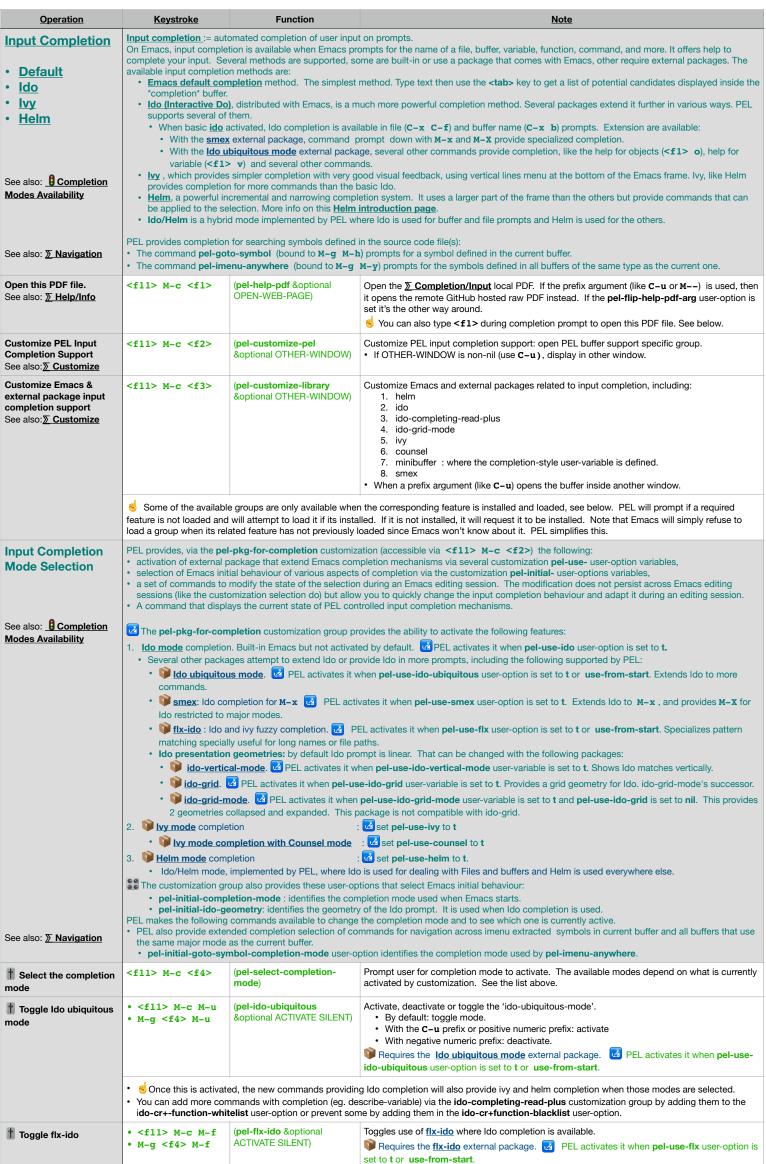
Input Completion (Emacs default, Helm, Ido, Ivy, Ivy/Counsel) z



<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>
† Change Ido Presentation Geometry: default - linear grid -collapsed grid - expanded vertical	• <f11> M-c M-g • M-g <f4> M-g</f4></f11>	(pel-select-ido-geometry)	Select the way Ido shows the match selection: • emacs default : a linear selection • grid-collapsed : ido-grid-mode starting collapsed: type Tab to expand grid • grid-expanded : ido-grid-mode already expanded • vertical At first the geometry used is determined by the value of the pel-initial-ido-geometry user-option, this command changes what is sued by Emacs during the editing session but does not change the user-option value which persists across editing sessions.
	Requires ido-grid and pel-use-ido-grid set to t for the ido-grid selection. Requires ido-grid-mode and pel-use-ido-grid-mode set to t and pel-use-ido-grid set to nil for the ido-grid-mode selections: collapsed-gid and expanded-grid. Requires Ido ubiquitous mode and pel-use-ido-vertical-mode set to t for the vertical selection.		
Show what completion mode is currently used.	<f11> M-c ?</f11>	(pel-show-active- completion-mode)	Display the completion mode currently used, and the Ido prompt geometry.
Default Input Completion	The keys available to e See Emacs Completion The completion-style basic: partial-completion: a	expand or act on the completed on Example for a simple example user-option variable from the incomplete with the same beginning ressive completion: em-l-m	atches emacs-lisp-mode.
	 emacs22: same as basic but ignores text in minibuffer after point substring: must contain text in minibuffer & point position controls matching extension added to beginning, end and where point is initials: aggressive completion style: attempt to complete acronyms and initialisms: for example: <i>lch</i> matches list-command-his The first 3 are available in the default value of completion-style. They can be added by customization: M-x customize-option RET completion-style RET to customize this variable, M-x customize-group RET minibuffer RET access its group or the PEL <f11> M-c <f2> key sequence.</f2></f11> 		point position controls matching extension added to beginning, end and where point is located. empt to complete acronyms and initialisms: for example: <i>lch</i> matches list-command-history. -style. They can be added by customization: -style RET to customize this variable,
Complete word	SPC	(minibuffer-complete-word)	Complete the minibuffer contents at most a single word. After one word is completed as much as possible, a space or hyphen is added, provided that matches some possible completion. Return nil if there is no valid completion, else t.
Complete input	Tab	(minibuffer-complete)	Complete the minibuffer contents as far as possible. Type it twice if no input to list all choices. Return nil if there is no valid completion, else t. If no characters can be completed, display a list of possible completions. If you repeat this command after it displayed such a list, scroll the window of possible completions.
List all possible choices	?	(minibuffer-completion-help &optional START END)	Display a list of possible completions of the current minibuffer contents.
Complete and exit	• RET • C-j	(minibuffer-complete-and-exit)	Exit if the minibuffer contains a valid completion. Otherwise, try to complete the minibuffer contents. If completion leads to a valid completion, a repetition of this command will exit. If 'minibuffer-completion-confirm' is 'confirm', do not try to complete; instead, ask for confirmation and accept any input if confirmed. If 'minibuffer-completion-confirm' is 'confirm-after-completion', do not try to complete; instead, ask for confirmation if the preceding minibuffer command was a member of 'minibuffer-confirm-exit-commands', and accept the input otherwise.
Escape	C-g	(abort-recursive-edit)	Abort the command that requested this recursive edit or minibuffer input.
Select completion list window	• M-v • <pgup></pgup>	(switch-to-completions)	Select the completion list window: move point to the window listing all possible completions.
In Completion Window	The following commands	are available inside the comple	tion window listing all possible completions.
From completion window: • Select a completion	• RET • <mouse-2></mouse-2>	(choose-completion &optional EVENT)	Choose the completion at point. • If EVENT, use EVENT's position to determine the starting position.
Move to next completion	• Tab • <right></right>	(next-completion N)	Move to the next item in the completion list. • With prefix argument N, move N items (negative N means move backward).
Move to previous completion	• S-Tab • <left></left>	(previous-completion N)	Move to the previous item in the completion list.
Quit completion window	q	(quit-window &optional KILL WINDOW)	Quit the window showing it and selects the window showing the minibuffer.
Kill completion buffer	z	(kill-current-buffer)	Kill completion buffer it and delete the window showing it.
Ido Input Completion	Emacs also provides the Ido (Interactive Do) completion mechanism in a separate package, part of Emacs distribution but not activated by default. PEL activates the following extra Ido features when Ido mode is selected: Ido mode used everywhere, which for Ido mode means for both file and buffer prompts. It does: (ido-everywhere 1) Flex matching is enabled. Disable need for confirmation when creating new buffers with C-x b It does: (setq ido-create-new-buffer 'always) Ido mode supports different prompts and has different keys valid for these prompts. There are several key sequences valid for all prompts and some valid for each prompt. The prompt types are listed following the key sequence that opens it: C-x C-b Prompt for buffers C-x C-d Prompt for directory. C-x d Prompt for directory.		
	 For file prompting, Ido propose files in the current directory but can propose others. The prompt in Ido mode remembers direct visited in the past (even in previous Emacs sessions) so it is able to propose files in different directories than the one holding to current buffer. When trying to open a new file and want to avoid ido from proposing matches, type C-f to exit Ido mode, then type yo However, if you want to open a file in a directory previously visited use completion: ido will be able to find it! Ido has a large number of key bindings, listed in the next 4 sections. 		o it is able to propose files in different directories than the one holding the file visited in the lido from proposing matches, type C-f to exit Ido mode, then type your new file name. previously visited use completion: ido will be able to find it!
all prompts	Commands available in all Ido prompts		
• Help		,	o prompt even though focus might move to the new PDF display window.
Open this <u>Sompletion/Input PDF</u> file or the web page See also: <u>Help/Info</u>	<f12> <f1></f1></f12>	(pel-help-on-completion- input &optional OPEN-WEB- PAGE)	 Open the input completion help PDF file. With a prefix (like C-u) use the default browser to open the GitHub web page. Note that if your browser can render PDF content you will then be able to easily navigate across PDF pages that have several web links.

<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>
Matcher control		ands control various aspects of last are available for all Ido geome	Ido matching mechanism. tries, except C-p not available in grid. The <f12> C-p</f12> is provided to replace it.
Toggle inclusion of ignored files.	C-a	(ido-toggle-ignore)	Toggle ignoring items for the current prompt: In ido-buffer: toggle ignoring special buffers identified in the 'ido-ignore-buffers' user-option. In ido-find-file: toggle ignoring files specified with 'ido-ignore-files' user-option, files with extensions listed in 'completed-ignored-extensions' dired user-option (when 'ido-ignore-extension' user-option is non-nil) For example, traditional behaviour is: not to list buffers whose names begin with a space character, not to list files whose names begin with a #, for which the regexp is '\'#', Customize these user-option variables in the ido customization group.
Toggle case folding • when on: lower case letter match uppercase	• C-c • <f12> c</f12>	(ido-toggle-case)	Toggle the value of 'ido-case-fold' which controls whether searching for buffer or file name should ignore case. The C-c binding is often hidden by the C-c key prefix used by various packages. PEL adds the <f12> C-c key binding to the common ido key map for that purpose. This is quite useful in OS that treat their file names are can sensitive names (like Unix and Linux, but unfortunately not MacOS!) or just if you want to quickly access names that have specific upper or lower case letters in it. For example using case sensitive matching will help select a Makefile.</f12>
Toggle <u>prefix matching</u> <u>method</u>	• C-p • <f12> p</f12>	(ido-toggle-prefix)	Toggle the value of user-option variable 'ido-enable-prefix'. It's nil by default. Non-nil means only match if the entered text is a prefix of file name. This behavior is like the standard Emacs completion. If nil, match if the entered text is an arbitrary substring. For example: "base" will match pel—base.el if ido-enable-prefix is nil, but no it is is t. The C-p key is hidden, reused for something else in ido-grid-mode. PEL provides the <f12> C-p to make the command available everywhere.</f12>
Toggle regular expression matching See also: <u>∑ Search/</u> Replace	C-t	(ido-toggle-regexp)	Toggle the value of 'ido-enable-regexp' to enable Ido to perform matching using regular expressions. This is nil (off) by default. You can customize this user-option variable. Regular expression matching is useful to select file with specific extensions. See <u>Search/Replace</u> for Emacs regular expression meta characters.
· Completion		ands control various aspects of last are available for all Ido geomet	
Show all possible completions	?	(ido-completion-help)	Show all possible completions in a completion list buffer.
Complete current selection	Tab	(ido-complete)	Try and complete the current pattern amongst the item names. • If several candidates, show the list in the *Ido Completions* buffer.
Complete current selection or insert space	SPC	(ido-complete-space)	Try completion unless inserting the space makes sense. • When space cannot be accepted as input, open a completion list buffer. • With list buffer already opened, scroll one page down and roll back to top.
Narrow list of candidates to current list of matching items.	• C-SPC • C-@	(ido-restrict-to-matches &optional REMOVEP)	Set current item list to the currently matched items. Further match only inside this narrowed list. • With prefix argument, remove the currently matched items instead and start matching against the remaining items.
Undo/redo last Ido "directory merge" proposing file in another directory	C-z	(ido-undo-merge-work- directory &optional TEXT TRY REFRESH)	Undo or redo last Ido directory merge operation. • If no merge has yet taken place, toggle automatic merging option. Ido "directory merge" occurs when trying to match a file name found in other directory.
Select match, create buffer/file if none	c-j	(ido-select-text)	Select entered name without attempt for completion. If no buffer or file exactly matching the prompt exists, create a new one. buffer: prompt for confirmation as controlled by `confirm-nonexistent-file-or-buffer' and `ido-create-new-buffer' user-options. file: prompt for confirmation as controlled by `confirm-nonexistent-file-or-buffer' user-option.
Select first match	• C-m • RET	(ido-exit-minibuffer)	Exit minibuffer, but make sure we have a match if one is needed. • Select the first element in the list of possible match.
Match history		cted it is stored in the history. Es are available for all Ido geomet	Elements from the history can be retrieved with the following commands. tries.
Select next match	• C • C-s • <right></right>	(ido-next-match)	Move to next match element. Put first element of 'ido-matches' at the end of the list.
Select previous match	• C-, • C-r • <left></left>	(ido-prev-match)	Move to last match element. Put last element of 'ido-matches' at the front of the list.
Get previous selection using regexp	M-r	(previous-matching-history-element REGEXP N)	Find the previous history element that matches REGEXP. • (Previous history elements refer to earlier actions.) • With prefix argument N, search for Nth previous match. • If N is negative, find the next or Nth next match. • Normally, history elements are matched case-insensitively if 'case-fold-search' is non-nil, but an uppercase letter in REGEXP makes the search case-sensitive. • See also 'minibuffer-history-case-insensitive-variables'.
Edit user input Switch mode	Edit and move point inside user input used as the basis for the match search. Use these to modify the user input to update matching request. These do not change the order of matches or their position. These commands are available for all Ido geometries.		
Delete next char or enter Dired	C-d	(ido-magic-delete-char ARG)	Delete following char in user input or perform magic action. • Before any user entry for item matching in the following file and directory prompt ido functions, preform the following: • ido-dired C-d enter 'dired' on current directory.' • ido-find-file C-d enter 'dired' on current directory. • ido-list-directory C-d enter 'dired' on current directory.
Move backward in user-input or change to buffer prompt	С-Ь	(ido-magic-backward-char ARG)	Move backward in user input. Inside directory path move up one directory level. • Before any user entry for item matching, on the left-most character switch to a buffer prompt selected depending on the currently executing command: • ido-buffer C-b fallback to 'switch-to-buffer' • ido-dired C-b switch to 'ido-buffer' • ido-find-file C-b switch to 'ido-buffer' • ido-list-directory C-b switch to 'ido-buffer'
Move forward in user input or change to non-Ido find-file	C-f	(ido-magic-forward-char ARG	Move forward on user-input. • Before any user entry item matching, switch to a buffer prompt selected depending on the currently executing command: • ido-buffer C-f switch to 'ido-find-file'. • ido-dired C-f fallback to non-ldo 'dired'. • ido-find-file C-f fallback to non-ldo 'find-file'. • ido-list-directory C-f fallback to non-ldo brief 'dired'.

<u>Operation</u>	<u>Keystroke</u>	Function	Note
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Enter non-matching edit mode	C-e	(ido-edit-input)	Switch to a temporary non-matching edit mode for editing the absolute buffer/file/directory name entered so far with Ido; terminate by RET to return to matching mode. • If cursor is not at the end of the user input, move to end of input. • When this is selected the matching mechanism is paused. It restarts with RET .
Take/edit first match	M-SPC	(ido-take-first-match)	Use first matching item as input text. Leave the cursor at the end of input text.
			Suseful, like C-e to edit a match and create a new file with similar name. Then type C-j to
			force Ido to use that name and open a new file.
• Escape	Exit the Ido prompt.		
Escape prompt	C-g	(minibuffer-keyboard-quit)	Abort the command that requested this recursive edit or minibuffer input.
buffer prompts	1 ' '	s, all common commands are av s are available for all Ido geome	vailable plus the commands listed below. See <u>∑ Buffers</u> tries.
Change to file prompt	C-x C-f	(ido-enter-find-file)	Drop into 'find-file' from buffer switching.
Change to standard	С-ж С-в	(ido-fallback-command	Fallback to 'switch-to-buffer': standard Emacs prompt for buffer.
buffer prompt See also: <u>∑ Buffers</u>		&optional FALLBACK- COMMAND)	See <u>Buffers</u> for more information on switch-to-buffer command.
Bury buffer	• C-S-b • <f12> b</f12>	(ido-bury-buffer-at-head)	Bury the buffer at the head of the Ido matches, moving it a the end of the list of matching buffers, before the name of current buffer.
Kill buffer identified as the first match	C-k	(ido-kill-buffer-at-head)	Kill the buffer at the head of 'ido-matches'. • If cursor is not at the end of the user input, delete to end of inpu
Toggle use of virtual	C-o	(ido-toggle-virtual-buffers)	Toggle the use of virtual buffers.
buffers			 With virtual buffers on, you see names of buffers that have been opened recently even if they have been closed since then. This includes files recently opened. This does not include special buffers. Use C-a to toggle visibility of special buffers.
dir prompts		lirectory related prompts, all cor s are available for all Ido geome	mmon commands are available plus the commands listed below. See <u>∑ File-mngt</u> tries.
Change to buffer prompt	C-x C-b	(ido-enter-switch-buffer)	Drop into 'ido-switch-buffer' from file switching.
Change to non-ido listing directory	C-x C-f	(ido-fallback-command &optional FALLBACK- COMMAND)	Drop into a non-ido directory listing command: no interpretation, no proposal, accept input as typed.
Enter Dired buffer	C-x C-d	(ido-enter-dired)	Drop into 'dired' from file switching: open the Dired buffer with current directory name.
Next directory in search	<down></down>	(ido-next-match-dir)	Find next directory in match list. If work directories have been merged, cycle through directories for first matching file.
Previous directory in search	<up></up>	(ido-prev-match-dir)	Find previous directory in match list. If work directories have been merged, cycle through directories for first matching file.
To next directory in list	• <m-up> • M-p</m-up>	(ido-prev-work-directory)	Change to next working directory in list.
To previous directory in list	• <m-down> • M-n</m-down>	(ido-next-work-directory)	Change to previous working directory in list.
Delete char backwards to go up 1 directory level	DEL Shackspace>	(ido-delete-backward-updir COUNT)	Delete char backwards, or at beginning of buffer, go up one level.
Delete chars backwards to go up 1 directory level	M -≪	(ido-delete-backward- word-updir COUNT)	Delete all chars backwards, or at beginning of buffer, go up one level.
Go up 1 directory level	c- ⊗	(ido-up-directory &optional CLEAR)	Go up one directory level.
Re-read directory	C-1	(ido-reread-directory)	Read current directory again. May be useful if cached version is no longer valid, but directory timestamp has not changed (e.g. with FTP or on Windows).
Wide directory	M-d	(ido-wide-find-dir-or- delete-dir &optional DIR)	Prompt for DIR to search for using 'find', starting from current directory. • If input stack is non-empty, delete current directory component.
Move to previous directory, push it in list of choices.	M-b	(ido-push-dir)	Move to previous directory in file name, push current input on stack.
Previous directory in search	M-v	(ido-push-dir-first)	Move to previous directory in file name, push first match on stack.
Expand absolute path and leave Ido until RET	M-f	(ido-wide-find-file-or-pop- dir ARG)	Expand absolute path of the directory and leave Ido prompting mode until RET is typed.
Remove directory from history	M-k	(ido-forget-work-directory)	Remove current directory from the history
Make directory	M-m	(ido-make-directory &optional DIR)	Prompt for DIR to create in current directory.
Show next element in search history	<pgdn></pgdn>	(next-history-element N)	Puts next element of the minibuffer history in the minibuffer. With argument N, it uses the Nth following element.
Previous file name	М-о	(ido-prev-work-file)	Change to previous working file name in list. These 2 commands seem to have invalid docstrings, I assume the function names are correct. They move from file to file but i's not obvious what the direction is. More investigation is needed.
Next file name	M-C-o	(ido-next-work-file)	Change to next working file name in list.
Show previous element in search history	<pgup></pgup>	(previous-history-element N)	Puts previous element of the minibuffer history in the minibuffer. With argument N, it uses the Nth previous element.
Search for file matching input	M-s	(ido-merge-work- directories)	Search (and merge) work directories for files matching the current input string. • This searches in all Ido remembered directories, supporting the match mechanisms. • For example, if you want to open the file std_base_type.h while editing some Python file but you know you visited a C directory that had that file, type "_base" followed by M-s
file prompts		s, all common commands, directs are available for all Ido geome	d commands and the following commands are available. See <u>File-mngt</u> tries.
Delete disk file at head	C-k	(ido-delete-file-at-head)	Delete disk file identified at the head of the matches. Prompt for deleting the file. Then return to the prompt.
Insert word at point in file-name prompt	C-0	(ido-copy-current-word ALL)	Append the word located at the location of the currently edited buffer (used just before the prompt stated) to the file name used in the prompt. • This is a way to quickly build a file name using the current directory and the new word (which will include the file extension if there is any in the word at point).
	1		

Insert file name of current	G		
	C-W	(ido-copy-current-file-name	Insert file name of current buffer.
buffer to prompt		ALL)	 If repeated, insert text from buffer instead. Use this to create or search for file with the same name as but with a different extension than current one.
	M-1	(ido-toggle-literal)	Toggle literal reading of this file.
file			 Affects next selection of file with RET. When reading a file literally, Emacs visit it in Fundamental mode and does not interpret the type of file, does not encode or decode, and does not use the major mode normally associated with the file.
Ivy/Counsel/Swiper			upport over a large number of packages.
See:	 Ivy is easy and intuitive to use; it shows all potential candidates on several lines. It supports several commands. The commands and key bindings are listed in the following sections. 		
Ivy Manual Ivy, Counsel, Swiper Tutorial	this information.		bugh Ivy provides a well written help page that is accessible with C-h m and contains most of when the pel-use-ivy user-option is set to t .
Open this <u>∑ Completion/</u>	<f12><f1></f1></f12>	(pel-help-on-completion-	Open the input completion help PDF file.
Input PDF file or the web page		input & optional OPEN-WEB-PAGE)	 With a prefix (like C-u) use the default browser to open the GitHub web page. Note that if your browser can render PDF content you will then be able to easily
		,	navigate across PDF pages that have several web links.
See also: <u>Nelp/Info</u>			 Use the C-h key prefix to access Emacs help commands, as PEL uses <f1> for this command.</f1>
Help for Ivy	C-h m	(ivy-help)	Open a window with the help for 'ivy'.
Using ivy Hydra	 Enter Hydra with C-o When in Hydra, C-o or i resumes editing. Hydra simplify key strokes, for example: C-n C-n C-n is C-o jjjj in Hydra. Besides certain shorter keys, Hydra shows useful info such as case folding and the current action. Additionally, here are the keys that are otherwise not bound: < and > adjust the height of the minibuffer. c (ivy-toggle-calling) - toggle calling the current action each time a different candidate is selected. M (ivy-rotate-preferred-builders) - rotate regex matcher. w and s scroll the actions list. Minibuffer editing is disabled when Hydra is active. 		
	Requires the hydra ext	ternal package 🛂 PEL provides	s Hydra when pel-use-hydra user option is set to t .
Start ivy Hydra	C-o	(hydra-ivy/body)	Invokes Hydra menus with key shortcuts.
		-UUU:**F1 *scratch*	All (1,0) (Lisp Interaction ivy WK Fly ² Anzu ElDoc) Cancel Options Action w/s/a: [1/3] default
		k follow occUr h + 1 done j go 1/89 Find file: ~/d pelbase.el pelmacros.el pelmys-macros.el pel-align.el pel-autocomplete.el pel-autoload.el pel-autoloads.el	insert c: calling off Case-fold: auto oops M: matcher ivy Truncate: t : shrink/grow Definition of this menu lev/elisp/pel/^pelel\$
Ivy Matcher control	lvy supports several match control engines (matchers). They are all regexp-based: • ivy-regex-plus : spaces separating words match any characters • ivy-regex-ignore-order : iyy-regex tokens : ignore order of regexp tokens		
Change ivy matcher	• <u>ivy-regex-fuzzy</u> C-o M	(hydra-ivy/ivy-rotate-	er with a wildchar and uses flx package scoring mechanism if it is installed. Changelyy matcher, rotating from regex-plus, regexp-ignore-order and regexp-fuzzy as
		preferred-builders)	described above. • Type C-o or i to exit lvy Hydra and continue typing selection.
Keys for selection navigation	Ivy display selections over	r a set of lines. Use the following	ng keys to navigate through them.
Select next candidate	• C-n • <down></down>	(ivy-next-line)	Select next candidate
Select previous candidate	• C-p • <up></up>	(ivy-previous-line)	Select previous candidate
Scroll to next page	C-v	(ivy-scroll-up-command)	Next page of candidates
Scroll to previous page	M-v	(ivy-scroll-down-command)	Previous page of candidates
Select first candidate	M-<	(ivy-beginning-of-buffer)	Select first candidate
Select last candidate	M->	(ivy-end-of-buffer)	Select last candidate
Keys for single selection	The following commands	act on a single item selection.	
Select candidate end exit	• C-m • RET	(ivy-done)	Exit the minibuffer with the selected candidate. • Exit with the current action.
Select item and execute single action	М-о	(ivy-dispatching-done)	Select item and prompt for a specific action. One of: • o: default operation for the context. • i: insert copied textin buffer • w: copy selection text
Select candidate/ continue directory completion	C-j	(ivy-alt-done &optional ARG)	Exit the minibuffer with the selected candidate. • When the candidate is a directory, enter it. Otherwise, exit with the current action. • When ARG is t, exit with current text, ignoring the candidates.
	Tab	(ivy-partial-or-done)	Complete the minibuffer text as much as possible. • Attempt partial completion, extending the current input as much as possible. • Tab Tab is the same as C-j.

<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>
	С-м-ј	(ivy-immediate-done)	Exit the minibuffer with current input instead of current candidate. Exit with the current action, calling it on the current input instead of the current candidate. This is useful especially when creating new files or directories - often the input will match an existing file, which you don't want to select.
Select a candidate with avy	• C-' • M-H	(ivy-avy)	Select a candidate from the current page with avy and exit with the current action. Any works by typing 2 characters that are replaced with a highlight to use. The C-' binding only works in graphics mode. When pel-use-avy is t, PEL adds the M-H key binding that works also in terminal mode. Requires the avy external packages PEL activates both of them when the pel-use-avy user option is set to t.
Keys for multiple selections	The following commands	act on a multiple item selection	n, which is used in some context.
	C-M-m	(ivy-call)	Non-exiting version of C-m
	C-M-n	(ivy-next-line-and-call)	Combines C-n and C-M-m .
	С-М-р	(ivy-previous-line-and-call)	Combines C-p and C-M-m.
	С-М-о	(ivy-dispatching-call)	Non-exiting version of M-o
Keys that alter minibuffer input	The following commands	modify the user input, using the	e history of previously selected items.
Next input in history	M-n	(ivy-next-history-element)	Select the next history element or symbol/URL at point.
Previous input in history	М-р	(ivy-previous-history- element)	Select the previous history element or symbol/URL at point.
	C-r	(ivy-reverse-i-search)	Start a recursive completion session to select a history element.
	M-j	(ivy-yank-word)	Insert the sub-word at point into the minibuffer.
Narrow selection to current matches	• S-SPC • C-SPC	(ivy-restrict-to-matches)	Deletes the current input, and resets the candidates list to the currently restricted matches. • This is how Ivy provides narrowing in successive tiers. • The S-SPC binding only works in graphics mode. PEL adds the C-SPC key binding that works also in terminal mode.
• Other			
Copy selections in kill ring	M-w	(ivy-kill-ring-save)	Copies the selected candidates to the kill ring; when the region is active, copies the active region.
Saving current completion in buffer			
List selection in separate buffer	C-c C-o	(ivy-occur)	Saves the current candidates to a new buffer; the list is active in the new buffer.
Select item from buffer	• RET • <mouse-1></mouse-1>	(ivy-occur-press-and- switch)	Used in the new buffer calls the appropriate action on the selected candidate.
Helm Input Completion	The <u>Helm</u> external package is very powerful and comes with a large set of features. • It does not use the minibuffer and does not use the <tabs "a="" (as="" (for="" <f11="" a="" action="" actions="" after="" allowing="" also="" and="" as="" b="" basic="" be="" buffer="" but="" c-f="" c-x="" can="" closes="" comes="" command="" commands="" commands,="" completion="" completion;="" comprehensive="" config="" configuration="" customize="" customize-group="" customized.="" described="" document="" document.="" does="" enter="" executing.="" extended="" extensions="" file="" file(s).="" filter="" find="" for="" helm="" helm"="" in="" input="" is="" it="" it.="" its="" just="" keep="" key="" league="" like="" list="" list,="" m-x="" made="" match="" matches="" more="" most="" navigate="" need="" normally="" not="" of="" on="" once="" one="" open="" opened.="" opening="" or="" other="" overview="" own:="" package="" part="" pattern="" pattern.="" pel="" perform="" potential="" probable="" processes="" provides="" refine="" resize="" right="" root.="" running="" screen="" search="" see="" see.="" select="" selection="" selections="" set="" several="" shots.="" shows="" similar="" some="" such="" switch="" text="" that="" the="" title="" to="" top="" top.="" type="" updated="" values="" want="" were="" when="" will="" window="" with="" you="" your="" •=""> <f2> g helm. (See also:) Customize) PEL sets the Helm global prefix to be C-c h. Once helm mode is active (or ido/helm mode) you can execute global Helm commands via that prefix key.</f2></tabs>		
Operation inside Helm buffer	Helm buffer windows opens up as soon as you launch a Helm session. The following sections describe the commands available inside Helm buffer window.		
Resize Helm Window	Use the following comma	and to reposition the Helm buffe	r window from horizontal to vertical, going through the 4 possible quadrants of the frame.
Resize Helm window	C-t	(helm-toggle-resplit-and- swap-windows)	Multi key command to re-split and swap helm window. • First call runs 'helm-toggle-resplit-window', and second call within 1s runs 'helm-swap-windows'.
Navigate Helm Pattern buffer	The following commands	move the currently selected pa	ttern line in the Helm pattern buffer list
Move to next pattern	• C-n • <down></down>	(helm-next-line &optional ARG)	Move selection to the next ARG line(s). • When numeric prefix arg is > than the number of candidates, then move to the last candidate of current source (i.e. don't move to next source).
Move to previous pattern	• C-p • <up></up>	(helm-previous-line &optional ARG)	Move selection to the ARG previous line(s). • Same behavior as 'helm-next-line' when called with a numeric prefix arg.
Move down 1 page	• C-v • <pgdn></pgdn>	(helm-next-page)	Move selection forward with a pageful.
Move up 1 page	• M-v • <pgup></pgup>	(helm-previous-page)	Move selection back with a pageful.
Move to top of list	M-<	(helm-beginning-of-buffer)	Move selection at the top of helm buffer list.
Move to end of list	M->	(helm-end-of-buffer)	Move selection at the bottom of helm buffer list.
Select patterns in Helm Pattern buffer	The following commands	, available only for some input li	sts, allow you to mark several patterns to be processed.
Toggle line selection	• C-SPC • C-@	(helm-toggle-visible-mark ARG)	Toggle helm visible mark at point ARG times. If ARG is negative toggle backward.
Select all	м-а	(helm-mark-all &optional ALL)	Mark all visible unmarked candidates in current source. • With a prefix arg mark all visible unmarked candidates in all sources.

Operation	<u>Keystroke</u>	Function	Note
Operate on selection	The following commands are used to act on the selected items from the Helm list		
Copy Helm selection to current buffer	• C-c C-i • C-c <tab></tab>	(helm-copy-to-buffer)	Copy selection or marked candidates to 'helm-current-buffer'. • Note that the real values of candidates are copied and not the display values.
Act on current selection(s)	RET	(helm-maybe-exit- minibuffer)	If Helm session has completed the search and is displaying the result, exit the helm session and act on the current selection, doing what corresponds to the command that launched the Helm session. The action applies to all selected candidates and is applied inside the window that was current when the Helm session started. so if point is inside window A when you issue a C-x C-f command to find a file and select several files then these files will be opened in buffers whose window will split the area of the previous window A.
Act on current selection(s) List possible actions First is the native action Other possible actions follow. The list depends on the original command.	• <tab> • C-i</tab>	(helm-select-action)	Select an action for the currently selected candidate(s). If action buffer is selected, back to the helm buffer. If several actions are possible, display a menu of possible actions, their assigned function key (for the first 12 possible action), a short descriptive link that may include possible key binding for the action. The list of possible actions can be quite long. For example, the list of actions shown in a Helm session opened to visit a file can include about 50 different actions that range from just visiting the file to diffing it, making a backup, compiling it, opening in hexadecimal editing, etc The action applies to all selected candidates and is applied inside the window that was current when the Helm session started. so if point is inside window A when you issue a C-x C-f command to find a file and select several files then these files will be opened in buffers whose window will split the area of the previous window A.
Perform action on current pattern without quitting Helm	• C-j • C-M-i	(helm-execute-persistent- action &optional ATTR SPLIT)	Perform the associated action ATTR without quitting helm. • The action applies to the current pattern, not lines that might have been selected.
Helm Help	Once Helm is running the following command open Helms manual.		
Open Helm Manual (in Org mode format)	• C-h m • C-c ?	(helm-help)	Generate helm's help according to 'help-message' attribute. If 'helm-buffer' is empty, provide completions on 'helm-sources' to choose its local documentation. If source doesn't have any 'help-message' attribute, a generic message explaining this is added instead. The global 'helm-help-message' is always added after this local help.
Launching Helm Search	The rest of this table	needs to be completed.	
Helm special commands	Helm provides the following commands that integrate with other tools. With PEL, when Helm or Ido/Helm mode is active the <f11> h key prefix is active giving quick access to these useful helm commands.</f11>		