

# LINUX COMMANDS

## 1. pwd

Syntax: `pwd [optional_arguments]`

Example:

```
updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update
Failed to connect to https://changelogs.ubuntu.com/meta-release-lts. Check your
Internet connection or proxy settings

Last login: Fri Sep  6 08:52:51 2024 from 10.100.1.130
tryhackme@linux1:~$ whatis pwd
pwd (1)          - print name of current/working directory
tryhackme@linux1:~$ pwd
/home/tryhackme
```

## 2. find

Syntax: `find /path/to/search -options criteria`

Example:

```
tryhackme@linux1:~$ whatis find
find (1)          - search for files in a directory hierarchy
tryhackme@linux1:~$ find "C:\Users\student\Pictures\Screenshots\Screenshot 202
3-08-10 155031.png"
find: 'C:\\Users\\student\\Pictures\\Screenshots\\Screenshot 2023-08-10 155031
.png': No such file or directory
```

## 3. ls:

Syntax: `ls [option] [file/directory]`

Example:

```
tryhackme@linux1:~$ whatis ls
ls (1)          - list directory contents
tryhackme@linux1:~$ ls
access.log  folder1  folder2  folder3  folder4  text
tryhackme@linux1:~$ ls -l
access.log
folder1
folder2
folder3
folder4
text
tryhackme@linux1:~$
```

#### 4 .Ls -l

Syntax: `ls -l`

Example:

```
tryhackme@linux1:~$ ls -l
total 84
-rw-rw-r-- 1 tryhackme tryhackme 65522 May 10 2021 access.log
drwxr-xr-x 2 tryhackme tryhackme 4096 May 10 2021 folder1
drwxr-xr-x 2 tryhackme tryhackme 4096 May 10 2021 folder2
drwxr-xr-x 2 tryhackme tryhackme 4096 May 10 2021 folder3
drwxr-xr-x 2 tryhackme tryhackme 4096 May 10 2021 folder4
drwxrwxr-x 2 tryhackme tryhackme 4096 Sep  6 09:24 text
tryhackme@linux1:~$
```

#### 5.cal

Syntax: `cal [ [ month ] year ]`

Example:

```
tryhackme@linux1:~$ cal 09 2014
    September 2014
Su Mo Tu We Th Fr Sa
      1  2  3  4  5  6
 7  8  9 10 11 12 13
14 15 16 17 18 19 20
21 22 23 24 25 26 27
28 29 30
```

#### 6.mkdir

Syntax: `mkdir dir_name`

#### 7.cd

Syntax: `cd dir_name`

```
tryhackme@linux1:~$ mkdir sansarika
tryhackme@linux1:~$ cd sansarika
tryhackme@linux1:~/sansarika$
```

## 8. whatis

Syntax: `whatis command`

Example:

```
tryhackme@linux1:~/sansarika$ whatis passwd
passwd (1ssl)      - compute password hashes
passwd (1)         - change user password
passwd (5)         - the password file
tryhackme@linux1:~/sansarika$
```

## 9. man:

Syntax: `man [option] [section number] [command name]`

Example:

```
tryhackme@linux1:~/sansarika$ man ls
LS(1)                                User Commands                                LS(1)

NAME
  ls - list directory contents
```

```
LS(1)                                User Commands                                LS(1)

NAME
  ls - list directory contents

SYNOPSIS
  ls [OPTION]... [FILE]...

DESCRIPTION
  List information about the FILES (the current directory by default).
  Sort entries alphabetically if none of -cftuvSUX nor --sort is speci-
  fied.

  Mandatory arguments to long options are mandatory for short options
  too.

  -a, --all
      do not ignore entries starting with .

  -A, --almost-all
      do not list implied . and ..

  --author
      with -l, print the author of each file

  -b, --escape
      print C-style escapes for nongraphic characters

  --block-size=SIZE
      with -l, scale sizes by SIZE when printing them; e.g.,
      '--block-size=M'; see SIZE format below

  -B, --ignore-backups
      do not list implied entries ending with ~

  -c      with -lt: sort by, and show, ctime (time of last modification
          of file status information); with -l: show ctime and sort by
          name; otherwise: sort by ctime, newest first
```

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



#### 10. rmdir:

Syntax: `rmdir [option]... [directory]...`

Example:

```
tryhackme@linux1:~/sansarika$ mkdir school
tryhackme@linux1:~/sansarika$ rmdir school
tryhackme@linux1:~/sansarika$
```

#### 11. Cat

Syntax: `cat [options] [file_name]`

Example:

```
tryhackme@linux1:~$ whatis cat
cat (1)          - concatenate files and print on the standard output
tryhackme@linux1:~$ cat test.txt
cat: test.txt: No such file or directory
tryhackme@linux1:~$ cat test1.txt test2.txt
cat: test1.txt: No such file or directory
cat: test2.txt: No such file or directory
tryhackme@linux1:~$
```

#### 12. Cat >

Syntax: `cat > newfile_name`

Example:

```
labex:project/ $ cat >> test.txt
And, I am an open source platform.
labex:project/ $ cat test.txt
Hello, I am Linux distro.
And, I am an open source platform.
```

#### 13. Cat >>

Syntax: `cat file1 >> file2`

Example:

```
labex:project/ $ cat > test.txt
Hello, I am Linux distro.
labex:project/ $ ls
test.txt
labex:project/ $ cat test.txt
Hello, I am Linux distro.
```

14. Date:

Syntax: `date [OPTION]... [+FORMAT]`

Example:

```
labex:project/ $ date --date="2 year ago"
Sat Sep 10 02:32:05 PM CST 2022
labex:project/ $ date --date="yesterday"
Mon Sep 9 02:32:46 PM CST 2024
```

15. Touch:

Syntax: `touch [options] file_name`

Example:

```
labex:project/ $ touch test.txt
labex:project/ $ ls
test.txt
```

16. Ls -a

Syntax: `ls -a`

Example:

```
labex:project/ $ ls -l
test.txt
labex:project/ $ ls -l
total 4
-rw-rw-r-- 1 labex labex 61 Sep 10 14:50 test.txt
labex:project/ $ ls -a
. .. test.txt
```

17. Ifconfig:

Syntax: `ifconfig [interface] [options]`

Example:

```
labex:project/ $ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 172.18.0.6 netmask 255.255.0.0 broadcast 172.18.255.255
    ether 02:42:ac:12:00:06 txqueuelen 0 (Ethernet)
    RX packets 35213 bytes 2738976 (2.7 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 30304 bytes 12911838 (12.9 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    loop txqueuelen 1000 (Local Loopback)
    RX packets 6 bytes 384 (384.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 6 bytes 384 (384.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

18. Mv

Syntax: `mv [options(s)] [source_file_name(s)] [Destination_file_name]`

Example:

```
labex:project/ $ cat test2.txt
cat: test2.txt: No such file or directory
labex:project/ $ cat test.txt
Hey, there!
labex:project/ $ ls -a
.  ..  test.txt
```

19. Ps:

Syntax: `ps [options]`

Example:

```
labex:project/ $ ps
  PID TTY          TIME CMD
 1591 pts/0        00:00:00 zsh
 1842 pts/0        00:00:00 ps
```

```
labex:project/ $ ps -A
  PID TTY          TIME CMD
    1 ?            00:00:00 init.sh
   20 ?            00:00:00 supervisord
   21 ?            00:00:00 sshd
   22 ?            00:00:00 su
   23 ?            00:00:00 vncserver
   35 ?            00:00:34 Xvnc
   45 ?            00:00:00 sh
   46 ?            00:00:00 sh
   47 ?            00:00:00 xfce4-session
   56 ?            00:00:00 dbus-launch
   57 ?            00:00:00 dbus-daemon
   59 ?            00:00:00 at-spi-bus-laun
```

20. Ln

Syntax: `ln [OPTION]... TARGET... DIRECTORY`

Example:

```
labex:project/ $ ls
exam.txt  example  test_dir
labex:project/ $ ln exam.txt test_dir
labex:project/ $ cd test_dir
labex:test_dir/ $ ls
exam.txt
```

21. Whoami

Syntax: `whoami [OPTION]`

Example:

```
labex:test_dir/ $ whoami
labex
labex:test_dir/ $
```

22. Gid:

Syntax: `id -g`

Example:

```
labex:test_dir/ $ id
uid=5000(labex) gid=5000(labex) groups=5000(labex),27(sudo),121(ssl-cert),5002(public)
labex:test_dir/ $ id -g
5000
labex:test_dir/ $
```

23. Kill:

Syntax: `kill [signal] PID`

Example:

```
labex:test_dir/ $ kill 230
labex:test_dir/ $ ps
  PID TTY          TIME CMD
  230 pts/2    00:00:02 zsh
  796 pts/2    00:00:00 ps
labex:test_dir/ $
```

24. Chmod:

Syntax: `chmod [options] [mode] [File_name]`

Example:



```
labex:test_dir/ $ chmod u+rw exam.txt
labex:test_dir/ $ ls
exam.txt
labex:test_dir/ $ ls -l
total 0
-rwxrw-r-- 2 labex labex 0 Sep 13 09:16 exam.txt
```

25. Wc:

Syntax: `wc <filepath>`

Example:

```
labex:test_dir/ $ wc exam.txt
0 0 0 exam.txt
labex:test_dir/ $ cat > exam.txt
Hey, I am your friend. How are you?
labex:test_dir/ $ cat exam.txt
Hey, I am your friend. How are you?
labex:test_dir/ $ wc exam.txt
1  8 36 exam.txt
```

26. Su:

Syntax: `su [options] [username]`

Example:

```
labex:project/ $ su -V
su from util-linux 2.37.2
labex:project/ $ su -f
Password:
root@66f20ec4e9643e1b7d995d6b:/home/labex/project# Hello
bash: Hello: command not found
root@66f20ec4e9643e1b7d995d6b:/home/labex/project# ls
cpfile file.txt t1.txt t2.txt text1.txt text2.txt
root@66f20ec4e9643e1b7d995d6b:/home/labex/project#
```

27. Head:

Syntax: `head [OPTION]... [FILE]...`

Example:

```
labex:test_dir/ $ cat state.txt
Madhya Pradesh
Andhra Pradesh
Sikkim
Mizoram
Telangana
Hyderabad
Rajasthan
labex:test_dir/ $ head -n 3 state.txt
Madhya Pradesh
Andhra Pradesh
Sikkim
```

28. Tail:

Syntax: `tail [OPTION]... [FILE]...`

Example:

```
labex:test_dir/ $ tail -n 3 state.txt
Telangana
Hyderabad
Rajasthan
labex:test_dir/ $
```

29. Netstat:

Syntax: `netstat [options]`

Example:

```
labex:test_dir/ $ netstat -at
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 0.0.0.0:ssh             0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:3001            0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:3002            0.0.0.0:*               LISTEN
tcp        0      0 127.0.0.11:37887        0.0.0.0:*               LISTEN
tcp        0      0 47065fda167b.limit:3001 node_openresty.li:42460 ESTABLISHED
tcp        0      0 47065fda167b.limit:3002 node_openresty.li:39662 ESTABLISHED
tcp        0      0 47065fda167b.limite:ssh 47.251.57.20:44430     ESTABLISHED
tcp6       0      0 [::]:ssh                [::]:*                  LISTEN
```

30. Grep:

Syntax: `grep [options] pattern [files]`

Example:

```
labex:test_dir/ $ grep -n "unix" exam.txt
labex:test_dir/ $ grep -n "Pradesh" state.txt
1:Madhya Pradesh
2:Andhra Pradesh
labex:test_dir/ $ grep -n "." exam.txt
1:Hey, I am your friend. How are you?
```

31. Pid:

Syntax: `pidof [options] program1 program2 ... programN`

Example:

```
labex:test_dir/ $ pidof bash
1
labex:test_dir/ $ pidof -x bash
1
labex:test_dir/ $
```

32. Echo:

Syntax: `echo [option] [string]`

Example:

```

1
labex:test_dir/ $ echo "Heya how're you"
Heya how're you
labex:test_dir/ $ echo echo -e "Heya \cfor how're you"
echo -e Heya
labex:test_dir/ $ echo -e "Heya \nfor \nhow're you"
Heya
for
how're you

```

### 33. Sudo:

Syntax: `sudo [options]`

Example:

```

labex:test_dir/ $ sudo -V
Sudo version 1.9.9
Sudoers policy plugin version 1.9.9
Sudoers file grammar version 48
Sudoers I/O plugin version 1.9.9
Sudoers audit plugin version 1.9.9
labex:test_dir/ $

```

### 34. Cp

Syntax: `cp [options] source... destination`

Example:

```

labex:project/ $ cp file.txt cpfile
labex:project/ $ ls
cpfile file.txt
labex:project/ $

```

### 35. Join

Syntax: `join [option]...[file]...`

Example:

```

labex:project/ $ cat > text1.txt
101 Shreya
104 Shyaam
labex:project/ $ cat > text2.txt
101 Verma
104 Mehra
labex:project/ $ join text1.txt text2.txt
101 Shreya Verma
104 Shyaam Mehra

```

### 36. Paste

Syntax: paste [option]...[file]...

Example:

```

labex:project/ $ cat > t1.txt
Football
Cricket
labex:project/ $ touch t2.txt
labex:project/ $ cat > t2.txt
Sport
Sport
labex:project/ $ paste t1.txt t2.txt
Football      Sport
Cricket Sport

```

### 37. Wc -l

Syntax: wc -l [OPTION]... [FILE]...

Example:

```

labex:project/ $ wc -l t1.txt
4 t1.txt
labex:project/ $

```

### 38. Kill all

Syntax: kill [signal] PID

Example:

```
labex:project/ $ killall -1
HUP INT QUIT ILL TRAP ABRT BUS FPE KILL USR1 SEGV USR2 PIPE ALRM TERM STKFLT
CHLD CONT STOP TSTP TTIN TTOU URG XCPU XFSZ VTALRM PROF WINCH POLL PWR SYS
labex:project/ $
```

#### 39. Rm:

Syntax: `rm -r[directory]`

Example:

```
labex:project/ $ rm folder1
rm: cannot remove 'folder1': Is a directory
labex:project/ $ rm -r folder1/
labex:project/ $ ls
cpfile  file.txt
```

#### 40. Rev

Syntax: `rev [option] [file...]`

Example:

```
labex:project/ $ rev text1.txt
ayerhS 101
maayhS 401
labex:project/ $
```

#### 41. Cmp:

Syntax: `cmp [OPTION]... FILE1 [FILE2 [SKIP1 [SKIP2]]]`

Example:

```
labex:project/ $ cmp t1.txt t2.txt
t1.txt t2.txt differ: char 1, line 1
labex:project/ $ cmp text1.txt text2.txt
text1.txt text2.txt differ: char 5, line 1
labex:project/ $
```

#### 42. Pwd:

Syntax: `pwd [options] [username]`

Example:

```
labex:project/ $ sudo passwd root
New password:
Retype new password:
passwd: password updated successfully
labex:project/ $
```

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