CS 3810 - Principles of Database Systems (Fall 2019)

## **Database Assignment 03**

Deadline: Tuesday November 12 (11:59pm)

Run the given <u>ipps.sql</u> file to build the IPPS database from Database Assignment 02. For this second part of the IPPS assignment you are asked to use the provided database schema. Use the LOAD DATA commands (embedded in the SQL file) to populate your tables from the following CSV files that you will have to download:

- DRGs.csv
- HRRs.csv
- Providers.csv
- <u>ChargesAndPayments.csv</u>

Your task in this assignment is to answer the following queries using SQL. Write your answers to all queries updating the ipps.sql file. That's the file you are expected to submit through Blackboard.

- a) List all diagnostic names in alphabetical order (no repetition).
- b) List the names and correspondent states of all of the providers in alphabetical order (state first, provider name next, no repetition).
- c) List the number of (distinct) providers.
- d) List the number of (distinct) providers per state in alphabetical order (also printing out the state).
- e) List the number of (distinct) hospital referral regions (HRR).
- f) List the number (distinct) of HRRs per state (also printing out the state).
- g) List all of the (distinct) providers in the state of Pennsylvania in alphabetical order.
- h) List the top 10 providers (with their correspondent state) that charged the most for the clinical condition with code 308. Output should display the provider, their state, and the average charged amount in descending order.

- i) List the average charges of all providers per state for the clinical condition with code 308. Output should display the state and the average charged amount per state in descending order (of the charged amount) using only two decimals.
- j) Which hospital and clinical condition pair had the highest difference between the amount charged and the amount covered by health insurance?

Each query is worth +10 points.