

# Vi Reference Card

## Modes

Vi has two modes: insertion mode, and command mode. The editor begins in command mode, where cursor movement and text deletion and pasting occur. Insertion mode begins upon entering an insertion or change command. [ESC] returns the editor to command mode (where you can quit, for example by typing :q!). Most commands execute as soon as you type them except for “colon” commands which execute when you press the return key.

## Quitting

exit, saving changes	:x
quit (unless changes)	:q
quit (force, even if unsaved)	:q!

## Inserting text

insert before cursor, before line	i , I
append after cursor, after line	a , A
open new line after, line before	o , O
replace one char, many chars	r , R

## Motion

left, down, up, right	h , j , k , l
next word, blank delimited word	w , W
beginning of word, of blank delimited word	b , B
end of word, of blank delimited word	e , E
sentence back, forward	( , )
paragraph back, forward	{ , }
beginning, end of line	0 , \$
beginning, end of file	1G , G
line <i>n</i>	<i>n</i> G or : <i>n</i>
forward, back to char <i>c</i>	f <i>c</i> , F <i>c</i>
forward, back to before char <i>c</i>	t <i>c</i> , T <i>c</i>
top, middle, bottom of screen	H , M , L

## Deleting text

Almost all deletion commands are performed by typing *d* followed by a *motion*. For example *dw* deletes a word. A few other deletions are:

character to right, left	x , X
to end of line	D
line	dd
line	:d

## Yanking text

Like deletion, almost all yank commands are performed by typing *y* followed by a *motion*. For example *y\$* yanks to the end of line. Two other yank commands are:

line	yy
line	:y

## Changing text

The change command is a deletion command that leaves the editor in insert mode. It is performed by typing *c* followed by a *motion*. For example *cw* changes a word. A few other change commands are:

to end of line	
line	
put after position or after line	P
put before position or before line	p

## Putting text

## Registers

Named registers may be specified before any deletion, change, yank, or put command. The general prefix has the form "*c*" where *c* may be any lower case letter. For example, "*adw*" deletes a word into register *a*. It may thereafter be put back into the text with an appropriate put command, for example "*ap*".

## Markers

Named markers may be set on any line of a file. Any lower case letter may be a marker name. Markers may also be used as the limits for ranges.

set marker <i>c</i> on this line	mc
goto marker <i>c</i>	' <i>c</i>
goto marker <i>c</i> first non-blank	' <i>c</i>

## Search for strings

search forward	/string
search backward	?string
repeat search in same, reverse direction	n , N

## Replace

The search and replace function is accomplished with the *:s* command. It is commonly used in combination with ranges or the *:g* command (below).

replace pattern with string	:s/pattern/string/flags
flags: all on each line, confirm each	g , c
repeat last :s command	&

## Regular expressions

any single character except newline	.	(dot)
zero or more repeats	*	
any character in set	[...]	
any character not in set	[^ ...]	
beginning, end of line	^ , \$	
beginning, end of word	< , >	
grouping	\( ... \)	
contents of <i>n</i> th grouping	\n	

## Counts

Nearly every command may be preceded by a number that specifies how many times it is to be performed. For example *5dw* will delete 5 words and *3fe* will move the cursor forward to the 3rd occurrence of the letter *e*. Even insertions may be repeated conveniently with this method, say to insert the same line 100 times.

## Ranges

Ranges may precede most “colon” commands and cause them to be executed on a line or lines. For example *:3,7d* would delete lines 3–7. Ranges are commonly combined with the *:s* command to perform a replacement on several lines, as with *:. , \$s/pattern/string/g* to make a replacement from the current line to the end of the file.

lines <i>n-m</i>	: <i>n</i> , <i>m</i>
current line	:.
last line	:\$
marker <i>c</i>	:' <i>c</i>
all lines	:%
all matching lines	:g/pattern/

## Files

write file (current file if no name given)	:w file
append file (current file if no name given)	:w >>file
read file after line	:r file
read program output	:r !program
next file	:n
previous file	:p
edit new file	:e file
replace line with program output	:. !program

## Other

toggle upper/lower case	~
join lines	J
repeat last text-changing command	.
undo last change, all changes on line	u , U