**Problem #1**

**Student Database**

You need to process the following files to gather some information about students. Then you need to summarize the information in another output file. Store the information of each student in an appropriately designed structure. To create an array of structures, use dynamic memory allocation. (And release the memory after your work is done). Also, after processing of a file is done, remember to close it.

Following information is stored in the different input files:

* **stdInfo.txt**: Line #1 contains the total number of students, *n*. Each of next *n* lines contains first name (no spaces) and roll number (integer) of a student. You cannot assume anything about the roll number, except that it is an integer that fits within 32-bit integer of C.
* **{phy.txt, chem.txt, math.txt}**: Each of these files contains *n* lines. Each line contains roll number and score (real) in the respective subject (as indicated by the filename) for each student. **No particular ordering can be assumed about the data.**

Your output is another file as described below:

* **stdScores.txt**: This file should contain student information in increasing order of roll number. For each student, a line contains roll number, followed by first name, followed by scores in physics, chemistry and math respectively.

Write the necessary code. Then write necessary data files to test your code rigorously. Then ask your teacher to evaluate your assignment.