
























## Emacs support for Ruby 🚧

Description	Keystroke	Function	Note
<b>Ruby Editing</b>	Emacs provides the built-in ruby-mode to support Ruby programming. PEL activates Ruby support with the  <b>pel-use-ruby</b> user-options. When it is turned on the <b>&lt;f11&gt; SPC U</b> prefix is made available. In a ruby buffer these commands are accessible via the <b>&lt;f12&gt;</b> key. It also activates the ability to activate minor modes for the ruby major mode through the PEL <b>pel-ruby-activates-minor-modes</b> user-option.   PEL support for Ruby is not complete. More commands should be provided and documented. Ruby support is preliminary.		
<b>Open this PDF file.</b> See also: <a href="#">🔗 Help/Info</a>	<b>&lt;f11&gt; SPC U &lt;f1&gt;</b> <b>&lt;f12&gt; &lt;f1&gt;</b>	<b>(pel-help-pdf</b> &optional OPEN-WEB-PAGE)	Open the  - <b>Ruby</b> local PDF. If the prefix argument (like <b>C-u</b> or <b>M--</b> ) is used, then it opens the remote GitHub hosted raw PDF instead. If the <b>pel-flip-help-pdf-arg</b> user-option is set it's the other way around.
<a href="#">🔗 Customize</a> PEL Python support	<b>&lt;f11&gt; SPC U &lt;f2&gt;</b> <b>&lt;f12&gt; &lt;f2&gt;</b>	<b>(pel-customize-pel</b> &optional OTHER-WINDOW)	Customize PEL Ruby support. • If OTHER-WINDOW is non-nil (use <b>C-u</b> ), display in another window.
<a href="#">🔗 Customize</a> Emacs Python support	<b>&lt;f11&gt; SPC U &lt;f3&gt;</b> <b>&lt;f12&gt; &lt;f3&gt;</b>	<b>(pel-customize-library</b> &optional OTHER-WINDOW)	Customize Emacs Ruby support: ruby. • If OTHER-WINDOW is non-nil (use <b>C-u</b> ), display in another window.
<b>Comments</b>			
<b>Toggle display of comments in buffer or active region</b> See also: <a href="#">🔗 Comments</a>	<b>&lt;f11&gt; ; ;</b>	<b>(hide/show-comments-toggle</b> &optional START END)	Toggle hiding/showing of comments in the active region or whole buffer. • If the region is active then toggle in the region. Otherwise, in the whole buffer.  This requires the <a href="#">hide-comnt.el</a> package (see <a href="#">🔗 Comments</a> ).  PEL activates it when the <b>pel-use-hide-comnt</b> user option is <b>t</b> .
<b>Ruby-mode control</b>			
<b>Toggle string literal quoting</b>	<b>C-c ' </b>	<b>(ruby-toggle-string-quotes)</b>	Toggle string literal quoting between single and double.
<b>Toggle block type</b>	<b>C-c {</b>	<b>(ruby-toggle-block)</b>	Toggle block type from do-end to braces or back. • The block must begin on the current line or above it and end after the point. • If the result is do-end block, it will always be multiline.
<b>Navigation</b>	The following navigation commands are specialized for Ruby and complement what is described in the <a href="#">🔗 Navigation</a> section.		
• <b>by block</b>	The following commands move point through Python code blocks		
<b>Move forward to end of current block</b>	<b>C-M-n</b>	<b>(ruby-end-of-block</b> &optional ARG)	Move forward to the end of the current block. • With ARG, move out of multiple blocks.
<b>Move backward to beginning of current block</b>	<b>C-M-p</b>	<b>(ruby-beginning-of-block</b> &optional ARG)	Move backward to the beginning of the current block. • With ARG, move up multiple blocks.
<b>Move forward down one nested level</b>	<b>C-M-d</b>	<b>(smie-down-list</b> &optional ARG)	Move forward down one level paren-like blocks. Like 'down-list'. • With argument ARG, do this that many times. • A negative argument means move backward but still go down a level. • This command assumes point is not in a string or comment.
<b>Go up in the block hierarchy</b>	<ul style="list-style-type: none"> <li><b>C-M-u</b></li> <li><b>C-M-&lt;up&gt;</b></li> <li><b>C-[ C-u</b></li> <li><b>Esc C-u</b></li> <li><b>Esc C-&lt;up&gt;</b></li> </ul>	<b>(backward-up-list</b> &optional ARG <u>ESCAPE-STRINGS NO-SYNTAX-CROSSING</u> )	Move backward out of one level of parentheses. • This command will also work on other parentheses-like expressions defined by the current language mode. With ARG, do this that many times. A negative argument means move forward but still to a less deep spot. If ESCAPE-STRINGS is non-nil (as it is interactively), move out of enclosing strings as well. If NO-SYNTAX-CROSSING is non-nil (as it is interactively), prefer to break out of any enclosing string instead of moving to the start of a list broken across multiple strings. On error, location of point is unspecified.
• <b>by class/function definition</b>	The commands move point by function and class definitions.  The <b>&lt;f6&gt;</b> cursor key mappings use <b>&lt;up&gt;</b> and <b>&lt;down&gt;</b> to move to the beginning of the function/class definition, and <b>&lt;left&gt;</b> and <b>&lt;right&gt;</b> to the end of the function/class definition.  These work with function definitions and allow moving forward to the end of a class definition, but not backward to the beginning or end of a class definition. 		
<b>Backward to beginning of function definition</b>	<ul style="list-style-type: none"> <li><b>C-M-a</b></li> <li><b>C-M-&lt;home&gt;</b></li> <li><b>&lt;f6&gt; p</b></li> <li><b>&lt;f6&gt; &lt;up&gt;</b></li> <li><b>C-[ C-a</b></li> <li><b>Esc C-a</b></li> </ul>	<b>(beginning-of-defun</b> &optional ARG)	Move backward to the beginning of a defun. • With ARG, do it that many times. Negative ARG means move forward to the ARGth following beginning of defun.  Shift marking is available in graphics mode, <b>not in terminal mode</b> (for <b>C-M-a</b> and <b>C-M-&lt;home&gt;</b> ). However <b>&lt;f6&gt; p</b> handles Shift-marking fine in terminal mode.  This command moves to the beginning go the next function or of the same nesting level of the current location. It skips the functions and methods that are more deeply nested.
<b>Forward to end of function and class definition</b>	<ul style="list-style-type: none"> <li><b>C-M-e</b></li> <li><b>C-M-&lt;end&gt;</b></li> <li><b>&lt;f6&gt; &lt;right&gt;</b></li> <li><b>C-[ C-e</b></li> <li><b>Esc C-e</b></li> </ul>	<b>(end-of-defun</b> &optional ARG)	Move forward to next end of defun. With argument, do it that many times. Negative argument -N means move back to Nth preceding end of defun.  Shift marking is available in graphics mode, <b>not in terminal mode</b> (both keys).  This command moves to the end of the next <b>top-level</b> function or class. It skips the nested functions and methods.
<b>Forward to start of next function definition</b>	<ul style="list-style-type: none"> <li><b>&lt;f6&gt; n</b></li> <li><b>&lt;f6&gt; &lt;down&gt;</b></li> </ul>	<b>(pel-beginning-of-next-defun</b> &optional SILENT DONT-PUSH_MARK)	Move forward to the beginning of the next function definition. • Beeps if does not find beginning of next function unless SILENT is non-nil. • If the beginning of next function is found, push the start location to the mark ring unless DONT-PUSH_MARK is non-nil. <ul style="list-style-type: none"> <li>Move back to previous position with <b>M-`</b>.</li> </ul>  Shift marking is available.  This command complements what end-of-defun does. • It moves forward but not to the end of the function definition (like end-of-defun) but to the beginning of the function definition, which is often what users of other editors expect. • It handles nested functions or class methods in languages like Python and others.
<b>Backward to end of previous function definition</b>	<b>&lt;f6&gt; &lt;left&gt;</b>	<b>(pel-end-of-previous-defun</b> &optional SILENT DONT-PUSH_MARK)	Move backwards to the end of the previous function definition. • Beeps if does not find end of previous function unless SILENT is non-nil. • If the end of previous function is found, push the start location to the mark ring unless DONT-PUSH_MARK is non-nil. <ul style="list-style-type: none"> <li>Move back to previous position with <b>M-`</b>.</li> </ul>  Shift marking is available.  This command complements this set of 4 commands. •  It handles most nested functions or class methods in Python but not always. In some cases it does not move the point. Better logic is needed. 
<b>Highlight blocks</b>	The following commands can be used to activate or toggle useful modes to highlight blocks of {}, [], and []. • <a href="#">show-paren-mode</a> , which highlights the parens that matches the one before or after point. • <a href="#">rainbow delimiters</a> mode, where matching nested parens are highlighted with the same colour.		
<b>Toggle show-paren mode on/off</b>  See also: <a href="#">🔗 Highlight</a>	<ul style="list-style-type: none"> <li><b>&lt;f12&gt; M-9</b></li> <li><b>&lt;M-f12&gt; M-9</b></li> </ul>	<b>(show-paren-mode</b> &optional ARG)	Toggle visualization of matching parens (Show Paren mode). • With a prefix argument ARG, enable Show Paren mode if ARG is positive, and disable it otherwise. • Show Paren mode is a global minor mode. When enabled, any matching parenthesis is highlighted in 'show-paren-style' after 'show-paren-delay' seconds of Emacs idle time.
<ul style="list-style-type: none"> <li><b>&lt;f11&gt; h (</b></li> </ul>			

Description	Keystroke	Function	Note
Enable/Disable coloured highlight of nested blocks <code>(){}[]</code> See also: <a href="#">↗ Highlight</a>	<ul style="list-style-type: none"><li>• <code>&lt;f12&gt; M-r</code></li><li>• <code>&lt;M-f12&gt; M-r</code></li></ul>	(rainbow-delimiters-mode &optional ARG)	Highlight nested parentheses, brackets, and braces with different colours according to their depth. <ul style="list-style-type: none"><li>• Customize the depth and colours with <b>M-x customize-group rainbow-delimiters</b></li></ul>  <b>Requires:</b> <a href="#">rainbow-delimiters.el</a>
	<ul style="list-style-type: none"><li>• <code>&lt;f11&gt; h R</code></li></ul>		 PEL activates this when the <b>pel-use-rainbow-delimiters</b> user option is set to <b>t</b> .
Indentation	Indent/un-indent lines with following Python-specific commands. These complement what is available in the <a href="#">↗ Indentation</a> section.		
Indent expression after point	<b>C-M-q</b>	(prog-indent-sexp &optional DEFUN)	Indent the expression after point. <ul style="list-style-type: none"><li>• When interactively called with prefix, indent the enclosing defun instead.</li><li>• Does nothing if indentation is currently correct.</li></ul>
Open the indent-tools hydra  See also: <a href="#">↗ Indentation</a>	<code>&lt;f11&gt; &lt;tab&gt; &gt;</code>	(indent-tools-hydra/body)	Activate the e body in the "indent-tools-hydra" hydra.  <b>Requires</b> <a href="#">indent-tools</a> external package  PEL activates it when the <b>pel-use-indent-tools</b> user-option is turned on (set to t).
	<b>C-c &gt;</b>		 With PEL, this key binding is only available when: <ul style="list-style-type: none"><li>• globally, when <b>pel-indent-tools-key-bound</b> is set to <b>globally</b>,</li><li>• in python-mode only when <b>pel-indent-tools-key-bound</b> is set to <b>python</b>.</li><li>• The actual key is selected by indent-tools <b>indent-tools-keymap-prefix</b> user-option, the default is <b>C-c &gt;</b></li></ul>
	See also: <a href="#">↗ Hide/Show</a>	The heads for the associated hydra are: <code>&gt;:</code> 'indent-tools-indent', <code>&lt;:</code> 'indent-tools-demote', <code>E:</code> 'indent-tools-indent-end-of-defun', <code>c:</code> 'indent-tools-comment', <code>U:</code> 'indent-tools-uncomment', <code>P:</code> 'indent-tools-indent-paragraph', <code>l:</code> 'indent-tools-indent-end-of-level', <code>K:</code> 'indent-tools-kill-tree', <code>C:</code> 'indent-tools-copy-hydra/body', <code>s:</code> 'indent-tools-select', <code>e:</code> 'indent-tools-goto-end-of-tree', <code>u:</code> 'indent-tools-goto-parent', <code>d:</code> 'indent-tools-goto-child', <code>S:</code> 'indent-tools-select-end-of-tree', <code>n:</code> 'indent-tools-goto-next-sibling', <code>p:</code> 'indent-tools-goto-previous-sibling', <code>i:</code> 'helm-imenu', <code>j:</code> 'forward-line', <code>k:</code> 'previous-line', <code>SPC:</code> 'indent-tools-indent-space', <code>_:</code> 'undo-tree-undo', <code>L:</code> 'recenter-top-bottom', <code>f:</code> 'yafolding-toggle-element', <code>q:</code> exit	
Indent region or line or complete symbol before point.	<b>TAB</b>	(py-indent-or-complete)	Complete or indent depending on the context. <ul style="list-style-type: none"><li>• If a region is marked, indent all lines in the region,</li><li>• If cursor is at end of a symbol, try to complete,</li><li>• otherwise indent the current line.</li></ul> <ul style="list-style-type: none"><li>• Note: use 'C-q TAB' to insert a literally TAB-character</li><li>• In 'python-mode' 'py-complete-function' is called, in (I)Python shell-modes 'py-shell-complete'</li></ul>
Search Support	In Python mode, the superword mode can be useful since <a href="#">snake_case</a> is often used. Using superword-mode helps searching. PEL activates the superword mode by default in Python mode. To change this use the <code>&lt;f11&gt; t &lt;f2&gt;</code> to access the customize buffer.		
Toggle superword-mode  See also: • <a href="#">↗ Text Modes</a> • <a href="#">↗ Search/Replace</a>	<ul style="list-style-type: none"><li>• <code>&lt;f11&gt; t m p</code></li><li>• <code>&lt;f12&gt; M-p</code></li></ul>	(superword-mode &optional ARG)	Toggle superword-mode: a minor mode that treats <a href="#">snake_case</a> as one word. In Python <code>'_'</code> are treated as part of words. <ul style="list-style-type: none"><li>• With a prefix argument ARG, enable superword mode if ARG is positive, and disable it otherwise.</li><li>• PEL provides the <code>&lt;f12&gt; M-p</code> key for the programming language modes where <a href="#">snake_case</a> is popular (Emacs Lisp, C, C++, Erlang, Python, etc...)</li></ul>

## Emacs & Ruby – References

Document	Notes
Ruby Programming Language	<ul style="list-style-type: none"> <li><a href="#">Ruby @ Wikipedia</a></li> <li><a href="#">Ruby Homepage</a></li> </ul>
Notes on Emacs Ruby Support	<ul style="list-style-type: none"> <li><a href="#">Ruby Mode @ Emacs Wiki</a></li> <li><a href="#">Ruby On Rails @ Emacs Wiki</a></li> </ul>
LSP Support	<ul style="list-style-type: none"> <li><a href="#">LSP Mode for Ruby</a></li> <li><a href="#">solargraph @ GitHub</a></li> </ul>
Blogs on adding support for Ruby	<ul style="list-style-type: none"> <li><a href="#">Getting Started with Emacs for Ruby</a> , by Horace William, 07 June 2016.</li> <li><a href="#">Ruby and Emacs Tip: Advanced Pry Integration</a>, from Thiago Araújo Silva, Aug 27, 2018 and updated May 11, 2019</li> </ul>
Tools for Ruby	
<ul style="list-style-type: none"> <li><b>Pry</b> - an alternative for the Ruby IRB shell</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Pry @ GitHub</a></li> <li><a href="#">Pry Home Page</a></li> </ul>