

CS 405G: Introduction to database systems

Assignment 4

Assigned: March. 21st, 2013
Due: March. 28th, 2013

Submission instructions: Please submit your code and the results of the queries. Put the course number and your name as part of your code. Please follow the rules in the course syllabus regarding late homework and plagiarism.

Topics: SQL Implementation

Problem 1 (100 points): Consider the following relational database.

employee (*person-name*, *street*, *city*)

works (*person-name*, *BankID*, *salary*)

company (*BankID*, *company-name*, *city*)

The initial database content can be found at

http://protocols.netlab.uky.edu/~liuj/teaching/CS405G_s13/assn/assn4-db.xlsx

Sample java and php program for connecting a database can be found at

http://protocols.netlab.uky.edu/~liuj/teaching/CS405G_s13/code/

For this homework, you are required to write an application program with PHP (other programming languages are acceptable) to do the following:

1. Set up the above database tables and initiate the database with the above content at MySQL database on the multilab linux machine. (Your passwords are 'u'+last 7 digits of UKID)
2. Write SQL to conduct the following queries a-f (You've done this!)
 - a) Find the names of all employees who work for First Bank Corporation.
 - b) Find the names and cities of residence of all employees who work for First Bank Corporation.
 - c) Find the names, street address, and cities of residence of all employees who work for First Bank Corporation and earn more than \$10,000 per annum.
 - d) Find the names of all employees in this database who live in the same city as the company for which they work.
 - e) Assume the companies may be located in several cities. Find all companies located in every city in which Small Bank Corporation is located.
 - f) Find the employees who work for more than two companies.