Database Used: movies_rdb
Tool: MySQLCommand Line client
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Movie Review and Recommendation Engine

Introduction:

The rise of online streaming platforms and large-scale movie databases has created the need for intelligent systems that can recommend content tailored to user preferences. This project aims to build a simple yet effective movie recommendation system using SQL in MySQL Workbench, leveraging structured data like ratings and genres. The system helps users discover top-rated content based on aggregated ratings and genres.

Abstract:

This project focuses on designing and developing a basic movie recommendation engine using MySQL. It involves creating a relational database schema for storing user information, movies, ratings, and reviews. With the help of SQL queries and views, the project calculates average ratings, ranks movies, and generates genre-specific recommendations using window functions. The final result is exported as a CSV file that presents a list of top-recommended movies based on user ratings.

Tools Used:

Tool	Purpose
MySQL (Command Line Client)	Database management and query execution

Steps Involved in Building the Project:

1. Database and Schema Creation

- Created a new database named movie_rdb.
- Designed 4 tables: Users, Movies, Ratings, and Reviews.

2. Data Insertion

- Inserted sample IMDb-style data for users, movies, and ratings.

3. Rating Aggregation and Analysis

Wrote SQL queries to calculate average ratings.

- Used RANK() and AVG() to order movies by popularity.

4. Creating Views

- Created a view Top_Rated_Movies to filter and store movies with average rating ≥ 8.

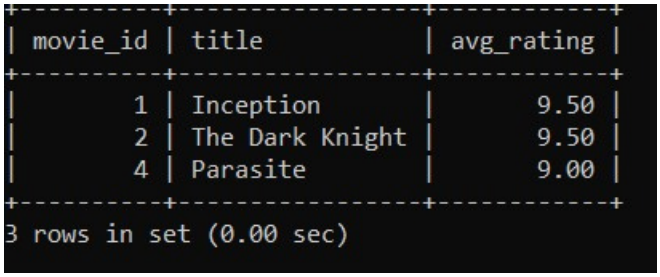
5. Genre-wise Recommendation

- Used window functions to identify top-rated movies per genre.

6. Exporting the Results

- Used MySQL Command Line Client to export the top-rated movies.

RESULT:



```
+----------+-----------------+------------+
| movie_id | title           | avg_rating |
+----------+-----------------+------------+
|        1 | Inception       |       9.50 |
|        2 | The Dark Knight |       9.50 |
|        4 | Parasite        |       9.00 |
+----------+-----------------+------------+
3 rows in set (0.00 sec)
```

CONCLUSION:

The Movie Review and Recommendation Engine successfully demonstrates how structured data and SQL analytics can be used to generate intelligent movie suggestions. By creating a robust schema, using aggregate and window functions, and exporting results, the project builds a functional and extendable base for future improvements such as user-specific recommendations and integration with web interfaces.