VIP Quick Reference Card

(Based on VIP 3.5 in GNU Emacs 18)

Loading VIP

Just type `M-x vip-mode` followed by `RET`

VIP Modes

VIP has three modes: *emacs mode*, *vi mode* and *insert mode*. Mode line tells you which mode you are in. In emacs mode you can do all the normal GNU Emacs editing. This card explains only vi mode and insert mode. **GNU Emacs Reference Card** explains emacs mode. You can switch modes as follows.

from emacs mode to vi mode	`C-z`
from vi mode to emacs mode	`C-z`
from vi mode to insert mode	`i, I, a, A, o, O` or `C-o`
from insert mode to vi mode	`ESC`

If you wish to be in vi mode just after you startup Emacs, include the line:

```
(add-hook 'emacs-startup-hook 'vip-mode)
```

in your `.emacs` file. Or, you can put the following alias in your `.cshrc` file.

```
alias vip 'emacs \!* -f vip-mode'
```

Insert Mode

Insert mode is like emacs mode except for the following.

go back to vi mode	`ESC`
delete previous character	`C-h`
delete previous word	`C-w`
emulate `ESC` key in emacs mode	`C-z`

The rest of this card explains commands in **vi mode**.

Getting Information on VIP

Execute info command by typing `M-x info` and select menu item `vip`. Also:

describe function attached to the key *x*	`C-h k` *x*

Leaving Emacs

suspend Emacs	`X Z` or `:st`
exit Emacs permanently	`Z Z` or `X C` or `:q`

Error Recovery

abort partially typed or executing command	`C-g`
redraw messed up screen	`C-l`
recover a file lost by a system crash	`M-x recover-file`
restore a buffer to its original contents	`M-x revert-buffer`

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Counts

Most commands in vi mode accept a *count* which can be supplied as a prefix to the commands. In most cases, if a count is given, the command is executed that many times. E.g., `5 d d` deletes 5 lines.

Registers

There are 26 registers (`a` to `z`) that can store texts and marks. You can append a text at the end of a register (say `x`) by specifying the register name in capital letter (say `X`). There are also 9 read only registers (`1` to `9`) that store up to 9 previous changes. We will use x to denote a register.

Entering Insert Mode

insert at point	`i`
append after cursor	`a`
insert before first non-white	`I`
append at end of line	`A`
open line below	`o`
open line above	`O`
open line at point	`C-o`

Buffers and Windows

move cursor to **next** window	`C-n`
delete current window	`X 0`
delete other windows	`X 1`
split current window into two windows	`X 2`
show current buffer in two windows	`X 3`
switch to a buffer in the current window	`s` *buffer*
switch to a buffer in another window	`S` *buffer*
kill a buffer	`K`
list existing **buffers**	`X B`

Files

visit file in the current window	`v` *file* or `:e` *file*
visit file in another window	`V` *file*
save buffer to the associated file	`X S`
write buffer to a specified file	`X W`
insert a specified file at point	`X I`
get information on the current **file**	`g` or `:f`
run the **directory** editor	`X d`

Viewing the Buffer

scroll to next screen	`SPC` or `C-f`
scroll to previous screen	`RET` or `C-b`
scroll **down** half screen	`C-d`
scroll **up** half screen	`C-u`
scroll down one line	`C-e`
scroll up one line	`C-y`
put current line on the **home** line	`z H` or `z RET`
put current line on the **middle** line	`z M` or `z .`
put current line on the **last** line	`z L` or `z -`

Marking and Returning

mark point in register x	`m` x
set mark at buffer beginning	`m <`
set mark at buffer end	`m >`
set mark at point	`m .`
jump to mark	`m ,`
exchange point and mark	`` ` ` ``
... and skip to first non-white on line	`' '`
go to mark x	`` ` `` x
... and skip to first non-white on line	`'` x

Macros

start remembering keyboard macro	`X (`
finish remembering keyboard macro	`X )`
call last keyboard macro	`*`
execute macro stored in register x	`@` x

Motion Commands

go backward one character	`h`
go forward one character	`l`
next line keeping the column	`j`
previous line keeping the column	`k`
next line at first non-white	`+`
previous line at first non-white	`-`
beginning of line	`0`
first non-white on line	`^`
end of line	`$`
go to n-th column on line	n `|`
go to n-th line	n `G`
go to last line	`G`
find matching parenthesis for `()`, `{}` and `[]`	`%`
go to **home** window line	`H`
go to **middle** window line	`M`
go to **last** window line	`L`

Words, Sentences, Paragraphs

forward **word**	`w` or `W`
backward word	`b` or `B`
end of word	`e` or `E`

In the case of capital letter commands, a word is delimited by a non-white character.

forward sentence	`)`
backward sentence	`(`
forward paragraph	`}`
backward paragraph	`{`

Find Characters on the Line

find c forward on line	`f` c
find c backward on line	`F` c
up **to** c forward on line	`t` c
up **to** c backward on line	`T` c
repeat previous `f`, `F`, `t` or `T`	`;`
... in the opposite direction	`,`

VIP Quick Reference Card

Searching and Replacing

search forward for *pat*	`/` *pat*
search backward for *pat*	`?` *pat*
repeat previous search	`n`
... in the opposite direction	`N`
incremental **search**	`C-s`
reverse incremental search	`C-r`
replace	`R`
query replace	`Q`
replace a character by another character *c*	`r` *c*

Modifying Commands

The delete (yank, change) commands explained below accept a motion command as their argument and delete (yank, change) the region determined by the motion command. Motion commands are classified into *point commands* and *line commands*. In the case of line commands, whole lines will be affected by the command. Motion commands will be represented by *m* below.

The point commands are as follows:

`h l 0 ^ $ w W b B e E ( ) / ? ‘ f F t T % ; ,`

The line commands are as follows:

`j k + - H M L { } G ’`

Delete/Yank/Change Commands

	delete	**yank**	**change**
region determined by *m*	`d` *m*	`y` *m*	`c` *m*
... into register *x*	`"` *x* `d` *m*	`"` *x* `y` *m*	`"` *x* `c` *m*
a line	`d d`	`Y` or `y y`	`c c`
current **region**	`d r`	`y r`	`c r`
expanded **region**	`d R`	`y R`	`c R`
to end of line	`D`	`y $`	`c $`
a character after point	`x`	`y l`	`c l`
a character before point	`DEL`	`y h`	`c h`

Put Back Commands

Deleted/yanked/changed text can be put back by the following commands.

Put back at point/above line	`P`
... from register *x*	`"` *x* `P`
put back after point/below line	`p`
... from register *x*	`"` *x* `p`

Repeating and Undoing Modifications

undo last change	`u` or `:und`
repeat last change	`.` (dot)

Undo is undoable by `u` and repeatable by `..` For example, `u...` will undo 4 previous changes. A `.` after `5dd` is equivalent to `5dd`, while `3.` after `5dd` is equivalent to `3dd`.

Miscellaneous Commands

	shift left	shift right	filter shell command	indent
region	`<` *m*	`>` *m*	`!` *m shell-com*	`=` *m*
line	`< <`	`> >`	`! !` *shell-com*	`= =`

emulate `ESC`/`C-h` in emacs mode	`ESC/C-h`
emulate `C-c`/`C-x` in emacs mode	`C/X`
join lines	`J`
lowercase region	`# c` *m*
uppercase region	`# C` *m*
execute last keyboard macro on each line in the region	`# g` *m*
insert specified string for each line in the region	`# q` *m*
check spelling of the words in the region	`# s` *m*

Differences from Vi

In VIP some keys behave rather differently from Vi. The table below lists such keys, and you can get the effect of typing these keys by typing the corresponding keys in the VIP column.

	Vi	VIP
forward character	`SPC`	`l`
backward character	`C-h`	`h`
next line at first non-white	`RET`	`+`
delete previous character	`X`	`DEL`
get information on file	`C-g`	`g`
substitute characters	`s`	`x i`
substitute line	`S`	`c c`
change to end of line	`C` or `R`	`c $`

(Strictly speaking, `C` and `R` behave slightly differently in Vi.)

Customization

By default, search is case sensitive. You can change this by including the following line in your `.vip` file.

```
(setq vip-case-fold-search t)
```

variable	default value
`vip-search-wrap-around`	`t`
`vip-case-fold-search`	`nil`
`vip-re-search`	`nil`
`vip-re-replace`	`nil`
`vip-re-query-replace`	`nil`
`vip-open-with-indent`	`nil`
`vip-help-in-insert-mode`	`nil`
`vip-shift-width`	`8`
`vip-tags-file-name`	`"TAGS"`

Include (some of) following lines in your `.vip` file to restore Vi key bindings.

```
(define-key vip-mode-map "\C-g" 'vip-info-on-file)
(define-key vip-mode-map "\C-h" 'vip-backward-char)
(define-key vip-mode-map "\C-m" 'vip-next-line-at-bol)
(define-key vip-mode-map " " 'vip-forward-char)
(define-key vip-mode-map "g" 'vip-keyboard-quit)
(define-key vip-mode-map "s" 'vip-substitute)
(define-key vip-mode-map "C" 'vip-change-to-eol)
(define-key vip-mode-map "R" 'vip-change-to-eol)
(define-key vip-mode-map "S" 'vip-substitute-line)
(define-key vip-mode-map "X" 'vip-delete-backward-char)
```

Ex Commands in VIP

In vi mode, an Ex command is entered by typing:

`:` *ex-command* `RET`

Ex Addresses

current line	`.`	next line with *pat*	`/` *pat* `/`
line *n*	*n*	previous line with *pat*	`?` *pat* `?`
last line	`$`	*n* line before *a*	*a* `-` *n*
next line	`+`	*a* through *b*	*a* `,` *b*
previous line	`-`	line marked with *x*	`'` *x*
entire buffer	`%`	previous context	`' '`

Addresses can be specified in front of a command. For example,

`:.,.+10m$`

moves 11 lines below current line to the end of buffer.

Ex Commands

mark lines matching *pat* and execute *cmds* on these lines	`:g /`*pat*`/` *cmds*
mark lines *not* matching *pat* and execute *cmds* on these lines	`:v /`*pat*`/` *cmds*
move specified lines after *addr*	`:m` *addr*
copy specified lines after *addr*	`:co` (or `:t`) *addr*
delete specified lines [into register *x*]	`:d` [*x*]
yank specified lines [into register *x*]	`:y` [*x*]
put back text [from register *x*]	`:pu` [*x*]
substitute *repl* for first string on line matching *pat*	`:s /`*pat*`/`*repl*`/`
repeat last substitution	`:&`
repeat previous substitute with previous search pattern as *pat*	`:~`
read in a file	`:r` *file*
read in the output of a shell command	`:r!` *command*
write out specified lines into *file*	`:w` *file*
write out specified lines at the end of *file*	`:w>>` *file*
write out and then quit	`:wq` *file*
define a macro *x* that expands to *cmd*	`:map` *x cmd*
remove macro expansion associated with *x*	`:unma` *x*
print line number	`:=`
print **version** number of VIP	`:ve`
shift specified lines to the right	`:>`
shift specified lines to the left	`:<`
join lines	`:j`
mark specified line to register *x*	`:k` *x*
set a variable's value	`:se`
run a sub**shell** in a window	`:sh`
execute shell command *command*	`:!` *command*
find first definition of **tag** *tag*	`:ta` *tag*

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For VIP 3.5 with GNU Emacs version 18

Written by Masahiko Sato,
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