## **CSCI 3357: Database System Implementation**

Homework Assignment 1 Due Thursday, September 7

Write a JDBC program named *SectionInfo*. Your program should make a <u>network</u> connection to a SimpleDB engine that holds the university database of Figure 1.1. It should request a section number from the user and then print the professor of the section, the number of students in the section, and the number of "A" grades given. For example:

Enter a section number: 43
Professor einstein had 2 students and gave 0 A's.

If there is no section with that number, it should print "No such section". For example:

Enter a section number: 1234
No such section.

Your program **must** execute two SQL queries: one that retrieves the professor for that section from the SECTION table, and one that retrieves the grades for that section from the ENROLL table. Note that SimpleDB's version of SQL cannot perform calculations, so your Java code will need to do all the necessary arithmetic.

Those of you with experience with SQL may realize that it is possible to solve the problem using a single multi-table query. However, I do not want you to do it this way, because I want you to experience writing a program that uses multiple result sets. Please use two single-table SQL queries, as requested above.

WARNING: A JDBC program can exhibit bizarre behavior when multiple result sets are open at the same time. (Section 2.2.2 of the text explains this issue.) Consequently, your program should always close a result set before opening another.

Submit the file SectionInfo.java to Canvas.