless -c or -h is supplied.

A FILE argument string of - is handled specially and causes touch to change the times of the file associated with standard output.

WITHOUT OPTIONS:

151070031@ltsp219:~/Desktop$ touch ostlab2

151070031@ltsp219:~/Desktop$

OPTIONS:

1) -c, --no-create

do not create any files

151070031@ltsp219:~/Desktop$ touch -c ostlab2

2) -d, --date=STRING

parse STRING and use it instead of current time

151070031@ltsp219:~/Desktop$ touch -d "2016-09-22" ostlab2

151070031@ltsp219:~/Desktop$ touch -c

**13) find**

NAME

find - search for files in a directory hierarchy

SYNOPSIS

find [-H] [-L] [-P] [-D debugopts] [-Olevel] [path...] [expression]

DESCRIPTION

This manual page documents the GNU version of find. GNU find searches the directory tree rooted at each given file name by evaluating the given expression

from left to right, according to the rules of precedence (see section OPERATORS), until the outcome is known (the left hand side is false for and operations,

true for or), at which point find moves on to the next file name.

WITHOUT OPTIONS:

151070031@ltsp122:~/$ find Desktop

Desktop

Desktop/GradienceDiscent.m

Desktop/ost2.1

Desktop/ost2.1~

Desktop/A.txt~

Desktop/ABC.txt

Desktop/B.txt~

OPTIONS:

1) -depth : Process each directory's contents before the directory itself.

The -delete action also implies -depth.

151070031@ltsp219:~/Desktop$ find -depth

./tushar print

./ostlab2

./mysql 1 ~

./main.odt

./ostlab2~

./fds lab 2

./final

./main.cpp

./ost lab 1.odt

./mysql 1

.

2) -maxdepth levels

Descend at most levels (a non-negative integer) levels of direc‐

tories below the command line arguments. -maxdepth 0

means only apply the tests and actions to the command line

arguments.

151070031@ltsp219:~$ find -maxdepth 2

.

./xcv

./xcv/xcv.cbp

./xcv/obj

./xcv/main.cpp

./xcv/bin

./dftb

./dftb/dftb.cbp

./dftb/obj

./dftb/dftb.layout

./dftb/main.c

./dftb/dftb.depend

./dftb/bin

./.bash\_history

./Music

./.xsession-errors

./Pictures

./Desktop

**14) ) ln**

NAME

ln - make links between files

SYNOPSIS

ln [OPTION]... [-T] TARGET LINK\_NAME (1st form)

ln [OPTION]... TARGET (2nd form)

ln [OPTION]... TARGET... DIRECTORY (3rd form)

ln [OPTION]... -t DIRECTORY TARGET... (4th form)

DESCRIPTION

In the 1st form, create a link to TARGET with the name LINK\_NAME. In

the 2nd form, create a link to TARGET in the current directory. In the

3rd and 4th forms, create links to each TARGET in DIRECTORY. Create

hard links by default, symbolic links with --symbolic. By default,

each destination (name of new link) should not already exist. When

creating hard links, each TARGET must exist. Symbolic links can hold

arbitrary text; if later resolved, a relative link is interpreted in

relation to its parent directory.

OPTIONS:

1) --version : output version information and exit

151070031@ltsp219:~/Desktop$ ln --version

ln (GNU coreutils) 8.21

**15**) **service**

NAME

service - run a System V init script

SYNOPSIS

service SCRIPT COMMAND [OPTIONS]

service --status-all

service --help | -h | --version

DESCRIPTION

service runs a System V init script or upstart job in as predictable an

environment as possible, removing most environment variables and with

the current working directory set to /.

The SCRIPT parameter specifies a System V init script, located in

/etc/init.d/SCRIPT, or the name of an upstart job in /etc/init.

WITHOUT OPTIONS:

151070031@ltsp219:~/Desktop$ service

Usage: service < option > | --status-all | [ service\_name [ command | --full-restart ]

(NO OPTIONS AVAILABLE)

OPTIONS:

1)—status-all:

Gives the status of all running services.

service --status-all

[ + ] acpid

[ - ] anacron

[ - ] apparmor

[ ? ] apport

[ + ] avahi-daemon

[ ? ] binfmt-support

[ + ] bluetooth

[ - ] brltty

[ ? ] console-setup

[ - ] cron

[ + ] cups

[ + ] cups-browsed

[ - ] dbus

[ ? ] dns-clean

[ - ] friendly-recovery

2)—help:

service --help

Usage: service < option > | --status-all | [ service\_name [ command | --full-restart ] ]

151070031@ltsp238:~$ service --version

service ver. 0.91-ubuntu1

**16) diff**

NAME

diff - compare files line by line

SYNOPSIS

diff [OPTION]... FILES

DESCRIPTION

Compare FILES line by line

Mandatory arguments to long options are mandatory for short options

too.

OPTIONS :

1) -s, --report-identical-files

report when two files are the same

151070031@ltsp219:~/Desktop$ diff -s ostlab2 ostlab22

2,4c2

< Good morning

< students

< subjects

---

> Good Evening

6,7c4

< college

< semester

---

> Hello World

2) --version

151070031@ltsp238:~$ diff --version

diff (GNU diffutils) 3.3

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There is NO WARRANTY, to the extent permitted by law.

Written by Paul Eggert, Mike Haertel, David Hayes,

Richard Stallman, and Len Tower.

<

WITHOUT OPTIONS:

151070031@ltsp219:~$ diff B.txt Desktop/A.txt

1,47c1,97

< 2104,3,399900

< 1600,3,329900

< 2400,3,369000

< 1416,2,232000

< 3000,4,539900

< 1985,4,299900

< 1534,3,314900

< 1427,3,198999

< 1380,3,212000

< 1494,3,242500

< 1940,4,239999

< 2000,3,347000

< 1890,3,329999

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< 1000,1,169900

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< 1239,3,229900

< 2132,4,345000

< 4215,4,549000

< 2162,4,287000

< 1664,2,368500

< 2238,3,329900

< 2567,4,314000

< 1200,3,299000

< 852,2,179900

< 1852,4,299900

< 1203,3,239500

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> 6.1101,17.592

> 5.5277,9.1302

> 8.5186,13.662

> 7.0032,11.854

> 5.8598,6.8233

> 8.3829,11.886

> 7.4764,4.3483

> 8.5781,12

> 6.4862,6.5987

> 5.0546,3.8166

> 5.7107,3.2522

> 14.164,15.505

> 5.734,3.1551

> 8.4084,7.2258

> 5.6407,0.71618

> 5.3794,3.5129

> 6.3654,5.3048

> 5.1301,0.56077

> 6.4296,3.6518

> 7.0708,5.3893

> 6.1891,3.1386

> 20.27,21.767

> 5.4901,4.263

> 6.3261,5.1875

> 5.5649,3.0825

> 18.945,22.638

> 12.828,13.501

> 10.957,7.0467

> 13.176,14.692

> 22.203,24.147

> 5.2524,-1.22

> 6.5894,5.9966

> 9.2482,12.134

> 5.8918,1.8495

> 8.2111,6.5426

> 7.9334,4.5623

> 8.0959,4.1164

> 5.6063,3.3928

> 12.836,10.117

> 6.3534,5.4974

> 5.4069,0.55657

> 6.8825,3.9115

> 11.708,5.3854

> 5.7737,2.4406

> 7.8247,6.7318

> 7.0931,1.0463

> 5.0702,5.1337

> 5.8014,1.844

> 11.7,8.0043

> 5.5416,1.0179

> 7.5402,6.7504

> 5.3077,1.8396

> 7.4239,4.2885

> 7.6031,4.9981

> 6.3328,1.4233

> 6.3589,-1.4211

> 6.2742,2.4756

> 5.6397,4.6042

> 9.3102,3.9624

> 9.4536,5.4141

> 8.8254,5.1694

> 5.1793,-0.74279

> 21.279,17.929

> 14.908,12.054

> 18.959,17.054

> 7.2182,4.8852

> 8.2951,5.7442

> 10.236,7.7754

> 5.4994,1.0173

> 20.341,20.992

> 10.136,6.6799

> 7.3345,4.0259

> 6.0062,1.2784

> 7.2259,3.3411

> 5.0269,-2.6807

> 6.5479,0.29678

> 7.5386,3.8845

> 5.0365,5.7014

> 10.274,6.7526

> 5.1077,2.0576

> 5.7292,0.47953

> 5.1884,0.20421

> 6.3557,0.67861

> 9.7687,7.5435

> 6.5159,5.3436

> 8.5172,4.2415

> 9.1802,6.7981

> 6.002,0.92695

> 5.5204,0.152

> 5.0594,2.8214

> 5.7077,1.8451

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> 5.8707,7.2029

> 5.3054,1.9869

> 8.2934,0.14454

> 13.394,9.0551

> 5.4369,0.61705

151070031@ltsp238:~$

# **Conclusion:**

Thus, the various Linux commands were studied and executed with a terminal. Some of them could not be executed due to system constraints.