General pattern of commands: [n] operator [m] movement

##### Vim Command Summary

<https://github.com/praful/vim-cheatsheet> Updated: 2019/04/10

# Movement Commands

|  |  |
| --- | --- |
| Character | |
| h, j, k, l | Left, down, up, right (3j moves down 3 lines) |
| **Text** | |
| w, W, b, B | Forward, backward by word/WORD  (lowercase w, b: letters, numbers, underscore make up word; uppercase W, B: separator is whitespace) |
| e, E | End of word/WORD |
| ge, gE | End of previous word/WORD |
| ), ( | Beginning of next, previous sentence |
| }, { | Beginning of next, previous paragraph |
| ]], [[ | Beginning of next, previous section (or function in C, Java, etc) |
| % | Move to matching brace, paren, etc |
| **Line** | |
| 0, $ | First, last position of current line |
| ^ | First character of current line (ignore spaces) |
| +, - | First character of next, previous line |
| n| | Column n of current line |
| H, M, L | Top / middle / last line of screen |
| *n*H | *n* (number) of lines after top line |
| *n*L | *n* (number) of lines before last line |
| gm | middle of line |
| Screens | |
| CTRL-F, CTRL-B | Scroll forward, backward one screen |
| CTRL-D, CTRL-U | Scroll down, up one-half screen |
| CTRL-E, CTRL-Y | Scroll line up, down |
| z <Enter> or zt | Reposition line with cursor: to top of screen |
| z. or zz | Reposition line with cursor: to middle of screen |
| z- or zb | Reposition line with cursor: to bottom of screen |
| CTRL-L | Redraw screen (without scrolling) |
| % | Smart range: highlight next block |
| Searches | |
| /*pattern* | Search forward for *pattern* |
| ?*pattern* | Search backward for *pattern* |
| n, N | Repeat last search in same, opposite direction |
| / , ? | Repeat previous search forward, backward |
| f*x* | Search forward for character *x* in current line |
| F*x* | Search backward for character *x* in current line |
| t*x* | Search forward for character before *x* in current line |
| T*x* | Search backward for character after *x* in current line |
| ; , , | Repeat previous current-line search forward / backward |
| \*, # | Move forward/back to string matching the one under cursor. Precede by g for embedded match. |
| [i , [I | (lower/uppercase i) In status bar, show first/all lines containing word under cursor |
| Line number | |
| CTRL-G | Display current line number |
| *n*G | Move to line number *n* |
| G | Move to last line in file |
| :*n* | Move to line number *n* |
| Bookmarks | |
| m*x* | Bookmark current position as *x* (uppercase mark eg m*X* set global mark, ie file and location) |
| `*x* (back tick) | Move cursor to *x* |
| '*x* (apostrophe) | Move to start of line containing *x* |
| `` (2 back ticks) | Return to position before most recent jump |
| '' (2 apostrophes) | Like preceding, but return to start of line |
| `. (back tick period) | Move to last change |
| `[ , `] | Go to start, end of previously operated text |
| CTRL-O, CTRL-I | Move backwards and forwards in jumplist. See :help jumplist |
| g; and g, | Move backwards and forwards in changelist. See :help changelist |
| :marks | List active marks |
| :jumps | List jumps |
| :reg x | Show registers or register *x* |

# Editing Commands

|  |  |
| --- | --- |
| Select | |
| v, V, CTRL-V | Select character / line / block (visual mode) |
| gv | Reselect previous selection |
| o | Exchange cursor position between start/end of selection |
| vaw, vas, vap, vab, vaB | Select a word / a sentence / a paragraph /  a () block / a {} block. Can use other verbs, eg delete, yank to act on object. Also i instead of a acts **i**nside object (a acts **a**round) |
| Insert | |
| i, a | Insert text before, after cursor |
| I, A | Insert text at beginning, end of line |
| o, O | Open new line for text below / above cursor |
| Change | |
| r, R | Change character / overwrite characters |
| c{*motion}*, cw, cc, 2cw, cG, caw | Begin change / change word / line (stay in insert mode) / change next two words / change to end of file / change word (when in middle) |
| C | Change to end of line |
| C% | Change text in next group |
| R | Type over characters |
| s, S | Delete character (=cl) / delete line and substitute text |
| gu, gU{motion} | Lowercase / uppercase |
| ~ | Toggle case and move right. |
| g~w, guw, gUw | Switch case of word / lowercase word / uppercase word |
| CTRL-A, CTRL-X | Increment / decrement number under cursor |
| . | (period) Repeat last edit command |
| u, CTRL-R, U | Undo / redo / restore current line |
| j , gJ | Join two lines / join without space |
| Copy (yank), paste, delete | |
| yw, y$, :%y | Yank (copy) word / line / buffer |
| yy, 5yy | Yank current line / next five lines |
| "*a*yy | Yank current line into named buffer *a* |
| y’*x* | Yank from mark *x* to cursor |
| p, P | Put yanked text after / before cursor |
| ]p , [p | Like p, P with indent adjusted |
| gp , gP | Like p, P leaving cursor after new text |
| "*a*P | Put text from buffer *a* before cursor |
| "*n*p | Put text from delete buffer number *n* after cursor (for last nine deletions) |
| x | Delete character |
| X | Delete character before cursor |
| dw, dd, dfS, d^, d/*pat*, dn, dL, dG | Delete word / line / upto S (c and d both cut but c stays in insert mode) / to beginning / to pattern / to next pattern / to end screen / to end file. 10dd deletes 10 lines. dwwP transposes two words. |
| D | Delete to end of line |
| di> | Delete inner block delimited by > |
| d’*x* | Del from mark *x* to cursor |
| Insert mode | |
| CTRL-R" | Paste last yank/delete. Instead of “, use % (filename), + (clipboard) |
| CTRL-A | Repeat last insertion |
| CTRL-D, CTRL-T | Shift line left/right to previous shift width |
| CTRL-E | Insert character found just below cursor |
| CTRL-H | Delete prev char (=backspace) |
| CTRL-I | Insert a tab |
| CTRL-K | Begin insertion of multi-stroke char |
| CTRL-N, CTRL-P | Insert next/previous completion of the pattern to the left of the cursor |
| CTRL-O *command* | Execute one command eg dw |
| CTRL-X + CTRL-L | Show list of completions for current line |
| CTRL-X + CTRL-F | Filename completion |
| CTRL-U | Delete from cursor to start of line |
| CTRL-V | Insert next char verbatim |
| CTRL-W | Delete prev word |
| CTRL-Y | Insert char found just above cursor |
| CTRL-[ | End insert mode (=ESC) |

# Other Commands

|  |  |
| --- | --- |
| Command line mode | |
| CTRL-B, CTRL-E | Beginning/end of line |
| CTRL-F | Open command history in new buffer (like q: in normal mode). Use CTRL-C to paste line in history or press *Enter* to run command. |
| CTRL-N, CTRL-P | Next/previous command in history |
| CTRL-H, CTRL-R, CTRL-U, CTRL-W | As insert mode |
| CTRL-V | Insert next non-digit literally. You can enter funky keys by pressing ctrl-v first, and then the keystroke. This is most useful in help, eg type :help ^v^t to get help for the keystroke ctrl-t. For this, though, you can also just type :help ctrl-t. |
| *text* UP-ARROW or *text* DOWN-ARROW | Searches history for previously entered commands starting with text |
| Shell and Shell Filtering | |
| :r !*command* | Read in output from *command* after current line |
| :!*command* | Run *command*, then return |
| !{*motion}command* | Send the text covered by *motion* to Unix *command*; replace with output |
| :n,m!*command* | Send lines *n-m* to *command*; replace with output |
| num!!*command* | Send *num* lines Unix *command*; replace with output |
| :!! | Repeat last system command |
| !!*command* | Pass current line only through *command* |
| !}*command* | Pass area from current line through end of paragraph through *command* |
| !G*command* | Pass area from current line through end of file through *command* |
| :%!*command* | Pass the entire current buffer through *command* |
| Code Reformatting | |
| =G | Indented formatting |
| %!astyle or %!indent | Linux reformatting programs |
| gq*{motion}* | Re-do line wrapping intelligently |
| gqq | Rewrap current line |
| gqj | Rewrap current and following line |
| gq} | Rewrap from current line to end of paragraph |
| Buffers, Tabs, Window commands | |
| :bnext, :bprev, :bdelete | Next, previous, delete buffer |
| :sp *file*  :vsp *file* | Split current window horizontally or vertically. With *file*, edit that file in the new window. |
| :new, CTRL-W n | Open a new windows |
| :tabnew | Open a new tab |
| :new *file* | Open *file* in new window |
| :clo, CTRL-W c | Close current window |
| :on, CTRL+W o | Make current window the only visible one |
| :qa | Close all buffers and exit |
| CTRL-W j, k | Move cursor to next/previous window |
| CTRL-W h, l, t, b | Move cursor to left/right/top/bottom window |
| CTRL-W K, B, H, L | Move current window top/bottom/far left/far right |
| CTRL+W f CTRL+W gf | Open file at cursor in new windows / tab |
| CTRL+W r, R | Rotate windows down/up |
| CTRL+W +, - | Increase/decrease current window size |
| CTRL+W = | Make all windows the same height |
| Miscellaneous commands and options | |
| :sort u / n | Sort, remove duplicates / Sort by number |
| :sh | Start a shell |
| :so % | Source current file, eg vimrc after changes |
| :bufdo *command* | Execute command on all buffers eg command *bdelete* closes all open buffers |
| :set list | Display tabs and eol character |
| :options | Display help for options and show current values (:set all dumps settings) |
| :set ft=html | Set filetype to html (use any ext.) |
| :helptags ~/vimfiles/doc | Install help file |
| :verbose map *key* | Shows where *key* was mapped |
| :verb set *str* | Shows where *str* was set |
| :let g: :let v: | Show global/local variables |
| :set [no]spell | Disable/enable spellchecking |
| z=, ]s,[s, zg,zw | Suggest corrections, next/prev spelling error, add/remove word to exception list |
| :set path=path | Search path for files |
| :sh | Start shell |
| :noh | remove highlight on highlighted text |
| CTRL-G | Print status line |
| qx, @x | Record macro to *x*, run *x* (precede by *n* to run *n* times, eg 5@x). |
| <, > | Shift text described by following motion command left/right by one shift width eg <} shifts paragraph |
| <<, >> | Shift line left/right one shift width; 3>> shifts three lines |
| :1,$> :1,$< | Move entire file 1 shiftwidth to the right / left |
| :%s/^/ /g | Insert any number of spaces at the beginning of each line in the entire file. Press the space bar the desired number of times. |
| :%norm jdd | Delete every other line (example of using normal mode command on command line; powerful!). |
| :20>> | Moves next 20 lines over 1 shift width. |
| K | Look up word under cursor in help |
| q: | Command history |
| :mess | Show messages |
| CTRL-X CTRL-O/K/S | Complete from omni/dictionary/spelling |
| :tab help *index* | Open help in new tab for *index* (or whatever) |
| ex commands | |
| :s/old/new/g | Substitute in current line |
| :%s/old/new/g | Substitute in current file |
| :.+1,$s/old/new/g | Substitute in all lines after current. Can use line numbers (eg 3,45s/…) and marks (eg ‘a,’bs/…) |
| :^,.s/old/new/g | Substitute from start of file to cursor |
| \v | Escapes regex Eg :%s/\(good\|nice\)/awesome/g can be written as %s/\v(good|nice)/awesome/g |
| :& | Repeat last substitute command |
| :d | Delete lines |
| :m | Move lines, eg :30,60m0 ($ to move to end) |
| :co or :t | Copy lines, eg :5,10t105 |
| :.,/*pattern*/co$ | Copy from current line through line containing *pattern* to end of file |
| :d | Delete lines, eg 3,10d |
| :g[!]/*pat*/*cmd* | Execute *cmd* on all lines containing *pat*. Use ! for all lines not containing pattern. eg g/Unix/p prints all lines containing Unix; g/Name:/s/tom/Tom/ change "tom" to "Tom" on all lines containing "Name:". :v is the same as :g!. See referemce 1 for examples. |
| :center | Centre line |

# File Commands

|  |  |
| --- | --- |
| ZZ or :x or :wq | Write (save) and quit file |
| :w | Write (save) file |
| :w! | Write (save) file (overriding protection) |
| :30,60w *newfile* | Write from line 30 through line 60 as *newfile* |
| :30,60w>>*file* | Write from line 30 through line 60 and append to file |
| :w !sudo tee % | Write file using sudo |
| :q | Quit file |
| :q! | Quit file (overriding protection) |
| Q | Quit vi and invoke ex |
| :e *file* | Edit *file* |
| :n | Edit next file |
| :e! | Return to version of current file at time of last write (save) |
| :e# | Edit alternate file |
| % | Current filename |
| # | Alternate filename |
| :r *file* | Read in contents of file after cursor |
| :e . | Explore dir. Can change dot to path. |
| :e# | Returns to previous window |
| gf | Open file at cursor at same window |

# Links

1. Best of Vim tips: <http://zzapper.co.uk/vimtips.html>
2. The power and joy of Vim. Derek Wyatt: <https://vimeo.com/15443936>