Marcus Plumley

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READ ME file

Assignment #1

Design:

The project we are taking on this week is asking us to use and show all the primitive data types in the C language. This will likely be done with a main function that will set variables as each primitive data type, and perhaps after that a printing/testing function will format and print it. The format will display the data type name and then the value. From my research, there are about 6 primitive data types: char, short, int, long, float, double.

Exercise:

In the exercise section, we were asked to do a few things to get ready for the assignment and the term. The first thing we are asked to do is get a running compiler, and because I’m on a mac, I found that xcode seems to work the best for me. Next we are asked to compile a simple program, so I did a very simple hello world program. Then we are asked to explore compiling and running that program from the terminal which went well, and the outputs were as expected. These exercises helped me refresh and improve my basic coding skills to get ready for this assignment and the term.

Testing:

The testing should print each of the seven data types with data that matches. If not, then the test has failed, and more decoding is required.

Reflection:

We will likely use integers, shorts, and longs for many different projects, but the main difference between these data types that will determine which we use is the data size. Shorts are 2 bytes of data, integers are 4 bytes of data, and longs are 8 bytes. The uses of these data types will ultimately be determined by the size of the data that we are manipulating.

For this assignment, we used printf a lot, and we will likely use it in many other assignments. Some intricacies of the printf function that we have to keep in mind is the specifiers for the different data types. The specifiers do not work interchangeably, but when you use a specifier that does not correspond to a data type is used, it will convert the data into the specifier’s data. One use for this was shown in class as a way to convert your data from one to another.