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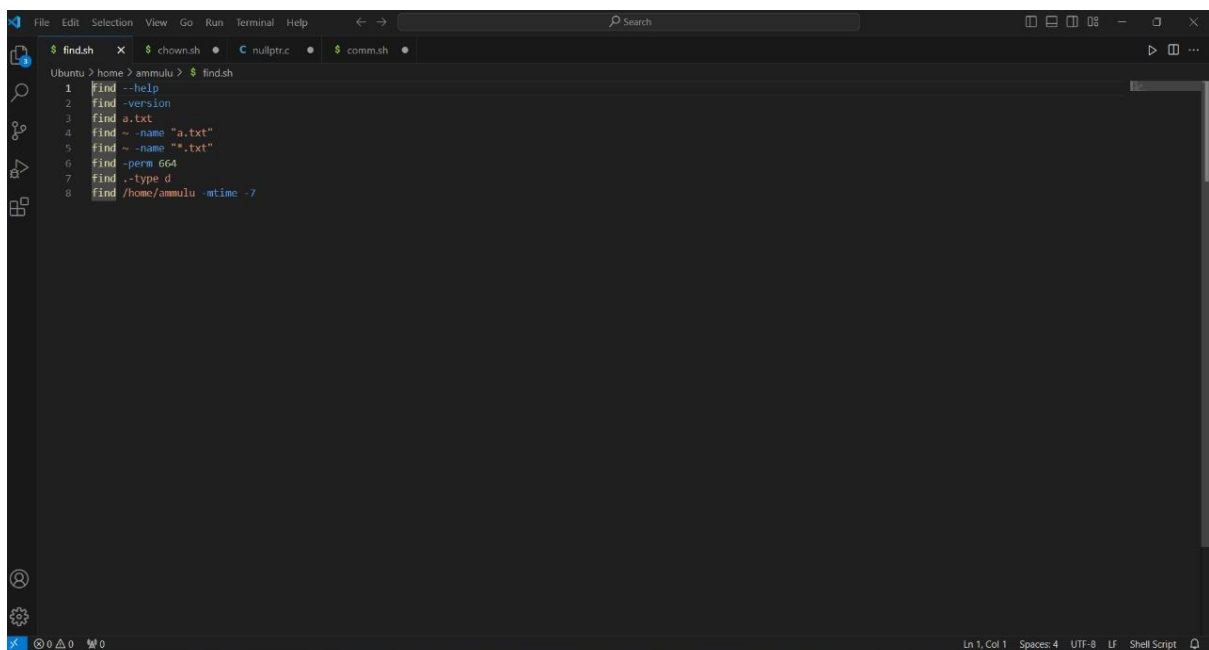
RollNo:422163

Section:CSE-A

Write shell script for commands

find,ftp,lock,ln,lp,lpstat,mesg

find command



```
Ubuntu > home > ammu > $ find.sh
1 find --help
2 find --version
3 find a.txt
4 find ~ -name "a.txt"
5 find ~ -name "*.txt"
6 find -perm 664
7 find -type d
8 find /home/ammu -mtime -7
```

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

default path is the current directory; default expression is -print

expression may consist of: operators, options, tests, and actions:

operators (decreasing precedence; -and is implicit where no others are given):

(Expr) ! Expr -not Expr Expr1 -a
Expr2 Expr1 -and Expr2

Expr1 -o Expr2 Expr1 -or Expr2 Expr1
, Expr2

positional options (always true): -daystart -
follow -regextype

normal options (always true, specified before
other expressions):

-depth --help -maxdepth LEVELS -
mindepth LEVELS -mount -noleaf

--version -xdev -ignore_readdir_race -
noignore_readdir_race

tests (N can be +N or -N or N): -amin N -
anewer FILE -atime N -cmin N

-cnewer FILE -ctime N -empty -false -fstype
TYPE -gid N -group NAME

-ilname PATTERN -iname PATTERN -inum N
-iwholename PATTERN -iregex PATTERN

-links N -lname PATTERN -mmin N -mtime
N -name PATTERN -newer FILE

-nouser -nogroup -path PATTERN -perm [-
/]MODE -regex PATTERN

-readable -writable -executable

-wholename PATTERN -size N[bcwkMG] -
true -type [bcdpflsD] -uid N

-used N -user NAME -xtype [bcdpfls] -
context CONTEXT

actions: -delete -print0 -printf FORMAT -
fprintf FILE FORMAT -print

-fprintf0 FILE -fprintf FILE -ls -fls FILE -prune
-quit

-exec COMMAND ; -exec COMMAND {} + -
ok COMMAND ;

-execdir COMMAND ; -execdir COMMAND
{ } + -okdir COMMAND ;

Valid arguments for -D:

exec, opt, rates, search, stat, time, tree, all,
help

Use '-D help' for a description of the options,
or see find(1)

Please see also the documentation at
<https://www.gnu.org/software/findutils/>.

You can report (and track progress on fixing)
bugs in the "find"

program via the GNU findutils bug-reporting
page at

[https://savannah.gnu.org/bugs/?group=findut
ils](https://savannah.gnu.org/bugs/?group=findutils) or, if

you have no web access, by sending email to
<bug-findutils@gnu.org>.

find (GNU findutils) 4.8.0

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Inc.

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<<https://gnu.org/licenses/gpl.html>>.

This is free software: you are free to change
and redistribute it.

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

Written by Eric B. Decker, James Youngman,
and Kevin Dalley.

Features enabled: D_TYPE
O_NOFOLLOW(enabled) LEAF_OPTIMISATION
FTS(FTS_CWDFD) CBO(level=2)

a.txt

/home/ammulu/a.txt

/home/ammulu/at.txt

/home/ammulu/outfind.txt

/home/ammulu/outdd.txt

/home/ammulu/outdiff.txt

/home/ammulu/al.txt

/home/ammulu/outchown.txt

/home/ammulu/outch.txt

/home/ammulu/a.txt

/home/ammulu

/home/ammulu/at.txt

/home/ammulu/hdadisk.img

/home/ammulu/outfind.txt

/home/ammulu/outdd.txt

/home/ammulu/outdiff.txt

/home/ammulu/al.txt

/home/ammulu/.viminfo

/home/ammulu/.pgpkey

/home/ammulu/.lesshst

/home/ammulu/.bash_history

/home/ammulu/chown.sh

/home/ammulu/.local

/home/ammulu/.local/share

/home/ammulu/.local/share/nano

/home/ammulu/.local/share/nano/search_history

/home/ammulu/dd.sh

/home/ammulu/find.sh

/home/ammulu/outchown.txt

/home/ammulu/symbolic_link

/home/ammulu/finger.sh

/home/ammulu/.plan

/home/ammulu/.selected_editor

/home/ammulu/outch.txt

/home/ammulu/tgsservice.iso

/home/ammulu/.motd_shown

/home/ammulu/abc.sh

/home/ammulu/chgrp.sh

/home/ammulu/partition.img

/home/ammulu/diff.sh

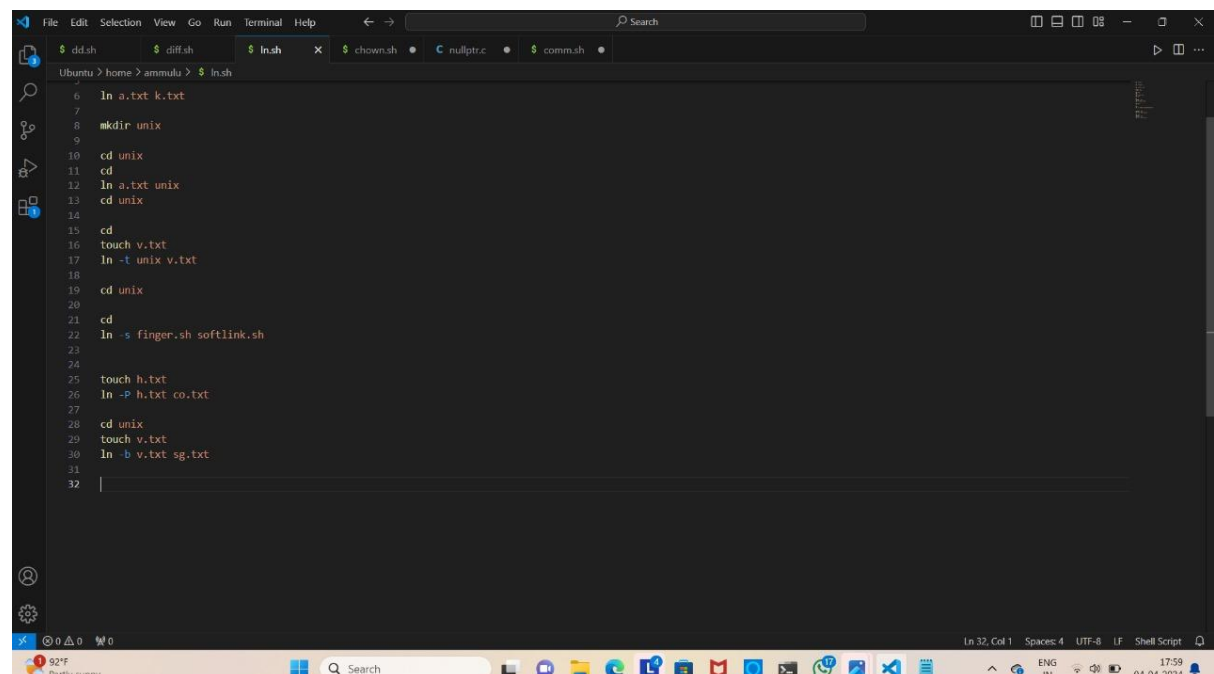
/home/ammulu/.project

ftp command

lock command

```
ammulu@LAPTOP-I4949DCG:~$ lslocks
COMMAND  PID  TYPE  SIZE  MODE  M  START  END  PATH
snapd    160  FLOCK  WRITE 0     0    0  /snap...
cron     143  FLOCK  WRITE 0     0    0  /run...
```

ln command



The screenshot shows a terminal window with the following commands and output:

```
6 ln a.txt k.txt
7
8 mkdir unix
9
10 cd unix
11 cd
12 ln a.txt unix
13 cd unix
14
15 cd
16 touch v.txt
17 ln -t unix v.txt
18
19 cd unix
20
21 cd
22 ln -s finger.sh softlink.sh
23
24
25 touch h.txt
26 ln -p h.txt co.txt
27
28 cd unix
29 touch v.txt
30 ln -b v.txt sg.txt
31
32
```


Output:

```
Windows PowerShell
ammulu@LAPTOP-I4949DCG: ~
ln: failed to create hard link 'unix/v.txt': File exists
ln: failed to create symbolic link 'softlink.sh': File exists
ammulu@LAPTOP-I4949DCG: ~$ ln --help
Usage: ln [OPTION]... [-T] TARGET LINK_NAME
       or: ln [OPTION]... TARGET
       or: ln [OPTION]... TARGET... DIRECTORY
       or: ln [OPTION]... -t DIRECTORY TARGET...
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.

Mandatory arguments to long options are mandatory for short options too.
  -b, --backup[=CONTROL]  make a backup of each existing destination file
                           like --backup but does not accept an argument
  -d, -F, --directory      allow the superuser to attempt to hard link
                           directories (note: will probably fail due to
                           system restrictions, even for the superuser)
  -f, --force              remove existing destination files
  -i, --interactive        prompt whether to remove destinations
  -L, --logical            dereference TARGETs that are symbolic links
                           treat LINK_NAME as a normal file if
                           it is a symbolic link to a directory
  -P, --physical          make hard links directly to symbolic links
  -r, --relative          create symbolic links relative to link location
  -s, --symbolic          make symbolic links instead of hard links
  -S, --suffix=SUFFIX     override the usual backup suffix
  -t, --target-directory=DIRECTORY specify the DIRECTORY in which to create
                           the links
  -T, --no-target-directory treat LINK_NAME as a normal file always
  -v, --verbose            print name of each linked file
  --help                  display this help and exit
  --version               output version information and exit
```

```
Windows PowerShell
--help      display this help and exit
--version   output version information and exit

The backup suffix is '~', unless set with --suffix or SIMPLE_BACKUP_SUFFIX.
The version control method may be selected via the --backup option or through
the VERSION_CONTROL environment variable. Here are the values:

   none, off      never make backups (even if --backup is given)
   numbered, t    make numbered backups
   existing, nil  numbered if numbered backups exist, simple otherwise
   simple, never  always make simple backups

Using -s ignores -L and -P. Otherwise, the last option specified controls
behavior when a TARGET is a symbolic link, defaulting to -P.

GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Report any translation bugs to <https://translationproject.org/team/>
Full documentation <https://www.gnu.org/software/coreutils/ln>
or available locally via: info '(coreutils) ln invocation'
ammulu@LAPTOP-I4949DCG: $ ln --version
ln (GNU coreutils) 8.32
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This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

Written by Mike Parker and David MacKenzie.
ammulu@LAPTOP-I4949DCG: $ ls
a.txt  at.txt  chown.sh  diff.sh  h.txt  ln.sh  outdd.txt  partition.img  tgsservice.iso
abc.sh  awk.sh  co.txt  find.sh  hdadisk.img  outch.txt  outdiff.txt  softlink.sh  unix
al.txt  chgrp.sh  dd.sh  finger.sh  k.txt  outchown.txt  outfind.txt  symbolic_link  v.txt
ammulu@LAPTOP-I4949DCG: $ ln a.txt k.txt
ln: failed to create hard link 'k.txt': File exists
ammulu@LAPTOP-I4949DCG: $ ln a.txt gy.txt
ammulu@LAPTOP-I4949DCG: $ ls
a.txt  awk.sh  dd.sh  gy.txt  ln.sh  outdiff.txt  symbolic_link  tgsservice.iso
abc.sh  chgrp.sh  diff.sh  h.txt  outch.txt  outfind.txt  unix
al.txt  chown.sh  find.sh  hdadisk.img  outchown.txt  partition.img  v.txt

a.txt  awk.sh  dd.sh  gy.txt  ln.sh  outdiff.txt  symbolic_link
abc.sh  chgrp.sh  diff.sh  h.txt  outch.txt  outfind.txt  tgsservice.iso
al.txt  chown.sh  find.sh  hdadisk.img  outchown.txt  partition.img  unix
at.txt  co.txt  finger.sh  k.txt  outdd.txt  softlink.sh  v.txt
ammulu@LAPTOP-I4949DCG: $ ln a.txt unix
ln: failed to create hard link 'unix/a.txt': File exists
ammulu@LAPTOP-I4949DCG: $
ammulu@LAPTOP-I4949DCG: $ ln u.txt unix
ln: failed to access 'u.txt': No such file or directory
ammulu@LAPTOP-I4949DCG: $ ln outch.txt unix
ammulu@LAPTOP-I4949DCG: $ cd unix
ammulu@LAPTOP-I4949DCG: ~/unix$
ammulu@LAPTOP-I4949DCG: ~/unix$ ls
a.txt  find.sh  finger.sh  outch.txt  sg.txt  sg.txt~  v.txt
ammulu@LAPTOP-I4949DCG: ~/unix$ cd
ammulu@LAPTOP-I4949DCG: $ touch f.txt
ammulu@LAPTOP-I4949DCG: $ ln -t unix f.txt
ammulu@LAPTOP-I4949DCG: $ cd unix
ammulu@LAPTOP-I4949DCG: ~/unix$ ls
a.txt  f.txt  find.sh  finger.sh  outch.txt  sg.txt  sg.txt~  v.txt
ammulu@LAPTOP-I4949DCG: ~/unix$ cd
ammulu@LAPTOP-I4949DCG: $ ln -s outfind.txt softlink
ammulu@LAPTOP-I4949DCG: $ ls
a.txt  awk.sh  dd.sh  finger.sh  k.txt  outdd.txt  softlink  unix
abc.sh  chgrp.sh  diff.sh  gy.txt  ln.sh  outdiff.txt  softlink.sh  v.txt
al.txt  chown.sh  f.txt  h.txt  outch.txt  outfind.txt  symbolic_link
at.txt  co.txt  find.sh  hdadisk.img  outchown.txt  partition.img  tgsservice.iso
ammulu@LAPTOP-I4949DCG: $ touch ed.txt
ammulu@LAPTOP-I4949DCG: $ ln -P ed.txt jk.txt
ammulu@LAPTOP-I4949DCG: $ ls
a.txt  awk.sh  dd.sh  find.sh  hdadisk.img  outch.txt  outfind.txt  symbolic_link
abc.sh  chgrp.sh  diff.sh  finger.sh  jk.txt  partition.img  tgsservice.iso
al.txt  chown.sh  ed.txt  gy.txt  k.txt  outdd.txt  softlink  unix
at.txt  co.txt  f.txt  h.txt  ln.sh  outdiff.txt  softlink.sh  v.txt
ammulu@LAPTOP-I4949DCG: $
ammulu@LAPTOP-I4949DCG: $ touch rw.txt
ammulu@LAPTOP-I4949DCG: $ ln -b rw.txt d.txt
ammulu@LAPTOP-I4949DCG: $ ls
```

```
Windows PowerShell
ammulu@LAPTOP-I4949DCG: ~\unix$ cd
ammulu@LAPTOP-I4949DCG: $ ln -s outfind.txt softlink
ammulu@LAPTOP-I4949DCG: $ ls
a.txt  awk.sh  dd.sh  finger.sh  k.txt  outdd.txt  softlink  unix
abc.sh  chgrp.sh  diff.sh  gy.txt  ln.sh  outdiff.txt  softlink.sh  v.txt
al.txt  chown.sh  f.txt  h.txt  outchown.txt  outfind.txt  symbolic_link
at.txt  co.txt  find.sh  hdadisk.img  outchown.txt  partition.img  tgsservice.iso
ammulu@LAPTOP-I4949DCG: $ touch ed.txt
ammulu@LAPTOP-I4949DCG: $ ln -P ed.txt jk.txt
ammulu@LAPTOP-I4949DCG: $ ls
a.txt  awk.sh  dd.sh  find.sh  hdadisk.img  outchown.txt  outdiff.txt  partition.img  softlink  tgsservice.iso
abc.sh  chgrp.sh  diff.sh  finger.sh  jk.txt  outdd.txt  softlink.sh  v.txt
al.txt  chown.sh  ed.txt  gy.txt  k.txt  outdiff.txt  symbolic_link
at.txt  co.txt  f.txt  h.txt  ln.sh  outchown.txt  tgsservice.iso
ammulu@LAPTOP-I4949DCG: $ touch rw.txt
ammulu@LAPTOP-I4949DCG: $ ln -b rw.txt d.txt
ammulu@LAPTOP-I4949DCG: $ ls
a.txt  awk.sh  d.txt  f.txt  h.txt  ln.sh  outdiff.txt  softlink  unix
abc.sh  chgrp.sh  dd.sh  find.sh  hdadisk.img  outchown.txt  outfind.txt  softlink.sh  v.txt
al.txt  chown.sh  diff.sh  finger.sh  jk.txt  outchown.txt  partition.img  symbolic_link
at.txt  co.txt  ed.txt  gy.txt  k.txt  outdd.txt  rw.txt  tgsservice.iso
ammulu@LAPTOP-I4949DCG: $ ln -r chown.sh ft.txt
ln: cannot do --relative without --symbolic
ammulu@LAPTOP-I4949DCG: $ ln -r symbolic_link ty.txt
ln: cannot do --relative without --symbolic
ammulu@LAPTOP-I4949DCG: $
```

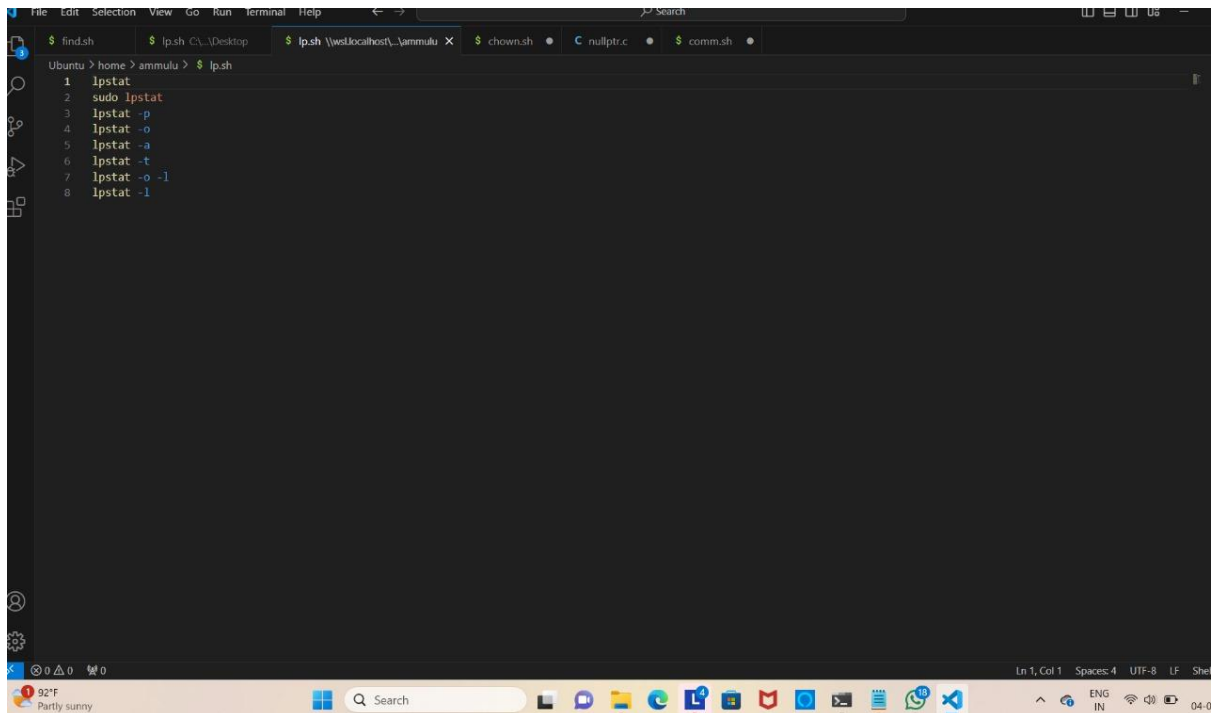
Lp command

```
File Edit Selection View Go Run Terminal Help
$ find.sh $ lp.sh X $ chown.sh C nullptr.c $ comm.sh
C:\Users\K SOUJANYA\Desktop> $ lp.sh
1 lp --help
2 lp --version
3 lp a.txt
4 lp -c -n30 a.txt
5 lp -s a.tx
```

Output:

```
lp: Error - No default destination.
ammu@LAPTOP-I4949DCG:/mnt/c/Users/K_SOUJANYA/Desktop$ lp --help
Usage: lp [options] [--] [file(s)]
       lp [options] -i id
Options:
-c                Make a copy of the print file(s)
-d destination    Specify the destination
-E               Encrypt the connection to the server
-h server[:port] Connect to the named server and port
-H HH:MM         Hold the job until the specified UTC time
-H hold          Hold the job until released/resumed
-H immediate      Print the job as soon as possible
-H restart        Reprint the job
-H resume         Resume a held job
-i id            Specify an existing job ID to modify
-m              Send an email notification when the job completes
-n num-copies     Specify the number of copies to print
-o option[=value] Specify a printer-specific option
-o job-sheets=standard Print a banner page with the job
-o media=size     Specify the media size to use
-o number-up=N    Specify that input pages should be printed N-up (1, 2, 4, 6, 9, and 16 are supported)
-o orientation-requested=N
                  Specify portrait (3) or landscape (4) orientation
-o print-quality=N Specify the print quality - draft (3), normal (4), or best (5)
-o sides=one-sided Specify 1-sided printing
-o sides=two-sided-long-edge
                  Specify 2-sided portrait printing
-o sides=two-sided-short-edge
                  Specify 2-sided landscape printing
-P page-list      Specify a list of pages to print
-q priority        Specify the priority from low (1) to high (100)
-s               Be silent
-t title          Specify the job title
-U username        Specify the username to use for authentication
-t title          Specify the job title
-U username        Specify the username to use for authentication
ammu@LAPTOP-I4949DCG:/mnt/c/Users/K_SOUJANYA/Desktop$ lp --version
lp: Error - unknown option "--version".
Usage: lp [options] [--] [file(s)]
       lp [options] -i id
Options:
-c                Make a copy of the print file(s)
-d destination    Specify the destination
-E               Encrypt the connection to the server
-h server[:port] Connect to the named server and port
-H HH:MM         Hold the job until the specified UTC time
-H hold          Hold the job until released/resumed
-H immediate      Print the job as soon as possible
-H restart        Reprint the job
-H resume         Resume a held job
-i id            Specify an existing job ID to modify
-m              Send an email notification when the job completes
-n num-copies     Specify the number of copies to print
-o option[=value] Specify a printer-specific option
-o job-sheets=standard Print a banner page with the job
-o media=size     Specify the media size to use
-o number-up=N    Specify that input pages should be printed N-up (1, 2, 4, 6, 9, and 16 are supported)
-o orientation-requested=N
                  Specify portrait (3) or landscape (4) orientation
-o print-quality=N Specify the print quality - draft (3), normal (4), or best (5)
-o sides=one-sided Specify 1-sided printing
-o sides=two-sided-long-edge
                  Specify 2-sided portrait printing
-o sides=two-sided-short-edge
                  Specify 2-sided landscape printing
-P page-list      Specify a list of pages to print
-q priority        Specify the priority from low (1) to high (100)
-s               Be silent
-t title          Specify the job title
-U username        Specify the username to use for authentication
```

Lpstat command



The screenshot shows a Windows terminal window with a dark background. The title bar includes 'File', 'Edit', 'Selection', 'View', 'Go', 'Run', 'Terminal', and 'Help'. The terminal content shows the following commands and their outputs:

```
Ubuntu > home > ammulu > $ lp.sh
1 lpstat
2 sudo lpstat
3 lpstat -p
4 lpstat -o
5 lpstat -a
6 lpstat -t
7 lpstat -o -l
8 lpstat -l
```

The terminal window has a taskbar at the bottom with various application icons, including the Start button, Search, and several open applications. The system tray shows the date and time as 04:00.

Mesg command

```
Windows PowerShell
Command 'lpstat' not found, but can be installed with:
sudo apt install cups-client # version 2.4.1op1-lubuntu4.7, or
sudo apt install lprng      # version 3.8.B-5
ammulu@LAPTOP-I4949DCG: $
ammulu@LAPTOP-I4949DCG: $ mesg --help

Usage:
mesg [options] [y | n]

Control write access of other users to your terminal.

Options:
-v, --verbose  explain what is being done
-h, --help    display this help
-V, --version  display version

For more details see mesg(1).
ammulu@LAPTOP-I4949DCG: $ man mesg
ammulu@LAPTOP-I4949DCG: $ mesg y
ammulu@LAPTOP-I4949DCG: $ mesg
is y
ammulu@LAPTOP-I4949DCG: $ mesg n
ammulu@LAPTOP-I4949DCG: $
ammulu@LAPTOP-I4949DCG: $ mesg
is n
ammulu@LAPTOP-I4949DCG: $ write tinku
write: you have write permission turned off
ammulu@LAPTOP-I4949DCG: $ mesg y
ammulu@LAPTOP-I4949DCG: $ mesg
is y
ammulu@LAPTOP-I4949DCG: $ write tinku
write: tinku is not logged in
ammulu@LAPTOP-I4949DCG: $ write kakashi
write: kakashi is not logged in
ammulu@LAPTOP-I4949DCG: $ write ammulu
write: ammulu has messages disabled
ammulu@LAPTOP-I4949DCG: $
ammulu@LAPTOP-I4949DCG: $ mesg y -v
```

```
Windows PowerShell
Command 'lpstat' not found, but can be installed with:
sudo apt install cups-client # version 2.4.1op1-lubuntu4.7, or
sudo apt install lprng      # version 3.8.B-5
ammulu@LAPTOP-I4949DCG: $
ammulu@LAPTOP-I4949DCG: $ mesg --help

Usage:
mesg [options] [y | n]

Control write access of other users to your terminal.

Options:
-v, --verbose  explain what is being done
-h, --help    display this help
-V, --version  display version

For more details see mesg(1).
ammulu@LAPTOP-I4949DCG: $ man mesg
ammulu@LAPTOP-I4949DCG: $ mesg y
ammulu@LAPTOP-I4949DCG: $ mesg
is y
ammulu@LAPTOP-I4949DCG: $ mesg n
ammulu@LAPTOP-I4949DCG: $
ammulu@LAPTOP-I4949DCG: $ mesg
is n
ammulu@LAPTOP-I4949DCG: $ write tinku
write: you have write permission turned off
ammulu@LAPTOP-I4949DCG: $ mesg y
ammulu@LAPTOP-I4949DCG: $ mesg
is y
ammulu@LAPTOP-I4949DCG: $ write tinku
write: tinku is not logged in
ammulu@LAPTOP-I4949DCG: $ write kakashi
write: kakashi is not logged in
ammulu@LAPTOP-I4949DCG: $ write ammulu
write: ammulu has messages disabled
ammulu@LAPTOP-I4949DCG: $
ammulu@LAPTOP-I4949DCG: $ mesg y -v
```