Homework 8

1. **(Structure Usage)** Your goal in this program is to write an address book. Your program should present the user with three menu options:   
    1. Display the current people in the address book.   
    2. Add a new person to the address book  
    3. Quit the program  
   *Your address book should use a structure* to store the first name, last name, phone number and email address of each person. You don't need to use any file I/O, just use an array of your structure to store each entry. You can assume that the address book has a maximum capacity of 100 people that it can store.
2. **(Data Structures - Linked List Library)** Write a linked-list library file is capable of storing characters and supports the following linked list operations:  
    1. Print the current list  
    2. Add new node to the list  
    3. Delete a node from the list  
   Be sure to also implement a main function that offers the above options to the user and allows them to test your linked list library.
3. **(Data Structures - Linked List Library)** Modify the linked-list library you wrote in problem 2 to by adding one additional function, "findValue". This function should be of integer type and return a -1 if the value doesn't exist inside of the linked-list. If the value does exist inside the linked list, it should return the position of the element. For example, if I had a linked list that looked like this:  
    a -> b -> c -> d -> NULL  
   and the user called findValue ('f') the function should return a -1. If, however the user called the function findValue('c') the function should return a 2 since c is the second element (assuming we start the count at 0 like we do with arrays).