

Introduction to vim

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The Most Important Command

Before we start, let's settle down the age-old question:



The Most Important Command

The most common exit and save commands:

Command	Keys
Simple exit	: q (
Save	: w (
Save and exit	
Exit without save	
Save and override	
Command history	
Jus	t to confuse ;)

Vim Modes

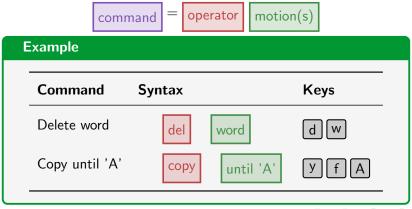
Vim has three modes:

Name	Function	Key(s)
Normal	navigation and text editing	Default/Esc
Insert	inserting text	i
Normal	highlighting text/rows/blocks	v/V/Ctrl+v

Vim Grammer

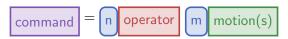
Generaly speaking, vim commands can be structure in different forms (here refered to as "rules" (CITE)).

The most simple rule is



Vim Grammer

Operators and motions can be preceded by repetitions, i.e.



Example			
Command	Syntax		Keys
3× delete word	3 del	word	3 d w
Delete 3 words	del 3	word	d 3 w

List of Operators

Main vim operator keys:

Key	Func.	Key	Func.
У	сору	С	change (delete + insert)
d	delete	X	delete single
p	paste	P	paste before
u	undo	Ctrl + r	redo
·	repeat action	·	repat motion

List of Motions

Main vim motion (navigation) keys:

Key	Func.	Key	Func.
W	next word	b	beginning of word
e/ge	end of word / prev	n	next find
n	next find	N	prev find
$f\alpha$	$next\ \alpha$	$F[\alpha]$	$prev\ \alpha$
t α	before next α	$T\alpha$	after prev α

Operators without Motions

Some operators don't need motions:

Key	Func.	Key	Func.
Visual mode			
U	make uppercase	u	make lowercase
~	switch case		
Normal mode			
ctrl + a	increment int	ctrl + ×	decrement int
g U \cdots	make uppercase	g u ···	make lowercase
g , \cdots	switch case		

Operators without Motions

Some more operators without motions:

Key	Func.	Key	Func.	
Normal mode				
u	undo	Ctrl+r	redo	
d d	delete line	c c replace line		

Motions without Operators

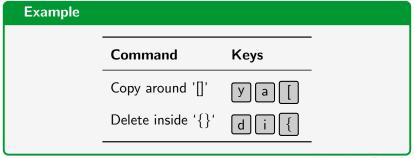
Some motions aren't actually relevant to operators and repetitions:

Key	Func.	Key	Func.
h / ←	left	j / \downarrow	down
k / 1	up		right
0	start of line	\$	end of line
^	start of line (text)	%	matched paranthesis
H	top of view	L	bottom of view
M	middle of view	L	bottom of view
Ctrl + y	scroll screen up	Ctrl + e	scroll screen down

Modifiers

The following two keys are **Modifiers**:

Key	Meaning
i	Inside an object
а	Around an object



The Command Buffer

Marks

Points in a file can be marked for later use. There are 52 possible custom marks: all lowercase letters + all uppercase letters.

Adding a mark a is done by

ma

Navigating to a mark a is done by

The combination a will jump to the start of the line where the mark is.

Macros

A **macro** is a recording of a set of operations, which can be repeated as many times as needed.

A macro a is recorded by typing q a [set of operations]

A macro *a* is called by

Registers

Find, Search & Replace, Regex

Searching for a string is done by pressing / (? for backwards search), and entering a regex-like search query.

Moving between matches can be done via $\begin{bmatrix} n \end{bmatrix}$ for forward search, and $\begin{bmatrix} N \end{bmatrix}$ for back search.

The word currently under the cursor can be searched by [*] for a forward search, and [#] for backwards search.

As with commands, the search history is searchable via \uparrow and \downarrow .

Find, Search & Replace, Regex

Replacing an expression is done by :s :

- :s/foo/bar/g changes each foo to bar in current line
- :\%s/foo/bar/g change globally
- :'<,'>s/foo/bar/g in visual mode: change in selected lines
- :'<,'>s/foo/bar/g in visual mode: change in selected lines
- \bullet :,\\$s/foo/bar/g change from here to end of file
- ullet :,+Ns/foo/bar/g change current line + ${\mathbb N}$ more lines

Find, Search & Replace, Regex

continuing:

- :\%s/foo/bar/gc change with confirmation per each change
- :\%s/foo/bar/gci change case insensitive
- :g/^baz/s/foo/bar/g change in lines starting with baz
- :s//bar/g use last searched pattern
- :\%s/foo/<c-r></br>:\%s/foo/<c-r></br>cursor (Ctrl+r) (Ctrl+w)
- :\%s/foo/<c-r>a/g replace with the content of register a
- :\%/foo/\\=ae/g replace using arithmetic expression ae

Splits