COP 3710 Introduction to Data Engineering
HW5
Requirements:
1. Please make sure that your name does NOT show in the file name or the body of your programs. Please name your test program HW5_LAST_FOUR_DIGITS_UIN.txt
2. End each SQL statement with a semicolon.
3. Submit a zip file, containing your programs to Canvas.
4. Due 11:59pm Apr 9

Description:

Using the database which you created for Homework 4, write eight SQL statements in a single file to perform the following queries, for each of which you are shown the wanted columns: (Note the content in your query result could be a little different than mine depending on how null values are handled. But your results should be very close.)

1. Find all the Harry Potter movies whose title starts with "Harry Potter" ordered by their critics scores.

TITLE	CRITICS_SCORE
Harry Potter and the Deathly Hallows - Part 2	96
Harry Potter and the Prisoner of Azkaban	91
Harry Potter and the Goblet of Fire	88
Harry Potter and the Half-Blood Prince	84
Harry Potter and the Chamber of Secrets	82
Harry Potter and the Sorcerer's Stone	80
Harry Potter and the Order of the Phoenix	79
Harry Potter and the Deathly Hallows - Part 1	78

2. Find the titles for the movies which were made in 2014 and whose critics scores are greater than their audience score. (Note a critics score or audience score is invalid if the value is -1.)

TITLE
The Lego Movie
The Lunchbox
The Missing Picture
The Returned
The Trip To Italy
The New Black
Journey To The West
We Are the Best!

3. Find the five movies with the greatest differences of audience and critics score. (Hint: using "limit 5" to limit the number of returned rows.)

SCORE_DIFF	TITLE	ID	AUDIENCE_SCORE	CRITICS_SCORE
73	Facing the Giants	304703728	86	13
72	The Boondock Saints	12869	92	20
65	The Right Kind of Wrong	771325548	76	11
64	The Football Factory	4844270	84	20
63	The Life of David Gale	13604	82	19

4. For each type of mpaa rating, find how many movies there are. Order the return table by how many movies there are under each rating type.

COUNT(ID)	MPAA_RATING
444	R
375	PG-13
196	PG
166	Unrated
64	G
2	NC-17

5. Find the Harry Potter movie with the highest critics score without using "limit". (Hint: use a subquery to find the highest critics score among all the Harry Porter movies first.)

TITLE	CRITICS_SCORE
Harry Potter and the Deathly Hallows - Part 2	96

6. Find each movie and its critics score if Tom Hanks was in the movie. (Hint: use a subquery to find all the movies in which Tom Hanks has acted. Then use "inner join" to link table Movie to find the critics score.)

TITLE	CRITICS_SCORE
A League of Their Own	77
The 'Burbs	46
The Ladykillers	55
The Terminal	60
The Polar Express	56
The Green Mile	80
The Da Vinci Code	25

7. Find each Harry Potter movie and its actors. Order the return table by the actors' name. (Hint: use a subquery to find all the Harry Porter movies. Then in another subquery, use "inner join" to link table Character to find all their characters. At last, use "inner join" to link table Actor to find actors' names.)

ACTOR_IN_HARRY_POTTER
Daniel Radcliffe
David Thewlis
Emma Watson
Gary Oldman
Helena Bonham Carter
Jim Broadbent
Kenneth Branagh
Maggie Smith
Michael Gambon
Ralph Fiennes
Robbie Coltrane
Rupert Grint

8. Find all the actors who have played in the same movie with Tom Hanks. Order by the return table by the movie title.

NAME	TITLE
Geena Davis	A League of Their Own
Jon Lovitz	A League of Their Own
Madonna	A League of Their Own
Lori Petty	A League of Their Own
Carrie Fisher	The 'Burbs
Rick Ducommun	The 'Burbs
Bruce Dern	The 'Burbs
Corey Feldman	The 'Burbs
Audrey Tautou	The Da Vinci Code
Alfred Molina	The Da Vinci Code
Ian McKellen	The Da Vinci Code
Jurgen Prochnow	The Da Vinci Code
Michael Clarke Duncan	The Green Mile
Bonnie Hunt	The Green Mile
David Morse	The Green Mile
James Cromwell	The Green Mile
Tzi Ma	The Ladykillers
Marlon Wayans	The Ladykillers
Irma P. Hall	The Ladykillers
J.K. Simmons	The Ladykillers
Michael Jeter	The Polar Express
Nona Gaye	The Polar Express
Charles Fleischer	The Polar Express
Peter Scolari	The Polar Express
Stanley Tucci	The Terminal
Diego Luna	The Terminal
Chi McBride	The Terminal
Catherine Zeta-Jones	The Terminal