## **Database Systems**

**CMPT 308** 

## -Lab 3: Getting Started with SQL Queries - 20 points

Goals

- Become accustomed to writing SQL queries.
- Enjoy the beauty and accuracy of the relational model.
- Get some still-easy lab points.

Before you begin

Check that your instance of our beloved CAP database is **exactly** the same as mine in the script on our class web site. You need to have a clean instance when you begin this assignment. If you've modified it in any manner, please drop everything in CAP and reload from the scripts on our class web page.

Instructions

Use CAP to answer all of these query questions. Write only one query per question. Be certain to end each query with a semi-colon. Your final script should execute all of the queries in sequence from one command. Remember that CAP is one snapshot in time in the life of that database. The queries you write should return the correct answer for all time, not just for this snapshot.

- 1. List the order number and total dollars of all orders.
- 2. List the name and city of agents named Smith.
- 3. List the id, name, and price of products with quantity more than 200,010.
- 4. List the names and cities of customers in Duluth.
- 5. List the names of agents not in New York and not in Duluth.
- 6. List all data for products in neither Dallas nor Duluth that cost US\$1 or more.
- 7. List all data for orders in March or May.
- 8. List all data for orders in February of US\$500 or more.
- 9. List all orders from the customer whose cid is C005.

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. While you're in there  $\dots$ 

- Be sure to write meaningful commit messages.
- Practice using *diff* to see the differences between successive versions of your code.
- Practice reverting to an earlier version so that you'll have that option in the future.

Don't forget to test. A lot. Really. (Rilly.)

Resources

- Chapter 6.1 in our text
- 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. Then, if you've been completely clueless and have not yet done so, e-mail Alan the url of your GitHub repository. Praise PostgreSQL!