Nick Roy - 4/10/16 - Assignment 3 Reflection

For the 3.a program, one of the main items that was used in the program was a loop that continued to accept input from the user for the number of integers that they were planning to enter. While the loop is executing it is comparing the input to a variable that is storing both the min and max number. These variables are initialized with the users first integer that they enter. From there the loop compares the entered integer with the stored min and max value. If the value entered is less than the min or greater than the max, the variable is updated with the latest integer entered.

The design of the program is useful for getting familiar with loops, accepting input from a user, and testing different situations with an if-else statement.

Most of the tests went as expected, however the one test that caught an error in the logic of the program was testing with all negative numbers. When designing the tests I wanted to cover positive and negative integers as well as taking in considerations for other tests such as duplicates, zeros, and large numbers, and large sets of numbers. As stated in the description of program 3.a tests were not designed around user input and testing for items such as strings, chars, or decimals.

One test that did help with the program and lead to some changes being made was testing with just one number entered. Initially I had the min and max variables stored as 1 and -1. Respectively. Testing the program with just one integer quickly showed that there was an error in the logic of the program.

Most of the program was created without an issue. Most of the refinements to the program were a result of running through the created test cases.

There weren't too many issues that I came across when implementing program 3.a. I've been trying to stay ahead of the reading and doing all of the assignments and practice problems in each chapter. One site that did help was random.org for generating different sets of random integers for testing.

Going forward one of the main things that I learned from the assignment was the importance of creating test cases designed to test all instances of the program. Originally the test cases were designed to check the list of integers entered and not take into consideration the first input which was how many integers the user was going to enter. The test cases, as well as basic pseudocode design of the program helped organize my ideas before creating program 3.a.