Objective

This assignment's objective is to get familiar with library, parallel array, function, pointer and file I/O in C program

Topics

Please write a C program to manage:
1. Students in a class
2. Motorbikes in a shop
3. Books in a library
4. Drugs in a store
5. Equipment in a laboratory
6. Food in a mini market
7. Fruits in a fruit shop
8. Items in sport shop

Description

You are supposed to create a list which contains the data you want to manage. Your program should have the following requirements
1. Data array: depending on the problem you want to solve, please think of the information of your data that you want to manage (name, quantity, ...). Then create your data array at least 5 objects.
2. Your program should show a menu where the following options (3, 4, 5, 6, 7, 8, 9, 10) can be selected to execute
3. Your program has a function of displaying all object in your list
4. Your program has a function to add a new object to the list.
5. Your program has a function to sort all objects in data array for each information field of the objects.
6. Your program has a function of looking for any object in your list. It prints out all information of the object found. It returns "not found" if the object does not exist
7. Your program can write your data into a text file. Please remember you have to process the file if it exists already (e. g. delete the file and write into a new file with the same name)
8. Your program has a function to delete the object which is found
9. Your program has a function to delete all objects
10. Your program has an option to exit the program.
11. Write a test code to illustrate those requirements (`main () {…}`) with at least 5 objects

Recommendation
A part of this assignment requires the knowledge of parallel array and file I/O that you will study at the end of the course. Therefore, your group should research on parallel array and file I/O yourself to complete the assignment as soon as possible. Because you have several weeks to complete your assignment, do not wait until you study of parallel array and file I/O to do the assignment. In addition to achieving the skill of team working, this is a chance to equip you with the skill of studying of a something new yourself, so please try it.

Report
Please submit a simple report to show
- The source code of the program.
- Which tasks are assigned to each members in your group?
- The results of test cases which your group have done to test your program.