

Before the Tutorial: Changing the Workspace

Use the `cram-vm` from the `fetch` and `place` tutorial:

http://cram-system.org/tutorials/demo/fetch_and_place

Open a terminal (Ctrl-Alt-T) and open the `.bashrc` file.

- ▶ `gedit .bashrc`
- ▶ Go to the bottom of the file
- ▶ Comment-out the line starting with `source` for day 1 & 2
- ▶ Comment-in the line for day 3
- ▶ Save and close the `.bashrc` file
- ▶ Do `source .bashrc`

Now when typing `roscd` you should be in the `cram_tutorial` workspace.

Exercise 1: Orc-Battle (Getting familiar with Emacs)

- ▶ start emacs from the terminal with *roslisp_repl &*
- ▶ open a file with *Ctrl-x Ctrl-f*
 - look for Downloads/orc-battle.lisp and hit Enter
- ▶ compile the whole file with *Ctrl-c Ctrl-k*
- ▶ switch buffer with *Ctrl-x b*
 - use up and down keys to find **slime-repl sbcl**, then press *Enter*
- ▶ execute (*orc-battle*)

Emacs Keybindings

The following notation is used in Emacs for keyboard shortcuts:

- ▶ C for <Ctrl>
- ▶ M for <Alt>
- ▶ '-' for when two keys are pressed together (e.g. C-x for <Ctrl>+x)
- ▶ SPC for <Space>
- ▶ RET for <Enter>

-
- ▶ Open a file: C-x C-f
TAB auto-completes, RET opens
 - ▶ Switch buffer: C-x b
Up/Down keys: browse buffers
 - ▶ Split view horizontally: C-x 2
 - ▶ Split view vertically: C-x 3
 - ▶ Switch between tabs: C-x o
 - ▶ Close current tab: C-x 0
 - ▶ Cut: C-w
 - ▶ Copy: M-w
 - ▶ Paste (yank): C-y
 - ▶ Compile section: C-c C-c
 - ▶ Compile whole file: C-c C-k

More Keybindings

- ▶ Cancel command mid-way: `C-g`
Or hit ESC 3 times.
- ▶ Kill buffer: `C-x k`
- ▶ Jump to definition: `M-.`
- ▶ Jump back from definition: `M-,`
- ▶ Select code within parentheses:
`C-M-SPC`
When at an opening parenthesis
- ▶ Exit Emacs: `C-x C-c yes`

While in the REPL

- ▶ Delete current input:
`C-M-Backspace`
- ▶ Get last command: `C-UP`
- ▶ Break line: `C-j`