Database Systems
CMPT 308

Lab 5: SQL Queries - The Joins Three-quel - 20 points

Goals
- Write some very interesting SQL queries
- Work a little harder for the lab points.

Before you begin

Check that your instance of our beloved CAP3 database is **exactly** the same as mine in the script on our class web site.

Instructions

Use CAP3 to answer all of these questions.

1. Show the cities of agents booking an order for a customer whose pid is 'c002'. Use joins; no subqueries.

2. Show the pids of products ordered through any agent who makes at least one order for a customer in Dallas, sorted by pid from highest to lowest. Use joins; no subqueries.

3. Show the names of customers who have never placed an order. Use a subquery.

4. Show the names of customers who have never placed an order. Use an outer join.

5. Show the names of customers who placed at least one order through an agent in their own city, along with those agent(s') names.

6. Show the names of customers and agents living in the same city, along with the name of the shared city, regardless of whether or not the customer has ever placed an order with that agent.

7. Show the name and city of customers who live in **the** city that makes the **fewest** different kinds of products. (Hint: Use count and group by on the Products table.)

Advice

Test, test, and test again. Then test some more. When you think you've tested enough, go back and keep testing. Then get someone else to test for you while you test theirs.

Push your work to your GitHub repository early and often. Be sure to write meaningful commit messages.

Resources
- Chapters 6.1 - 6.4 in our text, especially 6.3.6 through 6.3.8 and 6.4
- SQL tag at Stack Overflow - http://stackoverflow.com/questions/tagged/sql

Submitting

Submit your work as a text file with a *.sql* extension. Push your work to your GitHub repository **before** the due date (see syllabus). Remember to include your name, the date, and the assignment in the (copious, meaningful, and accurate) comments in your code.