

Database Systems

CMPT 308

- Lab 4: SQL Queries - The Subqueries Sequel - 20 points

Goals	<ul style="list-style-type: none">• Write some interesting SQL queries using subqueries and set operations. Please do not use joins; save them for the next assignment.• Enjoy the beauty and accuracy of the relational model and bask in its beauty.
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.
Instructions	<p>Use CAP to answer all of these questions. Be certain to end each query with a semi-colon and to label each query with the question number in a comment. Remember that CAP is a snapshot in time and your queries must return the correct answer for all time. Do not use primary key values in the queries. E.g., you may not assume that customer “Bond” has id 007. Also, please do not use joins to answer these queries; use sub-queries instead.</p> <ol style="list-style-type: none">1. Get all the People data for people who are customers.2. Get all the People data for people who are agents.3. Get all of People data for people who are both customers and agents.4. Get all of People data for people who are neither customers nor agents.5. Get the ID of customers who ordered either product 'p01' or 'p07' (or both).6. Get the ID of customers who ordered both products 'p01' and 'p07'. List the IDs in order from highest to lowest. Include each ID only once.7. Get the first and last names of agents who sold products 'p05' or 'p07' in order by last name from Z to A.8. Get the home city and birthday of agents booking an order for the customer whose pid is 001, sorted by home city from A to Z.9. Get the unique ids of products ordered through any agent who takes at least one order from a customer in Toronto, sorted by id from highest to lowest. (This is not the same as asking for ids of products ordered by customers in Toronto.)10. Get the last name and home city for all customers who place orders through agents in Teaneck or Santa Monica.
Advice	<p>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.</p> <p>Push your work to your GitHub repository early and often. Be sure to write meaningful commit messages.</p>
Resources	<ul style="list-style-type: none">• Chapters 6.1 - 6.4 in our text, especially 6.3 and 6.4• SQL tag at Stack Overflow - http://stackoverflow.com/questions/tagged/sql
Submitting	Submit your work as a text file with a <i>.sql</i> 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.