

EE2372 – Software Design 1
Spring 2010
TTh 10:30 – 11:50, CRBL 301
Assignment 10 – Structures and Strings

Instructor: Dr. Gerardo Rosiles Engineering Annex 304 Office hours: MTThF 1:30-2:30 Phone: 747-7956 e-mail: grosiles@utep.edu	
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Assigned: April 29, 2010
Due Date: May 14, 2010

READING: Chapter 10 and Chapter 11 of Stephen Kochan's book

Extend the program from Assignment 9 to do the following:

- 1) Create a linked list from your array of contacts. The linked list should sort your contacts by last name in alphabetical order.
- 2) Modify option 'L' to print contact names in alphabetical order.
- 3) Modify option 'A' to add a new contact and insert in on the list in the correct alphabetical order.

These are some specific examples or information from the book that could be useful. This will require you to read, study and implement examples.

- 1) Example 11.7 – traversing a linked list.
- 2) Example 11.10 – Finding an entry on a list.
- 3) Example 10.6 – Reading lines of data.
- 4) Example 10.9 and 10.10 – Dictionary lookup
- 5) String functions – page 470 and page 471. In particular look at the function:

```
int strcmp(s1, s2)
```

This could be useful for sorting the last names.

It is very important you send questions and/or come to my office if you ran into problems. Please do not try to get this working two hours before it is due, I may not be able to answer questions in such a short period.

Turn in: Your C code for both problems as a xxx.c file with the following format:

firstname_lastname_hw10_problem1.c

So if your name is Rey Misterio Jr then your file names should be:

Rey_Misterio_Jr_hw10_problem1.c

Homework will not be accepted if the files are not named like this.

Grading:

1) 60% your code will be checked for consistency, to check that you covered the proper programming elements (structures, strings, arrays, functions, loops, etc.) , and to make sure everyone did their own work.

2) 40% if your code works (i.e., runs on a computer after compilation) as required then you will get this part of the grade. If the code does not work at all you will get 0%. Anything in between will get some partial credit.