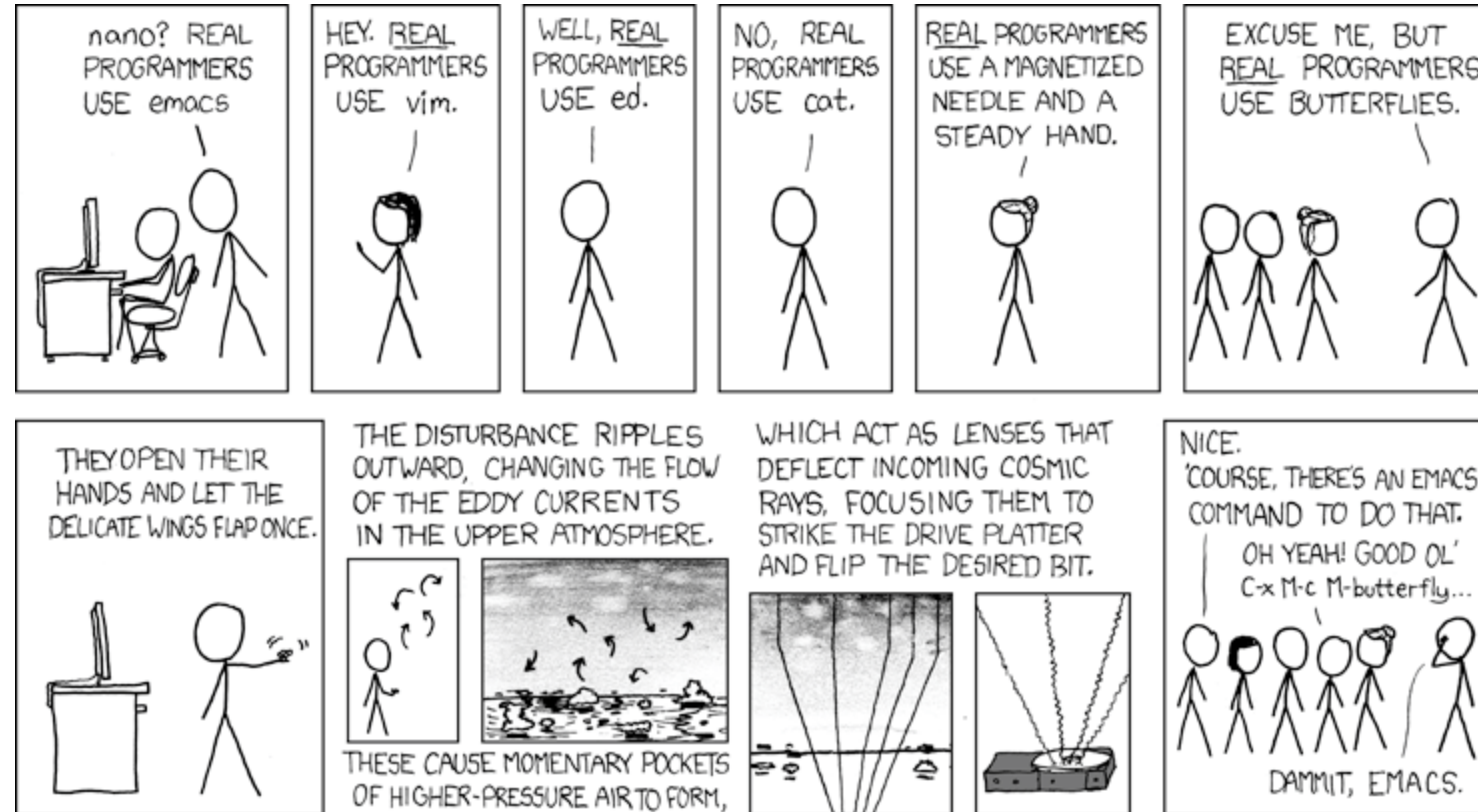




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Unix Editors

Winter 2022



Unix editors

- Come in two types
 - Modal
 - An “input” mode and a “control” mode
 - E.g. vi and ed
 - Modeless
 - E.g. pico and emacs

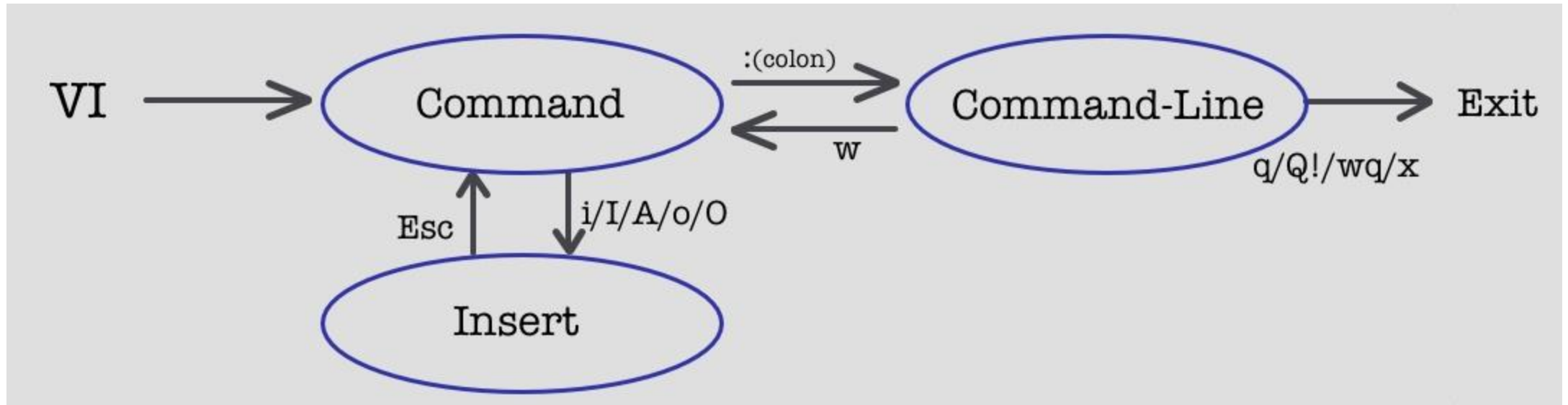
ed

- ed – Line editor
- The original text editor
- Generally superseded by vi
- [https://en.wikipedia.org/wiki/Ed_\(text_editor\)](https://en.wikipedia.org/wiki/Ed_(text_editor))

vi

- Much more popular
- Found on nearly any Unix system
- Has three modes
 - Input
 - Command
 - Colon command

vi



vi

- `vi <filename>`
- If the file already exists, you will see the file contents
- If the file does not exist, you will have a blank file ready for input
- The bottom of the screen will show the filename and the line/column number of the cursor

vi

- Common commands
 - Arrow keys – navigate around
 - i or a – change to “insert” or “append” mode
 - ESC – change to “command” mode
 - x – delete the current character
 - 3x deletes 3 characters

vi

- Common commands
 - dd – delete the entire line
 - 3dd deletes 3 lines
 - u – undo
 - /string – search for “string”

vi

- Common commands
 - :w – write the file
 - :wq or :x – write the file and quit
 - :q – quit
 - :q! – quit discarding any changes

vi

- Common commands
 - `:%s/foo/bar/g` – search for any instance of regular express “foo” and replace it with the string “bar”
 - More on regular expressions later

emacs

- Modeless but uses “Meta” (usually ALT or ESC) and CTRL to perform functions
- Has a graphical option if you are at a GUI terminal
- Key combinations
 - E.g. C-x – CTRL + x
 - E.g. C-x s – CTRL + x + s

emacs

- Common key combinations
 - C-x C-s – Save file
 - C-x C-c – Quit
 - C-_ or C-x u – Undo
 - C-a and C-e – Goto start or end of line
 - C-g – abort a partial command

emacs

- Popular because you can define your own key combination to do whatever you want (think Macros in Microsoft Office)
- <https://i.imgur.com/SKm6x.png>

Pico and nano

- Simple text editors that are always in insert mode
- Control options are always displayed at the bottom of the screen

What editor should you use for this course?

- Probably none of these.
- Use a graphical editor on your desktop and upload your code
 - VSCode (<https://code.visualstudio.com/>)
 - Notepad++ (<https://notepad-plus-plus.org>)
 - CLion (<https://www.jetbrains.com/clion/>)

Youtube links

- Fireship
 - Vim in 100 seconds (<https://youtu.be/-txKSRn0qeA>)
- Vim vs Emacs. Which is better (<https://youtu.be/VaBdlcYaZLQ>)



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