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9/26/22
Assignment 2

The programs I had to develop for this assignment required me to lay out my thinking. When First tasked with prog02v1.c it was clear this would be similar to the last assignment with the gathering of information with a minor tweak to how the data was processed. I started with calling the main function and converting the arguments passed through from string to integers. After this, it was important to first check to make sure that the data I received was proper and that I could use it in the program. I then checked to make sure that the values were above 0 and that there were three arguments passed through. Then another exception was to see that the second variable was larger than the first. After all the data was verified to be proper I was able to begin to generate the proper numbers of Fibonacci sequences and display them.

Moving on to prog02v2.c I followed most of the same steps but with minor tweaks. For this, I knew that I was going to have to initialize an array in order to store the unique values produced from the Fibonacci sequences along with a counter to keep track of the number of elements that will be stored in the array to make iterating over it easier in the end. After these were created I began to create a function to check if a value was unique. This function took the number along with the array search and the length of the array to search if we found the number we would then return 1 to indicate that the value was true and found in the array else it returns a 0 in order to show it wasn't found. In the main loop, we now check for the result of the function to see if the number was already stored in the array and if not then we now store the current Fibonacci number in the array. Once all the triplets are run we then output the array of unique values. The biggest tweak we had to do was have the main function from prog02v1.c loop through itself in order to run the proper triplets that were passed through the arguments of the program.