COSC 1336 – Programming Fundamentals I
Program 10 – Files, Lists, and Functions

The results of a survey of the households in your township are available for public scrutiny. Each record contains data for one household, including a four-digit integer identification number, the annual income for the household, and the number of household members. Write a program to read the survey results into three lists and perform the following analysis.

a) Print the record of each household included in the survey in a three-column format with headings.

b) Calculate and print the average household income.

c) List the identification number and income of each household that exceeds the average.

d) Determine and print the identification number and income of households that have income below the 2019 United States' Contiguous States poverty level.

e) Determine and print the percentage of households that have income below the 2019 United States' Contiguous States poverty level.

Compute the poverty level income using the formula below.

$$povertyLevel = 16910.00 + 4420.00 * (m - 2)$$

where ***m*** is the number of members of each household. This formula shows that the poverty level depends on the number of family members, ***m***, and the poverty level income increases as ***m*** gets larger.

The input data is available in ***Program10.txt*** on Blackboard and the I: drive and has the format of identification number, annual income for the household, and the number of household members.

No input, processing or output should happen in the main function. All work should be delegated to other functions. The program should have at least **six functions** (main and developerInfo included) and the output sent to an output file, ***Program10-out.txt***. Include the recommended minimum documentation for each function. See the program one template for more details.

Do not use any global variables. You will not get credit for the program if you do.

Run your program with the input file, Program10.txt. Create a folder named, **Fullname_Program10**. Copy your source code and the output file to the folder. Zip the folder, as a "**.zip**" file, and upload it to Blackboard.