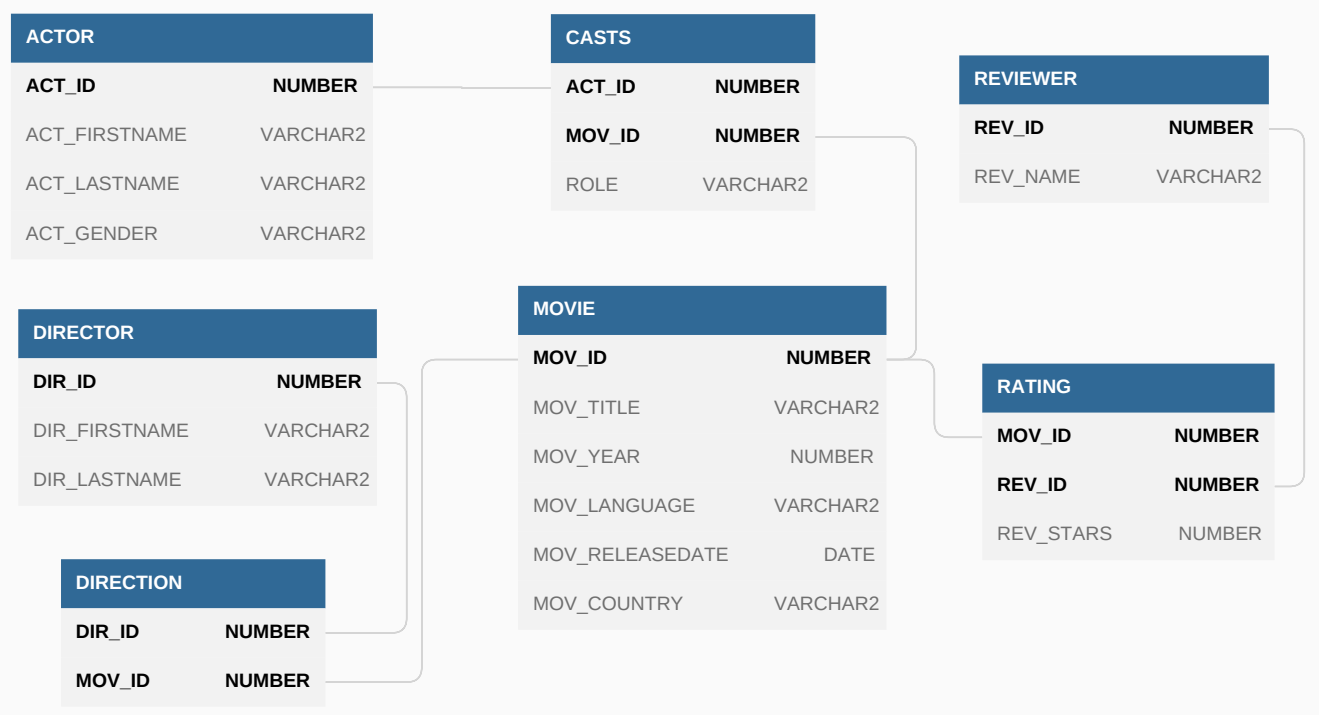
# Lab 4
# Advanced Data Manipulation

CSE 4308

DATABASE MANAGEMENT SYSTEMS LAB

SEPTEMBER 12, 2022

Execute the `movie.sql` script using  command. It creates a set of tables along with values that maintain the following schema:




Here, the boldfaces denote the primary keys and the arcs denote the foreign key relationships.
In this lab, you have to write all SQL statements in an editor first and save them with .sql extension. Then execute the SQL script.
Write SQL statements for the following queries:

1. Find the name of the actors/actresses that are also directors (with and without '`intersect`' clause).
2. Find the list of all the first names stored in the database.
3. Find the movie titles that did not receive any ratings (with and without '`minus`' clause).
4. Find the average rating of all movies.
5. Find the minimum rating for each movie and display them in descending order of rating.
6. Find the last name of actors/actresses and the number of ratings received by the movies that they played a role in.
7. Find the last name and average runtime of movies of different actors/actresses. Do not include any actor/actress who worked with 'James Cameron' (with and without '`having`' clause).
8. Find the first name and last name of the director of the movie having the highest average rating (with and without '`all`' clause).
9. Find all the movie related information of movies acted and directed by the same person.
10. Find the title and average rating of the movies that have average rating more than 7 (with and without using '`having`' clause).
11. Find the title of the movies having average rating higher than the average rating of all the movies.
12. Find the title and average rating of the movies without using the group by statement.
13. Find the actresses with the same first name.

14. Find the title and maximum rating of the movies that has at least 10 reviews and has a female actress. One of the reviewers of the movie should be 'Neal Wruck'. Do not include any movie that received less than 4 stars rating or any movies from directors that have did not direct more than one movie.