VIM QUICK REFERENCE CARD

Frequently used VIM commands - Version v1.5 March 2016

Vim cheatsheet based on the version by Michael Goerz

Helpsections

:h <topic> will open the vimdocs to each *topic*s helppage.

:h /zero-width matches with 'zero-width' $\langle @! \rangle$ patterns

Movements

:viu show a summary of all commands

Basic Movements

 \hookrightarrow :h motion

h	1	k	i	 character	left.	right:	line	up, do	wn

b wword or token left, right

ge eend of word or token left, right

0 _ \$ beginning, first, last character of line

 $nG ngg \dots line n$, default the last, first

 $n \mid \dots \dots$ column n of current line

% match of next brace, bracket, comment,

#define

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

B Wspace-separated word left, right

gE Eend of space-separated word left, right

g0 gm beginning, middle of screen line

g^ g\$ first, last character of screen line

 $fc Fc \dots next$, previous occurence of character c

t
 ${\tt T} c \ \ldots \ldots$ before next, previous occurence of
 c

Jumps — print jump list :jumps

{ } beginning of previous, next paragraph

()beginning of previous, next sentence

[[]]go to previous, next function $_{or}$ \section in $T_E X$
[{]}beginning, end of current block
[z]z move to start, end of current open fold
$n \hat{\ } 0 \ n \hat{\ } I \ \ldots$ go to n^{th} older, newer position in jump list
$ng; ng, \ldots go to n older, newer position in change list$
'jump back on last edited line
or ,
'09 go to last exit position

Advanced Scrolling

$n {\bf } {\bf Y}$	n E \dots	scroll	window	n	lines	up,	downwards
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" go to position before jump, at last edit

'['] go to start, end of previously operated

^Tjump to the tag under cursor, return

from tag (eg. inside of vimdocs)

 $^{\rm D}$ $^{\rm U}$ scroll half a page up, down

^F ^B scroll page up, down

zt zz zb current line to top, center, bottom of

 ${\tt zh} {\tt zl} {\tt}$ scroll one character to the right, left

 ${\tt zH} \ {\tt zL} \ \ldots \ldots \ {\rm scroll} \ {\rm half} \ {\rm a} \ {\rm screen} \ {\rm to} \ {\rm the} \ {\rm right}, \ {\rm left}$

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

Insert, Command & Visual Mode

Insertion, Replace \rightarrow insert mode

cc or S change current line

i ainsert before, after cursor

o $\ensuremath{\mathsf{0}}$ open a new line below, above the current line

I Ainsert at beginning, end of line
$\mathtt{gi}\ \mathtt{gI}\ \ldots\ldots$ insert text on last edited line, first column
$\mathtt{r}c\ \mathtt{gr}c\ \ldots\ldots$ replace character under cursor, without affecting layout
R gR \dots replace characters starting at the cursor, without affecting layout
$\mathbf{s}c$ substitute character c under cursor \rightarrow insert mode

Visual Mode

refer to :h object-select

v	V	Ŷ	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

${\tt x} \ {\tt X} \ \dots \dots$ delete character under, before cursor
$\mathtt{d} m$ delete text of movement command m
${\tt dd}\ {\tt D}\ \ldots\ldots$ delete current line, to the end of line
$\tt u \ \tt U \ \ldots \ldots undo$ 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

. \hat{R} repeat last n changes, redo last undo

Copying

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

ym yank the text of movement command
m
yy $_{or}$ Y yank current line into register
$p\ P\ \dots\dots$ put register after, before cursor position
$\ensuremath{\text{]}} p \ensuremath{\text{[}} p \ensuremath{\text{}} \ldots \ldots \ensuremath{\text{}} \text{like} \ensuremath{\text{}} p, \ensuremath{\text{}} P \ensuremath{\text{}} \text{with indent adjusted}$
$gp\ gP\ \dots\dots$ like p,P leaving cursor after new text

Registers & Macros

:reg \leftarrow , :reg x show content of all registers, single register x
: $0x$ execute register x as an Ex command
qx qX $q\dots$ 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
qxq empty register x
\Rightarrow delete lines with pattern p into Register x and copy to clipboard afterwards: $g/p/d x \mid \text{let @+ = @x}$

Search & Substitute

q: 0: list all, repeat macro

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

Search, Substitute Flags

С	confirm each substitution
е	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 pat- tern (overwrites 'ignorecase' and 'smartcase' options)

p # 1	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

 $/s \leftarrow ?s \leftarrow \dots$ search forward, backward for s $/s/o \leftarrow ?s?o \leftarrow$

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 $_{or}$ / \leftarrow repeat forward last search		
N $_{or}$? \leftarrow repeat backward last search		
#* search backward, forward for word under cursor		
$g\#\ g*\ \dots$ same, but also find partial matches		
gd g D local, global definition of symbol under cursor		
Substitutions		
refer to :h :sub		

:rs/p/q/g ... substitute all p by q in range r :rs q repeat substitution with new r & q

:rg/x/e	:rv/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,'bg/x/-1j

:rg/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
\dot{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
$\in \k \I \K$	an identifier, keyword; excldigits
$\f \p \F \P$	a file name, printable char.; excldigits
$\ensuremath{\setminus} e \ensuremath{\setminus} t \ensuremath{\setminus} r \ensuremath{\setminus} b$	$\langle \mathrm{esc} \rangle$, $\langle \mathrm{tab} \rangle$, $\langle \hookleftarrow \rangle$, $\langle \leftarrow \rangle$
\= * \+	match $01, 0\infty, 1\infty$ of preceding atoms
$\setminus \{n,m\}$	match n to m occurrences
$\setminus \{-\}$	non-greedy match
\	separate two branches ($\equiv or$)
\(\)	group patterns into an atom
& \1	the whole matched pattern, 1^{st} () group

\&	a branch: matches last concat, but only if all preceding concats also match at the same position
	g pattern finds all lines that "red" and "blue", in any or-\&.*blue
\u \1	upper, lowercase character
\U \L	id., whole pattern
\c \C	ignore, match case on pattern
\@= \@!	<pre>char(?=pattern) char(?!pattern)</pre>
-	ern, only when line is not oo': $pattern\(foo\)\@!\$
\@<= \@ </th <th>(?=pattern)char (?!pattern)char</th>	(?=pattern)char (?!pattern)char
	efore the comment '#' is expattern: /\(#.*\)\@<=pattern
\@>	(?>pattern)
_^ _\$	start-of-line, end-of-line, anywhere in pattern
\	any single char, including end- of-line
· -	tern $foo\ bar$, even when diebreak: foo_\s*bar
\zs \ze	set start, end of pattern
\%^ \%\$	match start, end of file
\n 1 \%nc \%nv	$\begin{array}{c} \text{matches specific line, column, virtual column} \ n \end{array}$
\%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

Special Text Operations

cgn dgn change, delete the next search pattern match (repeat change, deletion with $\langle . \rangle$)
materi (repeat change, deletion with (./)
J gJjoin current line with next, without space
$\tilde{g}m \dots$ switch case and advance cursor, on move-
ment m
$\mathtt{gu} m \ \mathtt{gU} m \ \ldots$ 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 (\leftarrow)

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

Tags

. Use rect t list matching tags and select one for
$_{ m jump}$
:tjump t jump to tag or select one if multiple
matches
:tag ^[jump to tag (under cursor)

list matching tage and solvet one for

Reading from & writing to files

```
:edit f ..... edit file f, reload current file if no f: args f_1 \ldots f_n load n files to buffer in background :rwrite f ... write range r to file f (this file if no f) :rwrite >> 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 :rdelete :rdelete x delete range r lines, into register x
```

Filter Lines

! <i>mc</i> ←	. filter lines of movement m through com-
	$\operatorname{mand} c$

$n!!c \leftarrow \dots$ filter n lines through command c
$: r!c \dots : filter range r lines through command c$

Insert, Send Content

Compile

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

```
gqm gqgq ... format movement m, current line
:rce w ..... center lines in range r to width w
:rri w ..... rightalign lines in range r to width w
```

Advanced Operations

perl

$\mathtt{zf} m$ create fold of movement m
$:rfold \ldots create fold for range r$
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 fold column to level n
$\underline{\text{Multiple Files, Buffers, Tabs }(\hookleftarrow)}$
Generic Buffer Commands
:tab ballshow buffers as tablist
:buffersshow list of buffers
:on make current window one on screen
:new :vnewcreate new empty window (vert.)
:b n switch to buffer n
:bn :bf :bl buffer movement next, prev, first, last
: bdn delete buffer n (also with filename)
⇒ Delete all Buffers with Extension 'ext':
⇒ Defete 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
Tab Management
:tabs list all tabs including their displayed windows
:tabfirstgo to first tab
:tablast go to last tab

:rle ileft align lines in range with indent i

Folds

:tabnew open a new empty tab page		
:tabcloseclose current tab page		
<pre>:qall :wqall quit, and save all tabs</pre>		
:tabonly close all other tabs		
${\tt gt}\ {\tt gT}\ \ldots\ldots$ go to next, previous Tab		
ngt 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

```
\begin{array}{c} \text{vimdiff} \ f_1 \ f_2 \\ \qquad \qquad \text{diff} \ file_1 \ + \ file_2 \ \text{using synchronized} \\ \text{split windows} \\ \\ \text{vim -o/-0} \ f_1 \ f_2 \dots f_n \\ \qquad \qquad \text{open } files \ \text{in horiz, vert split mode} \\ \\ \text{vim +} n \ file \ . \ \text{open } file \ \text{at } n \text{th line (eof if } n \ \text{omitted)} \\ \\ \text{vim +} s \ file \ \ \text{open } file \ \text{and search for } string \\ \\ \text{vim -S } name \ \ \text{reload vim-session } name \\ \end{array}
```

Special operations

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

to any other section:-)
Krun keywordprg (manpage) on word under cursor
^A ^X \ldots increment, decrement number under cur-
sor
[^] L redraw screen
gashow Ascii value of character under
cursor

```
gf ........... open filename under cursor  \texttt{g} \, \hat{\texttt{G}} \, \dots \dots \dots \text{count words, characters, bytes (in selection or buffer)}   \hat{\texttt{K}} c_1 c_2 \, \text{ or } \, c_1 \leftarrow c_2
```

$$\mathsf{K} c_1 c_2$$
 or $c_1 \leftarrow c_2$ enter digraph $\{c_1, c_2\}$

 \Rightarrow for a complete list of all digraphs enter: :digraphs $_{or}$:h digraph-table

Common Digraphs

^KnS ^Kns Superscript, subscript Number n

CTRL-Keys

CTRL in Normal Mode

α	$\Gamma \mathbf{D} \mathbf{I}$	J-W
	ւռւ	J- V\

Buffer Shortcuts

 $\hat{\ }$ toggle between the current and the last window

 ${\tt `Wf \ gf \}$ 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

 $\mathbf{\hat{}}$ Wc $\mathbf{\hat{}}$ Woclose current, all other $\mathbf{window}(s)$

^Ws ^Wvsplit window in two (vert.)

 $\mathbf{\hat{W}x}$ or $\mathbf{\hat{W}}\mathbf{\hat{R}}\dots\mathbf{swap}$ open buffer windows

 $Wn+Wn-\dots$ increase, decrease window size by n lines

 $\mathbf{\hat{W}}n > \mathbf{\hat{W}}n < \mathbf{\hat{I}}$ increase, decrease window width

W = Make all windows equally high and wide

 $\mathbf{\hat{W}}_{-}\mathbf{\hat{W}}$ maximize current window height, width

 W_n W_n W_n set current window height, width to n

CTRL in Command, Insert Mode

CTRL-R

 ${\bf \hat{R}}{\bf \hat{A}}$ content under cursor to command mode

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

Rx Rx RR Rx ... insert content of register x, literally

CTRL-X

Keyword completion

 $^{\hat{}}$ X $^{\hat{}}$ L whole lines

 $\mathbf{\hat{X}^{\hat{N}}}\ \mathbf{\hat{X}^{\hat{I}}}.....$ keywords in current file, plus included files

 ${\bf \hat{X}^K} {\bf \hat{X}N} \ldots$ keywords in dictionary, the saurus

^X^] tags

^X^F file names

^X ^D	definitions or macros
$\hat{\ } X \hat{\ } V \dots \dots V \hat{\ } X \hat{\ }$	vim command line
$\hat{\ }X\hat{\ }U\ \dots\dots\dots$	user defined completion
^X ^O	omni completion

CTRL-<...>

$\mathbf{\hat{V}}c$ $\mathbf{\hat{V}}n$ insert char c literally, decimal value n
^A ^Q insert previously inserted text, stop insert \rightarrow command mode
${\bf \hat{N}}$ ${\bf \hat{P}}$ text completion before, after cursor
$\mathbf{\hat{V}}$ $\mathbf{\hat{U}}$ delete word before cursor, to start of line
${\bf \hat{D}}$ ${\bf \hat{T}}$ shift left, right one shift width
${\bf \hat{0}}c$ execute c in temporary command mode
$\langle \operatorname{esc} \rangle$ or $\widehat{\ }]$ abandon edition \to command mode

github.com/emzap79/QRCs

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This TeXfile is based on Gabriel B. Burcas © git-qrc.tex and has then been modified to my own requirements, with permission!