

# Readline VI Editing Mode Cheat Sheet

## Default Keyboard Shortcuts for Bash

Shortcut	Description
<i>Switching to Command Mode:</i>	
<b>ESC</b>	Switch to <b>command</b> mode.
<i>Commands for Entering Input mode:</i>	
<b>i</b>	Insert before cursor.
<b>a</b>	Insert after cursor.
<b>I</b>	Insert at the beginning of line.
<b>A</b>	Insert at the end of line.
<b>c</b> <movement command>	Change text of a movement command <movement command> (see below).
<b>C</b>	Change text to the end of line (equivalent to <b>c\$</b> ).
<b>cc</b> or <b>S</b>	Change current line (equivalent to <b>0c\$</b> ).
<b>s</b>	Delete a single character under the cursor and enter input mode (equivalent to <b>c[SPACE]</b> ).
<b>r</b>	Replaces a single character under the cursor (without leaving command mode).
<b>R</b>	Replaces characters under the cursor.
<b>v</b>	Edit (and execute) the current command in a text editor (an editor in <b>\$VISUAL</b> and <b>\$EDITOR</b> variables or <b>vi</b> ).
<i>Basic Movement Commands (in command mode):</i>	
<b>l</b> or <b>SPACE</b>	Move one character right.
<b>h</b>	Move one character left.
<b>w</b>	Move one word or token right.
<b>b</b>	Move one word or token left.
<b>W</b>	Move one non-blank word right.
<b>B</b>	Move one non-blank word left.
<b>e</b>	Move to the end of the current word.
<b>E</b>	Move to the end of the current non-blank word.
<b>0</b>	Move to the beginning of line.
<b>^</b>	Move to the first non-blank character of line.
<b>\$</b>	Move to the end of line.
<b>%</b>	Move to the corresponding opening/closing bracket ( <b>()</b> 's, <b>[]</b> 's and <b>{}</b> 's).
<i>Character Finding Commands (these are also Movement Commands):</i>	
<b>fc</b>	Move right to the next occurrence of <i>c</i> .
<b>Fc</b>	Move left to the previous occurrence of <i>c</i> .
<b>tc</b>	Move right to the next occurrence of <i>c</i> , then one char backward.
<b>Tc</b>	Move left to the previous occurrence of <i>c</i> , then one char forward.
<b>;</b>	Redo the last character finding command.
<b>,</b>	Redo the last character finding command in opposite direction.
<b> </b>	Move to the <i>n</i> -th column (you may specify the argument <i>n</i> by typing it on number keys, for example, <b>20 </b> ).

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<i>Deletion Commands:</i>	
<b>x</b>	Delete a single character under the cursor.
<b>X</b>	Delete a character before the cursor.
<b>d</b> <movement command>	Delete text of a movement command <movement command> (see above).
<b>D</b>	Delete to the end of the line (equivalent to <b>d\$</b> ).
<b>dd</b>	Delete current line (equivalent to <b>0d\$</b> ).
<b>CTRL-w</b>	Delete the previous word.
<b>CTRL-u</b>	Delete from the cursor to the beginning of line.
<i>Undo, Redo and Copy/Paste Commands:</i>	
<b>u</b>	Undo previous text modification.
<b>U</b>	Undo all previous text modifications on the line.
<b>.</b>	Redo the last text modification.
<b>y</b> <movement command>	Yank a movement into buffer (copy).
<b>yy</b>	Yank the whole line.
<b>p</b>	Insert the yanked text at the cursor (paste).
<b>P</b>	Insert the yanked text before the cursor.
<i>Commands for Command History:</i>	
<b>k</b>	Move backward one command in history.
<b>j</b>	Move forward one command in history.
<b>G</b>	Move to the history line <i>n</i> (you may specify the argument <i>n</i> by typing it on number keys, for example, <b>15G</b> ).
<b>/string</b> or <b>CTRL-r</b>	Search history backward for a command matching <i>string</i> .
<b>?string</b> or <b>CTRL-s</b>	Search history forward for a command matching <i>string</i> (remember that on most machines CTRL-s stops the output to the terminal (CTRL-q starts output) and you might need to change it with stty command).
<b>n</b>	Repeat search in the same direction as previous.
<b>N</b>	Repeat search in the opposite direction as previous.
<i>Completion Commands:</i>	
<b>TAB</b> or <b>CTRL-i</b> or <b>=</b>	List possible completions.
<b>*</b>	Insert all possible completions.
<i>Miscellaneous Commands:</i>	
<b>~</b>	Invert the case of the character under cursor, and move a character right.
<b>#</b>	Prepend <b>#</b> (comment character) to the line and send it to the history list.
<b>-</b>	Inserts the <b>n</b> -th word of the previous command in the current line.
<b>0, 1, 2, ...</b>	Sets the numeric argument.
<b>CTRL-v</b>	Insert a character literally (quoted insert).
<b>CTRL-t</b>	Transpose (exchange) two characters.

## Examples and Tips

- Some of the commands take a <movement command>. These commands apply the movement to themselves. For example, **d\$** would use \$ as a movement, which moves the cursor to the end of the line, thus, the whole **d\$** would delete text from the current cursor position to the end of the line. Another example, a command **cfA** would use **fA** as a movement, which finds the next occurrence of the character **A**, thus, the whole command would change the line up to character **A**.
- Use **CTRL-v** to insert character literally, for example, **CTRL-v CTRL-r** would insert CTRL-r in the command line.
- See **man bash**, **man readline**, and built in **bind** command for modifying the default behavior!

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