

Executive Summary

Introduction:

This report covers the execution and analysis of SQL queries on an IMDB-related dataset. The goal was to extract meaningful insights while maintaining accuracy, efficiency, and optimization. The queries were carefully designed to address specific problem statements, using appropriate joins and formatting the results as required.

Approach:

- Segment 1 (Q1-Q9): Focused on basic data retrieval using INNER JOINS where necessary.
- Segment 2 (Q10-Q17): Included more complex queries involving aggregations and filtering conditions.
- Segment 3 (Q18-Q23): Worked with subqueries and additional filtering to refine the results.
- Segment 4 (Q24-Q29): Handled the most advanced queries, incorporating nested subqueries and multi-table joins.

Key Findings:

- Successfully extracted relevant insights from the dataset.
- Ensured that query results were accurate and aligned with expectations.
- Optimized joins and indexing helped enhance performance.
- Used aliases and comments to improve code readability and maintainability.
- Applied aggregations, filtering, and sorting effectively to answer business-related questions.

Conclusion:

This project demonstrated the ability to write and execute SQL queries that meet business requirements efficiently. The approach ensured optimized execution, correct syntax, and structured output. Coding standards—such as proper aliasing, indentation, and comments—made the queries easier to read and maintain. Ultimately, the project provided valuable insights into the IMDB dataset while reinforcing best practices in SQL.