Lab 10 – Files & Databases

March 27, 2019

Files

Exploring File I/O

1.1 Write a program that:

- Reads a file containing the sales prices for homes in the San José Metro area from August 1999 to July 2009 (**prices.dat** from http://www.sjsu.edu/people/burford.furman/courses/me30/sourcecode/
- Calculates the average home price and standard deviation

$$\text{average, } \overline{X} = \frac{\sum_{i=1}^{N} X_i}{N}$$

$$\text{standard deviation, } s = \sqrt{\frac{1}{N-1}\sum_{i=1}^{N}\left(X_i - \overline{X}\right)^2}$$

- Writes the average home price and standard deviation to a file, **prices_summary.dat**

Include your code and the output from the program to demonstrate that it works. (To save paper in your report, you don't have to print out all the home prices. It might be nice to have your program print out the first and last few prices, but this is not required. BTW, how would you do that if you had to?)

I suggest you split this problem up into various functions. Read the file in one function. Calculate the average in a second. Calculate the standard deviation in a third.

Databases

Modify problem 2 from Lab 9 to store the songs in a database.

When the program first runs, display a list of all stored songs.