

The purpose of this code is to have you writing basic C programs and to get used to using Makefiles.

Deliverables:

- **One sample C program for each of the following control structures:**
 - if / else statement
 - while loop
 - for loop
 - do-while loop
 - switch statement
- **For each program (other than the switch statement),** read in a number from the user (using `scanf()`) and then do something with the control statement. (i.e., read in a number, and then do the if/else with the number, printing something different based on the input). It isn't important what you do, but more important that you show you know how the control structure works by using the input from the user.
- **For the switch statement,** read in a char (use `getchar()`) and then have a switch statement that prints out something based on the input. Having at least one "fall-through" case without a break. I suggest a case-insensitive menu where you can enter an "A" or an "a" and have it run the same code, "B" or "b" to run some different code, etc. Make sure that it has a "default" at the end.
- **One Makefile** with the following targets:
 - one target for each program (i.e. an "if" target, a "while" target) that generates a program of that name
 - one "all" target which generates all of the executables
 - one "clean" target which deletes all of the executables
 - **Note:** You don't need to generate a .o file with this Makefile, but if you do, make sure you delete the .o files when you run the "clean" target.

This assignment is not intended to be difficult, but just to have you write snippets of code to make sure that you understand how the code works.