CSCI111 2020

Assignment .
Due

Aim:
To practice using structs, dynamic arrays and program design.

Requirements:
You are writing the subscription renewal system for a magazine.
For each subscriber, the system is to keep the following information:
a) Name (first, last);
b) Address (street, city, state, postcode);
c) Expiration date(month,year);
d) Date renewal notice was sent (day,month,year);
e) Number of renewal notices sent so far;
f) Number of years for which subscription is being renewed (0,1,2 or 3);
g) Whether or not the subscriber's name may be included in a mailing list for sale to other companies.

Design a suitable data structure to hold one such record.
You may require more than one struct, and maybe some user-defined types.

(Q1) What further details need to be known to complete the design?
Make suitable assumptions to enable completion of the design.

The information for the thousands of subscribers is to be stored on disc.
(Q2) How might they be stored?
(Q3) What problems occur when determining how to store the records?
(Q4) When read into memory, how might these records be stored?
(Q5) How much memory is required for 1000 of these records?

What functions might be useful to handle the input and output of these records?
Write prototypes for such functions in separate header file, where the first argument of each function is one of the entities being manipulated by the function.
Describe all the arguments of the functions in comment blocks before each function.

Write a suitable driver program to test all functionalities in your design.

Place your answers to all these questions in a comment block at the top of the file SRS.h which contains the struct definitions.

Submit:
Demo your program the header file name should be SRS.h, containing the data structure, the function prototypes, and the answers to the above questions.