Vim Modal text editor

START HERE

- `i` Insert before cursor
- `d` › `d` Delete line
- `Esc` Back to Normal mode
- `u` Undo
- `:w` Save
- `/` Search forward
- `:q` Quit
- `.` Repeat last change

Normal commands `i a o` → **Insert** typing `Esc` → **Normal** commands `v V Ctrl+V` → **Visual** select

Normal mode is the hub

Tab page a layout of windows
Window a view onto a buffer
Buffer a file in memory

CONCEPTS

Vim has modes. Normal mode is home: keys are commands. Press Esc to return to it.

Commands read like a sentence: operator + motion, e.g. d w deletes a word, c i " changes inside quotes.

Prefix a count to repeat: 3 d d deletes three lines, d 2 w two words.

Key sequences are typed one after another, not held together: d w means press d, then w.

MODES & FILES

- `i` Insert before cursor
- `Esc` Back to Normal mode
  Ctrl+[or Ctrl+C also leave Insert mode.
- `v` / `V` Visual: characters / lines
- `:w` Save file
- `:q` Quit window
- `:wq` / `ZZ` Save and quit
  ZZ only writes if something changed.
- `:q!` Quit and discard changes

MOTIONS

- `h` / `j` / `k` / `l` Left / down / up / right
- `w` / `b` / `e` Next word / previous / end
- `0` / `^` / `$` Line start / first char / end
- `g` › `g` / `G` First / last line
- `{` / `}` Paragraph back / forward
- `Ctrl` + `D` / `Ctrl` + `U` Half page down / up
- `f` › *<c>* / `t` › *<c>* To / before character on line
  Repeat with ; and reverse with ,
- `;` / `,` Repeat / reverse f t
- `%` Jump to matching bracket
- *<n>* › `G` Go to line n
- `Ctrl` + `O` / `Ctrl` + `I` Older / newer jump position

INSERT

- `a` Append after cursor
- `I` / `A` Insert at line start / end
- `o` / `O` Open line below / above
- `s` / `S` Substitute char / line
- `Ctrl` + `W` Delete word before cursor
- `Ctrl` + `R` › *<reg>* Insert register contents
- `Ctrl` + `N` / `Ctrl` + `P` Complete word next / previous

OPERATORS

- `d` › `d` Delete line
- `d` › *<motion>* Delete (cut)
- `D` Delete to end of line
- `c` › *<motion>* Change: delete and insert
- `c` › `c` / `C` Change line / to end
- `c` › `w` Change word
  cw acts like ce when on a non-blank.
- `y` › *<motion>* Yank (copy)
- `y` › `y` Yank line
- `x` / `X` Delete char under / before
- `r` › *<c>* Replace one character
- `u` Undo
- `Ctrl` + `R` Redo
- `.` Repeat last change
  Works for changes and puts, not for Ex commands.
- `p` / `P` Put after / before cursor
- `>` › `>` / `<` › `<` Indent / outdent line
- `J` Join lines with a space
- `Ctrl` + `A` / `Ctrl` + `X` Increment / decrement number

Operator + motion

Keys	Effect
`d i w`	delete word
`c i "`	change inside quotes
`y a p`	yank paragraph
`d t ,`	delete up to comma
`> i {`	indent block

TEXT OBJECTS

- `i` › `w` / `a` › `w` Word / word with space
- `i` › `"` / `a` › `"` Inside / around double quotes
  i' and i` work the same way.
- `i` › `(` / `a` › `(` Inside / around parentheses
  b is a synonym: ib, ab.
- `i` › `{` / `a` › `{` Inside / around braces
- `i` › `p` / `a` › `p` Paragraph
- `i` › `t` / `a` › `t` Inside / around XML tag

Text objects work from anywhere inside; no need to move to the start first. Use them after an operator or in Visual mode.

VISUAL MODE

- `v` Characterwise Visual
- `V` Linewise Visual
- `Ctrl` + `V` Blockwise Visual
- `g` › `v` Reselect last Visual area
- `Ctrl` + `V` › `I` Insert on all block lines
  Press Esc to apply to every line.
- `:` Ex command on selection
  Vim fills in '<,'> for the range.

Select first, then act: Visual mode takes the same operators (d y c > = and so on).

SEARCH & REPLACE

- `/` › *<pat>* Search forward
- `?` › *<pat>* Search backward
- `n` / `N` Next / previous match
- `*` / `#` Search word under cursor
  g and g# skip the whole-word match.*
- `:noh` Clear search highlight
- `:s/<a>/<b>/` Replace first on line
- `:%s/<a>/<b>/g` Replace in whole file

SEARCH & REPLACE (cont.)

- `:%s/<a>/<b>/gc` Replace with confirmation
  y yes, n no, a all, q quit, l last.
- `:g/<pat>/d` Delete matching lines

REGISTERS & MACROS

- `"` › *<a-z>* › `y` Yank into named register
- `"` › *<a-z>* › `p` Put from named register

System clipboard

Keys	Effect
`"+y`	yank to clipboard
`"+p`	put from clipboard

- `"` › `0` › `p` Put last yank
  Deletes do not overwrite register 0.
- `q` › *<a-z>* Record macro, q again stops
- `@` › *<a-z>* Play macro
- `@` › `@` Replay last macro

WINDOWS & BUFFERS

- `Ctrl` + `W` › `s` / `v` Split horizontal / vertical
- `Ctrl` + `W` › `h/j/k/l` Move to window left/down/up/right
- `:ls` List buffers
- `:b` › *<n>* Go to buffer n
- `Ctrl` + `^` Toggle alternate file

FOLDS & MISC

- `:set` › `nu` Show line numbers
- `:set` › `hls` › `is` Highlight / incrementally search

RECIPES

Open from the shell

```
vim +42 <file>  # at line 42
vim +/<pat> <file>
vim -d a b  # diff
find . -name '*.c' | vim -
```

Rename in file, confirm each

```
:%s/\<old\>/new/gc
```

Edit many lines at once

```
Ctrl+V  # select column
j j j  # extend down
I // Esc  # prefix all
```