

ls(1) — Linux manual page

[NAME](#) | [SYNOPSIS](#) | [DESCRIPTION](#) | [AUTHOR](#) | [REPORTING BUGS](#) | [COPYRIGHT](#) | [SEE ALSO](#) | [COLOPHON](#)

 LS(1)

User Commands

LS(1)**NAME** [top](#)

ls - list directory contents

SYNOPSIS [top](#)

ls [*OPTION*]... [*FILE*]...

DESCRIPTION [top](#)

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

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 change of file status information); with **-l**: show ctime and sort by name; otherwise: sort by ctime, newest first
- C** list entries by columns
- color[=*WHEN*]**
color the output *WHEN*; more info below
- d, --directory**
list directories themselves, not their contents
- D, --dired**
generate output designed for Emacs' dired mode
- f** do not sort, enable **-aU**, disable **-ls --color**
- F, --classify[=*WHEN*]**
append indicator (one of */=>@|) to entries *WHEN*
- file-type**
likewise, except do not append '*'
- format=*WORD***
across **-x**, commas **-m**, horizontal **-x**, long **-l**,
single-column **-l**, verbose **-l**, vertical **-C**
- full-time**
like **-l --time-style=full-iso**
- g** like **-l**, but do not list owner
- group-directories-first**
group directories before files; can be augmented with a
--sort option, but any use of **--sort=none** (**-U**) disables
grouping
- G, --no-group**
in a long listing, don't print group names
- h, --human-readable**
with **-l** and **-s**, print sizes like 1K 234M 2G etc.
- si** likewise, but use powers of 1000 not 1024
- H, --dereference-command-line**
follow symbolic links listed on the command line
- dereference-command-line-symlink-to-dir**
follow each command line symbolic link that points to a
directory

- hide=***PATTERN*
do not list implied entries matching shell *PATTERN*
(overridden by **-a** or **-A**)
- hyperlink[=***WHEN*
hyperlink file names *WHEN*
- indicator-style=***WORD*
append indicator with style *WORD* to entry names: none
(default), slash (**-p**), file-type (**--file-type**), classify
(**-F**)
- i, --inode**
print the index number of each file
- I, --ignore=***PATTERN*
do not list implied entries matching shell *PATTERN*
- k, --kibibytes**
default to 1024-byte blocks for file system usage; used
only with **-s** and per directory totals
- l** use a long listing format
- L, --dereference**
when showing file information for a symbolic link, show
information for the file the link references rather than
for the link itself
- m** fill width with a comma separated list of entries
- n, --numeric-uid-gid**
like **-l**, but list numeric user and group IDs
- N, --literal**
print entry names without quoting
- o** like **-l**, but do not list group information
- p, --indicator-style=***slash*
append / indicator to directories
- q, --hide-control-chars**
print ? instead of nongraphic characters
- show-control-chars**
show nongraphic characters as-is (the default, unless
program is 'ls' and output is a terminal)
- Q, --quote-name**
enclose entry names in double quotes

--quoting-style=WORD
use quoting style WORD for entry names: literal, locale, shell, shell-always, shell-escape, shell-escape-always, c, escape (overrides QUOTING_STYLE environment variable)

-r, --reverse
reverse order while sorting

-R, --recursive
list subdirectories recursively

-s, --size
print the allocated size of each file, in blocks

-S sort by file size, largest first

--sort=WORD
sort by WORD instead of name: none (**-U**), size (**-S**), time (**-t**), version (**-v**), extension (**-X**), width

--time=WORD
select which timestamp used to display or sort; access time (**-u**): atime, access, use; metadata change time (**-c**): ctime, status; modified time (default): mtime, modification; birth time: birth, creation;

with **-l**, WORD determines which time to show; with **--sort=time**, sort by WORD (newest first)

--time-style=TIME_STYLE
time/date format with **-l**; see TIME_STYLE below

-t sort by time, newest first; see **--time**

-T, --tabsize=COLS
assume tab stops at each COLS instead of 8

-u with **-lt**: sort by, and show, access time; with **-l**: show access time and sort by name; otherwise: sort by access time, newest first

-U do not sort; list entries in directory order

-v natural sort of (version) numbers within text

-w, --width=COLS
set output width to COLS. 0 means no limit

-x list entries by lines instead of by columns

-X sort alphabetically by entry extension

-Z, --context

print any security context of each file

--zero end each output line with NUL, not newline

-1 list one file per line

--help display this help and exit

--version

output version information and exit

The SIZE argument is an integer and optional unit (example: 10K is 10*1024). Units are K,M,G,T,P,E,Z,Y,R,Q (powers of 1024) or KB,MB,... (powers of 1000). Binary prefixes can be used, too: KiB=K, MiB=M, and so on.

The TIME_STYLE argument can be full-iso, long-iso, iso, locale, or +FORMAT. FORMAT is interpreted like in [date\(1\)](#). If FORMAT is FORMAT1<newline>FORMAT2, then FORMAT1 applies to non-recent files and FORMAT2 to recent files. TIME_STYLE prefixed with 'posix-' takes effect only outside the POSIX locale. Also the TIME_STYLE environment variable sets the default style to use.

The WHEN argument defaults to 'always' and can also be 'auto' or 'never'.

Using color to distinguish file types is disabled both by default and with **--color=never**. With **--color=auto**, ls emits color codes only when standard output is connected to a terminal. The LS_COLORS environment variable can change the settings. Use the [dircolors\(1\)](#) command to set it.

Exit status:

- 0 if OK,
- 1 if minor problems (e.g., cannot access subdirectory),
- 2 if serious trouble (e.g., cannot access command-line argument).

AUTHOR [top](#)

Written by Richard M. Stallman and David MacKenzie.

REPORTING BUGS [top](#)

GNU coreutils online help:

<<https://www.gnu.org/software/coreutils/>>

Report any translation bugs to
<<https://translationproject.org/team/>>

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SEE ALSO [top](#)

[dircolors\(1\)](#)

Full documentation <<https://www.gnu.org/software/coreutils/ls>> or available locally via: info '(coreutils) ls invocation'

COLOPHON [top](#)

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LS(1)

Pages that refer to this page: [column\(1\)](#), [find\(1\)](#), [namei\(1\)](#), [stat\(2\)](#), [statx\(2\)](#), [glob\(3\)](#), [strverscmp\(3\)](#), [core\(5\)](#), [dir_colors\(5\)](#), [passwd\(5\)](#), [proc\(5\)](#), [proc_pid_task\(5\)](#), [mq_overview\(7\)](#), [symlink\(7\)](#), [lsblk\(8\)](#), [lsof\(8\)](#), [setfiles\(8\)](#)

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