# **less**

Display output one screen at a time, Search through output, Edit the command line.

SYNTAX

**less** [*options*]

     <command> | **less** [*options*]

Moving Commands:

Commands marked with \* may be preceded by a number, N.

Notes in parentheses indicate the behavior if N is given.

 e  ^E  j  ^N  CR  \*  Forward  one line   (or N lines).

 y  ^Y  k  ^K  ^P  \*  Backward one line   (or N lines).

 f  ^F  ^V  SPACE  \*  Forward  one window (or N lines).

 b  ^B  ESC-v      \*  Backward one window (or N lines).

 z                 \*  Forward  one window (and set window to N).

 w                 \*  Backward one window (and set window to N).

 ESC-SPACE         \*  Forward  one window, but don't stop at end-of-file.

 d  ^D             \*  Forward  one half-window (and set half-window to N).

 u  ^U             \*  Backward one half-window (and set half-window to N).

 ESC-(  RightArrow \*  Left  8 character positions (or N positions).

 ESC-)  LeftArrow  \*  Right 8 character positions (or N positions).

 F                    Forward forever; like "tail -f".

 r  ^R  ^L            Repaint screen.

 R                    Repaint screen, discarding buffered input.

 h  H                 Display this help.

 q  :q  Q  :Q  ZZ     Exit.

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       Default "window" is the screen height.

       Default "half-window" is half of the screen height.

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Searching Commands:

 /pattern          \*  Search forward for (N-th) matching line.

 ?pattern          \*  Search backward for (N-th) matching line.

 n                 \*  Repeat previous search (for N-th occurrence).

 N                 \*  Repeat previous search in reverse direction.

 ESC-n             \*  Repeat previous search, spanning files.

 ESC-N             \*  Repeat previous search, reverse dir. & spanning files.

 ESC-u                Undo (toggle) search highlighting.

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       Search patterns may be modified by one or more of:

       ^N or !  Search for NON-matching lines.

       ^E or \*  Search multiple files (pass thru END OF FILE).

       ^F or @  Start search at FIRST file (for /) or last file (for ?).

       ^K       Highlight matches, but don't move (KEEP position).

       ^R       Don't use REGULAR EXPRESSIONS.

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Jumping commands:

 g  <  ESC-<       \*  Go to first line in file (or line N).

 G  >  ESC->       \*  Go to last line in file (or line N).

 p  %              \*  Go to beginning of file (or N percent into file).

 {  (  [           \*  Find close bracket } ) ].

 }  )  ]           \*  Find open bracket { ( [.

 ESC-^F    \*  Find close bracket .

 ESC-^B    \*  Find open bracket

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       Each "find close bracket" command goes forward to the close bracket

         matching the (N-th) open bracket in the top line.

       Each "find open bracket" command goes backward to the open bracket

         matching the (N-th) close bracket in the bottom line.

 m            Mark the current position with .

 '            Go to a previously marked position.

 ''                   Go to the previous position.

 ^X^X                 Same as '.

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       A mark is any upper-case or lower-case letter.

       Certain marks are predefined:

            ^  means  beginning of the file

            $  means  end of the file

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Changing files:

 :e [file]            Examine a new file.

 ^X^V                 Same as :e.

 :n                \*  Examine the (N-th) next file from the command line.

 :p                \*  Examine the (N-th) previous file from the command line.

 :x                \*  Examine the first (or N-th) file from the command line.

 :d                   Delete the current file from the command line list.

 =  ^G  :f            Print current file name.

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Miscellaneous Commands:

 -           Toggle a command line option [see OPTIONS below].

 --          Toggle a command line option, by name.

 \_           Display the setting of a command line option.

 \_\_          Display the setting of an option, by name.

 +cmd        Execute the less cmd each time a new file is examined.

 !command    Execute the shell command with $SHELL.

 |**X**command   Pipe file between current pos & mark **X** to shell command.

 v           Edit the current file with $VISUAL or $EDITOR.

 V           Print version number of "less".

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OPTIONS:

Most options may be changed either on the command line, or from within less by using the - or -- command.  
Options may be given in one of two forms: either a single character preceded by a -, or a name preceeded by --.

FINDING:

 -a  ........  --search-skip-screen

                 Forward search, skips current screen.

 -g  ........  --hilite-search

                 Highlight only last match for searches.

 -G  ........  --HILITE-SEARCH

                 Don't highlight any matches for searches.

 -h [N]  ....  --max-back-scroll=[N]

                 Backward scroll limit.

 -i  ........  --ignore-case

                 Ignore case in searches.

 -I  ........  --IGNORE-CASE

                 Ignore case in searches and in search patterns.

 -j [N]  ....  --jump-target=[N]

                 Screen position of target lines.

 -p [pattern]  --pattern=[*pattern*]

                 Start at pattern (from command line).

 -t [tag]  ..  --tag=[tag]

                 Find a tag.

 -T [tagsfile] --tag-file=[*tagsfile*]

                 Use an alternate tags file.

 -y [N]  ....  --max-forw-scroll=[*N*]

                 Forward scroll limit.

DISPLAY OPTIONS:

 -D [*xn.n*]  .  --color=*xn.n*

                 Set screen colors. (MS-DOS only)

 -c  -C  ....  --clear-screen  --CLEAR-SCREEN

                 Repaint by scrolling/clearing.

 -P [*prompt*]   --prompt=[*prompt*]

                 Define new prompt.

 -m  -M  ....  --long-prompt  --LONG-PROMPT

                 Set prompt style.

 -n  -N  ....  --line-numbers  --LINE-NUMBERS

                 Use line numbers.

 -r  ........  --raw-control-chars

                 Output "raw" control characters.

 -s  ........  --squeeze-blank-lines

                 Squeeze multiple blank lines.

 -S  ........  --chop-long-lines

                 Chop long lines.

 -w  ........  --hilite-unread

                 Highlight first new line after forward-screen.

 -W  ........  --HILITE-UNREAD

                 Highlight first new line after any forward movement.

 -~  ........  --tilde

                 Don't display tildes after end of file.

 -z [*N*]  ....  --window=[*N*]

                 Set size of window.

FILE OPTIONS:

 -b [*N*]  ....  --buffers=[*N*]

                 Number of buffers.

 -B  ........  --auto-buffers

                 Don't automatically allocate buffers for pipes.

 -f  ........  --force

                 Force open non-regular files.

 -k [*file*]  .  --lesskey-file=[*file*]

                 Use a lesskey file.

 -o [*file*]  .  --log-file=[*file*]

                 Copy to log file (standard input only).

 -O [*file*]  .  --LOG-FILE=[*file*]

                 Copy to log file (unconditionally overwrite).

MISC OPTIONS:

 -d  ........  --dumb

                 Dumb terminal.

 -e  -E  ....  --quit-at-eof  --QUIT-AT-EOF

                 Quit at end of file.

 -q  -Q  ....  --quiet  --QUIET  --silent --SILENT

                 Quiet the terminal bell.

 -u  -U  ....  --underline-special  --UNDERLINE-SPECIAL

                 Change handling of backspaces.

 -x [*N*]  ....  --tabs=[*N*]

                 Set tab stops.

 -X  ........  --no-init

                 Don't use termcap init/deinit strings.

 -" [*c*[*c*]]  .  --quotes=[*c*[*c*]]

                 Set shell quote characters.

 -?  ........  --help

                 Display help (from command line).

 -V  ........  --version

                 Display the version number of "less".

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Line Editing:

       These keys can be used to edit text being entered

       on the "command line" at the bottom of the screen.

RightArrow                       ESC-l     Move cursor right one character.

LeftArrow                        ESC-h     Move cursor left one character.

CNTL-RightArrow  ESC-RightArrow  ESC-w     Move cursor right one word.

CNTL-LeftArrow   ESC-LeftArrow   ESC-b     Move cursor left one word.

HOME                             ESC-0     Move cursor to start of line.

END                              ESC-$     Move cursor to end of line.

BACKSPACE                                  Delete char to left of cursor.

DELETE                           ESC-x     Delete char under cursor.

CNTL-BACKSPACE   ESC-BACKSPACE             Delete word to left of cursor.

CNTL-DELETE      ESC-DELETE      ESC-X     Delete word under cursor.

CNTL-U           ESC (MS-DOS only)         Delete entire line.

UpArrow                          ESC-k     Retrieve previous command line.

DownArrow                        ESC-j     Retrieve next command line.

TAB                                        Complete filename & cycle.

SHIFT-TAB                        ESC-TAB   Complete filename & reverse cycle.

CNTL-L                                     Complete filename, list all.

“*Counter to the widely held belief that industrial agriculture is more efficient and productive, small farms produce far more per acre than large farms” -* [*Christos Vasilikiotis*](http://www.cnr.berkeley.edu/~christos/articles/cv_organic_farming.html)**Related**:  
  
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pg - Display one page at a time](http://ss64.com/bash/more.html)[tee - Redirect output to multiple files   
Equivalent Windows command:](http://ss64.com/bash/tee.html) [MORE - Display output one screen at a time.](http://ss64.com/nt/more.html)