

Practice: first C program! (15 min)

Let's set emacs up, write and run a first "literate" c program! it is very important that you enter everything **exactly as shown**. if you get something wrong just go back one step. Contact me if you need help.

- 1 Open the command line terminal with `cmd` in the search field and pin the app to the task bar to open it more quickly next time.
- 2 At the prompt, type `gcc --version` - this should tell you the location of the C compiler, GNU CC.
- 3 Open the Windows search field and type `notepad`, then open the app. You can also pin it to the taskbar. This is your editor now.
- 4 Pin the terminal to your taskbar to open it quickly next time!
- 5 In the `notepad` app window, enter the following lines - don't miss a single character, including empty 'whitespace':

```
6 #include <stdio.h>
7
8 int main (void)
9 {
10     puts("Hello, world!");
11     return 0;
12 }
```

- 13 Save the file with `CTRL + s` to the name: `hello.c`. Pay attention to the file location on your computer, e.g. This PC > Downloads.
- 14 Close the `notepad` app.
- 15 Open the `CMD` line terminal again.
- 16 Go to the location of your `hello.c` file by entering `cd` followed by the location, e.g. `cd Downloads` or `cd C:\`.
- 17 Make sure your file is there and ready by entering `type hello.c`. You should now see it on the screen.
- 18 Compile the program by entering `gcc hello.c`. If all is well, you'll get no response, just another prompt.
- 19 At the prompt, enter `DIR hello.c a.exe` - this will give you information about your C file and the executable machine file.
- 20 Run the program by entering `a.exe`.
- 21 Now compile the program again with the command `gcc hello.c -o hello`.
- 22 Your executable (the compiler's output) is now called `hello`.
- 23 Check that by entering `hello` at the prompt. You should get your output `Hello, world!` on the screen.
- 24 Now open `hello.c` again using `notepad` and at the top add the line:

```
25 // Hello world program by [yourname] (Pledged)
```

- 26 Save it again and submit it as your first in-class assignment:
- 27 Open a browser to `GDrive` and upload the file
- 28 Open the [assignment in Canvas](https://lyon.instructure.com) at `lyon.instructure.com`
- 29 Upload the file from `GDrive` (click on "More")
- 30 When you see it attached, click on `Submit Assignment`.