

Purpose: The purpose of this program is to take in a file name, given by the user, and open the file. The program then takes in the files contents, this being names, and stores them into a two-dimensional array. After this, the program executes a bubble sort, and sorts the name by placing the first occurring letter on top. It then prompts the user to output the name list to a file, and then the file is created, ending the program.

Design: My design on this program was to break as much stuff as possible into different functions. Certain functions like the string copy, were much easier to make, as we had a definite number of names and could set a definite string length. For both the string copy and string compare, I decided to use a for loop as we knew these limits for the names. After figuring out how to make these work, the bubble sort function was easy to complete. The function checked if the values at one column of the array were greater than that of a row up. If they were then they would be switched. The main function itself, had no actual code, just function calls, and that is how I wanted the design of the program to go.

Problems: In the end no problems still persisted, however, I had trouble finding the correct way to create the string copy, string compare, and bubble sort functions when using a two dimensional array. What I ended up doing was writing out the code by hand to better understand the logic being done, and finished it that way.

Changes: There are a few changes that I would like to make if I had the time. First, I would like to change my string copy and string compare functions, as I feel they are a little longer than they need to be. However, once I came to a working program I stopped there. Another item I might have looked into is going in and finding a different sort method that completes the sorting much more quickly.