

# Grep

Description	Keystroke	Function	Note
<a href="#">Grep under Emacs</a>	<p>Emacs support several find and grep commands that can be executed from within Emacs. Doing so has several advantages:</p> <ul style="list-style-type: none"><li>The command output is collected in the *grep* Emacs buffer while the command runs asynchronously. The buffer is read-only, you can search within it right away. If you type &lt;RET&gt; on a found line, Emacs visit the file of the match at the appropriate line.</li><li>Without even going inside the search result buffer you can type one of the 'goto match' commands to move to the next or previous match:<ul style="list-style-type: none"><li>(next-error) : <b>C-x `</b>, <b>M-g n</b> or <b>M-g M-n</b></li><li>(previous_error): <b>M-g p</b> or <b>M-g M-p</b></li></ul></li><li>Stop the grep asynchronous operation with <b>C-c C-k</b> or <b>&lt;f11&gt; g k</b></li><li>The search commands keep a history for the searches. You can browse the history at the prompt.</li></ul>		
Run grep via find	<b>&lt;f11&gt; g f</b>	(find-grep COMMAND-ARGS)	<p>Run grep via find, with user-specified args COMMAND-ARGS.</p> <ul style="list-style-type: none"><li>Collect output in a buffer.</li><li>While find runs asynchronously, you can use the <b>C-x `</b> command to find the text that grep hits refer to.</li><li>This command uses a special history list for its arguments, so you can easily repeat a find command.</li></ul>
<a href="#">Run grep</a>	<b>&lt;f11&gt; g g</b>	(grep COMMAND-ARGS)	<p>Run Grep with user-specified COMMAND-ARGS, collect output in a buffer.</p> <ul style="list-style-type: none"><li>While Grep runs asynchronously, you can use <b>C-x `</b> (M-x next-error), or <b>&lt;RET&gt;</b> in the *grep* buffer, to go to the lines where Grep found matches. To kill the Grep job before it finishes, type <b>C-c C-k</b>.</li><li>For doing a recursive 'grep', see the 'rgrep' command. For running Grep in a specific directory, see 'lgrep'.</li><li>This command uses a special history list for its COMMAND-ARGS, so you can easily repeat a grep command.</li><li>A prefix argument says to default the COMMAND-ARGS based on the current tag the cursor is over, substituting it into the last Grep command in the Grep command history (or into 'grep-command' if that history list is empty).</li></ul>
<a href="#">Local grep</a>	<b>&lt;f11&gt; g l</b>	(lgrep REGEXP &optional FILES DIR CONFIRM)	<p>Run grep, searching for REGEXP in FILES in directory DIR.</p> <ul style="list-style-type: none"><li>The search is limited to file names matching shell pattern FILES.</li><li>FILES may use abbreviations defined in 'grep-files-aliases', e.g. entering 'ch' is equivalent to '*.ch]'. As whitespace triggers completion when entering a pattern, including it requires quoting, e.g. '<b>C-q&lt;space&gt;</b>'.</li><li>With <b>C-u</b> prefix, you can edit the constructed shell command line before it is executed.</li><li>With <b>C-u C-u</b> prefix, directly edit and run 'grep-command'.</li><li>Collect output in a buffer. While grep runs asynchronously, you can use <b>C-x `</b> (M-x next-error), or RET in the grep output buffer, to go to the lines where grep found matches.</li><li>This command shares argument histories with <b>&lt;f11&gt; g r</b> and <b>&lt;f11&gt; g g</b>.</li></ul>
<a href="#">Recursive regexp grep over files in directory tree using RipGrep</a>	<ul style="list-style-type: none"><li><b>C-c s r</b></li><li><b>&lt;f11&gt; g i</b></li></ul>	(rg QUERY FILES DIR)	<p>Run ripgrep, searching for REGEXP in FILES in directory DIR.</p> <ul style="list-style-type: none"><li>The search is limited to file names matching shell pattern FILES.</li><li>FILES may use abbreviations defined in 'rg-custom-type-aliases' or ripgrep builtin type aliases, e.g. entering 'elisp' is equivalent to '*.el'. REGEXP is a regexp as defined by the ripgrep executable.</li><li>With <b>C-u</b> prefix (CONFIRM), you can edit the constructed shell command line before it is executed.<ul style="list-style-type: none"><li>Useful to add the -z option to search into compressed files (.zip, .el.gz, etc...).</li></ul></li><li>Collect output in a buffer. While ripgrep runs asynchronously, you can use <b>C-x `</b> (M-x 'next-error'), or RET in the rg output buffer, to go to the lines where rg found matches.</li></ul> <p>🔗📦 Requires the <a href="#">rg.el</a> package and <a href="#">ripgrep</a> command line utility.</p>
<a href="#">Recursive literal grep over files in directory tree using RipGrep</a>	<ul style="list-style-type: none"><li><b>C-c s t</b></li><li><b>&lt;f11&gt; g I</b></li></ul>	(rg-literal QUERY FILES DIR)	<p>Run ripgrep, searching for literal PATTERN in FILES in directory DIR.</p> <ul style="list-style-type: none"><li>With C-u prefix (CONFIRM), you can edit the constructed shell command line before it is executed.<ul style="list-style-type: none"><li>Useful to add the -z option to search into compressed files (.zip, .el.gz, etc...).</li></ul></li></ul> <p>🔗📦 Requires the <a href="#">rg.el</a> package and <a href="#">ripgrep</a> command line utility.</p>
<a href="#">Recursive grep over files in directory tree using grep</a>	<b>&lt;f11&gt; g r</b>	(rgrep REGEXP &optional FILES DIR CONFIRM)	<p>Recursively grep for REGEXP in FILES in directory tree rooted at DIR.</p> <ul style="list-style-type: none"><li>The search is limited to file names matching shell pattern FILES.</li><li>FILES may use abbreviations defined in 'grep-files-aliases', e.g. entering 'ch' is equivalent to '*.ch]'. As whitespace triggers completion when entering a pattern, including it requires quoting, e.g. '<b>C-q&lt;space&gt;</b>'.</li><li>With <b>C-u</b> prefix, you can edit the constructed shell command line before it is executed. With <b>C-u C-u</b> prefix, directly edit and run 'grep-find-command'.</li><li>Collect output in a buffer. While the recursive grep is running, you can use <b>C-x `</b> or <b>M-g n</b> (M-x next-error), or <b>&lt;RET&gt;</b> in the grep output buffer, to visit the lines where matches were found.</li><li>To kill the job before it finishes, type <b>C-c C-k</b>.</li><li>This command shares argument histories with M-x lgrep and M-x grep-find.</li><li>When called programmatically and FILES is nil, REGEXP is expected to specify a command to run.</li></ul> <p>As seen above, typing the <b>C-u</b> prefix before the command keystroke, we can modify the command line found, e.g. for adding a <b>  sort -V</b> so that output list the files in sorted order with lines number also sorted.</p>
<a href="#">Recursive Gzip grep</a>	<b>&lt;f11&gt; g z</b>	(zrgrep REGEXP &optional FILES DIR CONFIRM TEMPLATE)	<p>Recursively grep for REGEXP in gzipped FILES in tree rooted at DIR.</p> <ul style="list-style-type: none"><li>Like 'rgrep' but uses 'zgrep' for 'grep-program', sets the default file name to '*.gz', and sets 'grep-highlight-matches' to 'always'.</li></ul>
<a href="#">Kill grep process</a>	<ul style="list-style-type: none"><li><b>C-c C-k</b></li><li><b>&lt;f11&gt; g k</b></li></ul>	(kill-grep)	<p>Kill the grep process that runs asynchronously.</p>