

Assignment: SQL #2

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1 Assignment-Specific Packaging

The general packaging is unchanged from the basic “Homework Requirements” (see slides from first lecture and “Homework Policies for COM 3563” on Piazza).

This assignment’s “DIR” **must be named** *SQL2*. Your report **must be named** *\$DIR/SQL2.pdf*.

2 Database Installation

This exercises in this assignment are based on the Silberschatz textbook’s *University database*. You are already familiar with this database, but to make the results more interesting you are going to use the “[large database](#)” [version of this schema](#).

Use the scripts from this git repository to create and populate the “large university database”.

The one difference between the “small” and “large” versions of the database is that table names in the small version have an **_s** suffix. For example: *student_s* rather than *student*.

2.1 Advice

To avoid confusion between “small” and “large” versions of the database, you may want to install the large version in a different database from the (probably “default”) database that currently store the small version’s tables. When writing your SQL scripts, make sure to `\connect` to the correct database.

3 Requirements

Note: in all such exercises, you are responsible for (re)initializing the database before executing your SQL commands. All subsequent interactions with the database must execute the specified steps, **in the specified order!**

- Although the assignment references the textbook exercises, **pay attention** to any changes that I’ve made to the textbook version!
- For each of the following *natural language* queries, you must
 1. Show me a formatted SQL “translation” of that query
 2. Show a **clear snapshot** of your POSTGRESQL executing that query and the results therefrom. Your snapshot should include the “number of rows” in your result set.
- Note: most, if not all, your grade depends on “correctness”: i.e., the result of your query!
 1. Textbook, Exercise 3.26
Order your results, first by ascending “course id”, then by ascending “id”.
 2. Textbook, Exercise 3.27
Order the results by ascending “id”.
 3. Textbook, Exercise 3.29

- Use “Accounting” instead of the textbook’s “Music”
- Specify “ten Accounting courses” instead of the textbook’s “five”.
- Order by ascending “name”.

4. Exercise 3.35

Note: by “maximum enrollment”, the question is asking for “maximum over all sections”. If multiple sections have the same maximum, all should be included in the result set.