Introduction to Programming

Class Grade List – One Last Time - Again

Reading and Writing Files

Your client loved the last program you wrote where you read the student information from a file (since they didn't need to key the data in each time) and wrote the results to another file. After using it for a while, they are asking you (for an additional consulting fee, of course) to **modify the program** so that:

1. When the results are written to the output file, they appear in alphabetical order of student names, sorted in ascending order by last name and first name within last name.

For example:

Input file:

bob smith 45 89
sally jones 89 76
alan smith 45 89

yields

Output file:

sally   jones   89.0 76.0 82.5 10.333333333333329
alan   smith   45.0 89.0 67.0 -5.166666666666671
bob   smith   45.0 89.0 67.0 -5.166666666666671

As before your program will then **read** results.txt and produce a report like this:

```
     Name       Midterm        Final      Average         Deviation

 Bob Smith      100.00         98.00        99.00              3.17
Sara Jones       90.00         95.00        92.50             -3.33
Ethan Chen       92.00        100.00        96.00              0.17

Class Average is: 95.83
```

Note that this is the same output format as for the "Class Grade List assignment where we input values using a loop.