

COURSE OVERVIEW

CSC 100 - Introduction to programming - Spring 2023

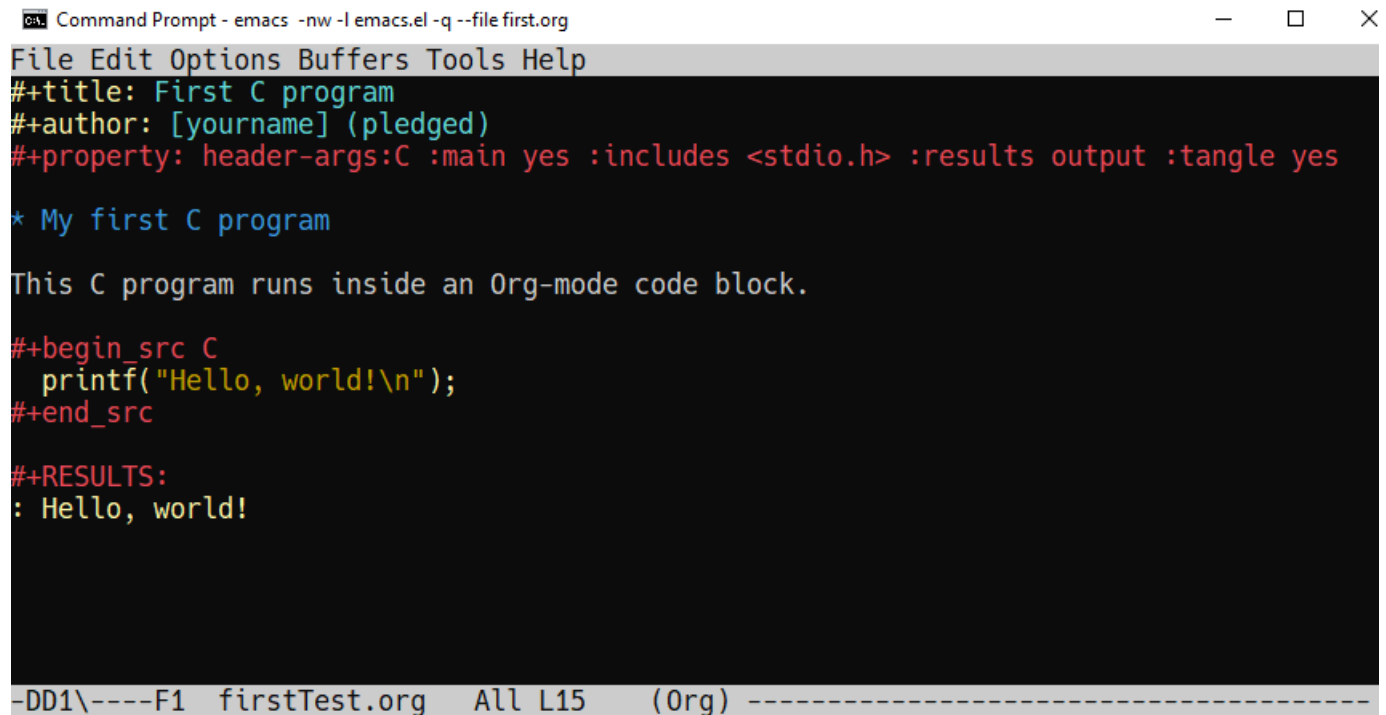
Practice: first "literate" C program!



Figure 1: My GitHub dashboard

Let's set Emacs up, write and run a first "literate" C program!

1. Open the command line terminal with CMD in the search field
2. At the prompt, type `gcc --version`
3. Open <https://github.com/birkenkrahe/org/> in a browser
4. Navigate to the repository `emacs` in GitHub
5. Click on the file name `.emacs` to open it
6. Open the Raw version of this file (there's a button)
7. Right click to `Save as` and save file as `emacs.txt` in `/Downloads`
8. Open a terminal by entering CMD in the Windows search bar
9. Pin the terminal to your taskbar
10. At the prompt, enter `DIR emacs.txt` - you should see the file
11. Enter `emacs -nw -l emacs.txt`
12. Inside Emacs, click `<F10>` and `ENTER` to open a new file
13. At the prompt at the bottom of the screen, enter `first.org`
14. Enter the following text (replace `yourname` with your own name):



```
File Edit Options Buffers Tools Help
#+title: First C program
#+author: [yourname] (pledged)
#+property: header-args:C :main yes :includes <stdio.h> :results output :tangle yes
* My first C program

This C program runs inside an Org-mode code block.

#+begin_src C
    printf("Hello, world!\n");
#+end_src

#+RESULTS:
: Hello, world!

-DD1\----F1 firstTest.org All L15 (Org) -----
```

15. Run the program by putting the cursor anywhere on the code block and typing CTRL-c CTRL-c (or C-c C-c)
16. Tangle the code with C-c C-v t (or M-x org-babel-tangle)
17. Open a shell (terminal program) with ALT-x eshell
18. At the prompt, enter `ls -l first*` - you should see `first.C`
19. Enter `gcc first.C -o hello`
20. Enter `hello` to run the program.
21. Upload `first.org` as your first in-class assignment to Canvas!

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Author: Marcus Birkenkrahe

Created: 2023-01-13 Fri 14:43