

Assigned 1/11/16

Due 1/18/16

Programming Assignment 1 (and Prerequisite Test)

In this program, it is required to read in from a text file a list of persons, display their information, add new persons, and do a search for certain persons. The information of each person consists of:

Last_Name,First_Name (30 chars, max)

Social Security Number (long)

Age (int)

Address (60 chars, max)

Your program will open a file *a1.txt* and read one person's info at a time, and you may assume the entries in the file are all in correct forms.

Each person's information is collected, in sequence, as **name, SSN, age, address**.

You can assume the maximum number of people in *a1.txt* is 20

1. Your program prints the information of all people according the social security numbers in ascending order. The information (**name, SSN, age, address**) should be identical to the information your program read from *a1.txt*
2. Your program then asks the user if there is an additional person to add. If so, the fields of information of this new person are the same format as in *a1.txt*, in sequence of **name, SSN, age, address**, and your program asks the user to enter one entry at a time. Your program should continue to ask if there is an additional to be added, and the user decides whether or not to add a new one.
3. After 2, your program asks the user to search for a person by *last_name*. The user will enter the name and your program should print out the information: **name, SSN, age, address**, in sequence and one line per field (e.g. name takes one line). Your program should continuously ask the user if to do another search, and stop only if the user chooses so. If there are two or more people with identical last name, each of them should be listed. Your program **prints out** the information immediately after the person is found.
4. After 3, your program should have a function to print out all people who are "searched and found", in the order of first searched and first printed. The standard printed (on screen) information consists: **name, SSN, age, address**, in sequence and one line per field.

Check the sample file for conforming the format, and test if your program works.