



EECS-3421
Introduction to Database Systems
York University
Winter 2018

Project #2
Jeopardy: SQL Queries

The Project

In this project, you will work with an existing database, the *Raccoon Rhapsody Database* (RR-DB). It is a database that tracks participation in an online, multi-player game. Each will install his or her own *private copy* of the database on which to work. You are to implement a number of SQL queries over the RR-DB. The project is 10% of the total grade.

There are ten queries that you are to write. Each is worth one point, for a total of ten points. I am the manager and I provide you for each one with English specifications in the form of a *statement*, which you will turn into a *question* — an SQL query against the RR-DB, actually — like in the game show *Jeopardy*.

Each query is given a name for bookkeeping. Also, a partial answer table for each is provided. This is so you can check whether you have likely implemented the SQL query correctly by seeing whether you get the *same* tuples when run in DB2 on the RR-DB. (Note that, however, this is not proof that your query is entirely correct! A logically incorrect query with respect to the requirements would give the wrong answers on *some* instance of the database. And one could “cheat” by making a simple query on purpose that manages to print the same results on this instance of the database!) Grading per query is *all-or-nothing*. Either your query (always) produces the right results, or it does not. (I likely will test the queries for grading against a different instance of the database.)

The queries below are arranged roughly in order of increasing difficulty. The ones at the beginning are straightforward, while the ones towards the end are difficult.

Some of the queries will be more involved to write than others. Do not get too discouraged if you are unable to do one right away. For some, you will need to look for features of SQL to help. For others, you will need to think carefully about the logic.

Honesty

For projects, you are permitted to confer with others, seek advice, and (to a reasonable extent) help. However, remember that copying someone else's queries and claiming them as your own work is *plagiarism*. You must do your own work.

The Raccoon-Rhapsody Database

Two scripts are provided:

- rrdb-create, and
- rrdb-drop.