

# VI Quick Reference

## Entering/leaving vi

|                                  |                              |
|----------------------------------|------------------------------|
| vi <i>name</i>                   | edit <i>name</i> at top      |
| vi +n <i>name</i>                | edit <i>name</i> at line n   |
| vi + <i>name</i>                 | edit <i>name</i> at end      |
| vi -r                            | list saved files             |
| vi -r <i>name</i>                | recover file <i>name</i>     |
| vi <i>name1</i> <i>name2</i> ... | edit first file, rest via :n |
| vi -t <i>tag</i>                 | start at <i>tag</i>          |
| vi +/ <i>pat</i> <i>name</i>     | search for <i>pat</i>        |
| view <i>name</i>                 | read only mode               |
| ZZ                               | exit from vi, saving changes |
| ~Z                               | stop vi for later resumption |

## The display

|           |  |
|-----------|--|
| Last line | Error message, echoing input to : / ? and !, feedback about i/o and large changes. |
| @ lines   | On screen only, not in file.   |
| ~ lines   | Lines past end of file.  |
| ^x        | Control characters, ^? is delete.  |
| tabs      | Expand to spaces, cursor at last.  |

## Vi states (or modes)

|                           |   |
|---------------------------|---|
| Command                   | Normal and initial state. Others return here. ESC (escape) cancels partial command.   |
| Insert                    | Entered by a <b>A</b> <b>I</b> <b>O</b> <b>C</b> <b>S</b> <b>S</b> <b>R</b> . Arbitrary text then terminates with ESC or abnormally with interrupt. |
| Last line                 | Reading input for : / ? or ; terminates with ESC or CR to execute, interrupt to cancel.   |
| Counts before vi commands |   |
| line/column number        | z G —   |
| scroll amount             | ^D ^U   |
| replicate insert          | a i A I   |
| repeat effect             | most other commands   |

## Simple commands

|     |                                   |
|-----|-----------------------------------|
| dw  | delete a word                     |
| de  | delete a word leaving punctuation |
| dd  | delete a line                     |
| 3dd | delete 3 lines                    |

## Adjusting the screen

|                          |  |
|--------------------------|--|
| itextESC                 | insert <i>text</i>   |
| cwnewESC                 | Change word to <i>new</i>                                  |
| eaESC                    | transpose word   |
| xp                       | pluralize word   |
| Interruption, cancelling |  |
| ESC                      | end insert or incomplete cmd (delete or rubout) interrupts |
| ~?                       | reprint screen if ~? scrambles it                          |
| File manipulation        |  |
| :w                       | write back changes   |
| :wq                      | write and quit   |
| :q                       | quit   |
| :q!                      | quit, discard changes                                      |
| :e <i>name</i>           | edit file <i>name</i>                                      |
| :e!                      | edit, discard changes                                      |
| :e + <i>n</i>            | edit, starting at line <i>n</i>                            |
| :e #                     | edit, alternate file                                       |
| :~                       | synonym for :e #   |
| :w <i>name</i>           | write file <i>name</i>                                     |
| :w! <i>name</i>          | overwrite file <i>name</i>                                 |
| :!cmd                    | run shell  |
| :in                      | run <i>cmd</i> , then return                               |
| :in <i>args</i>          | edit next file in arglist                                  |
| :if                      | specify new arglist  |
| :~G                      | show current file and line                                 |
| :ta <i>tag</i>           | synonym for <b>f</b>                                       |
| :ta <i>tag</i>           | to tag file entry <i>tag</i>                               |
| :ta                      | following word is <i>tag</i>                               |
| Positioning within file  |  |
| ^                        | forward screenfull   |
| ~B                       | backward screenfull  |
| ~D                       | scroll down half screen                                    |
| ~U                       | scroll up half screen                                      |
| G                        | goto line (end default)                                    |
| /pat                     | next line matching <i>pat</i>                              |
| ?pat                     | prev line matching <i>pat</i>                              |
| n                        | repeat last / or ?   |
| N                        | reverse last / or ?  |
| ^/pat/+n                 | n'th line after <i>pat</i>                                 |
| ?pat?-n                  | n'th line before <i>pat</i>                                |
| ]]                       | next section/function                                      |
| [[                       | previous section/function                                  |
| %                        | find matching () {} [ or ]                                 |
| Character positioning    |  |
| ^                        | first non-white  |
| 0                        | beginning of line  |
| \$                       | end of line  |
| l or →                   | right  |
| h or ←                   | left   |
| ~[[                      | same as <b>h</b>   |
| space                    | same as <b>l</b>   |
| fx                       | find <i>x</i> forward                                      |
| Fx                       | find <i>x</i> backward                                     |
| tx                       | find just before <i>x</i> forward                          |
| Tx                       | find just before <i>x</i> backward                         |
| ;                        | repeat last <b>f</b> <b>F</b> <b>t</b> or <b>T</b>         |
| ,                        | inverse of ;   |
| n!                       | to column <i>n</i>   |
| %                        | find matching () {} [ or ]                                 |

|  |   |
|--|---|
| <b>Words, sentences, paragraphs</b>                    |   |
| w  | next word forward   |
| b  | back one word   |
| e  | end of word   |
| )  | to next sentence  |
| {  | to next paragraph   |
| W  | to next sentence<br>to previous paragraph<br>blank delimited word |
| B  | back <b>W</b>   |
| E  | to end of <b>W</b>  |
| <b>Commands for LISP</b>                               |   |
| )  | Forward sexpression   |
| {  | ... but don't stop at atoms                                       |
| }  | Back sexpression  |
| })   | ... but don't stop at atoms                                       |
| <b>Corrections during insert</b>                       |   |
| ^H   | erase last character  |
| ~W   | erase last word   |
| erase  | your erase, same as <b>^H</b>                                     |
| \  | kill  |
| ESC  | escapes <b>^H</b> , your erase and kill                           |
| ?  | ends insertion, back to command                                   |
| ^D   | interrupt, terminates insert                                      |
| ^D   | backtab over <i>autoindent</i>                                    |
| 0^D  | kill <i>autoindent</i> , save for next                            |
| ^V   | ... but at margin next also                                       |
| <b>Insert and replace</b>                              |   |
| a  | quote non-printing character                                      |
| i  | append after cursor   |
| A  | insert before   |
| I  | append at end of line   |
| O  | insert before first non-blank                                     |
| o  | open line below   |
| rx   | open line above   |
| R  | replace single character with <i>x</i>                            |
| <b>Operators (double to affect lines)</b>              |   |
| d  | delete  |
| c  | change  |
| <  | left shift  |
| <b>Miscellaneous operations</b>                        |   |
| !>   | right shift   |
| !=   | filter through unix command                                       |
| y  | indent for LISP   |
| yank   | lines to buffer   |
| <b>Yank and put</b>                                    |   |
| p  | put back lines  |
| "xp  | put before  |
| "xy  | put from buffer <i>x</i>  |
| "xd  | yank to buffer <i>x</i>   |
| <b>Undo, redo, retrieve</b>                            |   |
| u  | undo last change  |
| U  | restore current line  |
| :  | repeat last change  |
| ,dp  | retrieve <i>d</i> th last delete                                  |
| <b>Scanning pattern formation</b>                      |   |
| .  | beginning of line   |
| \$   | end of line   |
| .  | any character   |
| '  | beginning of word   |
| '<   | end of word   |
| '>   | any character in <i>abc</i>                                       |
| [abc]  | any character not in <i>abc</i>                                   |
| [~abc]   | any character between <i>x</i> and <i>y</i>                       |
| [x-y]  | any number of preceding   |
| *  | replaces characters   |
| <b>Useful options (:se option, :se noop-<br/>tion)</b> |   |
| list   | print ~I for tabs, \$ at end                                      |
| magic  | • { * special in patterns   |
| number   | show line numbers   |
| paragraphs   | macro names that start para                                       |
| para   | simulate smart terminal   |
| redraw   | command mode lines  |
| scroll   | sections  |
| sections   | shiftwidth  |
| scroll   | sw  |
| shiftwidth   | macro names for sections  |
| showmatch  | for < >, and input ~D   |
| slowopen   | to ) and ] as typed   |
| slow   | choke updates during insert                                       |
| window   | visual mode lines   |
| wrapscan   | around end of buffer?   |
| ws   | wrapmargin  |
| wm   | automatic line splitting  |
| <b>Aliasing and Mapping</b>                            |   |
| :ab <enter-str> <real-str>                             | When <enter-str> is typed,<br>replace by <real-str>               |
| :ab mroe more  | corrects spelling mistake   |
| :ab tse <i>Transactions on Software Engineering</i>    | expands tse   |
| :map char commands                                     | (re)defines char  |
| :map ;   | ; is now equivalent to :  |
| :map g :1,\$ s/  | Frequent command  |
| :map F ifor {i = 1; i <= N; i++)^M^MESCkkfN            | ^C for loop   |
| :map B i{ESCealESC                                     | Latex boldface a word   |
| :map F !}fmt -70^M                                     | Format a paragraph  |
| <b>Jeff Offutt, 1995</b>                               |   |