

Vim Workshop

CSHub 2019

Tien Phan (attacker0211)

York University, Toronto, Canada

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Introduction to Vim

Vim Installation

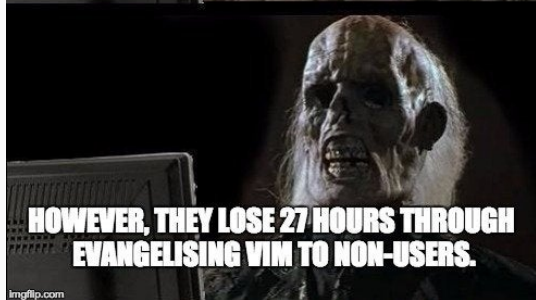
<https://www.vim.org/download.php>

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- It is included as "vi" in most Unix systems.
- Many other editors such as Visual Studio Code supports vim emulation mode.
- Vim is worth learning even if you finally end up switching to some other text editor.

Why Vim?



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- Vim is a modal editor with different modes for manipulating text:
 - **Normal mode** - used for editor commands. This is also the default mode.
 - **Visual mode** - similar to normal mode, but used to highlight areas of text. Normal commands are run on the highlighted area, which for an instance can be used to move or edit a selection.
 - **Select mode** - works similarly to visual mode. However, if a printable character, carriage return, or newline (or line feed) is entered, Vim inserts the character, and starts insert mode.
 - **Insert mode** - similar to editing in most modern editors.
 - **Command-line mode** - supports a single line input at the bottom of the Vim window. Normal commands (beginning with :), and some other specific letters corresponding to different actions (including pattern search and the filter command) activate this mode.
 - **Ex mode**, it takes a single line input at the bottom of the window.

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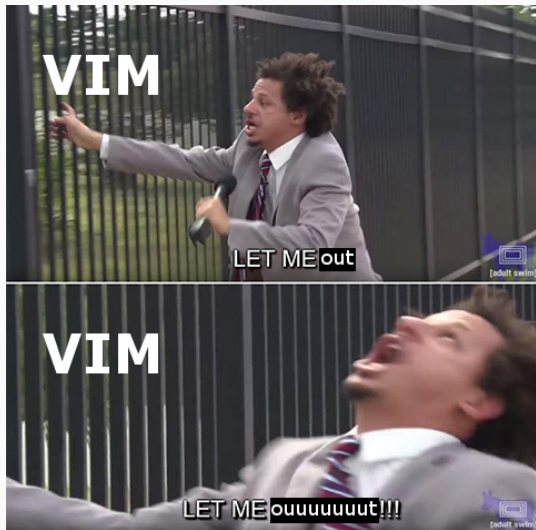
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- Vim is programmable with Vimscript and Vim commands are composable.
- Vim operates at the speed speed of thought
- And so much more crazier stuff, seriously. I'm still learning Vim everyday.

Basics

- From normal mode, press **i/a/o** to enter insert mode. Press **ESC** to return to normal mode.

Command Mode/Normal Mode

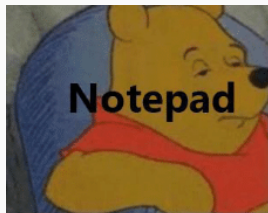


- **:q** quit
- **:w** save
- **:e** open for editing
- **:help**
- **:%s/find/replace**

Movements

- Basic movement: hjkl (left, down, up, right)
- Words: w (next word), b (beginning of word), e (end of word)
- Lines: 0 (beginning of line), ^ (first non-blank character), \$ (end of line)
- Screen: H (top of screen), M (middle of screen), L (bottom of screen)
- Scroll: Ctrl-u (up), Ctrl-d (down)
- File: gg (beginning of file), G (end of file)
- Line numbers: {number}G
- Find: fcharacter, t{character}, F{character}, T{character} find/to forward/backward {character} on the current line
- Search: /{findMatch}, n / N for next / previous matches

- **d**{**motion**} delete {motion} e.g. dw is delete word, d\$ is delete to end of line, d0 is delete to beginning of line
- **c**{**motion**} change {motion} e.g. cw is change word like dmotion followed by i
- **x** delete character (equal to dl)
- **s** substitute character (equal to xi)
- visual mode + manipulation select text, d to delete it or c to change it
- **u** to undo, <**C-r**> to redo
- **y** to copy /yank (some other commands like **d** also copy)
- **p** to paste



c = copy



y = YEET

How I remember copying in vim

- Character mode: **v** (lower-case)
- Line mode: **V** (upper-case)
- Block mode: **Ctrl+v**

- `ci(` :change the contents inside the current pair of parentheses
- `ci[` :change the contents inside the current pair of square brackets
- `da'` :delete a single-quoted string, including the surrounding single quotes

- Takes a single line input at the bottom of the window.
- However, in Cmdline mode, entering a command exits the mode when the command is executed. Entering a command in Ex mode doesn't cause the mode to change.

Advances

- Start recording by pressing q, followed by a lower case character to name the macro.
- Perform any typical editing, actions inside Vim editor, which will be recorded.
- Stop recording by pressing q.
- Play the recorded macro by pressing @ followed by the macro name.
- To repeat macros multiple times, press: number@macro-name.

- `:s` (substitute) command
- `%s/foo/bar/g`: replace foo with bar globally in file

- **Multiple windows:** `:sp / :vsp` to split windows
- Vim maintains a set of open files, called buffers.
- A Vim session has a number of tabs, each of which has a number of windows (split panes).
`:tabnew` to create a new tab.
- Can have multiple views of the same buffer.

Configure Vim Yourself!

- The configuration file should be in `/.vimrc`

Configuring Vim

- The configuration file should be in `/.vimrc`
- I recommend start with someone else's dotfiles first. When I first started, I used: <https://github.com/thoughtbot/dotfiles>

- Some famous plugin managers:
Pathogen(<https://github.com/tpope/vim-pathogen/>), Vundle(<https://github.com/VundleVim/Vundle.vim>).
- nerdtree (file explorer): <https://github.com/preservim/nerdtree>
- ctrlp.vim (fuzzy file finder): <https://github.com/ctrlpvim/ctrlp.vim>
- nerdcommenter: <https://github.com/preservim/nerdcommenter>
- vim-autoclose (auto close brackets):
<https://github.com/Townk/vim-autoclose>
- vim-surround (surroundings everything):
<https://github.com/tpope/vim-surround>
- UltiSnips (for snippets): <https://github.com/SirVer/ultisnips>

Resources

- vimtutor
- Vim Wiki