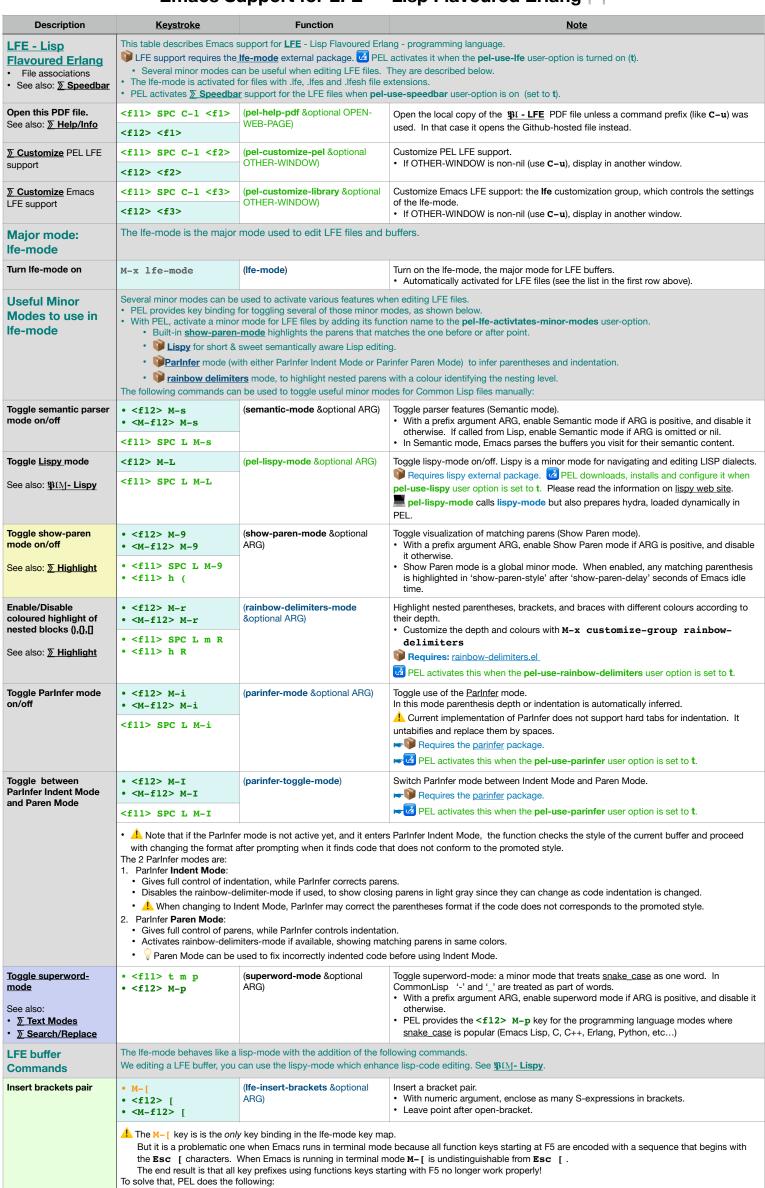
Emacs Support for LFE — Lisp Flavoured Erlang 🚧



• PEL unbinds the M-[key when Emacs runs in terminal mode.

• PEL adds the <f12> [key binding in both terminal and graphics mode.

Description	<u>Keystroke</u>	Function	Note
Compile and evaluate	Use the following commands to evaluate LFE source code in the inferior LFE process where you can then use it. Each of these commands take a prefix argument. You can use any prefix argument like C-u or M		
Evaluate the complete buffer	• <f12> M-c • <m-12> M-c</m-12></f12>	(pel-lfe-eval-buffer &optional AND-GO)	Send the complete buffer to the inferior LFE process. • Start the inferior LFE process if it's not already running. • Switch to the LFE buffer afterwards when AND-GO argument is non-nil.
Evaluate the S- Expression before point	С-х С-е	(Ife-eval-last-sexp &optional AND-GO)	Send the previous sexp to the inferior LFE process. • 'AND-GO' means switch to the LFE buffer afterwards.
Evaluate the current region	C-c C-r	(Ife-eval-region START END & Optional AND-GO)	Send the current region (from 'START' to 'END') to the inferior LFE process. • 'AND-GO' means switch to the LFE buffer afterwards.
Navigation in LFE code	This current list below describe the specialized commands only. See the others inside Navigation You can also use the lispy mode for extra single key commands for navigation across Lisp source code. See MINJ-Lispy Several emacs lisp specific commands will also work in a LFE buffer. These will soon be specialized for LFE as to make them independent from the		
To next/previous top- level forms	Move to beginning /end of S-expression forms. Jump over comments. Can be defun, defer, defconst, defmacros, free-from S-exp, etc The following 'beginning-of-defun' and 'end-of-defun' are standard Emacs commands. They have limitations: They only navigate across any top-level form. They do not discriminate between a defun, a defmacro or even an unless form or any other top-level form. They do not skip doc-strings unless you set open-paren-in-column-0-is-defun-start user option to ignore '(' in strings. PEL provides an additional commands, complementing the standard Emacs commands: pel-beginning-of-next-defun which moves forward to the beginning of the next form pel-end-of-previous-defun which moves backward to the end of the previous top-level form		
Change defun navigation functions	• <f12> M-N • <m-f12> M-N</m-f12></f12>	(pel-toggle-paren-in-column-0-is-defun-start)	Toggle interpretation of a paren in column 0 and display new behaviour. • It toggles standard Emacs `open-paren-in-column-0-is-defun-start' user option,
(toggle between Emacs default and PEL's)	<f11> SPC 1 M-N</f11>		between: • Interpret '(' in column 0 as always stating a defun (even in strings) - the default. • Ignore '(' in strings. A '(' in column 0 is not automatically interpreted as starting a defun.
Backward to beginning of defun See also: Navigation	• C-M-a • C-M- <home> • <f6> p • <f6> <up></up></f6></f6></home>	(beginning-of-defun &optional ARG)	Move backward to the beginning of a top-level form: function definition, macros, etc • 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, not in terminal mode (for C-M-a and C-M- <home>). However <f6> p and <f6> <up> handle Shift-marking fine in terminal mode.</up></f6></f6></home>
	By default Emacs treats all opening parenthesis character in the first column as a defun. • This causes this function to stop at function definition inside strings. • The behaviour can be changed by setting the open-paren-in-column-0-is-defun-start user option to nil. • PEL provides pel-toggle-paren-in-column-0-is-defun-start to toggle that user option. You can also change it dynamically with <f12> M-N. • Moves to beginning of next function of the same nesting level of the current location. It skips the functions and methods that are more deeply nested.</f12>		
Forward to end of defun	<pre>• <f12> <right> • <m-f12> <right></right></m-f12></right></f12></pre>	(end-of-defun &optional ARG)	Move forward to next end of defun. With argument, do it that many times. Negative argument -N means move back to Nth
See also: <u>∑ Navigation</u>	• C-M-e • C-M- <end> • <f6> <right></right></f6></end>		preceding end of defun. ►Shift marking is available in graphics mode, not in terminal mode (for C-M-e and C-M- <end>). <f6> <right> and <f12> <right> support Shift-marking in terminal mode. ↑ This command moves to the end of the next top-level function or class.</right></f12></right></f6></end>
Forward to start of next top-level form	• <f6> n • <f6> <down></down></f6></f6>	(pel-beginning-of-next-defun &optional SILENT DONT- PUSH_MARK)	Move forward to the beginning of the next top-level form: function definition, macros, etc • 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. Move back to previous position with M−ˆ. ►Shift marking is available with <f6> <down></down></f6>
 This command is generic and for Emacs Lisp, moves to the beginning of the next top-level form. It also complements what end-of-defun does. It moves forward but to the beginning of the function definition, which is often the second of the function definition in the first column as a defun. This causes this function to stop at function definition inside strings. The behaviour can be changed by setting the open-paren-in-column-0-is-defun-start user option. You can also change it dynamic 		ward but to the beginning of the function definition, which is often what users expect. the first column as a defun. e strings. n-column-0-is-defun-start user option to nil.	
Backward to end of previous defun	• <f12> <left> • <m-f12> <left></left></m-f12></left></f12>	(pel-end-of-previous-defun &optional SILENT DONT-	Move backwards to the end of the previous top-level form. • Beeps if does not find end of previous function unless SILENT is non-nil.
	<f6> <left></left></f6>	PUSH_MARK)	If the end of previous function is found, push the start location to the mark ring unless DONT-PUSH_MARK is non-nil. Move back to previous position with M− `. ★Shift marking is available.
To next/previous selected S-expression form or defun or ** ** ** ** ** ** ** ** **	Move to beginning /end of specified S-expression forms. Jump over comments and docstrings. Can be defun, defer, defconst, defmacros, free-from S-exp, groups of them, etc PEL provides the following powerful commands: pel-elisp-beginning-of-next-form and pel-elisp-beginning-of-previous-forms. Their behaviour depends on the value of the pel-elisp-target-forms, pel-elisp-user-specified-targets and pel-elisp-user-specified-targets2 user-options, as well as their corresponding global or buffer-local values if they exist. The user options give you the ability to select the type of targets. You can either select the standard behaviour (target the top level forms), or use one of the other 7 types of targets. These include moving to top-level defun form, to any defun form, to defun, defmacro, defsubst, defalias, defadvice forms, to include the eieio forms, the variable definition forms or specify you own set of forms (and those can include the require and provide forms). More information is available in the docstring of these user options. When your buffer is using the Emacs-Lisp major mode, use the <f12> <f2> key sequence to open the relevant customization buffer which will allow you to see and change the persistent or current session settings. PEL also provides specialized versions of these commands: pel-elisp-beginning-of-next-defun which moves to the beginning of next defun, pel-elisp-beginning-of-previous-defun to the previous defun. pel-elisp-to-name-of-next-defun which moves to the name of the next defun, pel-elisp-to-name-of-previous-defun to the previous one.</f2></f12>		
Change target form for commands: • <f12> <up> • <f12> <down></down></f12></up></f12>	• <f12> M-n • <m-f12> M-n</m-f12></f12>	(pel-elisp-set-navigate-target- form &optional GLOBALLY)	Select form navigation behaviour. Select the behaviour of the following navigation functions: 'pel-elisp-beginning-of-next-form' and 'pel-elisp-beginning-of-previous-form'.
• <f12> <c-up> • <f12> <c-down></c-down></f12></c-up></f12>	<f11> SPC 1 M-n</f11>	nil, in which case it modifies the • For persistent change, open the	target-forms' user-option only for the current buffer unless the GLOBALLY argument is non-behaviour for all buffers. The change in behaviour does not persist across Emacs sessions. customization buffer with <f12> <f2>, modify the value of the pel-elisp-target-forms, s and pel-elisp-user-specified-targets2 user-options and save the customize buffer.</f2></f12>

Section of the color of the c	Description	<u>Keystroke</u>	Function	<u>Note</u>
Configuration temporary - In the surrour of size and to present the support - In the surrour of size and to present the surround of the surr		7 7 77		
the command feel electron-square careging from 1, board or 4.11.9 4-b. it can also the command feel by the Million white and the profession of the professio	definition form			specified-targets and pel-elisp-user-specified-targets2 user options. That value
Segmental by the striper against spect of the spectral spectrum. ***The control of the control of the spectral spectrum of the s	**	<f11> SPC 1 <down></down></f11>		can be changed for the current session, for all buffers or only for the current buffer by
of the same of the name of the same of the	all top-level forms	b te		be specified by the TARGET argument: specify one of the symbols valid for 'pel-elisp-
**Monasta to provision profition with IR-1 discoverance in an extraction of the control of the c	 all defun all defun, defsubst,	• If no valid form is found, don't move point, issue an error describing the failure unless SILENT is non-nil, in which case the function returns nil on error and non-nil on success.		
defended, defeation of the command of the road facility and and configurate to rance like the rest of command. The command is the road facility and the command of the road facility and the command of the road facility and the command of the road facility of the road facility of the command of the road facility of the road facility of the command of the road facility of th		, ,		N I-PUSH-MARK IS NON-NII.
Because to the name of the n	defconst, defcustom,			nove like the most O commands
**Count of target the behaviorant for example, to more to rest define or any group of top-west or indepted definition from the defaults, defination, offered and the production of the produc		_	•	
define and the provision of control and the provision of the policy of the provision of control and the		•		·
### Toward to the name of high response of the control of the cont		defvar, etc	•	
**Out can also control the values of these 2 user-options for all buffers or on each buffer sequentially: **You can also control the values of these 2 user-options from the control part of		target-forms', 'pel-elis	sp-user-specified-targets' and 'pel	
In passible to stup a buffer to use the				

Description	<u>Keystroke</u>	Function	<u>Note</u>	
Move block backward	• C-M-b	(backward-sexp &optional ARG)	Move backward across one balanced expression (sexp). • With ARG, do it that many times. Negative arg -N means move forward across N	
See also:	• C-M- <left> • C-[C-b</left>		 With ARG, do it that many times. Negative arg -N means move forward across N balanced expressions. This command assumes point is not in a string or comment. 	
• <u>Navigation</u> • (CLCB s1.lisp)	• Esc C-b		• C-M-b : ► Shift marking is available in graphics mode, not in terminal mode.	
(<u>OLOB 31.1136)</u>	• Esc C- <left> !</left>		• C-M- <left> : ► Shift marking works with this command. • C-M-<left> does not work on Windows, but H-<left> works.</left></left></left>	
	⚠ With PEL: if you want to use Esc C- <left> binding you must ensure that pel-windmove-on-esc-cursor user option is set to nil. ③ Several Linux distros map C-M-<left> to desktop workspace operation. In that case you can either use another key binding or change Linux key binding in Systems->settings->keyboard->shortcuts to prevent it from using that key sequence.</left></left>			
Forward block/list	C-M-n	(forward-list &optional ARG)	Move forward across one balanced group of parentheses.	
See also: <u>» Navigation</u>			 This command will also work on other parentheses-like expressions defined by the current language mode. With ARG, do it that many times. Negative arg -N means move backward across N groups of parentheses. This command assumes point is not in a string or comment. C-M-n : Shift marking is available in graphics mode, not in terminal mode. 	
Move block forward	• C-M-f	(forward-sexp &optional ARG)	Move forward across one balanced expression (sexp).	
See also:	• C-M- <right> • C-[C-f</right>		 With ARG, do it that many times. Negative arg -N means move backward across N balanced expressions. This command assumes point is not in a string or comment. 	
Navigation	• Esc C-f		• c-м-f : ► Shift marking is available in graphics mode, not in terminal mode	
• (CLCB s1.lisp)	• Esc C- <right>!</right>		• C-M- <right> : ► Shift marking works with this command. • C-M-<right> does not work on Windows, but H-<right> does.</right></right></right>	
	! With PEL: if you want to	use Esc C-<right></right> binding you	must ensure that pel-windmove-on-esc-cursor user option is set to nil	
	⚠ With PEL: if you want to use Esc C- <right> binding you must ensure that pel-windmove-on-esc-cursor user option is set to nil. ③ Several Linux distros map C-M-<right> to desktop workspace operation. In that case you can either use another key binding or change Linux key binding in Systems->settings->keyboard->shortcuts to prevent it from using that key sequence.</right></right>			
in/out of lists	Move in and out of list nes			
Backward <u>Up/outside</u> sexp hierarchy See also:	• C-M-u • C-M- <up> • C-[C-u • Esc C-u</up>	(backward-up-list &optional ARG ESCAPE-STRINGS NO-SYNTAX- CROSSING)	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.	
• <u>∑ Navigation</u> • (CLCB s1.lisp)	• Esc C- <up> !</up>		• A. With PEL: if you want to use Esc C- <up> binding you must ensure that pel-windmove-on-esc-cursor user option is set to nil.</up>	
(<u>02000:mop)</u>			• C-M-u : ► Shift marking is available in graphics mode, not in terminal mode.	
			• C-M- <up>: ► Shift marking works with this command. • C-M-<up> does not work on Windows, but H-<up> does.</up></up></up>	
Forward Up/outside	C-M-1	(up-list &optional ARG ESCAPE-	Move forward out of one level of parentheses.	
sexp hierarchy	C-M-J	STRINGS NO-SYNTAX-	This also works on other parentheses-like expressions defined by the current language.	
See also: Navigation		CROSSING)	mode. • With ARG, do this that many times. A negative argument means move backward 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.	
Forward <u>Down/inside</u>	• C-M-d	(down-list &optional ARG)	Move forward down one level of parentheses.	
sexp/block	• C-M- <down></down>		This also works on other parentheses-like expressions defined by the current language mode.	
See also:	• Esc C-d		 With ARG, do this that many times. A negative argument means move backward but still go down a level. 	
• <u>∑ Navigation</u> • (CLCB s1.lisp)	• Esc C- <down> !</down>		This command assumes point is not in a string or comment.	
			 ! With PEL: if you want to use Esc C-<down> binding you must ensure that pel windmove-on-esc-cursor user option is set to nil.</down> 	
			• c - M - d : ► Shift marking is available in graphics mode, not in terminal mode.	
			• C-M- <down> : ► Shift marking works with this command. • C-M-<down> does not work on Windows, but H-<down> does.</down></down></down>	
By sentences	Move to beginning /end of statement of comment sentence.			
	• The variable 'sentence-end' is a regular expression that matches ends of sentences. Useful in comments. In code it moves to the beginning or end definition form (defun, defmacro, etc)			
Move to beginning of sentence or form	м-а	(backward-sentence &optional ARG)	Move backward to start of sentence. With arg, do it arg times. Shift marking works with this command.	
Move forward to end of	м-е	(forward-sentence &optional	Move forward to next end of sentence. With argument, repeat.	
sentence or form		ARG)	With negative argument, move backward repeatedly to start of sentence. Shift marking works with this command.	
LFE Shell	<f12> z</f12>	(run-Ife CMD)	Run an inferior LFE process, input and output via a buffer '*inferior-lfe*'.	
(Lisp Flavoured Erlang)			If 'CMD' is given, use it to start the shell, otherwise: 'inferior-lfe-program' 'inferior-lfe-program-options' -env TERM vt100.	
	<f11> z C-1</f11>		If the LFE process is already running move point to its buffer window. Province the life mode posterior and LFE (Light Flagger) installed.	
			Requires the <u>Ife-mode package</u> and LFE (Lisp Flavoured Erlang) installed. PEL activates this when the pel-use-Ife user option is set to t .	
LFE Shell	The following commands are	e available in the LFE shell buffer.		
		ntrol the input text prepared to send	to the LFE process.	
text input Delete character	C-d	(comint-delchar-or-maybe-eof	Delete ARG characters forward or send an EOF to subprocess.	
forward	C-u	ARG)	Sends an EOF only if point is at the end of the buffer and there is no input.	
Delete character	<delete></delete>	(backward-delete-char-untabify ARG &optional KILLP)	Delete characters backward, changing tabs into spaces.	
backward		And copulonal KILLP)	 The exact behavior depends on 'backward-delete-char-untabify-method'. Delete ARG chars, and kill (save in kill ring) if KILLP is non-nil. Interactively, ARG is the prefix arg (default 1) and KILLP is t if a prefix arg was specified. 	
		(comint-kill-input)	Kill all text from last stuff output by interpreter to point.	
	C-c C-u		additional and the desired the prompt.	
text	C-c C-w	(backward-kill-word ARG)	Kill characters backward until encountering the beginning of a word. • With argument ARG, do this that many times.	
Delete current input text Delete previous word Prompt history: next		(backward-kill-word ARG) (comint-next-input ARG)	Kill characters backward until encountering the beginning of a word.	
text Delete previous word	C-c C-w	,	Kill characters backward until encountering the beginning of a word. With argument ARG, do this that many times.	

line without sending to LFE Indent all lines of a list starting just after point	:-c SPC :-M-q :tab>	(comint-accumulate) (indent-sexp &optional ENDPOS)	Accumulate a line to send as input along with more lines. This inserts a newline so that you can enter more text to be sent along with this line. Use RET to send all the accumulated input, at once. The entire accumulated text becomes one item in the input history when you send it. Indent each line of the list starting just after point. If optional arg ENDPOS is given, indent each line, stopping when ENDPOS is encountered.
line without sending to LFE Indent all lines of a list starting just after point Indent the current line	:-M-q :tab>	· · ·	 This inserts a newline so that you can enter more text to be sent along with this line. Use RET to send all the accumulated input, at once. The entire accumulated text becomes one item in the input history when you send it. Indent each line of the list starting just after point. If optional arg ENDPOS is given, indent each line, stopping when ENDPOS is encountered.
starting just after point Indent the current line	:tab>	(indent-sexp &optional ENDPOS)	 If optional arg ENDPOS is given, indent each line, stopping when ENDPOS is encountered.
Indent the current line <			encountered.
			In the LEE shall use this with S. o. Sec. 1. 1. 2.1. 2.1. 20. 2.1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
			► In the LFE shell use this with C-c SPC to build a list with its elements on multiple lines and indent it. When at the end of the list, terminate the S-expression, return to the top of the input with C-c C-a and then type C-M-q
of the Li L shell input		(indent-for-tab-command &optional ARG)	Indent the current line or region, or insert a tab, as appropriate. This function either inserts a tab, or indents the current line, or performs symbol
		auptional And)	completion, depending on 'tab-always-indent'. The function called to actually indent the line or insert a tab is given by the variable 'indent-line-function'. If a prefix argument is given, after this function indents the current line or inserts a tab, it also rigidly indents the entire balanced expression which starts at the beginning of the current line, to reflect the current line's indentation. In most major modes, if point was in the current line's indentation, it is moved to the first non-whitespace character after indenting; otherwise it stays at the same position relative to the text. If 'transient-mark-mode' is turned on and the region is active, this function instead calls 'indent-region'. In this case, any prefix argument is ignored.
• send to LFE	Jse the following commands	to send text or signal to the LFE pro	icess.
process			
Send input	ET	(comint-send-input &optional NO-NEWLINE ARTIFICIAL)	Send input to process.
Send EOF C	-c C-d	(comint-send-eof)	Send an EOF to the current buffer's process.
Interrupt/break LFE C	!-c C-c	(comint-interrupt-subjob)	Interrupt the current subjob. The LFE process stops and displays the break prompt: BREAK: (a)bort (A)bort with dump (c)ontinue (p)roc info (i)nfo (1)oaded (v)ersion (k)ill (D)b-tables (d)istribution Depending on the state of the system, this does not always seem to work properly. If the buffer freezes type C-g to restore control.
Stop current subjob C	-c C-z	(comint-stop-subjob)	Stop the current subjob.
			if there is no current subjob, you can end up suspending the top-level process running in the buffer. If you accidentally do this, use M-x comint-continue-subjob to resume the process. (This is not a problem with most shells, since they ignore this signal.)
Send quit signal to LFE subjob	:-c C-\	(comint-quit-subjob)	Send quit signal to the current subjob.
Navigate U	Jse the following commands	to navigate across LFE prompts.	
Move point to C	-c C-a	(comint-bol-or-process-mark)	Move point to beginning of line (after prompt) or to the process mark.
beginning of line, then to process mark			 The first time you use this command, it moves to the beginning of the line (but after the prompt, if any). If you repeat it again immediately, it moves point to the process mark. The process mark separates the process output, along with input already sent, from input that has not yet been sent. Ordinarily, the process mark is at the beginning of the current input line; but if you have used C-c SPC to send multiple lines at once, the process mark is at the beginning of the accumulated input.
Move point to next prompt entry	e-c C-n	(comint-next-prompt N)	Move to end of Nth next prompt in the buffer. • If 'comint-use-prompt-regexp' is nil, then this means the beginning of the Nth next 'input' field, otherwise, it means the Nth occurrence of text matching 'comint-prompt-regexp'.
Move point to previous prompt entry	!-c C-p	(comint-previous-prompt N)	Move to end of Nth previous prompt in the buffer. If 'comint-use-prompt-regexp' is nil, then this means the beginning of the Nth previous 'input' field, otherwise, it means the Nth occurrence of text matching 'comint-prompt-regexp'.
Reposition buffer	Jse the following commands	to re-position the buffer inside its wi	indow, operations that are similar to scrolling.
Display last output at the top of the window	:-c C-r	(comint-show-output)	Display start of this batch of interpreter output at top of window. • Sets mark to the value of point when this command is run.
Put end of buffer at the end of the window	-c C-e	(comint-show-maximum-output)	Put the end of the buffer at the bottom of the window.
C	-c C-m	(comint-copy-old-input)	Insert after prompt old input at point as new input to be edited. Calls 'comint-get-old-input' to get old input.
Write interpreter output to specified file	:-c C-s	(comint-write-output FILENAME &optional APPEND MUSTBENEW)	Write output from interpreter since last input to FILENAME. Any prompt at the end of the output is not written. If the optional argument APPEND (the prefix argument when interactive) is non-nil, the output is appended to the file instead. If the optional argument MUSTBENEW is non-nil, check for an existing file with the same name. If MUSTBENEW is 'excl', that means to get an error if the file already exists; never overwrite. If MUSTBENEW is neither nil nor 'excl', that means ask for confirmation before overwriting, but do go ahead and overwrite the file if the user confirms. When interactive, MUSTBENEW is nil when appending, and t otherwise.
Cleanup output			
Delete last output C	-c C-o	(comint-delete-output)	Delete all output from interpreter since last input. • Does not delete the prompt.
Clean LFE shell buffer C	-с М-о	(inferior-lfe-clear-buffer)	Delete the output generated by the LFE process. All lines before the current prompt are deleted from the buffer. The Emacs-maintained history is still available.
Search command history	Jse the following commands	to retrieve a similar command from t	the command history
Display command history in the *Input History* buffer	!-c C-1	(comint-dynamic-list-input-ring)	Display a list of recent inputs entered into the current buffer.
Previous matching Chistory entry	!-c M-r	(comint-previous-matching-input-from-input N)	Search backwards through input history for match for current input. • (Previous history elements are earlier commands.) • With prefix argument N, search for Nth previous match. • If N is negative, search forwards for the -Nth following match.

Description	<u>Keystroke</u>	Function	<u>Note</u>
Next matching history entry	C-c M-s	(comint-next-matching-input-from-input $\ensuremath{N}\xspace)$	Search forwards through input history for match for current input. • (Following history elements are more recent commands.) • With prefix argument N, search for Nth following match. • If N is negative, search backwards for the -Nth previous match.
Insert nth argument used in call of the previous command	С-с .	(comint-insert-previous- argument INDEX)	Insert the INDEXth argument from the previous Comint command-line at point. • Spaces are added at beginning and/or end of the inserted string if necessary to ensure that it's separated from adjacent arguments. • Interactively, if no prefix argument is given, the last argument is inserted. • Repeated interactive invocations will cycle through the same argument from progressively earlier commands (using the value of INDEX specified with the first command). • This command is like 'M' in bash.

LFE - References

Document	Notes
LFE - Lisp Flavored Erlang	
LFE @ Wikipedia	Has a quick overview of the language.