CSP 609 - PG SOFTWARE LAB
Lab Assignment 1

Submission Deadline: Jan 19 2018 5:00pm
Total Weightage of the Assignment: 3%

General Instructions:

- All specifications must be strictly followed. Failure to do so may lead to substantial loss of points.
- It is important to go through the relevant reading material, there may be a viva in the following week on topics related to this lab assignment.
- All submissions must be made on the Moodle site of the course.
- You may use the internet for searching the syntax of the SQL commands.
- **Each submission must have the name and roll number of the student.**
- For each of queries, you are expected to load few tuples (e.g., 4-5) using the insert command into your schema and then run your SQL (select based) query. This would help you in self-evaluating your SQL based on the results obtained.
- **However, care must be taken that your SQL queries are general and conceptually correct so that they give the right answer on any arbitrary dataset.**
- **Substantial points would be deducted if the correctness of your answer (the SQL query) turns out to be limited to your (or just a few) dataset.**
- **Make sure there are no errors in the SQL queries you submit to us for evaluation.**

Important Links:

- SQL tutorial: https://www.w3schools.com/sql/
- Spooling the results in PostgreSQL: https://dzone.com/articles/spooling-queries-with-results-in-psql

Question 1:

Step 1: Create the following schema in your database:

Movies(<u>title, year</u>, length , genre, studioName, producerCert#)
StarsIn (<u>movieTitle, movieYear, starName</u>)
MovieStar(<u>name</u>, address, gender, birthdate)
MovieExec(<u>name</u>, address, cert# , netWorth)
Studio(<u>name</u>, address , PresidentCert#)

1. The underlined attributes are the primary keys of the corresponding relation.
2. producerCert# refers to cert# in MovieExec table.
3. PresidentCert# refers to cert# in MovieExec table.
4. Put some data into the tables. Kindly use your intuition to decide suitable data for each for the following SQL queries. You may prepare (i.e., corresponding insert table commands) data before and load it all at once for convenience.

Step 2:
Write and sql query for each of the following select queries. Use the results obtained to self-evaluate the correctness of the queries. Care must be taken such that your SQL queries are general and conceptually correct so that they give the right answer on any arbitrary dataset.

1. Find the address of the 'MGM' studios
2. Find all executives worth at least $1000000
3. Find all the stars that appeared either in a movie made in 1980 or a movie with 'Love' in the title.
4. Find the president of the 'MGM' studios.
5. Find all the male stars in the movie Titanic.
6. Find the studio whose president is worth more than $100000

Step 3:
Delete all the tables you created using the **DROP** command.

Things to be submitted:
Text file containing the following:

(a) SQL commands for creating the schema.
(b) SQL commands for inserting the data.
(c) SQL commands the results for each of the select queries mentioned in Step 2.