# **Data-Analysis-Project-Using-SQL**

SELECT \* FROM mydb1.imdb\_movie\_ratings\_2023;

select count(\*) from mydb1.imdb\_movie\_ratings\_2023;

-- alter table mydb1.imdb\_movie\_ratings\_2023 rename column `Moive Name` to movie\_name;

-- alter table mydb1.imdb\_movie\_ratings\_2023 rename column `Meta Score` to meta\_score;

-- alter table mydb1.imdb\_movie\_ratings\_2023 rename column `PG Rating` to PG\_Rating;

# -- 1: Year wise released movies’ count:

SELECT COUNT(\*) as movie\_count,Year

FROM mydb1.imdb\_movie\_ratings\_2023

GROUP BY Year;

# -- 2. Details and ratings of Comedy movies released in 2020:

SELECT movie\_name,year,Genre,Rating,votes,Cast,Director

FROM mydb1.imdb\_movie\_ratings\_2023

WHERE year = 2020 AND Genre LIKE '%Comedy%';

# -- 3.Check if a movie is suitable for children:

SELECT movie\_name,Genre,

CASE WHEN PG\_Rating like 'G' THEN 'Yes'

when PG\_Rating like 'PG' then 'Under parental guidence'

ELSE 'No' END AS SuitableForChildren

FROM mydb1.imdb\_movie\_ratings\_2023;

# -- 4. The cast details of a movie by its name using stored procedure:

select movie\_name,Cast,Director from mydb1.imdb\_movie\_ratings\_2023 order by Year;

delimiter $$

create procedure get\_cast()

begin

select movie\_name,Cast,Director from mydb1.imdb\_movie\_ratings\_2023 order by year();

end $$

delimiter ;

call get\_cast();

-- 5. What is the earliest released movie listed in the IMDb movie , along with its title and release year?

select Movie\_Name,Year FROM imdb\_movie\_ratings\_2023

WHERE Year=(SELECT MIN(Year) FROM imdb\_movie\_ratings\_2023);

# -- 6. Which movies directed by Steven Spielberg are listed in the IMDb movie ?

SELECT Movie\_Name,Year

FROM imdb\_movie\_ratings\_2023

WHERE director = 'Steven Spielberg';

# -- 7.Counting the movies released in 2023 and rating greater than 8?

select count(Movie\_Name) from imdb\_movie\_ratings\_2023

where year=2023 and Rating>8;

# -- 8. What are the top five PG rating categories based on the number of movies in the IMDb ?

SELECT PG\_Rating,COUNT(\*) AS RATING

FROM imdb\_movie\_ratings\_2023

GROUP BY PG\_Rating

ORDER BY PG\_Rating LIMIT 5;

# -- 9.Who are the most frequent directors in the dataset?--

SELECT

director,

COUNT(\*) AS movie\_count

FROM

imdb\_movie\_ratings\_2023

GROUP BY

director

ORDER BY

movie\_count DESC;

# -- 10.Count of movies in each decade--

SELECT CONCAT(FLOOR(year / 10) \* 10, 's') AS decade,

COUNT(\*) AS movies\_count

FROM imdb\_movie\_ratings\_2023

WHERE year >= 1940

GROUP BY CONCAT(FLOOR(year / 10) \* 10, 's')

ORDER BY decade;

# -- 11.Identify directors who have worked in multiple genres and count the distinct genres for each:

SELECT

director,

COUNT(DISTINCT genre) AS distinct\_genre\_count

FROM

imdb\_movie\_ratings\_2023

GROUP BY

director

HAVING

COUNT(DISTINCT genre) > 1

ORDER BY

distinct\_genre\_count DESC;

# -- 12.Which combination of genre and director produces the highest-rated movies?--

SELECT

genre,

director,

AVG(rating) AS avg\_rating

FROM

imdb\_movie\_ratings\_2023

GROUP BY

genre, director

ORDER BY

avg\_rating DESC;

# -- 13.Categorize movies based on their ratings:--

SELECT

movie\_name,

rating,

CASE

WHEN rating >= 8.0 THEN 'Excellent'

WHEN rating >= 6.0 AND rating < 8.0 THEN 'Good'

ELSE 'Average or Below'

END AS rating\_category

FROM

imdb\_movie\_ratings\_2023;

# --14.find out the top 10 movies names, rating,genre of movies that Leonardo DiCaprio have acted in and sort them by rating

SELECT movie\_name,Rating,Genre FROM imdb\_movie\_ratings\_2023

WHERE Cast LIKE '%Leonardo DiCaprio%'

order by Rating desc

limit 10;

# --15 Find out which director has made the most amount of films with a Meta score 90 and above

create view Rating2 as

Select Director,Count(\*) As Film\_count from imdb\_movie\_ratings\_2023 where Meta\_score>=90

group by Director;

Select \* from Rating2 where Film\_count = (select max(Film\_count) from Rating2);

--16 ,find out which Genre of movie was the most Released in 2023?

CREATE VIEW Genre\_Count AS

SELECT Genre, COUNT(\*) AS MovieCount

FROM imdb\_movie\_ratings\_2023

GROUP BY Genre;

SELECT \*

FROM Genre\_Count

WHERE MovieCount = (SELECT MAX(MovieCount) FROM Genre\_Count);

# --17 Find the top 3 directors with the highest average ratings for their movies,

# #considering only directors who have directed at least 3 movies.

# #Include the average rating and the number of movies directed by each of them.

select Director,avg(Rating) as Avg\_rating,Count(\*) as Film\_count

from imdb\_movie\_ratings\_2023

group by Director

order by Film\_count desc

limit 3;

# --18 Find the top 10 Genre which has the highest effectiveness ratio

-- Effectiveness ratio=(Rating \* Votes) + (AvgVotesPerMovie \* GlobalAvgRating)) / (Votes + AvgVotesPerMovie)

create view Table1 as

SELECT \*,

((Rating \* Votes) + (AvgVotesPerMovie \* GlobalAvgRating)) / (Votes + AvgVotesPerMovie) AS EffectiveRating

FROM (

SELECT \*,

(SELECT AVG(Rating) FROM imdb\_movie\_ratings\_2023) AS GlobalAvgRating,

(SELECT AVG(Votes) FROM imdb\_movie\_ratings\_2023) AS AvgVotesPerMovie

FROM imdb\_movie\_ratings\_2023

) AS subquery

ORDER BY EffectiveRating DESC;

select Genre,sum(EffectiveRating) as EffectiveRating

from table1

group by Genre order by EffectiveRating desc

limit 10;