**LAB ASSIGNMENT 4**

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1. Write a query to return the ratings data in a more readable format: reviewer name, movie title, stars, and ratingDate. Also, sort the data, first by reviewer name, then by movie title, and lastly by number of stars.

**Solution :**

SELECT name, title, stars, ratingDate

FROM Movie, Rating, Reviewer

WHERE Movie.mId = Rating.mId AND Reviewer.rId = Rating.rId

ORDER BY name, title, stars;

2. For each movie that has at least one rating, find the highest number of stars that movie received. Return the movie title and number of stars. Sort by movie title.

**Solution :**

SELECT title, MAX(stars)

FROM Movie

INNER JOIN Rating USING(mId)

GROUP BY mId

ORDER BY title;

3. For each movie, return the title and the difference between highest and lowest ratings

given to that movie. Sort by the difference from highest to lowest, then by movie title.

**Solution :**

SELECT title, (MAX(stars) - MIN(stars)) AS rating\_spread

FROM Movie

INNER JOIN Rating USING(mId)

GROUP BY mId

ORDER BY rating\_spread DESC, title;

4. Find the names of all reviewers who rated Gone with the Wind.

**Solution :**

SELECT DISTINCT name

FROM Movie

INNER JOIN Rating USING(mId)

INNER JOIN Reviewer USING(rId)

WHERE title = "Gone with the Wind";

5. For any rating where the reviewer is the same as the director of the movie, return the

reviewer name, movie title, and number of stars.

**Solution :**

SELECT name, title, stars

FROM Movie

INNER JOIN Rating USING(mId)

INNER JOIN Reviewer USING(rId)

WHERE director = name;

6. Return all reviewer names and movie names together in a single list, alphabetized.

**Solution :**

SELECT title FROM Movie

UNION

SELECT name FROM Reviewer

ORDER BY name, title;

7. List movie titles and average ratings, from highest-rated to lowest-rated. If two or more

movies have the same average rating, list them in alphabetical order.

**Solution :**

SELECT title, AVG(stars) AS average

FROM Movie

INNER JOIN Rating USING(mId)

GROUP BY mId

ORDER BY average DESC, title;

8. Find the names of all reviewers who have contributed three or more ratings.

**Solution :**

SELECT name

FROM Reviewer

WHERE (SELECT COUNT(\*) FROM Rating WHERE Rating.rId = Reviewer.rId) >= 3;