## **Buffers**

<u>Operation</u>	Keystroke	Function	<u>Note</u>		
Emacs Buffers			iers. A buffer might be shown inside one (or several) <u>Emacs windows.</u> Is and also switch the buffer currently shown inside an Emacs window.		
List Buffers     Switch to Buffer     Navigate through buffers     in current window	PEL provides quick access to the relevant customization buffers, several extra buffer-related commands, and quick access to install and activate buffer-related external packages. The pel-pkg-for-buffer customization group to control some aspect of Emacs buffers. The user options are:				
<ul><li>next/previous</li><li>with iflipb</li><li>same major mode</li></ul>		: activates <u>uniquify</u> to that buffer names show the distinguishing directory after the file name, like this: <b>fname dir</b>			
Buffer Selection     Manage Buffers		: activates W <u>ascii-table</u> external package. See <u>s Help/Info</u> for the key binding. : activates W fzf.el external package. For fast fuzzy search on buffer name. See fzf manual, fzf search syntax.			
read-only, clone     rename, kill	<del>_</del>	: activates is izi.el external package. For last 1022y search on buller hame. See izi manual, izi search syntax.  : activates is iflipb external package. Also activates the hydra external package is PEL sets pel-use-hydra option to t.			
Accumulate Text     Diff buffer with its file		: activates nhexi-mode external package used to display and manipulate the content of the current buffer in hexadecimal.			
Locking Buffer     Indirect Buffers		r: activates <b>popup-switcher</b> external package used for popping up a list of buffers. : activates <b>strace-mode</b> external package used to display Linux strace output.			
• GNU Screen Log Render • Buffer View Mode	PEL also provides a Hydra th	a Hydra that manipulates Emacs windows and buffers. See the <u><b>Ewindows</b></u> table for its description.			
Edit Binary File: hexl     nhexl	them, grouping them and op		and manipulation mode, allowing you to list all buffers in a window, filtering them, sorting		
• strace-mode  Last updated on:	2025-04-02	See also Emacs Lisp - Buffers			
Open this PDF file. See also: <u>▼ Help/Info</u>	<f11> b <f1></f1></f11>	(pel-help-pdf &optional OPEN- WEB-PAGE)	Open the <u>■ Buffers</u> 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> useroption is set it's the other way around.		
∑ Customize PEL Buffer Support	<f11> b <f2></f2></f11>	(pel-customize-pel &optional OTHER-WINDOW)	Customize PEL Buffer support: open PEL buffer support specific group.  • If OTHER-WINDOW is non-nil (use <b>C-u</b> ), display in other window.		
© Customize Emacs & external package buffer support	<f11> b <f3></f3></f11>	(pel-customize-library &optional OTHER-WINDOW)	Customize Emacs and external packages related to buffer via their <u>customization groups</u> : <b>Buffer-menu</b> , <b>bs</b> , <u>ibuffer</u> , <u>iflipb</u> , <u>minibuffer</u> , <u>hexl</u> , <u>nhexl</u> , <u>popup-switcher</u> .  • When a prefix argument (like <b>C-u</b> ) opens the buffer inside another window.  • If required file is not already loaded, PEL prompts to load and access its customization.		
Show buffer stats and current window last visited buffer	• <f11> b ? • <f11> ? e b</f11></f11>	(pel-emacs-buffer-stats)	Show buffer statistics: total count of buffers, # of buffer visiting files, # of special buffers and # of internal buffers. Also show the name of previous buffer used in the current window.		
List Buffers	• buffer-menu-open is a	drop-down hierarchical menu. psw	r that you can use to switch to another buffer:		
Open buffer drop-down	• C- <f10></f10>	(buffer-menu-open)	List buffers in a drop-down menu: lists the buffers by major-mode when several buffers of		
menu See also: ∑ Menus	• <f11> b m • C-<down-mouse-1></down-mouse-1></f11>		the same major-mode are opened.  • In graphics mode this can also be invoked using the C- <down-mouse-1>  • Close with C-g</down-mouse-1>		
List open buffers in popup	<f11> b b</f11>	(psw-switch-buffer &optional	Show buffers list menu to switch buffer in a popup window menu.		
menu		ARG)	If ARG show only buffers with files and without * in the beginning/end of buffer na     Requires popup-switcher   PEL activates when pel-use-popup-switcher is		
Show all buffers, including internal hidden buffers	<f11> b a</f11>	(pel-show-all-buffers &optional FILES-ONLY)  Display all buffers, including hidden internal buffers, listed inside a *Buffer List* buffer.  • With optional argument (as with <b>C-u</b> ) displays only buffer associated with files.			
List all buffers using	Do not manipulate internation. • <f11> b B</f11>	al buffers unless you understand the  • (buffer-menu &optional ARG)	consequences. Showing them is meant as an aid for Emacs Lisp code development.  Open the Buffer Menu: lists all buffers except those whose names start with a space		
Buffer Menu Mode	• C-x C-b	(list-buffers & optional ARG)	<ul> <li>(which are for internal use).</li> <li>With prefix argument ARG, show only buffers that are visiting files.</li> <li>buffer-menu also list all single key commands when opening.</li> </ul>		
The Buffer Menu Columns ➡ Customize via <b>Buffer-menu</b>	C: "." for the buffer from which you came, ">" for buffers you mark to be displayed, and "D" for those you mark for deletion. R: has a "%" if the buffer is read-only. M: has a """ if it is modified, or "S" if you have marked it for saving.				
		now the buffer name, the buffer size i	in characters, its major mode, and the visited file name (if any).		
Buffer Menu Mode keys	• ? : Get help • g : Update buffer		: Immediately : immediately		
	• C-n : next buffer in l • SPC : next buffer in l		: immediately : immediately		
	• n : next buffer in l • C-p : previous buffe		: immediately : immediately		
	• p : previous buffe • C-d : mark buffer fo	r in list	: immediately : deleted when pressing <b>x</b>		
	d : mark buffer fo     mark buffer fo	r deletion	: deleted when pressing <b>x</b> : deleted when pressing <b>x</b>		
	• s : save buffer		: saved when pressing <b>x</b>		
	• м-< <b>DEL&gt;</b> : Remove a spe		: immediately if just after marking : immediately if just after marking		
	• u : unmark all ma • x : execute marke	rks on buffer ed commands (delete buffers marke			
	• ~ : mark buffer as • % : toggle read-or		: immediately : immediately		
	1 : display emacs in full emacs screen 2 : Display this buffer & next in horizontal window		: immediately : immediately		
		(next) window with this buffer be displayed in windows	: immediately : when pressing v		
		s marked with in as many windows a			
List buffers using iBuffer	C-x C-b	(ibuffer &optional OTHER-	Begin using lbuffer to show, edit and operate on a list of buffers.		
Mode  ★★ See <u>∑</u> ibuffer-mode		WINDOW-P NAME QUALIFIERS NOSELECT SHRINK FILTER- GROUPS FORMATS)	<ul> <li>PEL binds 'ibuffer' to C-x C-b key sequence.</li> <li>ibuffer provides more functionality, working like dired, allowing to sort by name, size, mode, filtering by mode (hit return on the mode of a buffer). Type <f1> m to get the list of possible actions that can be done on the listed buffers.</f1></li> </ul>		
Switch to Buffer	The switch-to-buffer comm	and uses a prompt at the bottom of	• See <u>\(\bar{\mathbb{E}}\) ibuffer-mode</u> for more information on commands available in ibuffer-mode. the frame.		
Switch to buffer	С-х ь	(switch-to-buffer BUFFER-OR-	Switch window to display the previous, or another buffer (entered at echo area prompt).		
See also: Sampletion/ Input		NAME & optional NORECORD FORCE-SAME-WINDOW)	Switch window to display the previous, or another burner (entered at echo area prompt).  If he invisible buffers have a name that start with a space. To see them type space and tab and a list of those buffers will appear before the list of visible buffers.  To show what is currently used, type:   To change the main completion mode, type:   See  Completion/Input for more information.		
Switch buffer with fzf See also: Sele-mngt, fzf manual, fzf search syntax	<f11> b z</f11>	(fzf-switch-buffer)	Select buffer for current window with a fzf-driven fuzzy search.  • Uses the fzf command line utility for fast & flexible search.  • Requires the fzf.el external package activated by pel-use-fzf.		

<u>Operation</u>	Keystroke	Function Note					
Navigate through Buffers in current window	PEL provides the pel-∑buffer Hydra the gives quick access to commands that changes the buffer shown in the current window.  • To gain access to the keys, type <f7> <f9> key sequence to start the pel-∑buffer Hydra.  • Then type the keys listed in the Hydra table below. Stop the Hydra with <f7>  Requires the hydra external package PEL provides Hydra when pel-use-hydra or the pel-use-iflipb user option is set to t.  For all buffer selection commands you can also use the repeat command key, C-x z or <f5> to repeat the last command quickly. See: Lindo/Redo</f5></f7></f9></f7>						
Activate the pel-∑buffer Hydra	* <f7> <f9></f9></f7>	Buffer   Buffer S		Selection	Flip	Same Mode	Other
**			.: nex		C-n: next C-p: prev	]: next  [: previous	?: hint   <f7>: cancel</f7>
See <u>E Windows</u>	Other keys can be typed when the pel-∑buffer Hydra is active. The Hydra menu shows at the bottom of the frame. Type ? to toggle displaying it.   Solution of the frame of the frame of the frame of the frame. Type ? to toggle displaying it.   Solution of the frame o						
Next/Previous     Buffer	The following commands characters the commands are accessible.					o always available from (	global key sequences.
Switch to next buffer	• C-x <right> • C-x C-<right> • <f11> b n  * <f7> <f9> M-n</f9></f7></f11></right></right>	(next-buffer)		Switch to the next buffer displayed in the current window.			
Switch to previous buffer	• C-x <left> • C-x C-<left> • <f11> b p  * <f7> <f9> M-p</f9></f7></f11></left></left>	(previous-buffer)		Switch to the previous buffer displayed in the current window.  • This command is also available in the pel-∑buffer Hydra as M-p			
Switch to previous buffer in window	<f11> b 1 * <f7> <f9> M-1</f9></f7></f11>	(pel-switch-to-last-used- buffer)	_	Switch buffer in current Used twice returns to the		er previously seen in this	s window.
iflipb: Flip to next/ previous recently visited buffer	The following commands let you flip between recently visited buffers in a way that resembles what Alt-Tab and Alt-Shift-Tab does on Windows.  • A list of buffers is shown in the minibuffer at the bottom of the screen when you use the command. You can see them in the pel-∑buffer Hydra above.  • You can also identify buffer filtering in the iflipb customization group (use <f11> b <f3> and select iflipb to access it).  □ This requires the iflipb external package PEL activates it when pel-use-iflipb user-option is turned on (set to t). This also forces activation of the hydra package because the iflipb commands are bound to the pel-∑buffer Hydra, allowing quick single keystroke access without the use of a prefix key.</f3></f11>				ces activation of the		
Flip to next buffer	• <f11> b C-n * <f7> <f9> C-n</f9></f7></f11>	(iflipb-next-buffer ARG)		Flip to the next buffer in the buffer list.  Consecutive invocations switch to less recent buffers in the buffer list.  Buffers matching 'iflipb-always-ignore-buffers' are always ignored.  Without a prefix argument, buffers matching 'iflipb-ignore-buffers' are also ignored.			
Flip to previous buffer	• <f11> b C-p  * <f7> <f9> C-p</f9></f7></f11>	(iflipb-previous-buffer)		Flip to the previous buffer in the buffer list. Consecutive invocations switch to more recent buffers in the buffer list.			
Cycle Trough buffers using same major-mode	This works with any mode	ng 2 PEL commands cycle the buffers using the same major mode inside the current window. ks with any mode, including special buffer modes.  bindings that start with <f7> <f9> starts a pel-∑buffer Hydra. After the initial key sequence, single key commands are available.</f9></f7>			e available.		
Show next buffer using same major mode	• <f11> b ] * <f7> <f9> ]</f9></f7></f11>	(pel-smb-next &optional REFRESH)		Open next buffer of same major-mode from the registered list.  • Refresh list when wrapping. With optional prefix argument: REFRESH the list of buffers.			
Show previous buffer using same major mode	• <f11> b [ * <f7> <f9> [</f9></f7></f11>	(pel-smb-previous &optional REFRESH)		Open previous buffer of same major-mode from the registered list.  • Refresh list when wrapping. With optional prefix argument: REFRESH the list of buffers.			
Buffer Selection		uffer Selection commands key bindings are also available through the pel-∑buffer Hydra when the <b>hydra</b> package is used. ese commands are using the built-in <b>bs.el</b> library. PEL provides extra commands that extends it.					
Show next buffer in selection	• <f11> b . * <f7> <f9> M</f9></f7></f11>	(pel-bs-next)		Show next buffer in current window.  Next buffer is selected by the list of buffers selected by the Buffer Selection Mode configuration and sorting order last identified. These can be controlled by opening the Buffer Selection Mode with the bs-show command and then using the commands available in this mode, such as: bs-select-next-configuration, bs-toggle-show-all and bs-show-sorted.			
Show previous buffer in selection	• <f11> b , * <f7> <f9> M-,</f9></f7></f11>	(pel-bs-previous)		Show previous buffer in current window.  Next buffer is selected by the same criteria as for pel-bs-next described above.			
∑ Customize buffer selection mode	• <f11> b S</f11>	(bs-customize)		Customization of group bs for Buffer Selection Menu.  • Active configuration can be changed in the bs-show buffer. See below.			
Show Buffer Selection	• <f11> b s</f11>	(bs-show ARG)		Open the <b>bs-mode</b> buffer by splitting the current window  Shows menu of buffers to select and manipulate buffers.  With no prefix argument: show buffers selected by the <b>default</b> configuration.  If a <b>C-u</b> prefix argument: show buffers selected by <b>alternative</b> configuration.  With numeric argument ( <b>M-1</b> , <b>M-2</b> ,) show buffers selected by the <b>nth</b> configuration.  The pre-configured configurations are: all, files, file-and-scratch, all-intern-last.			
Buffer Selection Menu (bs-mode) commands	There are many key commands similar to 'Buffer-menu-mode' for manipulating the buffer list and the buffers themselves. User can move with [up] or [down], select a buffer by RET or [SPC]  Type q to leave Buffer Selection Menu without a selection.  Type ? after invocation to get help on commands available.  With prefix argument ARG show a different buffer list. Function 'bsconfiguration-name-for-prefix-arg' determine accordingly name of buffer configuration.						
Select current line's buffer : visit buffer	• RET • SPC • f	(bs-select)			d buffers the windo I. If there are marke elected in a window	w configuration before s d buffers each marked b	
View current line's buffer	v	(bs-view)			rent line's buffer in View mode. A minor mode for viewing text but not editing it. uffer View Mode below in this table.		
Move point down	• n • <down></down>	(bs-down ARG)		Move point vertically down ARG lines in Buffer Selection Menu.			
Move point up	• p • <up></up>	( <b>bs-up</b> ARG)		Move point vertically up ARG lines in Buffer Selection Menu.			
Refresh Buffer Selection Menu	g	(bs-refresh &rest IGNORE	ED)	Refresh whole Buffer Selection Menu.			
Bury buffer	b	(bs-bury-buffer)		Bury (not kill!) the buffer on this line: move it to the end of buffer list.			
Cycle through buffer line sorting method	S	(bs-show-sorted)			list sorted by next sort aspect. nethods supported are: by name, by size, by mode, by filename, by nothing d).		
Toggle show all buffers	a	(bs-toggle-show-all)		Toggle show all buffers	ouffers / show buffers with current configuration.		

selection configuration : types of buffers iterated through  Prompt for buffer selection configuration  Add a new configuration to display only buffers of this major mode	C C	(bs-select-next-configuration & optional START-NAME)  (bs-set-configuration-and-refresh)  (pel-bs-this-mode-only)	Apply next configuration START-NAME and refresh buffer list.  If START-NAME is nil the current configuration 'bs-current-configuration' will be used.  Cycles through the following methods of buffer cycling: all, files, files-and-scratch, all-intern-last  Ask user for a configuration and apply selected configuration.  Supports tab-based completion.			
selection configuration : types of buffers iterated through  Prompt for buffer selection configuration  Add a new configuration to display only buffers of this major mode	c .	&optional START-NAME)  (bs-set-configuration-and-refresh)	If START-NAME is nil the current configuration 'bs-current-configuration' will be used.     Cycles through the following methods of buffer cycling: all, files, files-and-scratch, all-intern-last  Ask user for a configuration and apply selected configuration.     Supports tab-based completion.			
selection configuration  Add a new configuration to display only buffers of this major mode	•	refresh)	Supports tab-based completion.			
configuration to display only buffers of this major mode		(nel-hs-this-mode-only)	Refresh whole Buffer Selection Menu.			
·	•	(per ba-tilla mode-only)	Add a Buffer Selection configuration for buffer of this mode only.  Add a Buffer Selection that will be named "only-X" where X is the major mode of the current line buffer.  This configuration will only show buffers that use the same major mode.			
Open selected buffer	To iterate through buffers.	• This configuration will only show buffers that use the same major mode.  To iterate through buffers of a specific major mode only, do this:				
Open selected huffer	Open the Buffer Sele     Move point to a buffer     If that mode is cu     Hit to execute pel-     Hit RET to display the	ction Mode buffer: execute bs-show or line of the wanted major-mode. Irrently not displayed, change the co- bs-thi-mode-only and select the mage buffer and dismiss the Buffer Selectorevious buffer of the same major m	r: type <f11> b s  onfiguration to all by typing C all RET first and then move point to the proper line.  najor mode of interest.</f11>			
in other window	0	(bs-select-other-window)	The window configuration before starting Buffer Selection Menu will be restored unless there is no other window. In this case a new window will be created.  • Leave Buffer Selection Menu.			
Open selected buffer in other window - stay in Buffer Selection buffer	C-0	(bs-tmp-select-other-window)	Make the other window select this line's buffer.  The current window remains selected.			
Save buffer	s	(bs-save)	Save buffer on current line.			
Kill buffer	k	(bs-delete)	Kill buffer on current line.			
Toggle buffer read-only status	%	(bs-toggle-readonly)	Toggle read-only status for buffer on current line.  • Uses function 'read-only-mode'.			
Clear buffer modified-	~	(bs-clear-modified)	Set modified flag for buffer on current line to nil.			
flag		(	A Be sure you don't want to save these modifications:  Emacs won't prompt you for that modified buffer when closing.			
Visit tags table file	t	(bs-visit-tags-table)	Visit the tags table in the buffer on this line.  See 'visit-tags-table' bound to <f11> X t in PEL. See X Xref - Cross References.</f11>			
Mark line's buffer to be displayed	m	(bs-mark-current COUNT)	Mark buffers. Move point vertically down COUNT lines.  • COUNT is the number of buffers to mark.			
Mark line's buffer to show always	+	(bs-set-current-buffer-to-show- always &optional NOT-TO- SHOW-P)	Toggle status of buffer on line to 'always shown'.  NOT-TO-SHOW-P: prefix argument.  With no prefix argument the buffer on current line is marked to show always.  Otherwise it is marked to show never.			
Toggle line's buffer show always/never/ normal	М	(bs-toggle-current-to-show)	Toggle status of showing flag for buffer in current line through: never show, always show, show normally			
Unmark previous line buffer to be displayed	DEL	(bs-unmark-previous COUNT)	Unmark previous COUNT buffers.  • Move point vertically up COUNT lines.  • When called interactively a numeric prefix argument sets COUNT.			
be displayed	u	(bs-unmark-current COUNT)	Unmark buffers. Move point vertically down COUNT lines.  • COUNT is the number of buffers to unmark.			
	Ü	(bs-unmark-all)	Unmark all buffers.			
, and the second	• > • C-x >	(scroll-right &optional ARG SET-MINIMUM)	Scroll selected window display ARG columns right.  • Default for ARG is window width minus 2.			
	• < • C-x <	(scroll-left &optional ARG SET- MINIMUM)	Scroll selected window display ARG columns left.  • Default for ARG is window width minus 2.			
	• q • C-c C-c	(bs-kill)	Let buffer disappear and reset window configuration.			
	• C-g • C-]	(bs-abort)	Ding and leave Buffer Selection Menu without a selection.			
Display Help	?	(bs-help)	Display help in the Help buffer.  ⚠ This conflicts with PEL pel-∑buffer hint key which takes precedence.			
Manage Buffers	The following commands sup	pport buffer management: display int	formation, change read-only mode, clone buffer, rename buffer, kill buffer, etc			
	• C-x C-q • <f11> b r</f11>	(read-only-mode &optional ARG)	When the buffer is in read-only mode the <u>mode line</u> shows '%%' on the left side, in the 'ch' area of "cs:ch-fr buf pos line (major minor)".  The <u>manual</u> states: "For a read-only buffer, it shows '%*' if the buffer is modified, and '% %' otherwise."  ▼ See also: the View Mode activating commands toward the end of this table.  • A buffer in View Mode cannot be modified.  • The View Mode may be used to ensure that no modifications are made to a buffer (visiting a file or not).			
Clone buffer	<f11> b c</f11>	(clone-buffer &optional NEWNAME DISPLAY-FLAG)	Create and return a twin copy of the current buffer.  • Unlike an indirect buffer, the new buffer can be edited independently of the old one (if it is not read-only). NEWNAME is the name of the new buffer. It may be modified by adding or incrementing <n> at the end as necessary to create a unique buffer name.  • For example if buffer *Help* is opened it opens another one named *Help*&lt;2&gt; (or *Help*&lt;3&gt; if *Help*&lt;2&gt; already exists, etc)</n>			
Rename a buffer	<f11> b R</f11>	(rename-buffer NEWNAME &optional UNIQUE)	Rename current buffer.  • With optional <b>C-u</b> prefix argument, the name is auto generated to be unique.			
Rename buffer - use unique name	<f11> b U</f11>	(rename-uniquely)	Rename the current buffer by adding ' <number>' to the end.  • Use this if you want multiple *Buffer* or *Info* buffers for example.  • Example: StackExchange: How can I have multiple help buffer with different content</number>			
	• <f11> b k</f11>	(kill-current-buffer)	Kill (close) the current buffer. Does not prompt if there is no change in the buffer.  • PEL also provides a window management Hydra with ability to kill the current buffer.			
O	•		See <u><b>® Windows</b></u> for more info.			
Kill buffer See also: <u>E Windows</u>	• C-x k  * <f7> k</f7>	(kill-buffer &optional BUFFER-OR-NAME)	Kill (close) the current buffer.  Prompt to identify a buffer unless inside a Window Hydra which does not prompt.			
		(iflipb-kill-buffer)	When the iflipb external package, activated by <b>pel-use-iflipb</b> is active, the key is bound to the iflip-kill-buffer which invokes the kill-buffer and maintains the iflipb buffer list state.			
	• C-x 4 0 * <f7> K</f7>	(kill-buffer-and-window)	<ul> <li>Kill the current buffer and delete the selected window.</li> <li>PEL also provides a window management Hydra when the <a href="hydra">hydra</a> package is used. with ability to kill the current buffer and close windows in separate operations.</li> </ul>			

Operation	Keystroke	Function	Note	
Kill some buffer		(kill-some-buffers &optional	Kill some buffers. Asks the user whether to kill each one of them.	
Delete all windows of a		LIST) (delete-windows-on &optional	Deletes all windows showing BUFFER-OR-NAME, by calling 'delete-window' on those	
specific buffer		BUFFER-OR-NAME FRAME)	windows.	
Accumulating Text	Emacs provides the following commands to insert text in other buffers, current buffer, or a file.			
Append region to specified buffer	<f11> b t a</f11>	(append-to-buffer BUFFER START END)	Append marked region of current buffer into the BUFFER specified at prompt before it's point.  • BUFFER: a buffer or the name of a buffer. Creates BUFFER if it doesn't already exist.	
Prepend region to specified buffer	<f11> b t p</f11>	(prepend-to-buffer BUFFER START END)	Prepend marked region of current buffer into the BUFFER specified at prompt after it's point.  • BUFFER: a buffer or the name of a buffer. Creates BUFFER if it doesn't already exist.	
Copy region to specified buffer (replacing old content)	<f11> b t c</f11>	(copy-to-buffer BUFFER START END)	Copy to specified BUFFER the text of the region.  The text is inserted into that buffer, replacing existing text there.  BUFFER: a buffer or the name of a buffer. Creates BUFFER if it doesn't already exist.	
Insert content of specified buffer at point	<f11> b t i</f11>	(insert-buffer BUFFER)	Insert after point the contents of BUFFER.  • Puts mark after the inserted text.  • BUFFER may be a buffer or a buffer name.	
Append region's text to specified file	<f11> b t f</f11>	(append-to-file START END FILENAME)	Append the contents of the region to the end of file FILENAME.  • This does character code conversion and applies annotations like 'write-region' does.	
Diff buffer with file	Use these commands to see See also:   Diff & Merge	the difference between the buffer a	nd its file when a buffer is rising a file and the changes were not saved back to the file.	
Diff buffer with its file	• <f11> b = • <f11> d b</f11></f11>	(diff-buffer-with-file &optional BUFFER	View the differences between BUFFER and its associated file.  • This requires the external program 'diff' to be in your 'exec-path'.	
edit buffer with its file	• <f11> b M-= • <f11> d e b f</f11></f11>	(ediff-current-file)	Start ediff between current buffer and its file on disk.  This command can be used instead of 'revert-buffer'.  If there is nothing to revert then this command fails.	
Locking Buffer	Lock a buffer against: exit, ki	ill or all (both) to prevent accidental	killing of the buffer. Controlled by 'emacs-lock-default-locking-mode' normally set to all.	
Toggle emacs lock-mode	<f11> b L</f11>	(emacs-lock-mode &optional ARG)	Toggle Emacs Lock mode in the current buffer. With prefix arg: prompt for locking mode.  • Normally set to all: buffer locked against killing buffer and exiting Emacs.	
Indirect Buffers	As described in <a href="Emacs Indirect Buffer section">Emacs Indirect Buffer section</a> , "an indirect buffer shares the text of some other buffer, called the base buffer of the indirect buffer.  • In some ways it is a buffer analogue of a <b>symbolic link</b> between files.  • The text of the indirect buffer is always identical to the text of its base buffer; changes made by editing either one are visible immediately in the other.  • But in all other respects, the indirect buffer and its base buffer are completely separate.  • They can have different names, different values of point, different narrowing, different markers, different major modes, and different local variables."			
⊌•	Use indirect buffers to show the same file in 2 or more windows but want to narrow an area in 1 buffer while seeing the complete text in the other window.			
Create indirect buffer explicitly	<f11> b I m</f11>	(make-indirect-buffer BASE- BUFFER NAME &optional CLONE)	Create and return an indirect buffer for buffer BASE-BUFFER, named NAME.  BASE-BUFFER should be a live buffer, or the name of an existing buffer.  NAME should be a string which is not the name of an existing buffer.  Optional argument CLONE non-nil means preserve BASE-BUFFER's state, such as major and minor modes, in the indirect buffer.  CLONE nil means the indirect buffer's state is reset to default values.	
Create indirect buffer of current buffer	<f11> b I c</f11>	(clone-indirect-buffer NEWNAME DISPLAY-FLAG &optional NORECORD)	Create an indirect buffer that is a twin copy of the current buffer.	
	<ul> <li>Give the indirect buffer name NEWNAME. Interactively, read NEWNAME from the minibuffer when invoked with a prefix arg. If NEWNAME is nil or if Not sourced with a prefix arg, NEWNAME defaults to the current buffer's name. The name is modified by adding a '<n>' suffix to it or by incrementing the N in an existing suffix. Trying to clone a buffer whose major mode symbol has a non-nil 'no-clone-indirect' property results in an error.</n></li> <li>DISPLAY-FLAG non-nil means show the new buffer with 'pop-to-buffer'. This is always done when called interactively.</li> <li>Optional third arg NORECORD non-nil means do not put this buffer at the front of the list of recently selected ones.</li> </ul>			
Create indirect buffer of current buffer in another window	• C-x 4 c • <f11> b I w</f11>	(clone-indirect-buffer-other- window NEWNAME DISPLAY- FLAG &optional NORECORD)	Like 'clone-indirect-buffer' but display in another window.	
GNU Screen Log File	GNU Screen log files contain		oreted by the shell but not by Emacs. Use the following command to render the codes.	
Fix the rendering of the log file created by GNU Screen  See also:	<f11> t s</f11>	(pel-screen-log-fix-rendering)	Fix rendering of buffer created by the GNU Screen log.  • It converts the marked area of a buffer, if it is marked, otherwise it processes the entire or the narrowed portion of the buffer. It renders the escape codes, converts the line endings to Unix-style line endings.  • In some cases the log file created by GNU Screen injects one extra line per line. If the 'pel-screen-log-delete-all-consecutive-blank-lines' user-option is set, the function removes them.  • Some artifact main remain after these transformations. To fix them automatically, identify a set of regular expression/replacement string pairs in the 'pel-screen-log-fix-regexp-pairs' user-option.  ⚠ This removes the escape codes from the buffer but renders them using color and other attributes. If you save the file these will no longer be visible unless you first activates the enriched text mode in the buffer to encode the text attributes in a way Emacs will be able	

<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>		
Buffer View Mode	Several commands (view-bu commands are available.  Emacs commands editing moving around in the buff.  Space scrolls forward, De	ffer, etc, see at top of this table) act the buffer contents are not available er. lete scrolls backward.	ctivate the View Mode for a buffer where the buffer is essentially read-only and special le; instead, a special set of commands (mostly letters and punctuation) are defined for command list below.		
Prompt for buffer to view in view-mode	<pre></pre>	(view-buffer BUFFER &optional EXIT-ACTION)	View BUFFER in View mode, returning to previous buffer when done.  • Prompt for buffer to open in view-mode.		
Toggle Buffer view-mode	<f11> b v * <f7> <f9> M-v</f9></f7></f11>	(view-mode &optional ARG)	Toggle view-mode.  When View mode is enabled, commands that do not change the buffer contents are available as usual. Kill commands save text but do not delete it from the buffer. Most other commands beep and tell the user that the buffer is read-only.  The <f7> <f9> M-v Hydra key sequence is available when the hydra package is used.</f9></f7>		
In view-mode no modifications are allowed.	Digits provide p negative negative move to to scroll so scroll for scroll for pEL, S-SPC scroll for general like SPC wellike S	used.  without his message.  rovide prefix arguments. egative prefix argument.  rove to the beginning of buffer.  rove to the end of buffer.  rove the buffer the end of buffer.  rove the control of rove guitar expression, starting after current page.  I means search for a line with no match for regexp.  Roventhes buffer the end of th			
Edit Binary file with hexl	Emacs provides the built-in <a 'hexl-bits'="" (displayed="" 16="" address"="" and="" are="" as="" ascii="" at="" bits,="" characters="" every="" file="" from="" grouped="" hexadecimal="" hexadecimal)="" href="https://memory.org/hem.or&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Open a file in hexl-mode See also: ∑ File-mngt&lt;/td&gt;&lt;td&gt;&lt;f11&gt; f M-x&lt;/td&gt;&lt;td&gt;(hexl-find-file FILENAME)&lt;/td&gt;&lt;td&gt;Edit file FILENAME as a binary file in hex dump format.  • Switch to a buffer visiting file FILENAME, creating one if none exists, and edit the file in 'hexl-mode'.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Toggle hexl mode&lt;/td&gt;&lt;td&gt;&lt;f11&gt; b M-x&lt;/td&gt;&lt;td colspan=3&gt;(hexl-mode &amp;optional ARG)  Toggle the hexl mode: a mode for editing binary files in hex dump format.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th colspan=4&gt;&lt;ul&gt; &lt;li&gt;This is not an ordinary major mode; it alters some aspects of the current mode's behavior, but not all; also, you can exit Hexl mode and return to the previous mode using 'hexl-mode-exit'.&lt;/li&gt; &lt;li&gt;This function automatically converts a buffer into the hexl format using the function 'hexlify-buffer'.&lt;/li&gt; &lt;li&gt;Each line in the buffer has an " in="" into="" li="" line="" offset="" on="" representing="" that="" the="" their="" this="" values="" values).<=""> <li>If any of the characters (displayed as ASCII characters) are unprintable (control or meta characters) they will be replaced by periods.</li> </a>				
Insert a byte in decimal	C-M-d	(hexl-insert-decimal-char ARG)	Insert a character given by its decimal code ARG times at point.		
Insert a byte in octal	С-М-о	(hexl-insert-octal-char ARG)	Insert a character given by its octal code ARG times at point.		
Insert a byte in hex	С-М-х	(hexl-insert-hex-char ARG)	Insert a character given by its hexadecimal code ARG times at point.		
Goto 512-byte page start	С-М-а	(hexl-beginning-of-512b-page)	Go to beginning of 512 byte boundary.		
Goto to 512-byte page end	С-М-е	(hexl-end-of-512b-page)	Go to end of 512 byte boundary.		
Goto 1K end	C-x ]	(hexl-end-of-1k-page)	Go to end of 1KB boundary.		
Goto 1K beginning	C-x [	(hexl-beginning-of-1k-page)	Go to beginning of 1KB boundary.		
-			,		
Goto address entered in hexadecimal	M-g	(hexl-goto-hex-address HEX- ADDRESS)	Go to Hexl mode address (hex string) HEX-ADDRESS.  • Signal error if HEX-ADDRESS is out of range.		
Goto to address entered in	M-i	(hexl-goto-address ADDRESS)	Go to hexl-mode (decimal) address ADDRESS.		
decimal decimal			Signal error if ADDRESS is out of range.		

<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>	
	The nhexi-mode external package used to display and manipulate the content of the current buffer in hexadecimal and manipulate hex dump files.			
with nhexl	PEL downloads installs and activates this package when the <b>pel-use-nhexi</b> user option is set to <b>t</b> .			
	Use the <f11> b <f2> key sequence to open the PEL buffer customization buffer to access this user option.</f2></f11>			
	Once the hexadecimal mode is on, turn it off by executing the <a href="mailto:nhexl-mode">nhexl-mode</a> command again.  Good <a href="mailto:nhexl-mode">nhexl-mode</a> features:  The <a href="mailto:nhexl-mode">nhexl-mode</a> keeps the undo history when you toggle the nhexl mode. Something that the helx mode does not do.  You can use all of the normal navigation commands. You don't need to use specialized commands. PEL <a href="mailto:home">home</a> and <a href="mailto:end-width:nhexl-mode">end-width:nhexl-mode</a> (and width:nhexl-mode) and end commands work.			
Toggle buffer between normal and hex display	<f11> b x</f11>	(nhexl-mode &optional ARG)	Toggle minor mode to edit files via hex-dump format.    Requires the nhexl-mode package 2 activated when pel-use-nhexl user option is t.	
Activate Hex nibble editing mode	<f11> b X</f11>	(nhexl-nibble-edit-mode &optional ARG)	Minor mode to edit the hex nibbles in 'nhexl-mode'.  Note: only works after nhexl-mode has been activated once.  Requires the <a href="mailto:nhexl-mode">nhexl-mode</a> package <a href="mailto:nhexl-mode">nhexl</a>	
Colorize strace log output	<ul> <li>☑ pel-use-strace-mode : activates  strace-mode external package used to display Linux strace output, required for this.</li> <li>Type <f1> o pel-use-strace-mode to open the customization buffer where you can activate it permanently.</f1></li> </ul>			
Turn on strace-mode	<f11> b M-t</f11>	(strace-mode)	Activate the strace-mode to colonize strace log output.	