

# 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'