

## VIM QUICK REFERENCE CARD

### Basic movement

h l k j ..... character left, right, line up, down  
b w ..... word/token left, right  
ge e ..... end of word/token left, right  
{ } ..... beginning of previous, next paragraph  
( ) ..... beginning of previous, next sentence  
0 gm ..... beginning, middle of line  
^ \$ ..... first, last character of line  
nG ngg ..... line *n*, default the last, first  
n% ..... percentage *n* of the file (*n must be provided*)  
n| ..... column *n* of current line  
% ..... match of next brace, bracket, comment, **#define**  
nH nL ..... line *n* from start, bottom of window  
M ..... middle line of window

### Insertion & replace → insert mode

i a ..... insert before, after cursor  
I A ..... insert at beginning, end of line  
gI ..... insert text in first column  
o O ..... open a new line below, above the current line  
rc ..... replace character under cursor with *c*  
grc ..... like **r**, but without affecting layout  
R ..... replace characters starting at the cursor  
gR ..... like **R**, but without affecting layout  
cm ..... change text of movement command *m*  
cc or S ..... change current line  
C ..... change to the end of line  
s ..... change one character and insert  
~ ..... switch case and advance cursor  
g~m ..... switch case of movement command *m*  
gum gUm ... lowercase, uppercase text of movement *m*  
<*m* >*m* ..... shift left, right text of movement *m*  
n<< n>> ..... shift *n* lines left, right

### Deletion

x X ..... delete character under, before cursor  
dm ..... delete text of movement command *m*  
dd D ..... delete current line, to the end of line  
J gJ ..... join current line with next, without space  
:rd↵ ..... delete range *r* lines  
:rdx↵ ..... delete range *r* lines into register *x*

### Insert mode

^Vc ^Vn ..... insert char *c* literally, decimal value *n*  
^A ..... insert previously inserted text  
^@ ..... same as ^A and stop insert → command mode  
^Rx ^R^Rx ..... insert content of register *x*, literally  
^N ^P ..... text completion before, after cursor  
^W ..... delete word before cursor  
^U ..... delete all inserted character in current line  
^D ^T ..... shift left, right one shift width  
^Kc<sub>1</sub>c<sub>2</sub> or c<sub>1</sub>↵c<sub>2</sub> ..... enter digraph {*c*<sub>1</sub>, *c*<sub>2</sub>}  
^Oc ..... execute *c* in temporary command mode  
^X^E ^X^Y ..... scroll up, down  
<esc> or ^[ ..... abandon edition → command mode

### Copying

"x ..... use register *x* for next delete, yank, put  
:reg↵ ..... show the content of all registers  
:reg x↵ ..... show the content of registers *x*  
ym ..... 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

### Advanced insertion

g?m ..... perform rot13 encoding on movement *m*  
n^A n^X ..... +*n*, −*n* to number under cursor  
gqm ..... format lines of movement *m* to fixed width  
:rce w↵ ..... center lines in range *r* to width *w*  
:rle i↵ ..... left align lines in range *r* with indent *i*  
:rri w↵ ..... right align lines in range *r* to width *w*  
!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*

### Visual mode

v V ^V .. start/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 { }

### Undoing & repeating commands

u U ..... undo last command, restore last changed line  
. ^R ..... repeat last changes, redo last undo  
n. .... repeat last changes with count replaced by *n*  
qc qC ... record, append typed characters in register *c*  
q ..... stop recording  
@c ..... execute the content of register *c*  
@@ ..... repeat previous @ command  
:c↵ ..... execute register *c* as an *Ex* command  
:rg/p/c↵ ..... execute *Ex* command *c* on range *r*  
[ where pattern *p* matches

### Complex movement

- + ..... line up/down on first non-blank character  
B W ..... space-separated word left, right  
gE E ..... end of space-separated word left, right  
n\_ ..... down *n* − 1 line on first non-blank character  
g0 ..... beginning of screen line  
g^ g\$ ..... first, last character of screen line  
gk gj ..... screen line up, down  
fc Fc ..... next, previous occurrence of character *c*  
tc Tc ..... before next, previous occurrence of *c*  
; , ..... repeat last fFtT, in opposite direction  
[[ ]] ..... start of section backward, forward  
[] ][ ..... end of section backward, forward  
[( )] ..... unclosed (, ) backward, forward  
[{ }] ..... unclosed {, } backward, forward  
[m ]m ... start, end of backward, forward java method  
[# ]#.unclosed #if, #else, #endif backward, forward  
[\* ]\* ..... start, end of /\* \*/ backward, forward

### Search & substitution

/s↵ ?s↵ ..... search forward, backward for *s*  
/s/o↵ ?s?o↵ ..... search fwd, bwd for *s* with offset *o*  
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  
:rs/f/t/x↵ ..... substitute *f* by *t* in range *r*  
[ *x* : g—all occurrences, c—confirm changes  
:rs x↵ ..... repeat substitution with new *r* & *x*

### Special characters in search patterns

`.` `^` `$` ..... any single character, start, end of line  
`\<` `\>` ..... start, end of word  
`[c1..c2]` ..... a single character in range  $c_1..c_2$   
`[^c1..c2]` ..... a single character not in range  
`\i` `\I` ..... an identifier, excluding digits  
`\k` `\K` ..... a keyword, excluding digits  
`\f` `\F` ..... a file name, excluding digits  
`\p` `\P` ..... a printable character, excluding digits  
`\s` `\S` ..... a white space, a non-white space  
`\e` `\t` `\r` `\b` ..... `<esc>`, `<tab>`, `<↵>`, `<←>`  
`\= *` `\+ ...` match 0..1, 0..∞, 1..∞ of preceding atoms  
`\|` ..... separate two branches ( $\equiv$  *or*)  
`\( \)` ..... group patterns into an atom

### Offsets in search commands

$n$  *or*  $+n$  .....  $n$  line downward in column 1  
 $-n$  .....  $n$  line upward in column 1  
 $e+n$   $e-n$  .....  $n$  characters right, left to end of match  
 $s+n$   $s-n$  .....  $n$  characters right, left to start of match  
 $;sc$  ..... execute search command  $sc$  next

### Marks and motions

`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  
`:marks` ..... print the active marks list  
`:jumps` ..... print the jump list  
 $n^0$  ..... go to  $n^{th}$  older position in jump list  
 $n^I$  ..... go to  $n^{th}$  newer position in jump list

### Key mapping & abbreviations

`:map c e` ..... map  $c \mapsto e$  in normal & visual mode  
`:map! c e` ..... map  $c \mapsto e$  in insert & cmd-line mode  
`:unmap c` `:unmap! c` ..... remove mapping  $c$   
`:mk f` ..... write current mappings, settings... to file  $f$   
`:ab c e` ..... add abbreviation for  $c \mapsto e$   
`:ab c` ..... show abbreviations starting with  $c$   
`:una c` ..... remove abbreviation  $c$

### Tags

`:ta t` ..... jump to tag  $t$   
`:nta` ..... jump to  $n^{th}$  newer tag in list  
`^]` `^T` ..... jump to the tag under cursor, return from tag  
`:ts t` ..... list matching tags and select one for jump  
`:tj t` ..... jump to tag or select one if multiple matches  
`:tags` ..... print tag list  
`:npo` `:n^T` ..... jump back from, to  $n^{th}$  older tag  
`:tl` ..... jump to last matching tag  
`^W}` `:pt t` ..... preview tag under cursor, tag  $t$   
`^W]` ..... split window and show tag under cursor  
`^Wz` *or* `:pc` ..... close tag preview window

### Scrolling & multi-windowing

`^E` `^Y` ..... scroll line up, down  
`^D` `^U` ..... scroll half a page up, down  
`^F` `^B` ..... scroll page up, down  
`zt` *or* `z` ..... set current line at top of window  
`zz` *or* `z.` ..... set current line at center of window  
`zb` *or* `z-` ..... set current line at bottom of window  
`zh` `zl` ..... scroll one character to the right, left  
`zH` `zL` ..... scroll half a screen to the right, left  
`^Ws` *or* `:split` ..... split window in two  
`^Wn` *or* `:new` ..... create new empty window  
`^Wo` *or* `:on` ..... make current window one on screen  
`^Wj` `^Wk` ..... move to window below, above  
`^Ww` `^Ww` ..... move to window below, above (wrap)

### Ex commands ( $\leftrightarrow$ )

`:e f` ..... edit file  $f$ , unless changes have been made  
`:e! f` ..... edit file  $f$  always (by default reload current)  
`:wn` `:wN` ..... write file and edit next, previous one  
`:n` `:N` ..... edit next, previous file in list  
`:rw` ..... write range  $r$  to current file  
`:rw f` ..... write range  $r$  to file  $f$   
`:rw>>f` ..... append range  $r$  to file  $f$   
`:q` `:q!` ..... quit and confirm, quit and discard changes  
`:wq` *or* `:x` *or* `ZZ` ..... write to current file and exit  
`<up>` `<down>` ..... recall commands starting with current  
`:r f` ..... insert content of file  $f$  below cursor  
`:r! c` ..... insert output of command  $c$  below cursor  
`:all` ..... open a window for each file in the argument list  
`:args` ..... display the argument list

### Ex ranges

`,` `;` ..... separates two lines numbers, set to first line  
 $n$  ..... an absolute line number  $n$   
`.` `$` ..... the current line, the last line in file  
`%` `*` ..... entire file, visual area  
`'t` ..... position of mark  $t$   
`/p/` `?p?` ..... the next, previous line where  $p$  matches  
 $+n$   $-n$  .....  $+n$ ,  $-n$  to the preceding line number

### Miscellaneous

`:sh` `:!` `c` ..... start shell, execute command  $c$  in shell  
`K` ..... lookup keyword under cursor with `man`  
`:make` ..... start `make`, read errors and jump to first  
`:cn` `:cp` ..... display the next, previous error  
`:cl` `:cf` ..... list all errors, read errors from file  
`^L` `^G` ..... redraw screen, show filename and position  
`g^G` ..... show cursor column, line, and character position  
`ga` ..... show ASCII value of character under cursor  
`gf` ..... open file which filename is under cursor  
`:redir>f` ..... redirect output to file  $f$   
`^@` `^K` `^_` `\` ..... unused keys, available for mapping