Intro to Programming in C – program 4 –

With this assignment you will start to learn how to write a practical menu driven program that manages a list of data. You will use an array of structs to organize the data and you will save the information in a text file.

The focus (topic) of your program is up to you.

The Menu commands must include:

P....Print the inventory list onto the screen
A....Add a new entry
C....Clear all records
S....Create a current report (save it to a file)
D....Delete an item from the list (inventory)
U....Update ONE OF THE FIELDS (not THE id)
Q....Quit

- You will use structs and an array to organize the data in the program. Your struct must contain at least the following kinds of information:
    - **Minimum of 2 strings (character arrays)**
        - Suggestions include: item name, manufacturer, etc
    - **Minimum of 2 integers – 1 must be product id**
        - Product id, qty in stock
    - **Minimum of 2 double values**
        - Suggestions include: cost, price, average inventory:

- When you add new item the program will ask the user for each of the fields on a separate line.
- When you delete an item from inventory the program will ask you for the integer id of the entry to be deleted, locate the entry in the array and remove all of the data for that entry. – The list does not need to be sorted – to remove an entry, you may move the last item in the list to the location of the deleted entry
- When you display the records on the screen, all of the information stored for each entry will be labeled and displayed.
- Creating a current inventory report copies the current entries in the array to an output file. This must include labeling all of the information so that it is clear what information is being provided.

Instructions:

- You should use at least **the 10 user-defined functions described below** (plus main) to appropriately break the problem up into smaller pieces.
- Your program must start up with at least 5 valid records. These records must be "hard coded" in your program file. (This **must** be done in one of your user-defined functions)
- You should use function prototypes and NO global variables (penalty)

- You should use a #define to set the upper bound of the list to 40 entries.
- Your code should be well designed, well commented and written with good style.

Other Important Hints and Reminders:

- Start work on this as soon as possible.
- It is your responsibility to request this help in the form of specific questions.
- When you ask a question, it should be specific, and you should provide me with the current version of your program.
- The current version of your program should be neatly formatted and commented. It should also be properly indented and use meaningful variable and function names. This will make it easier for anyone helping you to understand what you are trying to do.

NOTE: there will be no guarantee of assistance with this assignment on the last few days before it's due so DON'T leave this assignment to the last minute.

Function descriptions:

```
1. //Greets the user

2. //hardcodes five entries

3. //runs the menu and gets the user choice

4. //prints the contents of the list onto the screen

5. //prints a report to a file
/*declare the file pointer, connect to the file and close the file pointer all inside
this function*/

6. //adds an item to the list

7. //displays the ids in the list, gets the id from the user and returns it

8. //searches the list by id and returns the index, if there is a match or returns -1
 //three arguments: list, number of items, id

9. //removes an item from the list
//takes three arguments, the list, the number of items and the location

10.//updates the sale price
//takes three arguments, the list, the number of items and the location
```