CENG114 - Computer Programming II
2021 - 2022 Spring Semester
Homework 3

Due Date: Jun 10th, 2022 11:59 PM

Write a program to simulate patients in a veterinary clinic. For this purpose, define structure Patient for patients with members: pet name (string), pet type (string), age (int), payment (int), operation performed (string).

Use the following functions:

- F1(): gets patient information into an array of structures (at most 30 elements) from a text file and returns it and its size to the calling function.
- F2(): receives an array of Patient structure, its size, and a pet type, and returns another array of structures holding only the patients information with the matching type and its size.
- F3(): receives an array of Patient structure and its size, it finds and returns the patients who have operation "transfused".
- F5(): input a newly arrived patient's info into a structure and returns it to the calling function.
- F6(): receives an array of Patient structure and its size and a Patient structure, updates the array by adding the new patient data to the end of the array (assume there is enough space in the array) and returns it to the calling function
- F7(): receives an array of Patient structure and its size, displays patient info that has the maximum payment.
- F8(): displays the following menu continuously until user chooses to quit, gets user input and returns it to the calling function.

After each task, display a success message on screen.

Rules

Your program should;

1. be done INDIVIDUALLY!
2. include comments to explain your program,
3. give attention to the indentation of your code
4. be easy to follow.
5. work for all possible inputs.
6. include proper input and output messages.
7. give your student id to your source file name (e.g., 200111032_hw3.cpp). Otherwise, you will lose 10 points from your grade.

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     Welcome to Pet Hospital
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    1. Load patient info from a file
    2. Find patients
    3. View patients "transfused"
    4. Add new patient info
    5. Find largest payment
    6. Quit

Choose 1, 2, 3, 4, 5 or 6:

...
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