Explanation:

This program works by reading data from file, process it, and output the results. It starts by including several standard libraries and defining a constant. It then defines a struct to store data value and data count.

This program has 3 function to help process the data. The first function is called printMaxValueCount which used to print which data appeared the most on the specified column chosen by the user. Second function is called printMinValueCount which has a similar function with printMaxValueCount but this time it is used to print which data appeared the least.

Third function is called priceFunction which after I think about it should be named priceAndAreaFunction because the problem told to print different output if the user chooses Price or Area columns. The priceFunction is used to print the largest, the smallest data, and the average from the selected column which in this case is Price or Area columns.

The main functions then reads the input file (file.csv) and uses fgets to read each lines to a string called lines. However the program then uses strtok to tokenize the string and extract the values of each attribute instead of using fscanf to read all the lines until end of file. It then uses a switch statement to handle user input. After reading all the lines in the soecified column which the user had choose before the program check which column is asked by the user. If the user didin’t ask Price or Area column the program then print all data in that specified column with the data counts (how many times the data appeared) using the format “Data : Data counts”. After that the program calls printMaxValueCount and printMinValueCount function. If the user choose Price or Area columns the program will skip the print part and calls priceFunction.

Flowchart:

Diagram, schematic

Description automatically generated