C Fundamentals practice - hello world

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1. READ README

- This file is a practice file for C fundamentals.
- You will learn how to:
    1. understand and change syntax highlighting
    2. understand and use comments in C
- Time: approx. 15-30 min.
- When you're done with a section move the cursor on the section heading and type `S-<right>` (or SHIFT+ <right-arrow>).
    - When you leave class without having completed the file, save a copy to your GDrive as a backup and/or to work on it from home
- When you've completed the file, upload it to Canvas

2. TODO Identify yourself

1. replace `[yourName]` in the header of this file by your name
2. add `(pledged)` next to your name (as in "I obey the honor code")
3. Change the "TODO" in the headline to "DONE" (`S-<right>`)
4. save the file (`C-x C-s`).

3. TODO Syntax highlighting

1. Below, create a code block named `pgm:hello` with a program that prints "Hello, world!" on the screen: Use the `<s` template to create the code block.
2. Add the header arguments `C` and `:results output` to the code block.
3. Add the preprocessor directive (`#include`), the `main` function, and the code to print with `printf`.
4. Run the program in Emacs to make sure that it works (`C-c C-c`).
5. Open the Emacs themes chooser with `M-x custom-themes`. In the buffer, uncheck the current theme and check another. Then return here (`C-x b`) to see the effect on your hello world program.
6. If you like a theme especially well, you save it for future sessions if you like by clicking on `Save Theme Settings`. You get the message `Custom theme saved for future sessions` in the minibuffer.

—— Put code block here ——

4. TODO Fix the program

The program [1] below should print out the sentence `"I love my cat 'Milly'"`. But it doesn't. Instead it prints:

```
I dog 'Milly'
```

Something went wrong with the comments. Fix the program and run it again.

```c
#include <stdio.h>

int main()
{
  printf("I "); /****
                        printf("love ");
                        printf("my ");    ****/
  printf("cat");
  printf(" 'Milly'"); //* I really do! */

  return 0;
}
```

```
I cat 'Milly'
```

5. TODO Comment program

Write short comments in the program 1 to explain what each part of the program does (guess if you don't know for sure) - comment at least whenever you see WRITE COMMENT HERE.

The program contains so-called *inline* comments // and *multi-line* comments: /* ... */.

```c
#include <stdio.h> // WRITE COMMENT HERE

int main (void) // WRITE COMMENT HERE
{
  /*
     WRITE COMMENT HERE */
  int i = 1;

  // WRITE COMMENT HERE
  printf("%d\n", i);

  return 0;
}
```

```
1
```

6. TODO Upload completed file to Canvas

1. Open the Class practice assignment on Canvas
2. Upload this Org-mode file
3. Submit assignment

Author: [yourName] (pledged)

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