Bonus - Emacs + Org-mode Test Suite

CSC 100 - Lyon College - Spring 2025

Prerequisites

These tests will run provided you have the following applications available (installation instructions work under Linux only):

- Emacs:
 - 1. Executable: emacs
 - 2. Check with: emacs --version
 - 3. Install with: sudo apt install emacs
 - 4. Configure: wget -0 .emacs tinyurl.com/lyon-emacs
- GCC (already installed):
 - 1. Executable: gcc
 - 2. Check with =gcc –version
- Note that you can also get Emacs/GCC and bash for the tests below in a Windows environment, but then the installation is rather painful.

C Test

- You should be able to create a code block with the keyboard sequence <s TAB if this does not work, you did not install the configuration file .emacs properly:
 - The file may be in the wrong location: It should be at ~/.emacs
 - The wget command may have failed because of a typo (the flag is -0 and the 0 is Big-Oh as in "Otto".
- Hello world program:

```
printf("Hello, world!\n");
Hello, world!
```

C++ Test

• Hello world program:

```
std::cout << "Hello, world!" << std::endl;</pre>
```

Shell test

The following program generates an input file as stdout, and the C code reads the file as stdin:

```
echo Marcus > input
cat input
```

```
char name[100];
fgets(name, sizeof(name), stdin);
printf("Hello, %s\n", name);
```

```
Hello, Marcus
```

Tangle and weave

- Tangle hello.c with C-c C-v t (or M-x org-babel-tangle)
- You can now view the file here:

```
cat ./hello.c
```

```
#include <stdio.h>

int main() {
printf("Hello, world!\n");
return 0;
}
```

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