Homework 1

Assigned: 1/29/19

Due: Wednesday, Februray 5, 11:59PM

Objectives:
   a) Install and test the DBMS you will be using for homework for the semester.
   b) Write and run SQL queries, as needed, per the preequisite that you are comfortable with basic SQL queries.

The Assignment:

Per lecture, you must have a DBMS capable of executing SQL executing on your own machine, or, if you want to go there, running on your own virtual machine in a cloud is also acceptable. A shared database server in a lab for the class doesn't work as upcoming assignments will have you loading and querying 1 to 10 gigabyte databases. As homework deadline approaches an huge I/O bottleneck happens as students all try to complete the work at once.

1. Install a database of your choice, but not MySQL of SQLLite.

   Nearly all DBMS products today offer some form of free use more than adequate for the class. In the HW1 folder is a file containing links to free Enterprise class DBMSs downloads.

   If you choose to use a machine in the Cloud, most of the semester the database contents will be slightly over a gigabyte, and for one assignment the database will be somewhere between 5 and 10 gigabytes. So if you use a cloud computer the charges should be very modest. I expect to be able to arrange some budget of free use of the AWS (the Amazon cloud).

2. Test your installation.
   a. Also in the HW1 folder you will find an initialization file for one of the example textbook databases. (i.e. table definitions and data) I believe the files syntax is native to Oracle and may require some small changes to work with a different DBMS.

      Load that data into your database.

   b. To turn in, write and execute the queries in text problems, 2.4.1 b, e, g and i

      Unless you think it is boring, you should, starting with problem a, write and debug all the queries, in order, and penetrate some distance into the hard ones as indicated by an "!". The "!!" problems are more SQL than you need to know to succeed in the class. But you should probably try as many as your schedule allows.