🎬 Movie Ratings & Actor Insights — Detailed Project Report

1. Introduction
The film industry relies heavily on viewer feedback and actor popularity to gauge the success of movies. This project uses SQL to analyze movie ratings, actor participation, and genre trends, aiming to uncover insights that help understand what makes a movie successful.

2. Problem Statement
How do movie genres and actor appearances influence movie ratings? What trends can be identified over time in terms of viewer preferences and genre popularity?

3. Dataset Description

- **Genres:** Categories such as Action, Drama, Comedy, Sci-Fi.
- **Movies:** Movie titles, release years, and genre association.
- **Actors:** Names of actors.
- **Movie_Actors:** Mapping of actors to movies.
- **Ratings:** User ratings on a 1-10 scale with timestamps.

4. Methodology / SQL Techniques

- Multi-table joins to combine movies, actors, and ratings data.
- Aggregation with `GROUP BY` to compute average ratings by genre or actor.
- Filtering top-rated movies or actors using subqueries and `HAVING`.
- Temporal analysis using date functions to detect rating trends over time.

5. Key Findings

- **Top Genres:** Drama and Sci-Fi movies have the highest average ratings, indicating strong viewer preference.
- **Popular Actors:** Actors appearing in top-rated movies tend to have higher average ratings overall, suggesting star power impact.
- **Trend Analysis:** The average movie ratings in some genres show a rising trend over the years, indicating evolving tastes.

6. Conclusion
This analysis reveals that genres and actor involvement significantly affect movie ratings. Platforms can use such insights to tailor recommendations, promote popular genres, or highlight star actors to boost engagement.

7. Recommendations / Future Work

- Incorporate user demographic data to refine rating predictions.
- Use more granular rating data (e.g., detailed review texts).
- Build predictive models to forecast future movie success based on early ratings and cast.