



# Mastering Vim

**How I use the world's bestest text editor efficiently**



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# Agenda



- 1 Overview
- 2 Navigate in normal mode
- 3 Macros
- 4 How to adequately switch to insert mode
- 5 Visual Mode
- 6 Minor things

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# What is Vim?

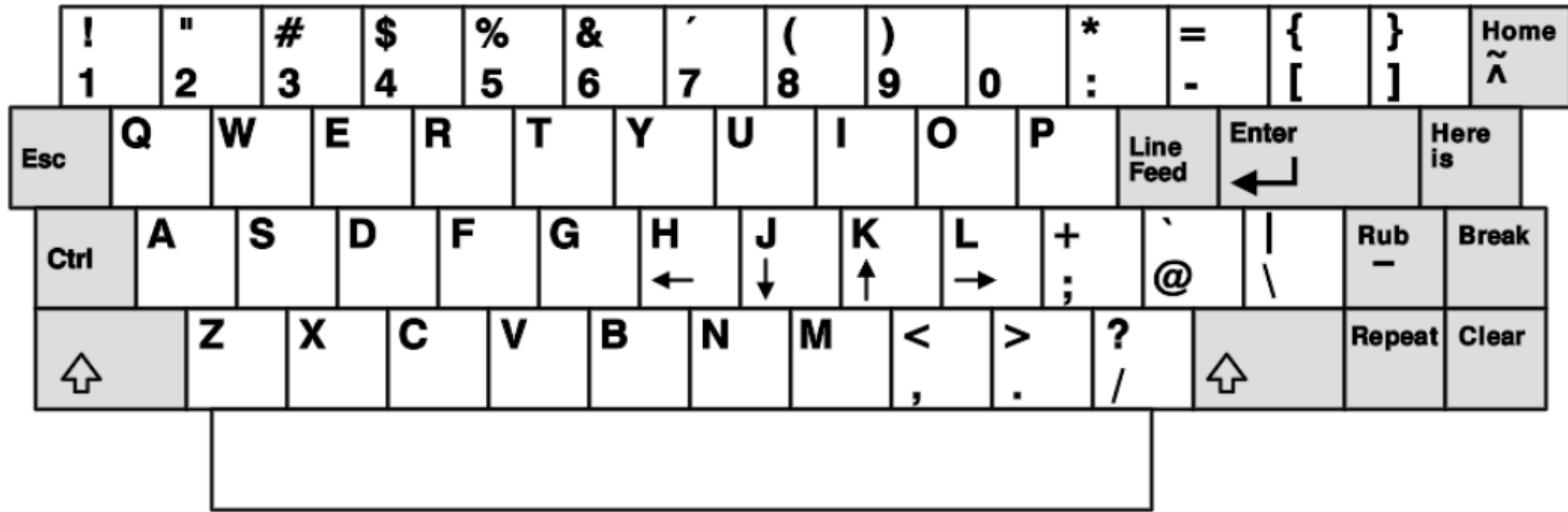
- ▶ Text editor
- ▶ VIM = Vi IMproved
- ▶ Main developer: Bram Moolenaar
- ▶ Turned 30 in 2021, approaches version 9
- ▶ has a lot of plugins
- ▶ is already very good without plugins

It is not:

- ▶ a trap
- ▶ a random string generator

# Origins





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i<ESC> :wq



My blood runs cold, when someone

- ▶ open vi, types i
- ▶ edits navigating using the cursor
- ▶ exits using :wq

## Mastering vim

- ▶ navigate in normal mode
- ▶ return to normal mode immediately after editing

# Vim modes



- ▶ Normal
- ▶ Insert, Replace, Substitute
- ▶ Visual (+line / block)
- ▶ (Motion)
- ▶ Command-line mode

# Navigating in normal mode



- ▶ Arrow keys
- ▶ hjkl
- ▶ jumping based on
  - ▶ word boundaries (`w`, `W`, `e`, `E`, `gE`)
  - ▶ sentences (`(`, `)`)
  - ▶ paragraphs (`{`, `}`)
  - ▶ parentheses (`%`)
  - ▶ lines (`+`, `-`, `^`, `$`, `0`, `_`)
  - ▶ marked points (`m<LETTER>` → '`<LETTER>`)
- ▶ searches (`/`, `?`, `*`, `#`, `n`, `N`)

Motions can be multiplied.

Marks are stored when closing Vim.

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- ▶ repeat a set of commands
- ▶ technically: string in a register

## Record and use macros

in normal mode:

- ▶ record: `q<[a-zA-Z]><MACRO>q`
- ▶ use: `@<NAME>`

# Macro examples



Insert “demo” after the third word of the next sentence

```
1 q m ) 3w i demo <ESC>q
```

Enter copyright note at end of file

```
1 q c G o COPYRIGHT me@atix.de <ESC>q
```

Note: Macros are stored persistently.

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# enter insert / replace mode



## Add new text

- ▶ `i/a`: insert before/after the cursor (**insert, append**)
- ▶ `I/A`: insert at beginning / end of line
- ▶ `o/o`: open new line below / above current line

## Replace existing text

- ▶ `c<motion>`: delete area and enter insert mode
- ▶ `R`: enter replace mode
- ▶ `s`: substitute current letter and enter insert mode

## Examples:

- ▶ `c3w`: change three words
- ▶ `c3j`: change three lines
- ▶ `c%`: delete scope block

# Registers

- ▶ Removed text is stored in registers (`c`, `d`, `x`)
- ▶ Yank into register (e.g. `y$` to copy until the end of line)
- ▶ Default register: `"`
- ▶ Paste using `p` and `P`
- ▶ Use named registers by prepending "`<NAME>`"
- ▶ Command `:register` to list used registers

## Example: Words switching position `dwP`

- ▶ `dw` to copy until the beginning of the next word
- ▶ `w` to move to the begining of the word after
- ▶ `P` to paste before the current cursor position

# Skip movement

- ▶ dd: completely delete current line
- ▶ D: delete until end of line (d\$)
- ▶ c: delete until end of line and start insert mode (c\$)
- ▶ s: substitute complete line (cc)
- ▶ yap: **yank all paragraph** (copy whole paragraph)
- ▶ cib: **change inside brackets**

## **a**ll and **i**nner

- ▶ w: word
- ▶ p: paragraph
- ▶ b: parenthesis
- ▶ B: curly braces
- ▶ t: XML tag
- ▶ [/|'|"/<.: within given delimiters

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## visual mode

- ▶ mark a piece of the document “visually”
- ▶ then yank, change or delete it
- ▶ `v`: mark sequence
- ▶ `V`: mark lines
- ▶ `^V`: mark columns

### Example: insert numbers

- ▶ `^V<down>`: mark a column of character
- ▶ `I1. <ESC>`: prepend string ‘1. ’
- ▶ `gvoj`: repeat selection omitting first line
- ▶ `g^a`: incrementally increment numbers

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# Copy and paste over file boundaries



- ▶ `:e<FILENAME>`: opens new file
- ▶ `:b<NUMBER>`: switch between **buffers**
- ▶ then do simple copy and paste commands
- ▶ or:
  - ▶ `:read<FILENAME>` insert content of <FILENAME>
  - ▶ `:read!<COMMAND>` insert output of <COMMAND>

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command	effect
<code>~</code> / <code>gU</code> / <code>gu</code>	switch capitalization of letter under cursor
<code>.</code>	repeat command
<code>J</code>	join lines (intelligently)
<code>&gt;/&lt;</code>	indent / unindent
<code>=</code>	auto-indent
<code>xp</code>	letter dance

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- ▶ navigate in normal mode
- ▶ delete in normal mode
- ▶ play Vimgolf

Thank you for your attention!