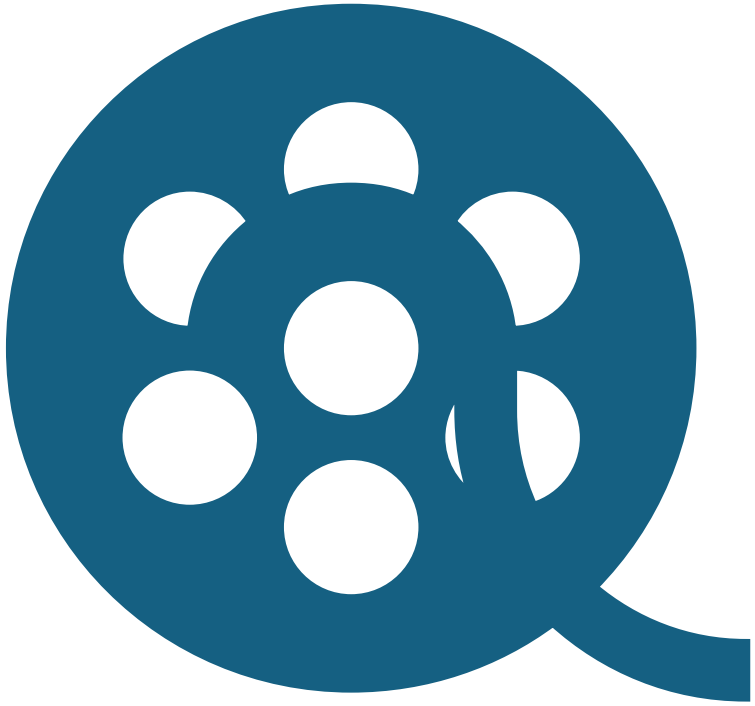


Project Title:

IMDb Movies Analytics using SQL

Asma’a Hakami
BI Analyst

Date: 7 May 2025

Overview

- This project explores and analyzes a dataset of global movie records using structured queries. By leveraging SQL, a variety of analytical queries were written to uncover patterns and trends related to movie ratings, genres, vote counts, and historical popularity. The insights provide a deeper understanding of the film industry from a data-driven perspective.

- The goal of this project is to demonstrate strong skills in database design, complex data querying, and statistical analysis — making it ideal for portfolio showcasing and professional interviews.

Data Preparation

- Used SQL for initial data aggregation
- Example queries

```
SELECT
    CASE
        WHEN "numVotes" >= 100000 THEN '100k+'
        WHEN "numVotes" >= 50000 THEN '50k-100k'
        WHEN "numVotes" >= 10000 THEN '10k-50k'
        ELSE 'Less than 10k'
    END AS "votes_range",
    COUNT(*) AS "movie_count"
FROM "Imdbmovies"
GROUP BY "votes_range"
ORDER BY "movie_count" DESC;
```

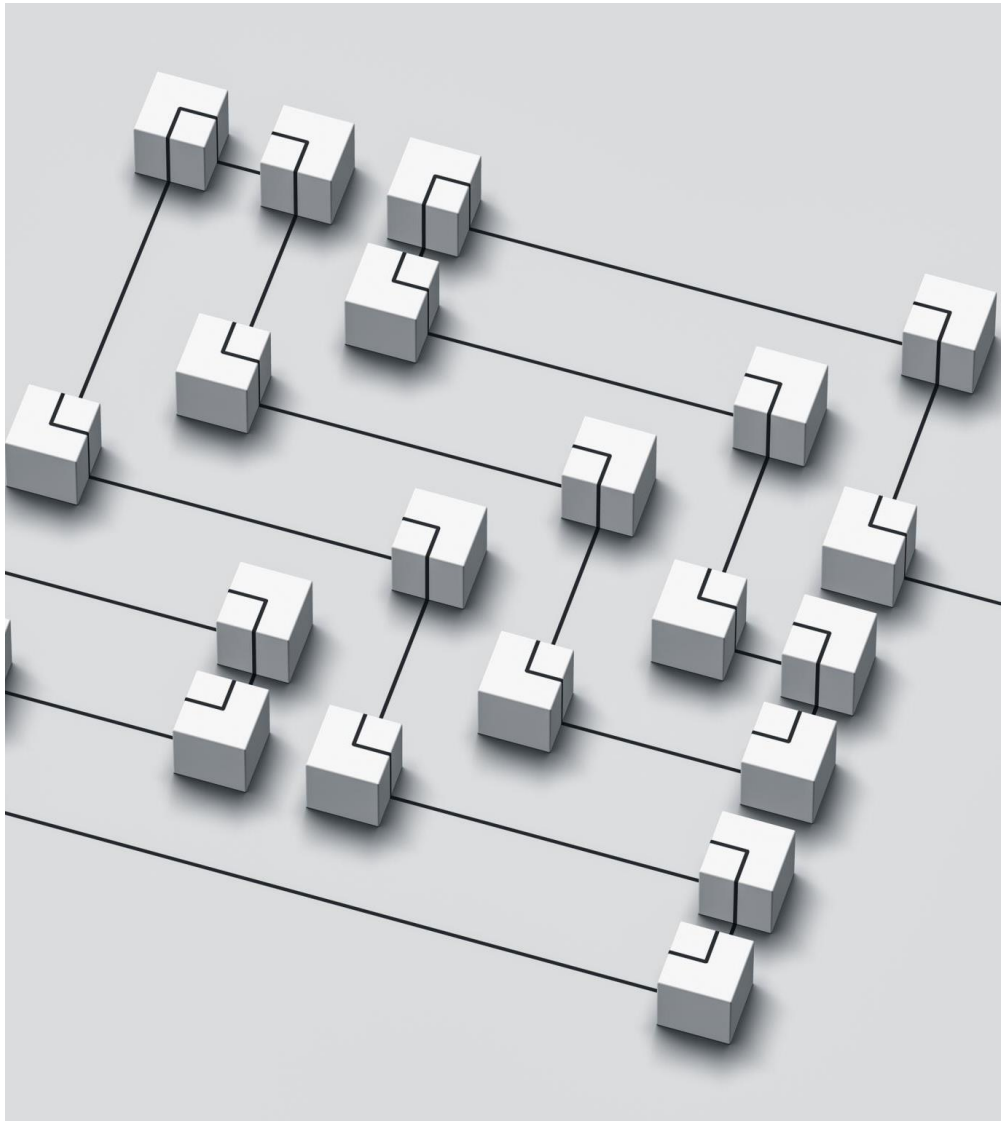
Technologies Used

- PostgreSQL (v13)
- dbfiddle.uk for online database development
- CSV dataset converted to SQL statements
- GitHub for project versioning

https://github.com/asmaa-hakmi/BI-peojects.git

Project Structure

- Database schema creation
- Data population (100+ rows, 10 columns)
- 19+ analytical SQL queries
- Hosted live on dbfiddle for testing and exploration

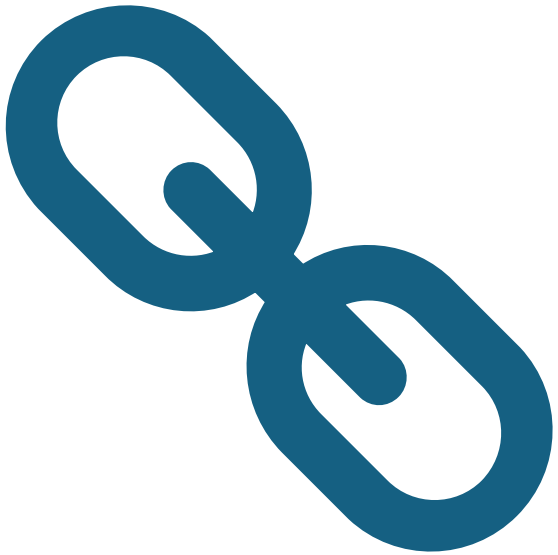


How to Run

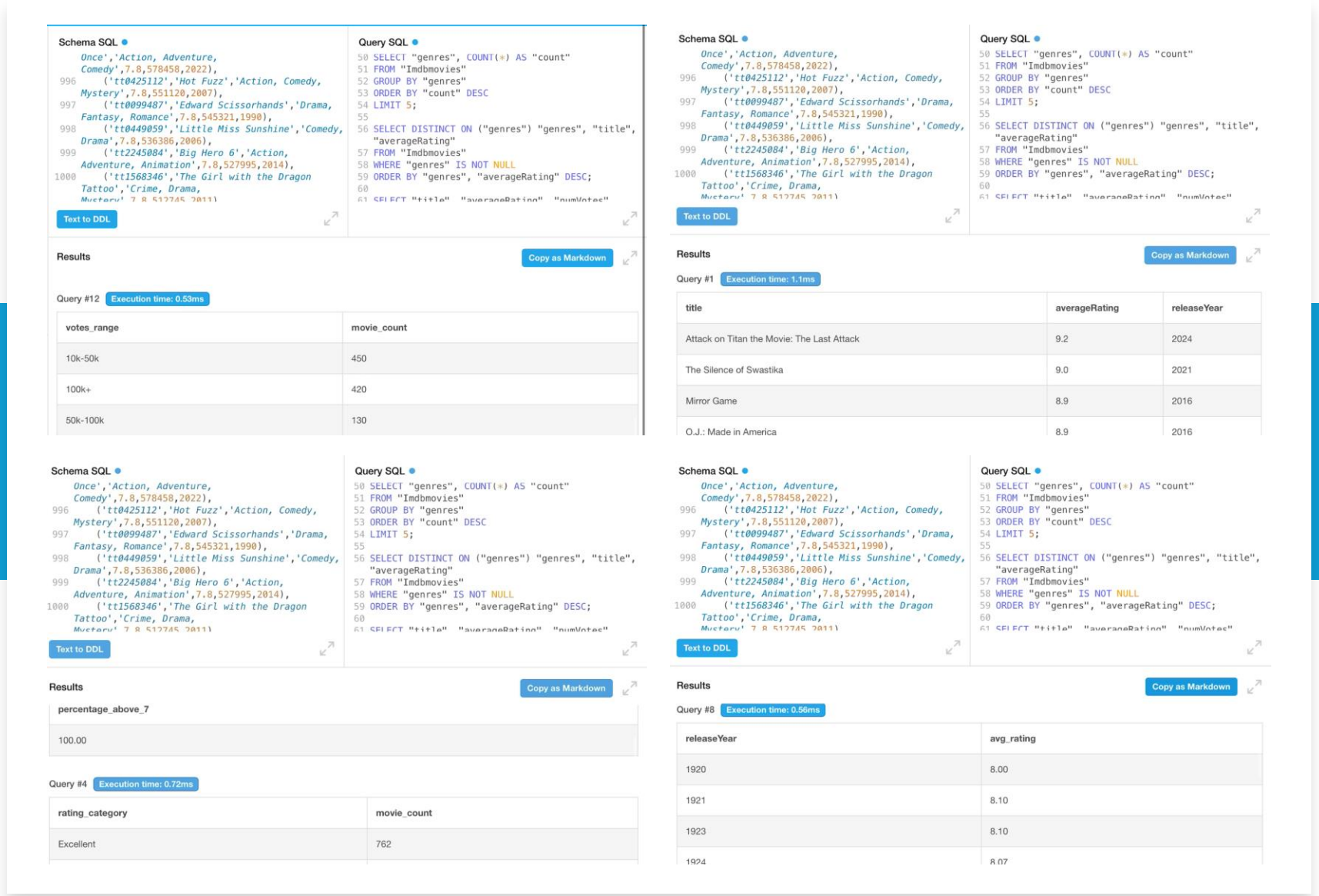
• Access the project directly through the provided link.

• No installation or setup required — just open the link and explore the database and queries.

https://www.db-fiddle.com/f/3EWhm4CWsuAVs2KZ1kzB28/0



Project Screenshot



Dashboard 1

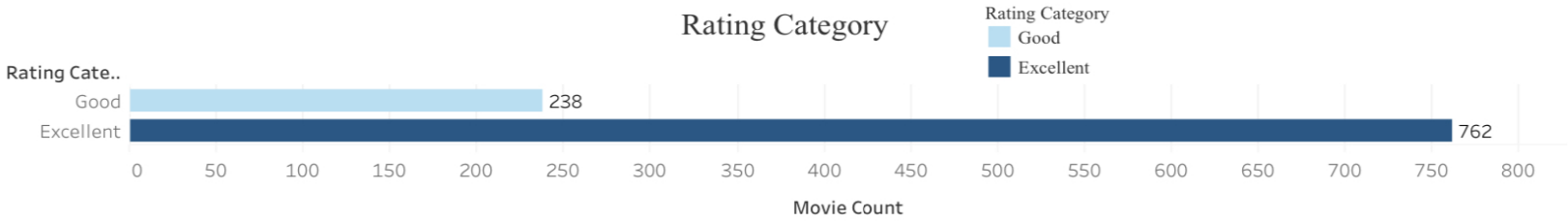
Dashboard 1: IMDB Movies: Ratings & Popularity Insights

Top Voted Movie

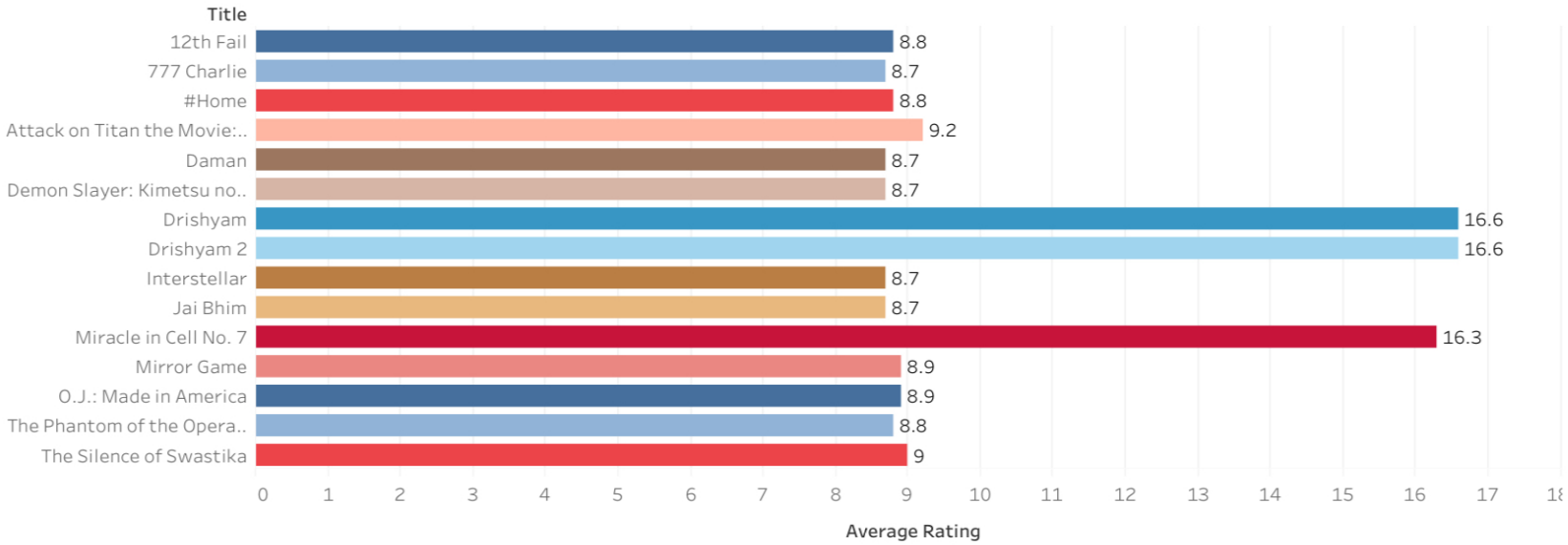
Title	
The Shawshank Redemption	1 3,036,547

100%
Percentage of movies rated above 7

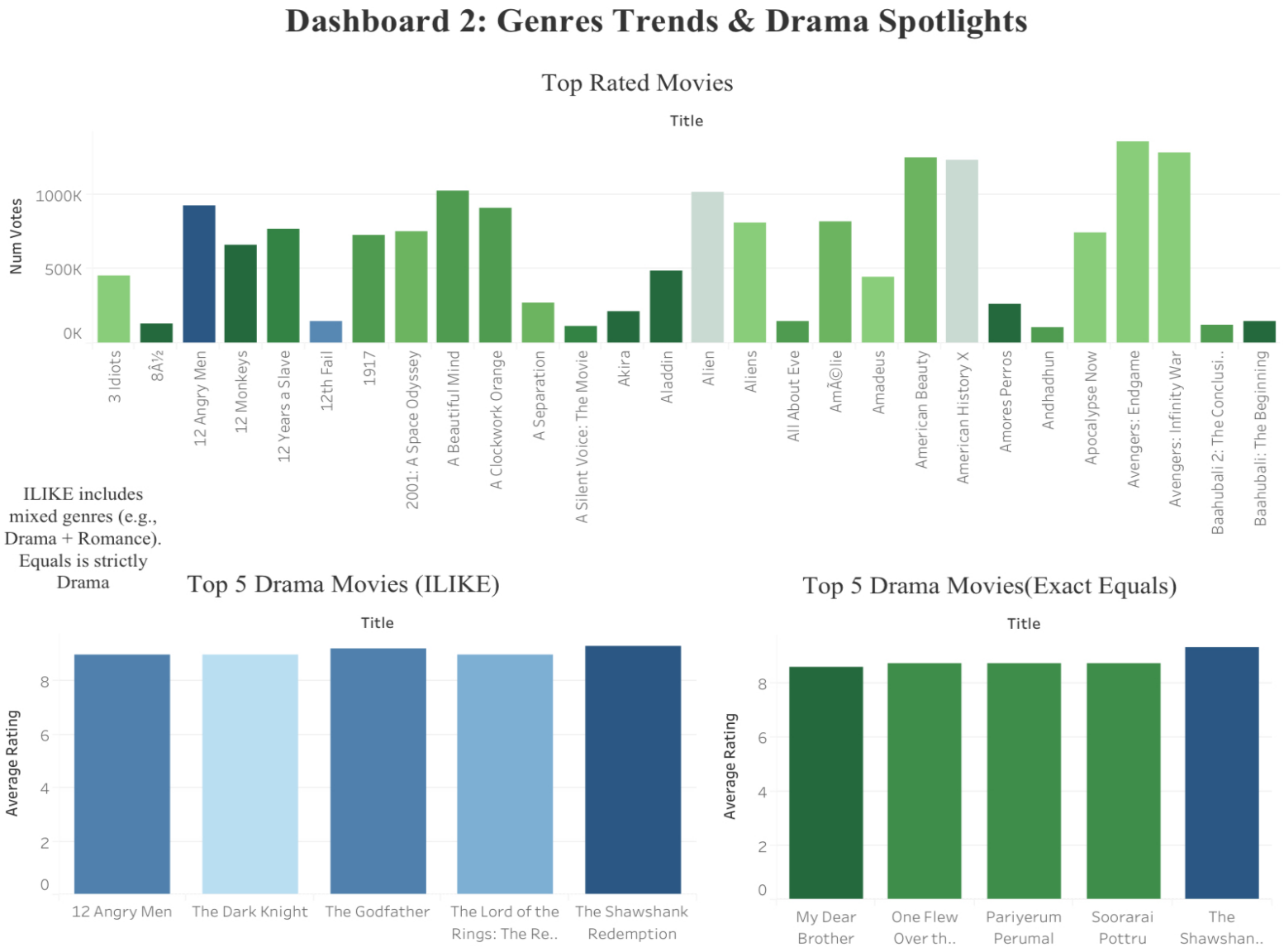
Rating Category



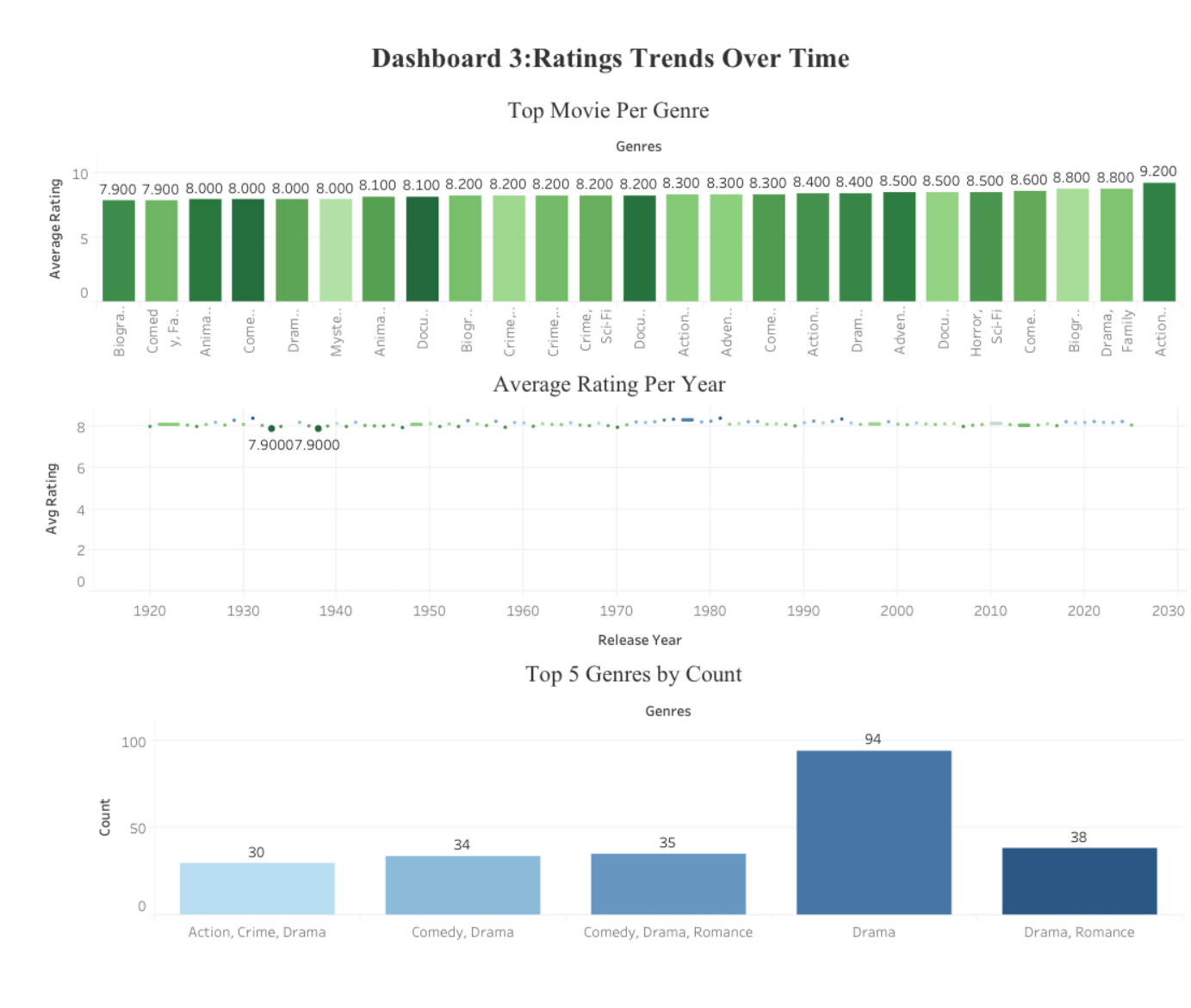
Votes Distribution by Range



Dashboard 2


Dashboard 2: Genres Trends & Drama Spotlights
Top Rated Movies
Title
Num Votes
1000K
500K
0K
3 Idiots
8Â½
12 Angry Men
12 Monkeys
12 Years a Slave
12th Fail
1917
2001: A Space Odyssey
A Beautiful Mind
A Clockwork Orange
A Separation
A Silent Voice: The Movie
Akira
Aladdin
Alien
Aliens
All About Eve
AmÃ©lie
Amadeus
American Beauty
American History X
Amores Perros
Andhadhun
Apocalypse Now
Avengers: Endgame
Avengers: Infinity War
Baahubali 2: The Conclusi..
Baahubali: The Beginning
ILIKE includes mixed genres (e.g., Drama + Romance). Equals is strictly Drama
Top 5 Drama Movies (ILIKE)
Title
Average Rating
8
6
4
2
0
12 Angry Men
The Dark Knight
The Godfather
The Lord of the Rings: The Re..
The Shawshank Redemption
Top 5 Drama Movies(Exact Equals)
Title
Average Rating
8
6
4
2
0
My Dear Brother
One Flew Over th..
Pariyerum Perumal
Soorarai Pottru
The Shawshan..

Dashboard 3


Dashboard 3:Ratings Trends Over Time
Top Movie Per Genre
Genres
Average Rating
10
5
0
7.900 7.900 8.000 8.000 8.000 8.000 8.100 8.100 8.200 8.200 8.200 8.200 8.200 8.300 8.300 8.300 8.400 8.400 8.500 8.500 8.500 8.600 8.800 8.800 9.200
Biogra..
Comed y, Fa..
Anima..
Come..
Dram..
Myste..
Anima..
Docu..
Biogr..
Crime,..
Crime..
Crime, Sci-Fi
Docu..
Action..
Adven..
Come..
Action..
Dram..
Adven..
Docu..
Horror, Sci-Fi
Come..
Biogr..
Drama, Family
Action..
Average Rating Per Year
Avg Rating
8
6
4
2
0
7.90007.9000
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020
2030
Release Year
Top 5 Genres by Count
Genres
Count
100
50
0
30
34
35
94
38
Action, Crime, Drama
Comedy, Drama
Comedy, Drama, Romance
Drama
Drama, Romance

Key Insights Extracted

- Movies with the highest ratings released after 2010
- The most voted movie of all time
- Percentage of movies rated above 7
- Categorization of movies based on average rating (Excellent, Good, Average, Poor)
- Top-rated movie in each release year
- Highest-rated movies containing or exclusively tagged as “Drama”
- Distribution and trends by genres, vote count, and release year