

LS(1)	User Commands	LS(1)
NAME	ls - list directory contents	
SYNOPSIS	ls [OPTION]... [FILE]...	
DESCRIPTION	<p>List information about the FILEs (the current directory by default). Sort entries alphabetically if none of -cftuvSUX nor --sort is specified.</p> <p>Mandatory arguments to long options are mandatory for short options too.</p> <p>-a, --all do not ignore entries starting with .</p> <p>-A, --almost-all do not list implied . and ..</p> <p>--author with -l, print the author of each file</p> <p>-b, --escape print C-style escapes for nongraphic characters</p> <p>--block-size=SIZE scale sizes by SIZE before printing them. E.g., '--block-size=M' prints sizes in units of 1,048,576 bytes. See SIZE format below.</p> <p>-B, --ignore-backups do not list implied entries ending with ~</p> <p>-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</p> <p>-C list entries by columns</p> <p>--color[=WHEN] colorize the output. WHEN defaults to 'always' or can be 'never' or 'auto'. More info below</p> <p>-d, --directory list directory entries instead of contents, and do not dereference symbolic links</p> <p>-D, --dired generate output designed for Emacs' dired mode</p> <p>-f do not sort, enable -aU, disable -ls --color</p> <p>-F, --classify append indicator (one of */=&gt;@ ) to entries</p> <p>--file-type likewise, except do not append '*'</p> <p>--format=WORD across -x, commas -m, horizontal -x, long -l, single-column -1, verbose -l, vertical -C</p> <p>--full-time like -l --time-style=full-iso</p> <p>-g like -l, but do not list owner</p>	

```
--group-directories-first
    group directories before files.

    augment 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, print sizes in human readable format (e.g., 1K 234M 2G)

--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 direc-
    tory

--hide=PATTERN
    do not list implied entries matching shell PATTERN (overridden
    by -a or -A)

--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
    use 1024-byte blocks

-l      use a long listing format

-L, --dereference
    when showing file information for a symbolic link, show informa-
    tion 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 raw entry names (don't treat e.g. control characters spe-
    cially)

-o      like -l, but do not list group information

-p, --indicator-style=slash
    append / indicator to directories

-q, --hide-control-chars
    print ? instead of non graphic characters

--show-control-chars
    show non graphic characters as-is (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, c, escape
```

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-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

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

--time=WORD
    with -l, show time as WORD instead of modification time: atime
    -u, access -u, use -u, ctime -c, or status -c; use specified
    time as sort key if --sort=time

--time-style=STYLE
    with -l, show times using style STYLE: full-iso, long-iso, iso,
    locale, +FORMAT. FORMAT is interpreted like 'date'; if FORMAT
    is FORMAT1<newline>FORMAT2, FORMAT1 applies to non-recent files
    and FORMAT2 to recent files; if STYLE is prefixed with 'posix-',
    STYLE takes effect only outside the POSIX locale

-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

-U      do not sort; list entries in directory order

-v      natural sort of (version) numbers within text

-w, --width=COLS
    assume screen width instead of current value

-x      list entries by lines instead of by columns

-X      sort alphabetically by entry extension

-Z, --context
    print any SELinux security context of each file

-l      list one file per line

--help display this help and exit

--version
    output version information and exit

```

SIZE is an integer and optional unit (example: 10M is 10\*1024\*1024). Units are K, M, G, T, P, E, Z, Y (powers of 1024) or KB, MB, ... (powers of 1000).

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

Report `ls` bugs to [bug-coreutils@gnu.org](mailto:bug-coreutils@gnu.org)

GNU coreutils home page: [<http://www.gnu.org/software/coreutils/>](http://www.gnu.org/software/coreutils/)

General help using GNU software: [<http://www.gnu.org/gethelp/>](http://www.gnu.org/gethelp/)

Report `ls` translation bugs to [<http://translationproject.org/team/>](http://translationproject.org/team/)

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## SEE ALSO

The full documentation for `ls` is maintained as a Texinfo manual. If the `info` and `ls` programs are properly installed at your site, the command

```
info coreutils 'ls invocation'
```

should give you access to the complete manual.