

VI Editor Quick Reference Card

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VI (pronounced "vee eye") is the standard Unix editor. Unlike PC editors and word processors, VI is a "modal" editor, which means that things you type on the keyboard are sometimes commands and sometimes input, depending on what you have typed in before. There is no way to tell which "mode" you are in in VI just by looking at the screen, but you rapidly learn to keep track.

VI has two modes: *command mode*, which is the default, and *insert mode*, which inserts characters typed at the cursor. (There is no mode corresponding to the "replace" (overtyping) mode of some PC editors - replacements must be done with an explicit "change" command.) Insert mode is entered by typing one of the "entering text" or "changing text" commands described below; the return to command mode when you are finished entering text is done by typing the ESC (escape) key. You must be careful to keep in mind what mode you are presently in; most commands in VI are single characters, and if you try to enter text when in command mode the characters you type will each cause some command to be executed, likely one whose effect you cannot easily undo!

VI may seem very awkward at first, but accomplished VI users can enter and modify text much more efficiently than is possible with the PC editors and word processors. For this reason VI is the preferred editor of a great many professional software developers.

The following is a short list of some of the most common VI commands. Most of them are mnemonic, which means the characters in the command may be thought of as a short form for the effect they will have. I have indicated the words that you may think of when you type the single letter commands in CAPITAL LETTERS.

Moving the Cursor Around

Character-wise

- Space Bar - move right one character
- Backspace - move left one character
- 0 (Zero) - move to the beginning of the current line
- \$ - move to the end of the current line

Word-wise

- w - move to the beginning of the next WORD
- b - move BACK to beginning of the previous word
- e - move to the END of the current word

Line-wise

- CR (Carriage Return) - move to the beginning of the next line
- (Minus) - move to the beginning of the previous line
- : 0 CR - move to the beginning of the first line in the file
- : \$ CR - move to the beginning of the last line in the file
- : <line number> CR - move to the beginning of the given line

Screen-wise

- CTRL-B - move BACK one screen
- CTRL-F - move FORWARD one screen
- CTRL-U - move UP one half screen
- CTRL-D - move DOWN one half screen

Pattern-wise

- / <pattern> CR - move forward to the next match
- ? <pattern> CR - move backward to the previous match
- n - repeat the previous search, same direction
- / CR - repeat the previous search, forward direction
- ? CR - repeat the previous search, backward direction

Entering Text

Character-wise

- a <text> ESC - ADD text following the current character
- i <text> ESC - INSERT text preceding the current character

Line-wise

- o <text> ESC - (OPEN) add text beginning on a new line following the current line
- O <text> ESC - (OPEN) insert text beginning on a new line preceding the current line

Changing Text

Character-wise

- c SP <text> ESC - CHANGE the character on which the cursor currently appears to <text>
- d SP - DELETE the character on which the cursor currently appears

Word-wise

- cw <text> ESC - CHANGE the WORD beginning with the character on which the cursor currently appears to <text>
- dw - DELETE the WORD beginning with the character on which the cursor currently appears

Line-wise

- cc <text> ESC - CHANGE the entire line on which the cursor currently appears to <text>
- dd - DELETE the entire line on which the cursor currently appears
- C <text> ESC - CHANGE the characters from the one on which the cursor currently appears to the end of the current line to <text>
- D - DELETE the characters from the one on which the cursor currently appears to the end of the current line

Moving Text

Character-wise

- dw - DELETE the WORD beginning with the
- xp - TRANSPOSE the current character with the next character

Word-wise

- dw (move cursor) p - move the current word to a new position

Line-wise

- dd (move cursor) p - move the current line to a new position

Some Sophisticated Stuff

- r <char> - REPLACE the character on which the cursor currently appears with the single character <char>
- x - delete the character on which the cursor currently appears
- J - JOIN the current line with the next line
- . (Period) - repeat the previous command (*try it!*)

File Handling

- : w - WRITE out the file being edited (i.e., save it)
- : wq - WRITE the file and QUIT
- : w <filename> - WRITE out as <filename>
- : q - QUIT
- : q ! - QUIT and discard changes
- ZZ - end session (save file and quit, same as : wq)

Adjusting the Screen

- CTRL-L - clear and redraw the screen
- z CR - redraw screen with current line at top
- z- - redraw screen with current line at bottom
- z. - redraw screen with current line in middle

Undoing Mistakes

- u - UNDO the last change
- U - restore current line to its original state

If All Else Fails

- ESC CTRL-L - get out of insert mode, redraw screen