CSCI 111

**Program #6**

**Due November 13, 2014**

A data file contains the names, departments, and salaries of the professors of a small college named Marvel College. In this program we will work with an array of structures. The structure will hold the following data fields: **whole** (a string), **first** ( a string), **mi** (a single character), **last** (a string), **department** (a string) and **salary,** an integer. Use **maxp** = 50 structures of this type. Be sure to call **initem** and to initialize all fields appropriately.

Perform the following steps:

A) Each line in the data file contains the professor’s **whole** name and the professor’s **department**. Read in the entire name into **whole** (you MUST use getline) and the **salary**. Output the name (**whole**),**salary**, and **department** (in that order) to the output file, using appropriate titles.

\*Hint: You will need to use the getline(filevar, string,delimiter);

B) Sort the arrays by the Department, and print using appropriate titles.

C) Code the statements to separate the first name, middle initial, and last name into the appropriate fields in the structure.

D) Sort the arrays by last name.

E) Print out the results in the form : last\_name, first\_name mi., followed by their salary. Determine and print the total salary for the college.

XCredit: Convert the salary to a string, inserting commas and a $ just before the first number. Print the data as in part E.

Use the following data for your data file:

**John Q. Smith Exercise Science 54000**

**Sally T. Handle Physical Geology 67500**

**Jorge G. Martinez Engineering 125700**

**Luke X. Skywalker Astronomy 1525000**

**Antonio M. Juarez History 60200**

**Han D. Solo Criminal Justice 58700**

**Anna L. Henderson Mathematics 53133**

**Old M. McDonald Agriculture 35200**

**Zaria Q. Sanderson Computer Science 92250**

**Santa X. Claus Social Science 20000000**