CS 377: Database Systems

Project #2

Due: Friday, March 17, 2017 at 11:59 PM on Canvas

SUBMISSION: Please submit the project electronically via Canvas before 11:59 pm. Any submissions afterwards will be marked late. You should use one file for each portion of the problem and follow these guidelines for your project submission:

- If you have comments in your SQL query, use C style comments using $/* < \text{comment} > */$

- Any text that is not within the comment brackets will be assumed to be part of your SQL command, and if the file does not execute properly, points will be deducted.

- Each file should be named as "<netID>-project2-<problem>-<part>.sql".

- A README.txt file **must** be submitted that contains the honor code, otherwise points will be deducted.

  ```
  /* THIS CODE IS MY OWN WORK.
  IT WAS WRITTEN WITHOUT CONSULTING CODE WRITTEN BY OTHER STUDENTS.
  _Your_Name_Here_ */
  ```

IMDB Database (100 points): We will answer more sophisticated questions from our course's version of the IMDB database. Please see Project #1 and Piazza for the database details. Write SQL queries to answer the following questions. Each file should be named as "<netID>-project2-2-<part>.sql". For example, the instructor's answer to part b of this question would have the file "jho31-project2-2-b.sql".

1. (10 points) List the movies and the year where Matt Damon, George Clooney, and Brad Pitt have all played a role.

2. (10 points) List the movie name and year for the comedy movies that Tom Hanks has either directed or starred in?

3. (10 points) Which actor(s) has only been in Steven Soderbergh's movies?

4. (10 points) What movies has no female actors in 2010?

5. (10 points) For each year, count the number of movies in that year that had only female actors (and at least one actor).

6. (10 points) What actor(s) has been in all of Stephen Chow's comedic movies before 2009?

7. (5 points) List the director, movie name, and year for the biographical movies that were directed in a leap year (assume every year divisible by 4 is a leap year for this purpose).

8. (10 points) Find the actors who have played five or more unique roles in the same movie in 2007. List the actor names, movie names, and number of distinct roles in that movie ordered by movie name in ascending order.

9. (10 points) Find the actress(es) that has been in the largest number of family movies between 2005 and 2010 (inclusive).

10. (15 points) Find the actor(s) that are exactly 2 degrees of separation from Kevin Bacon. For example, Ian McKellen has never been in a movie with Kevin Bacon. But Ian McKellen was in X-Men: Days of Future Past with James McAvoy and Michael Fassbender who were in X-Men: First Class with Kevin Bacon. Note that this example may not be in our version of the database.