VIM QUICK REFERENCE CARD

Frequently used VIM commands – Version v1.3 August 2015

Vim cheatsheet based on the version by Michael Goerz

Helpsections

`:h <topic>` will open the vimdocs to each *topic*s help-page.

`:h /zero-width`

matches with 'zero-width' ⟨@!⟩ patterns

Movements

`:viu` show a summary of all commands

Basic Movements
refer to helpsection `:h motion`

`h l k j` ..... character left, right; line up, down

`b w` .... word *or* token left, right

`ge e` .... end of word *or* token left, right

`0 _ $` .... beginning, first, last character of line

n`G` n`gg` ...... line n, default the last, first

n`|` .... column n of current line

`%` .... match of next brace, bracket, comment, `#define`

`- +` .... line up, down on first non-blank character

`B W` .... space-separated word left, right

`gE E` .... end of space-separated word left, right

`g0 gm` ...... beginning, middle of *screen* line

`g^ g$` ...... first, last character of *screen* line

`f`c `F`c .... next, previous occurence of character c

`t`c `T`c .... before next, previous occurence of c

Jumps
print the jump list with `:jumps`

`{ }` .... beginning of previous, next paragraph

`( )` .... beginning of previous, next sentence

`[[ ]]` .... go to previous, next function *or* `\section` in TEX

`[{ ]}` .... beginning, end of current block

`[z ]z` ...... move to start, end of current open fold

n`^O` n`^I` ..... go to n^{th} older, newer position in jump list

n`g;` n`g,` ..... go to n older, newer position in change list

`'.` .... jump back on last edited line

`''` .... toggle back, forward to previous, next position

`'0..9` .... go to last exit position

`'' '"` ...... go to position before jump, at last edit

`'[ ']` ...... go to start, end of previously operated text

`^] ^T` .... jump to the tag under cursor, return from tag (eg. inside of vimdocs)

Advanced Scrolling

n`^Y` n`^E` ...... scroll window n lines up, downwards

`^D ^U` .... scroll half a page up, down

`^F ^B` .... scroll page up, down

`zt zz zb` .... current line to top, center, bottom of win.

`zh zl` ...... scroll one character to the right, left

`zH zL` ...... scroll half a screen to the right, left

`H M L` .... jump to *high*, *middle*, *low* position in screen

Insert, Command & Visual Mode

Insertion, Replace → insert mode

`c`m .... change text of movement command m

`cc` *or* `S` ...... change current line

`C` .... change to the end of line

`i a` .... insert before, after cursor

`o O` .... open a new line below, above the current line

`I A` .... insert at beginning, end of line

`gi gI` .... insert text on last edited line, first column

`r`c `gr`c ...... replace character under cursor, without affecting layout

`R gR` .... replace characters starting at the cursor, without affecting layout

`s`c .... substitute character c under cursor → insert mode

Command Mode CTRL-Keys

`^V`c `^V`n ...... insert char c literally, decimal value n

`^A ^@` .... insert previously inserted text, stop insert → command mode

`^N ^P` .... text completion before, after cursor

`^W ^U` .... delete word before cursor, to start of line

`^D ^T` .... shift left, right one shift width

`^O`c .... execute c in temporary command mode

⟨esc⟩ *or* `^]` .... abandon edition → command mode

CTRL-R

`^R^A` .... content under cursor to command mode

`^R = 5*5` ..... insert 25 into text

`^R`x `^R^R`x ... insert content of register x, literally

CTRL-X (Command Mode Completions)

`^X^L` .... whole lines

`^X^N ^X^I` ..... keywords in current file, plus included files

`^X^K ^X^N` ..... keywords in dictionary, thesaurus

`^X^]` .... tags

`^X^F` .... file names

`^X^D` .... definitions or macros

`^X^V` .... vim command line

`^X^U` .... user defined completion

`^X^O` .... omni completion

Visual Mode
refer to `:h object-select`

v V ˆV .... start *or* stop highlighting characters, lines, block

o .... exchange cursor position with start of highlighting

gv .... start highlighting on previous visual area

aw as ap .... select a word, a sentence, a paragraph

ab aB ...... select a block ( ), a block { }

gˆG .... Count words, character lines and bytes of selection

Delete, Copy to Registers

Deletion
refer to :h und-tree

x X .... delete character under, before cursor

d*m* .... delete text of movement command *m*

dd D .... delete current line, to the end of line

u U .... undo last command, restore last changed line

⇒　To revert the current buffer to the state before the very first change remembered by Vim in the undo list, use the command: :u1|u

. ˆR .... repeat last *n* changes, redo last undo

Copying

"*x* .... use register *x* for next delete, yank, put

y*m* .... yank the text of movement command *m*

yy *or* Y ...... yank current line into register

p P .... put register after, before cursor position

]p [p .... like p, P with indent adjusted

gp gP .... like p, P leaving cursor after new text

Registers & Macros
show content of all registers: :reg

:@*x* .... execute register *x* as an *Ex* command

:reg*ister* *x* show content of single register *x*

q*x* q*X* q ..... record, append, stop recording typed characters as macro into register *x*

@*x* .... execute macro of register *x*

⇒　execute *x* on each file of buffer list:
　:bufdo exe "%normal @*x*"

@@ .... repeat previous recorded macro

q*x*q.......... empty register *x*

⇒　delete lines with pattern *p* into Register *x* and copy to clipboard afterwards:
　:g/*p*/d *x* | let @+ = @*x*

q: @: ...... list all, repeat macro

Search & Substitute

substitutions work like :s/*p*/*q*/*flag*, you may limit your search to an area between *r*anges (Ex ranges).

Search, Substitute Flags

c	confirm each substitution
e	do not issue error messages and continue as if no error occurred
g	replace all occurrences in the line
i I	ignore, mind case for the pattern (overwrites 'ignorecase' and 'smartcase' options)
p # l	print the line containing the last substitute, like :list , prepend line number afterwards
&	must be the first one: keep flags from the previous substitute
n	report the number of matches, do not actually substitute. (the [c] flag is ignored.)

Forward & Backward Searches
refer to :h search-commands

/*s*← ?*s*←.... search forward, backward for *s*

/*s*/*o*← ?*s*?*o*←
　　　　search fwd, bwd for *s* with offset *o*

Offsets

The offset gives the cursor position relative to the found match:

n, -*n*	lines down-, upwards, in col 1
e+*n*, e-*n*	characters to the right, left of the end of the match
s+*n*, e-*n*	characters to the right, left of the start of the match
b+*n*, e-*n*	identical to s+,-*n* above (mnemonic: begin)
;*p*	perform another search

Quick Search Commands

n *or* /←...... repeat forward last search

N *or* ?←..... repeat backward last search

* .... search backward, forward for word under cursor

g# g* .... same, but also find partial matches

gd gD .... local, global definition of symbol under cursor

Substitutions
refer to :h :sub

:*r*s/*p*/*q*/g ... substitute all *p* by *q* in range *r*

:*r*s *q* .... repeat substitution with new *r* & *q*

:*r*g/*x*/e :*r*v/*x*/e
　　　　execute *e* on range *r* where *x* matches, not matches

⇒　join any line containing the string *x* with previous line, if it lies between the *a* and *b* marks: :'*a*,'*b*g/*x*/-1j

:*r*g/*x*/s/*p*/*q*/g
　　　　for every line in *r* containing *x*, substitute *p* with *q*

:*r*&& :*r*& ..... repeat last search or substitution on range *r* with, without flags

Ex Ranges
refer to :h cmdline-ranges

,	cursor position interpreted from current line
;	the cursor position will be set to line of last search *or* substitution

n	an absolute line number n
`.` `$`	the current, last line in file
`%` `*`	entire file, visual area
`'t`	position of mark t
`/p/` `?p?`	the next, previous line where p matches
`-n` `+n`	preceding, appending line n

Patterns (differences to Perl)

refer to `:h pattern` and `:h /zero-width`

`\<` `\>`	start, end of word
`\i` `\k` `\I` `\K`	an identifier, keyword; excl.digits
`\f` `\p` `\F` `\P`	a file name, printable char.; excl.digits
`\e` `\t` `\r` `\b`	⟨esc⟩, ⟨tab⟩, ⟨↩⟩, ⟨←⟩
`\=` `*` `\+`	match 0..1, 0..∞, 1..∞ of preceding atoms
`\{n,m}`	match n to m occurrences
`\{-}`	non-greedy match
`|`	separate two branches ($\equiv$ *or*)
`\(` `\)`	group patterns into an atom
`&` `\1`	the whole matched pattern, 1st () group
`\&`	a *branch*: matches last concat, but only if all preceding concats also match at the same position

⇒ the following pattern finds all lines that contain both "red" and "blue", in any order: `/.*red\&.*blue`

`\u` `\l`	upper, lowercase character
`\U` `\L`	id., whole pattern
`\c` `\C`	ignore, match case on pattern
`\@=` `\@!`	*char*(?=pattern) *char*(?!pattern)

⇒ matches pattern, only when line is not ending in 'foo': `pattern\(foo\)\@!$`

`\@<=` `\@<!`	(?=pattern)*char* (?!pattern)*char*

⇒ everything before the comment '#' is excluded from pattern: `/\(#.*\)\@<=pattern`

`\@>`	(?>pattern)
`\_^` `\_$`	start-of-line, end-of-line, anywhere in pattern
`\_.`	any single char, including end-of-line

⇒ find any pattern *foo bar*, even when divided by linebreak: `foo\_\s*bar`

`\zs` `\ze`	set start, end of pattern
`\%^` `\%$`	match start, end of file
`\%nl` `\%nc` `\%nv`	matches specific line, column, virtual column n
`\%x`	match hex character
`\%V`	match inside visual area
`\'m`	match with position of mark m
`\%(\)`	unnamed grouping
`\_[ ]`	collection with end-of-line included
`\%[ ]`	sequence of optionally matched atoms
`\v`	very magic: patterns almost like perl

Advanced Operations

Special Text Operations

`cgn` `dgn`	change, delete the next search pattern match (repeat change, deletion with ⟨.⟩)
`J` `gJ`	join current line with next, without space
`~` `g~m`	switch case and advance cursor, on movement m
`gum` `gUm`	switch case, lc, uc on movement m
`guu` `gUU`	lower-/uppercase line

Marks and Tags

`:tags` print tag list, `:marks` print the active marks list

`mc`	mark current position with mark $c \in [a..Z]$
`'c` `'C`	go to mark c in current, C in any file

Ex Commands (↩)

refer to `:help holy-grail` for list of all commands

Tags

`:ts`elect t	list matching tags and select one for jump
`:tj`ump t	jump to tag or select one if multiple matches
`:ta`g `^[`	jump to tag (under cursor)

Reading from & writing to files

`:e`dit f	edit file f, reload current file if no f
`:ar`gs $f_1..f_n$	load n files to buffer in background
`:r`write f	write range r to file f (this file if no f)
`:r`write `>>` f	append range r to file f
`:q`uit `:q`uit!	quit and confirm, discard changes
`:wq` *or* `:x` *or* `ZZ`	write to current file and exit
`:r`delete `:r`delete x	delete range r lines, into register x

Filter Lines

`!mc`↩	filter lines of movement m through command c
`n!!c`↩	filter n lines through command c
`:r!c`	filter range r lines through command c

Insert, Send Content

`:r` f	insert content of file f below cursor
`:r!` c	insert output of command c below cursor
`:r`copy *or* `:r`t a	copy range r below line a

⇒ copy all lines containing *foobar* to EOF: `:g/foobar/t$`

`:r`move a	id. but move
`:r`hardcopy `> file.ps`	print range to ps file
`:r`ha `rw!lp`	sending r to printer (printout)

Compile

`:clist` `:cfile`
    list all errors, read errors from file

`:cnext` `:cprevious`
    display the next, previous error

`:compiler` c . set, show compiler plugins

`:copen` . . . . . . navigate errors from make

`:make` . . . . run `makeprg`, jump to first error

Standard Mode Formatting, Filtering
leave out m for visual mode commands

Indentation
set indent-foldmethod by `:set fdm=indent`

$< m$ $> m$ . . . shift left, right text of movement m

$n>$ $n<$ $=$ . . . indent, unindent n levels, reindent

$n \ll$ $n \gg$ . . shift n lines left, right

Alignment

`gq`m `gqgq` . . . format movement m, current line

`:`r`ce` w . . . . . . center lines in range r to width w

`:`r`ri` w . . . . . . rightalign lines in range r to width w

`:`r`le` i . . . . left align lines in range with indent i

Folds

`zf`m . . . . create fold of movement m

`:`r`fold` . . . . . . create fold for range r

`zd zE` . . . . delete fold at cursor, all in window

`zo zc zO zC`   open, close one fold; recursively

`zj zk` . . . . move down, up to start, end of next fold

`zm zM` . . . . fold more, close all folds

`zr zR` . . . . fold less, open all folds

`zn zN zi` . . . . fold non, fold normal, invert folding

`:set fdc=`n . show foldcolumn to level n

Multiple Files, Buffers, Tabs ($\hookleftarrow$)

Generic Buffer Commands

`:tab ball` . . . show buffers as tablist

`:buffers` . . . . show list of buffers

`:on` . . . . make current window one on screen

`:new :vnew` . . create new empty window (vert.)

`:b`n . . . . switch to buffer n

`:bn :bp :bf :bl`
    buffer movement next, prev, first, last

`:bd`n . . . . delete buffer n (also with filename)

  $\Rightarrow$ Delete all Buffers with Extension 'ext':
    `:bd *.ext ^A`

`:badd f.txt`   load file into new buffer

`:bufdo` cmd . . execute cmd in each buffer in the buffer list.

`:sb`n . . . . Split window and edit buffer n from the bufflist

Buffer Shortcuts
refer to `:h ctrl-w`

`^^` . . . . toggle between the current and the last window

`^Wf gf` . . . . . . open file under cursor in new, current window

`^Ww ^W^W` . . . . . move to window below, above (wrap)

`^Wj ^Wk` . . . . . move to window below, above

`^Wt ^Wb` . . . . . move to top, bottom window

`^Wc ^Wo` . . . . . close current, all other window(s)

`^Ws ^Wv` . . . . . split window in two (vert.)

`^Wx` *or* `^W^R` . . . swap open buffer windows

`^W`n`+` `^W`n`-` . . . increase, decrease window size by n lines

`^W`n `>` `^W`n `<` . increase, decrease window width

`^W =` . . . . Make all windows equally high and wide

`^W` n`_` . . . . set window height to n (default: very high)

`^W` n`|` . . . . set current window width to n

Tab Management

`:tabs` . . . . list all tabs including their displayed windows

`:tabfirst` . . . go to first tab

`:tablast` . . . . go to last tab

`:tabnew` . . . . . open a new empty tab page

`:tabclose` . . . close current tab page

`:qall :wqall` quit, and save all tabs

`:tabonly` . . . . close all other tabs

`gt gT` . . . . go to next, previous Tab

n`gt` . . . . goto tab in position n

Miscellaneous

Spell Check
activate spellcheck: `:set spell spelllang=en_us`

`]s [s` . . . . next, previous misspelled word

`zg zG` . . . . add good word (to internal word list)

`zug zuG` . . . . . . undo the addition of a word to the dictionary

`zw zW` . . . . mark bad word (to internal word list)

`z=` . . . . suggest corrections

Invocation

`vimdiff` f_1 f_2
    diff $file_1$ + $file_2$ using synchronized split windows

`vim -o/-O` f_1 f_2..f_n
    open $files$ in horiz, vert split mode

`vim +`n $file$. open $file$ at nth line (eof if n omitted)

`vim +/`s $file$ open $file$ and search for $string$

`vim -S` $name$ reload vim-session $name$

Special operations
Usefull (and not so usefull) operations which don't fit to any other section :-)

`K` . . . . run `keywordprg` (manpage) on word under cursor

`ˆA ˆX` .... increment, decrement number under cursor

`ˆL` .... redraw screen

`ga` .... show Ascii value of character under cursor

`gf` .... open filename under cursor

`gˆG` .... count words, characters, bytes (in selection or buffer)

`ˆK`$c_1 c_2$ *or* $c_1 \leftarrow c_2$
enter digraph $\{c_1, c_2\}$

⇒   `for a complete list of all digraphs enter:  :digraphs` *or* `:h digraph-table`