

# LS

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## 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 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 modification 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]** colorize the output; WHEN can be 'always' (default if omitted), 'auto', or 'never'; 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** append indicator (one of \*/=>@|) to entries
- 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 can be 'always' (default if omitted), 'auto', or 'never'
- 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 disk 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**)
- time=*WORD*** with **-l**, show time as *WORD* instead of default modification time: atime or access or use (**-u**); ctime or status (**-c**); also use specified time as sort key if **--sort=*time*** (newest first)
- time-style=*TIME\_STYLE*** time/date format with **-l**; see `TIME_STYLE` below
- t** sort by modification time, newest first
- 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
- 1 list one file per line. Avoid '\n' with -q or -b
- 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 (powers of 1024) or KB,MB,... (powers of 1000).

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.

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 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

Written by Richard M. Stallman and David MacKenzie.

## REPORTING BUGS

GNU coreutils online help: <<https://www.gnu.org/software/coreutils/>>  
 Report ls translation bugs to <<https://translationproject.org/team/>>

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# **SEE ALSO**

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