VIM QUICK REFERENCE CARD

Frequently used VIM commands – Version v1.2 May 2015

Vim cheatsheet based on the version by Michael Goerz

Movements

`:viusage`   show a summary of all commands

Basic Movements
refer to helpsection `:h motion.txt`

`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

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

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

`[[ ]]` .... go to previous, next function

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

`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

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 ^V` ...... 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 { }

`g^G` .... 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`

`. ^R` .... 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

$\Rightarrow$ execute x on each file of buffer list:
`:bufdo exe "%normal @`x`"`

`@@` .... repeat previous recorded macro

`q`x`q` .... empty register x

$\Rightarrow$ 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 $ranges$ (`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`

`/`$s\hookleftarrow$ `?`$s\hookleftarrow$ ... search forward, backward for s

`/`s`/`$o\hookleftarrow$ `?`s`?`$o\hookleftarrow$
        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* `/`$\hookleftarrow$ ..... repeat forward last search

`N` *or* `?`$\hookleftarrow$ .... 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

$\Rightarrow$ 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; excldigits
`\f \p \F \P`	a file name, printable char.; excldigits
`\e \t \r \b`	$\langle$esc$\rangle$, $\langle$tab$\rangle$, $\langle\hookleftarrow\rangle$, $\langle\hookleftarrow\rangle$
`\= * \+`	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

$\Rightarrow$ 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)`

$\Rightarrow$ 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
gu$m$ gUm	switch case, lc, uc on movement m
guu gUU	lower-/uppercase line

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

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
'0..9	go to last exit position
'' '"	go to position before jump, at last edit
'[']	go to start, end of previously operated text

Jumps

print the jump list with :jumps

n^O n^I	go to n^{th} older, newer position in jump list
^] ^T	jump to the tag under cursor, return from tag
^O ^I	jump to older, newer location btwbuffers
ng; ng,	go to n older, newer position in change list
'.	jump back on last edited line
''	toggle back, forward to previous, next position

Ex Commands (↩)

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

Tags

:tselect t	list matching tags and select one for jump
:tjump t	jump to tag or select one if multiple matches
:tag ^[	jump to tag (under cursor)

Reading from & writing to files

:edit f	edit file f, reload current file if no f
:args $f_1..f_n$	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
:quit :quit!	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* :rt 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`

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

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

$n \ll \quad n \gg$ .. 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

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

`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 ($\leftrightarrow$)

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

`^A ^X`......... increment, decrement number under cursor

`^L` .... redraw screen

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

`gf` .... open filename under cursor

`g^G`.......... count words, characters, bytes (in selection or buffer)

`^K`$c_1 c_2$ _or_ $c_1 \leftarrow c_2$
            enter digraph $\{c_1, c_2\}$

⇒   for a complete list of all digraphs en-
     ter: :digraphs *or* :h digraph-table

Helpsections

`:h /zero-width`
                matches with 'zero-width' ⟨@!⟩ patterns