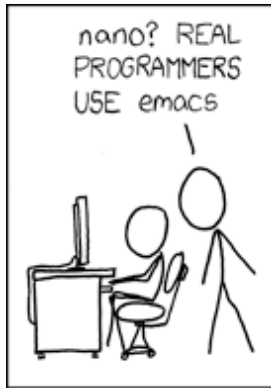


emacs



why emacs?



Alt: Real programmers set the universal constants at the start such that the universe evolves to contain the disk with the data they want.

why emacs?

- A text editor is just a tool for creating text documents.
- A programmer needs a tool which allows him or her to write code efficiently.
- emacs is a very efficient and extensible tool.

getting emacs

- emacs is free and widely available for download for Windows, Mac OS, or Linux.
- If using Windows or Mac OS, you'll likely want to download a 'precompiled binary', unless you really want to compile from source.

master the keyboard



master the keyboard

- Hands belong on the keyboard.
- emacs is designed to keep your fingers on the keys and off the mouse.
- Keyboard shortcuts let you navigate text faster than you could using the mouse.

shortcut notation

- C-x means “hold ctrl and press x”
- M-x means “hold alt and press x”
- Sometimes use option instead of alt on Macs!



buffers

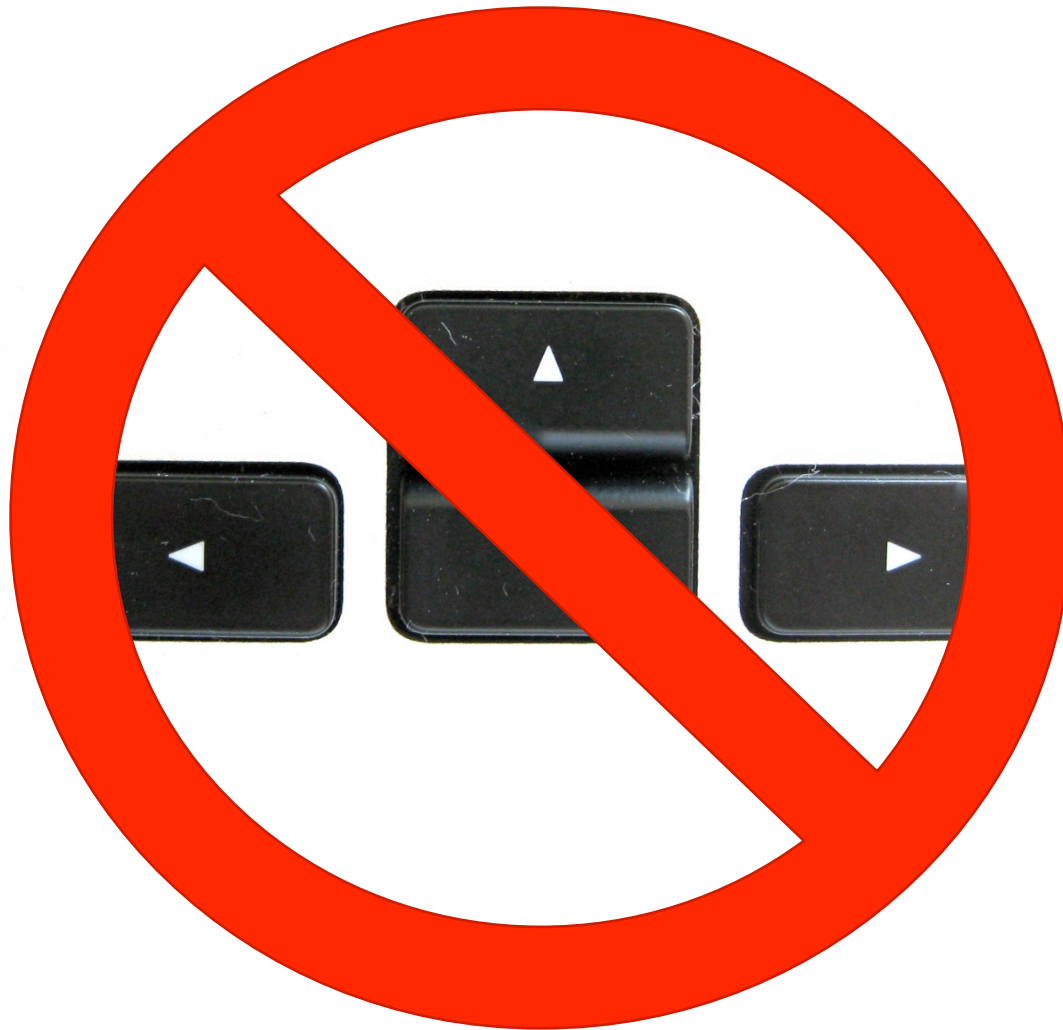
- In programming, a buffer is a contiguous region of memory in which we store data. An array, for example, is a buffer!
- In emacs, we refer to our open files as buffers, regions of text which we may edit and write to disk.
- We can switch between various open buffers and view multiple buffers at the same time.

basic operations

- C-x shortcuts tend to relate to operations on buffers.
- These operations including opening and saving files!

Shortcut	Description
C-x C-f	Open file in new buffer.
C-x C-s	Save current buffer to file.
C-x C-w	Write out current buffer to different file.
C-z	Suspend emacs.
C-x C-c	Close emacs. (Why!?)

navigating text



navigating text

Shortcut	Description
C-n	Move cursor to next line.
C-p	Move cursor to previous line.
C-v	Page down.
M-v	Page up.
C-a	Move cursor to start of current line.
C-e	Move cursor to end of current line.
M-g g	Go to line. (Prompts for line number.)

navigating text

Shortcut	Description
C-f	Move cursor forward by one character.
C-b	Move cursor backward by one character.
M-f	Move cursor forward by one word.
M-b	Move cursor backward by one word.

manipulating text

Shortcut	Description
C-d	Delete character at cursor.
C-k	'Kill' a line of text. (Cut)
C-y	'Yank' a line of text. (Paste)
C-_	Undo!

selecting text

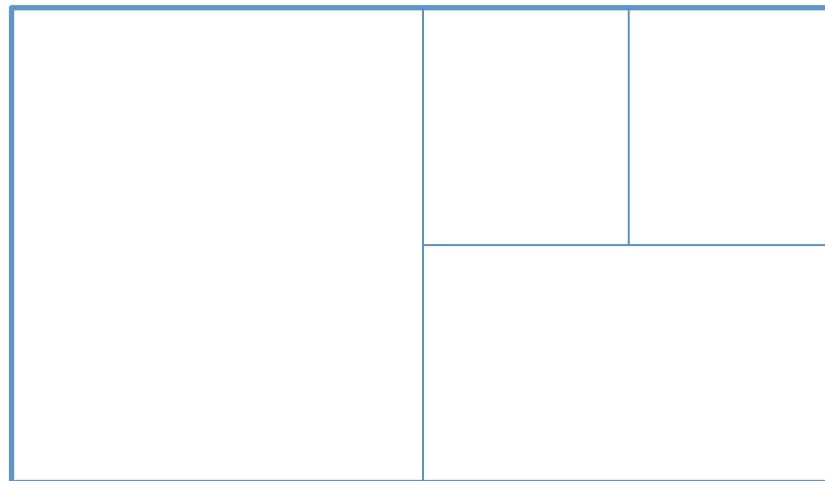
- A **region** is a contiguous span of text in a buffer. Selecting a region is like highlighting text in another program.
- To select a region:
 - Move cursor to one end of desired region.
 - Press C-<space>
 - Move cursor to other end of desired region.
 - You have a selected region!

manipulating regions

Shortcut	Description
C-w	'Kill' a region of text.
M-w	Copy a region of text.

buffers and windows

- We can split the screen into multiple distinct windows to work on multiple files at once or view the same file from different locations.
- The screen can be split vertically or horizontally, and multiple times!



managing windows

Shortcut	Description
C-x o	Cycle focus to next window.
C-x 0	Remove current window.
C-x 1	Remove all but current window.
C-x 2	Split window horizontally.
C-x 3	Split window vertically.

using the shell

- emacs is so fun to use. Wouldn't it be great if we never had to leave?
- Turns out we don't!



using the shell

- We can access the shell prompt from within an emacs buffer.
- This means we can compile and test a program without leaving our editor!

using the shell

- M-x shell - Creates a new window (within emacs) containing a shell prompt.
- You can type a command at the prompt and hit enter to execute it, just like in the terminal!

work on your macro

- If I have to do something n times where n is annoying, I write a program.
- So why do something repetitive manually in emacs? We shouldn't!

work on your macro

- Macros let you automate tedious editing by allowing the execution of ‘batch’ editing commands.

Shortcut	Description
C-u n <cmd>	Perform <cmd> n times.
C-x (Start defining a keyboard macro.
C-x)	Stop defining the keyboard macro.
C-x e	Execute the keyboard macro.

give it a shot

- Okay to just use some basic commands and use emacs like nano at first.
- You don't have to learn everything at once – this isn't practical.
- Gradually learn new shortcuts, and if you find something missing, you can create your own!

M-x prompt-for-questions

