

Up and Running with vi

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Entering and leaving vi

- \$ **vi file** edits existing or new file
- **[Shift] + ZZ** writes file and quits (or **:wq**[Return])
- **:q!**[Return] quits without saving changes

File management

- | | | | |
|-------------|------------------------|------------|-------------------------|
| :w | Write without quitting | :q | Quit without writing |
| :q! | Abandon changes | :vi | Edit another file |
| :n | Go to next file | :N | Go to previous file |
| :rew | Rewind to first file | :r | Read file into this one |
- Use **[Control] + g** to display line number and file status

Basic cursor movement

- | | |
|----------|-----------------------------------|
| h | Left one character |
| j | Down one line |
| k | Up one line |
| l | Right one character (lowercase L) |

More ways of moving the cursor

- Arrow keys
- **[Space]** and **[Backspace]** for forward and backward
- **[Return]** to move to beginning of next line
- **-** (minus) to move to beginning of previous line
- Can use a number before any movement command

Moving by textual units

- | | | | |
|----------|--|----------|----------------------|
| w | Forward a word | b | Backward a word |
| e | Forward to end of current or next word | | |
|) | Forward a sentence | (| Backward a sentence |
| } | Forward a paragraph | { | Backward a paragraph |
- Can use a number before any movement command

Moving by lines

- | | | | |
|-----------|-----------------------|-----------|----------------------|
| ^ | Beginning of line | \$ | End of line |
| 1G | First line of file | G | Last line of file |
| nG | Line <i>n</i> of file | % | Matching paren/brace |
- Use **[Control] + g** to display line number and file status
 - Can use a number before any movement command

Summary of movement commands

h,l	Characters	j,k	Lines
w, b, e	Words	^, \$	Begin/end of line
(,)	Sentences	{, }	Paragraphs

- Can use a number before any movement command
- Can be used as modifiers for some other commands

Scrolling

- **[Control] + e** Scroll down one line ("expose")
- **[Control] + y** Scroll up one line
- **[Control] + d** Scroll down half a screen
- **[Control] + u** Scroll up half a screen
- **[Control] + f** Scroll down one screen ("forward")
- **[Control] + b** Scroll up one screen ("back")

Inserting text

i	Insert before cursor	I	Insert at beginning of line
a	Append after cursor	A	Append at end of line
o	Open a new line below	O	Open a new line above

- All of these commands enter insert mode
- Use **[Esc]** to return to command mode

Deleting text

x	Current character	dd	Current line
dw	Current word	de	To end of word
d^	To beginning of line	d\$	To end of line (also D)

- Can use **dx**, where x is any movement command
- Can use a number before any deletion command

Changing text

r	Current character *	s	Current character
cc	Current line	cw	Current word (also ce)
c^	To beginning of line	c\$	To end of line (also C)

- * **r** leaves you in command mode. Others: insert mode
- As with delete, **c** can use number or any movement cmd

Miscellaneous editing commands

- **R** enters overwrite mode (*[Esc]* to exit)
- **~** changes the case of the character at the cursor
- **J** joins the next line to the current line
- Can use a number before any of these

Undo, redo, and repeat

- **u** undoes last change (repeat to undo more)
- *[Control]* + **r** redoes last change (undoes undo)
- **U** undoes all changes to current line
- **.** (period) repeats last change
- Multiple undo and redo are **Vim** features

Delete, yank, and put

dd	Delete (cut) line	yy	Yank (copy) line
dx	Delete an amount	yx	Yank an amount
p	Put after cursor	P	Put before cursor

- As with delete, **y** can use number or any movement cmd
- Deletes and yanks go into vi's "buffer," not OS clipboard

Searching

- **/text** searches forward for *text*
- **?text** searches backward for *text*
- **n** repeats previous search
- **N** repeats previous search in opposite direction

Regular expressions

- **.** matches any single character
- **** removes special meaning
- **^** and **\$** match line starts and ends
- **[]** matches any character in set
- **\(\)** repeats multiple items

Search and replace

- **:s/old/new/** replaces first *old* with *new* on current line
- **:s/old/new/g** replaces every *old* with *new* on current line
- **:%s/old/new/** replaces first *old* with *new* on every line
- **:%s/old/new/g** replaces every *old* with *new* on every line

More about search and replace

- **/** can actually be any character
- *old* is a regular expression
- *new* is generally a string, except...
- **&** is replaced with the found text
- **\n** is replaced with the text found for the *nth* **\(...\)**

Indenting, auto-indent, and word wrap

- **>>** indents current line
- **<<** outdents current line
- As with delete, can use number or movement command
- **:se ai** enables auto-indent **:se noai** disables it
- **:se wm=8** enables wrap margin **:se wm=0** disables it

Filtering through shell commands

- **!!** filters current line through shell command
- **n!!** filters *n* lines **!%** filters to matching paren
- **!}** filters next paragraph **!{** filters previous paragraph
- Useful commands include **fmt**, **tr**, **grep**, **sed**, and **awk**

Using line ranges with colon commands

- **: line [, line] cmd** performs *cmd* on *line(s)* specified as:

<i>n</i>	Line number <i>n</i>	.	Current line
\$	Last line of file	'x	Mark <i>x</i> (set with mx)
/re/	Regular expression	%	All lines (same as 1,\$)
- *cmd* includes **s**, **d**, **y**, **c**, **!**, **>**, and others