# Movie Analysis — PostgreSQL

### 1. Top 5 Highest Rated Movies

	movie_id [PK] integer	title character varying (100)	industry character varying (100)	release_year integer	imdb_rating numeric (5,2)	studio character varying (100)	language_id integer
1	111	The Shawshank Redemption	Hollywood	1994	9.30	Castle Rock Entertainment	5
2	120	The Godfather	Hollywood	1972	9.20	Paramount Pictures	5
3	121	The Dark Knight	Hollywood	2008	9.00	Syncopy	5
4	122	Schindler's List	Hollywood	1993	9.00	Universal Pictures	5
5	112	Inception	Hollywood	2010	8.80	Warner Bros. Pictures	5

# **SQL Query:**

```
select
    *
from
    movies
order by
    imdb_rating desc
limit 5;
```

# 2. Number of Movies Released by Year

	release_year integer	number_of_movies bigint
1	2008	1
2	2022	5
3	2017	1
4	2009	2
5	2013	1
6	2003	1
7	2015	3
8	1993	2
9	1997	1
10	2018	3
11	1975	1
12	1995	1

12	1995	1
13	1994	1
14	2014	3
15	2010	1
16	2019	2
17	2000	1
18	2011	1
19	1946	1
20	1972	1
21	2007	1
22	2006	1
23	2001	1
24	1955	1
25	2021	2

```
select
    release_year,
    count(movie_id) number_of_movies
from
    movies
group by
    1;
-- Sort by number of movies
select
    release_year,
    count(movie_id) number_of_movies
from
    movies
group by
    1
order by
    2 desc;
```

#### 3. Movies by Marvel Studios in the Order of their Release

	title character varying (100)	release_year integer
1	Doctor Strange in the Multiverse of Madness	2022
2	Thor: The Dark World	2013
3	Thor: Ragnarok	2017
4	Thor: Love and Thunder	2022
5	Avengers: Endgame	2019
6	Avengers: Infinity War	2018
7	Captain America: The First Avenger	2011
8	Captain America: The Winter Soldier	2014

```
select
    title,
    release_year

from
    movies
where
    studio = 'Marvel Studios';
```

#### 4. Movies that Include the Word "Avenger"

	movie_id [PK] integer	title character varying (100)	industry character varying (100)	release_year integer	imdb_rating numeric (5,2)	studio character varying (100)	language_id integer
1	125	Avengers: Endgame	Hollywood	2019	8.40	Marvel Studios	5
2	126	Avengers: Infinity War	Hollywood	2018	8.40	Marvel Studios	5
3	137	Captain America: The First Avenger	Hollywood	2011	6.90	Marvel Studios	5

### **SQL Query:**

```
select
    *
from
    movies
where
    title like '%Avenger%';
```

#### 5. Release Year of Any Specific Movie (i.e. 3 Idiots)

	title character varying (100)	release_year integer	
1	3 Idiots	2009	

#### **SQL Query:**

```
select
    title,
    release_year

from
    movies
where
    title = '3 Idiots';
```

### 6. List of Movie Studios in the Bollywood Industry



```
select
    distinct studio
from
    movies
where
    industry = 'Bollywood';
```

# 7. Movies by Release Year

	release_year integer	title character varying (100)
1	2022	RRR
2	2022	Doctor Strange in the Multiverse of Madness
3	2022	K.G.F: Chapter 2
4	2022	The Kashmir Files
5	2022	Thor: Love and Thunder
6	2021	Shershaah
7	2021	Pushpa: The Rise - Part 1
8	2019	Parasite
9	2019	Avengers: Endgame
10	2018	Avengers: Infinity War
11	2018	Race 3
12	2018	Sanju
13	2017	Thor: Ragnarok
14	2015	Baahubali: The Beginning
15	2015	Bajirao Mastani
16	2015	Bajrangi Bhaijaan
17	2014	Interstellar
18	2014	PK
19	2014	Captain America: The Winter Soldier

.,	2017	ouptuin America. The Winter oblaid
20	2013	Thor: The Dark World
21	2011	Captain America: The First Avenger
22	2010	Inception
23	2009	3 Idiots
24	2009	Avatar
25	2008	The Dark Knight
26	2007	Taare Zameen Par
27	2006	The Pursuit of Happyness
28	2003	Munna Bhai M.B.B.S.
29	2001	Kabhi Khushi Kabhie Gham
30	2000	Gladiator
31	1997	Titanic
32	1995	Dilwale Dulhania Le Jayenge
33	1994	The Shawshank Redemption
34	1993	Jurassic Park
35	1993	Schindler's List
36	1975	Sholay
37	1972	The Godfather
38	1955	Pather Panchali
39	1946	It's a Wonderful Life

```
select
    release_year,
    title
from
    movies
order by
    release_year desc;
```

#### 8. Movies Released in 2022



# **SQL Query:**

```
select
    release_year,
    title
from
    movies
where
    release_year = 2022;
```

#### 9. Movies Released After 2020

	release_year integer	title character varying (100)
1	2022	K.G.F: Chapter 2
2	2022	Doctor Strange in the Multiverse of Madness
3	2022	Thor: Love and Thunder
4	2021	Pushpa: The Rise - Part 1
5	2022	RRR
6	2022	The Kashmir Files
7	2021	Shershaah

```
select
    release_year,
    title
from
    movies
where
    release_year > 2020;
```

#### 10. Movies After the Year 2020 having more than 8 Rating

	release_year integer	title character varying (100)	imdb_rating numeric (5,2)
1	2022	K.G.F: Chapter 2	8.40
2	2022	The Kashmir Files	8.30
3	2021	Shershaah	8.40

### **SQL Query:**

```
select
    release_year,
    title,
    imdb_rating

from
    movies
where
    release_year > 2020
    and imdb_rating > 8;
```

#### 11. Movies by Yash Raj Films and Hombale Films

	movie_id [PK] integer	title character varying (100)	industry character varying (100)	release_year integer	imdb_rating numeric (5,2)	studio character varying (100)	language_id integer
1	101	K.G.F: Chapter 2	Bollywood	2022	8.40	Hombale Films	3
2	107	Dilwale Dulhania Le Jayenge	Bollywood	1995	8.00	Yash Raj Films	1

### **SQL Query:**

```
select
    *
from
    movies
where
    studio in ('Yash Raj Films', 'Hombale Films');
```

#### 12. All Thor Movies by their Release Year

	release_year integer	title character varying (100)
1	2022	Thor: Love and Thunder
2	2017	Thor: Ragnarok
3	2013	Thor: The Dark World

```
select
    release_year,
    title

from
    movies
where
    lower(title) like '%thor%'
order by
    release_year desc;
```

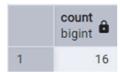
#### 13. Movies that are not from Warner Bros. Pictures and Marvel Studios

	movie_id [PK] integer	title character varying (100)	industry character varying (100)	release_year integer	imdb_rating numeric (5,2)	studio character varying (100)	language_id integer
1	101	K.G.F: Chapter 2	Bollywood	2022	8.40	Hombale Films	3
2	106	Sholay	Bollywood	1975	8.10	United Producers	1
3	107	Dilwale Dulhania Le Jayenge	Bollywood	1995	8.00	Yash Raj Films	1
4	108	3 Idiots	Bollywood	2009	8.40	Vinod Chopra Films	1
5	109	Kabhi Khushi Kabhie Gham	Bollywood	2001	7.40	Dharma Productions	1
6	111	The Shawshank Redemption	Hollywood	1994	9.30	Castle Rock Entertainment	5
7	115	The Pursuit of Happyness	Hollywood	2006	8.00	Columbia Pictures	5
8	116	Gladiator	Hollywood	2000	8.50	Universal Pictures	5
9	117	Titanic	Hollywood	1997	7.90	Paramount Pictures	5
10	118	It's a Wonderful Life	Hollywood	1946	8.60	Liberty Films	5
11	119	Avatar	Hollywood	2009	7.80	20th Century Fox	5
12	120	The Godfather	Hollywood	1972	9.20	Paramount Pictures	5
13	121	The Dark Knight	Hollywood	2008	9.00	Syncopy	5
14	122	Schindler's List	Hollywood	1993	9.00	Universal Pictures	5
15	123	Jurassic Park	Hollywood	1993	8.20	Universal Pictures	5
16	127	Pather Panchali	Bollywood	1955	8.30	Government of West Bengal	7
17	129	Munna Bhai M.B.B.S.	Bollywood	2003	8.10	Vinod Chopra Productions	1
18	130	PK	Bollywood	2014	8.10	Vinod Chopra Films	1
19	131	Sanju	Bollywood	2018	7.60	Vinod Chopra Films	1
20	132	Pushpa: The Rise - Part 1	Bollywood	2021	7.60	Mythri Movie Makers	2
21	133	RRR	Bollywood	2022	8.00	DVV Entertainment	2
22	134	Baahubali: The Beginning	Bollywood	2015	8.00	Arka Media Works	2
23	135	The Kashmir Files	Bollywood	2022	8.30	Zee Studios	1
24	136	Bajrangi Bhaijaan	Bollywood	2015	8.10	Salman Khan Films	1
25	139	Race 3	Bollywood	2018	1.90	Salman Khan Films	1
26	140	Shershaah	Bollywood	2021	8.40	Dharma Productions	1

```
select
    *

from
    movies
where
    studio not in ('Warner Bros. Pictures', 'Marvel Studios');
```

#### 14. Number of Movies Released between 2015 and 2022



### **SQL Query:**

```
select
    count(*)
from
    movies
where
    release_year between 2015 and 2022;
```

#### 15. Profit % of All Movies

	title character varying (100)	budget numeric (10,2)	revenue numeric (10,2)	profit numeric 🙃	unit character varying (50)	currency character varying (30)	profit_percentage numeric
1	K.G.F: Chapter 2	1.00	12.50	11.50	Billions	INR	1150.00000000000000000
2	Doctor Strange in the Multiverse of Madness	200.00	954.80	754.80	Millions	USD	377.4000000000000000
3	Thor: The Dark World	165.00	644.80	479.80	Millions	USD	290.7878787878787900
4	Thor: Ragnarok	180.00	854.00	674.00	Millions	USD	374.44444444444400
5	Thor: Love and Thunder	250.00	670.00	420.00	Millions	USD	168.0000000000000000
6	Dilwale Dulhania Le Jayenge	400.00	2000.00	1600.00	Millions	INR	400.00000000000000000
7	3 Idiots	550.00	4000.00	3450.00	Millions	INR	627.2727272727272700
8	Kabhi Khushi Kabhie Gham	390.00	1360.00	970.00	Millions	INR	248.7179487179487200
9	Bajirao Mastani	1.40	3.50	2.10	Billions	INR	150.0000000000000000
10	The Shawshank Redemption	25.00	73.30	48.30	Millions	USD	193.2000000000000000
11	Interstellar	165.00	701.80	536.80	Millions	USD	325.3333333333333300
12	The Pursuit of Happyness	55.00	307.10	252.10	Millions	USD	458.3636363636363600
13	Gladiator	103.00	460.50	357.50	Millions	USD	347.0873786407767000
14	Titanic	200.00	2202.00	2002.00	Millions	USD	1001.0000000000000000
15	It's a Wonderful Life	3.18	3.30	0.12	Millions	USD	3.77358490566037735800
16	Avatar	237.00	2847.00	2610.00	Millions	USD	1101.2658227848101300
17	The Godfather	7.20	291.00	283.80	Millions	USD	3941.6666666666666700
18	The Dark Knight	185.00	1006.00	821.00	Millions	USD	443.7837837837837800
19	Schindler's List	22.00	322.20	300.20	Millions	USD	1364.5454545454545500
20	Jurassic Park	63.00	1046.00	983.00	Millions	USD	1560.3174603174603200
21	Parasite	15.50	263.10	247.60	Millions	USD	1597.4193548387096800
22	Avengers: Endgame	400.00	2798.00	2398.00	Millions	USD	599.5000000000000000
23	Avengers: Infinity War	400.00	2048.00	1648.00	Millions	USD	412.0000000000000000
24	Pather Panchali	70000.00	100000.00	30000.00	Thousands	INR	42.85714285714285714300
25	Taare Zameen Par	120.00	1350.00	1230.00	Millions	INR	1025.0000000000000000
26	Munna Bhai M.B.B.S.	100.00	410.00	310.00	Millions	INR	310.0000000000000000
27	PK	850.00	8540.00	7690.00	Millions	INR	904.7058823529411800
Tota	l rows: 37 Query complete 00:00:00.05	0					

```
select
    m.title,
    f.budget,
    f.revenue,
    (f.revenue - f.budget) as profit,
    f.unit,
```

```
f.currency,
    (((f.revenue - f.budget) / f.budget) * 100) as profit_percentage
from
    financials f
join movies m on
    m.movie_id = f.movie_id;
```

# 16. Movies with their Language Names

	title character varying (100)	name character varying (50)
1	Shershaah	Hindi
2	Race 3	Hindi
3	Bajrangi Bhaijaan	Hindi
4	The Kashmir Files	Hindi
5	Sanju	Hindi
6	PK	Hindi
7	Munna Bhai M.B.B.S.	Hindi
8	Taare Zameen Par	Hindi
9	Bajirao Mastani	Hindi
10	Kabhi Khushi Kabhie Gham	Hindi
11	3 Idiots	Hindi
12	Dilwale Dulhania Le Jayenge	Hindi
13	Sholay	Hindi
14	Baahubali: The Beginning	Telugu
15	RRR	Telugu
16	Pushpa: The Rise - Part 1	Telugu
17	K.G.F: Chapter 2	Kannada
18	Captain America: The Winter Soldier	English
19	Captain America: The First Avenger	English
20	Avengers: Infinity War	English
21	Avengers: Endgame	English
22	Parasite	English
23	Jurassic Park	English
24	Schindler's List	English
25	The Dark Knight	English
26	The Godfather	English
27	Avatar	English

```
select
    m.title,
    L.name
from
    movies m
left join languages l
on
    m.language_id = L.language_id;
```

# 17. Hindi Movie Names (Assuming that the language id for Hindi is unknown)

	title character varying (100)	name character varying (50)
1	Sholay	Hindi
2	Dilwale Dulhania Le Jayenge	Hindi
3	3 Idiots	Hindi
4	Kabhi Khushi Kabhie Gham	Hindi
5	Bajirao Mastani	Hindi
6	Taare Zameen Par	Hindi
7	Munna Bhai M.B.B.S.	Hindi
8	PK	Hindi
9	Sanju	Hindi
10	The Kashmir Files	Hindi
11	Bajrangi Bhaijaan	Hindi
12	Race 3	Hindi
13	Shershaah	Hindi

```
select
    m.title,
    L.name
from
    movies m
left join languages l
on
    m.language_id = l.language_id
where
    l.name = 'Hindi';
```

#### 18. Number of Movies Released in Each Language

	name character varying (50)	total_movies bigint
1	English	21
2	Hindi	13
3	Telugu	3
4	Kannada	1
5	Bengali	1

### **SQL Query:**

#### 19. Hindi Movies Sorted by Revenue (when revenue is less than a billion, show in millions)

	title character varying (100)	revenue numeric (10,2)	currency character varying (30)	unit character varying (50)	revenue_mln numeric
1	Bajrangi Bhaijaan	11690.00	INR	Millions	11690.00
2	PK	8540.00	INR	Millions	8540.00
3	Sanju	5.90	INR	Billions	5900.00
4	3 Idiots	4000.00	INR	Millions	4000.00
5	Bajirao Mastani	3.50	INR	Billions	3500.00
6	The Kashmir Files	3409.00	INR	Millions	3409.00
7	Race 3	3.10	INR	Billions	3100.00
8	Dilwale Dulhania Le Jayenge	2000.00	INR	Millions	2000.00
9	Kabhi Khushi Kabhie Gham	1360.00	INR	Millions	1360.00
10	Taare Zameen Par	1350.00	INR	Millions	1350.00
11	Shershaah	950.00	INR	Millions	950.00
12	Munna Bhai M.B.B.S.	410.00	INR	Millions	410.00

```
select
     f.revenue,
     f.currency,
     f.unit,
     case
           when unit = 'Thousands' then round(revenue / 1000, 2)
           when unit = 'Billions' then round(revenue * 1000, 2)
           else revenue
     end as revenue_mln
from
     movies m
inner join financials f
on
     m.movie_id = f.movie_id
inner join languages L
on
     m.language_id = L.language_id
where
      l.name = 'Hindi'
order by
    revenue_mln desc;
```

#### 20. Oldest and Newest Movies

	title character varying (100)	release_year integer
1	K.G.F: Chapter 2	2022
2	Doctor Strange in the Multiverse of Madness	2022
3	Thor: Love and Thunder	2022
4	RRR	2022
5	The Kashmir Files	2022
6	It's a Wonderful Life	1946

```
select
    title,
    release_year

from
    movies
where
    release_year in (
```

```
select
    max(release_year)
from
    movies),
(
    select
    min(release_year)
    from
     movies)
)
order by
    release_year desc;
```

# 21. Movies with Above Average IMDB Rating

	movie_id [PK] integer	title character varying (100)	industry character varying (100)	release_year integer	imdb_rating numeric (5,2)	studio character varying (100)	language_id integer
1	111	The Shawshank Redemption	Hollywood	1994	9.30	Castle Rock Entertainment	5
2	120	The Godfather	Hollywood	1972	9.20	Paramount Pictures	5
3	122	Schindler's List	Hollywood	1993	9.00	Universal Pictures	5
4	121	The Dark Knight	Hollywood	2008	9.00	Syncopy	5
5	112	Inception	Hollywood	2010	8.80	Warner Bros. Pictures	5
6	118	It's a Wonderful Life	Hollywood	1946	8.60	Liberty Films	5
7	113	Interstellar	Hollywood	2014	8.60	Warner Bros. Pictures	5
8	124	Parasite	Hollywood	2019	8.50	[null]	5
9	116	Gladiator	Hollywood	2000	8.50	Universal Pictures	5
10	101	K.G.F: Chapter 2	Bollywood	2022	8.40	Hombale Films	3
11	108	3 Idiots	Bollywood	2009	8.40	Vinod Chopra Films	1
12	125	Avengers: Endgame	Hollywood	2019	8.40	Marvel Studios	5
13	126	Avengers: Infinity War	Hollywood	2018	8.40	Marvel Studios	5
14	140	Shershaah	Bollywood	2021	8.40	Dharma Productions	1
15	128	Taare Zameen Par	Bollywood	2007	8.30	[null]	1
16	135	The Kashmir Files	Bollywood	2022	8.30	Zee Studios	1
17	127	Pather Panchali	Bollywood	1955	8.30	Government of West Bengal	7
18	123	Jurassic Park	Hollywood	1993	8.20	Universal Pictures	5
19	130	PK	Bollywood	2014	8.10	Vinod Chopra Films	1
20	136	Bajrangi Bhaijaan	Bollywood	2015	8.10	Salman Khan Films	1
21	129	Munna Bhai M.B.B.S.	Bollywood	2003	8.10	Vinod Chopra Productions	1
22	106	Sholay	Bollywood	1975	8.10	United Producers	1
23	134	Baahubali: The Beginning	Bollywood	2015	8.00	Arka Media Works	2
24	115	The Pursuit of Happyness	Hollywood	2006	8.00	Columbia Pictures	5
25	107	Dilwale Dulhania Le Jayenge	Bollywood	1995	8.00	Yash Raj Films	1
26	133	RRR	Bollywood	2022	8.00	DVV Entertainment	2

```
select
    *
from
    movies
where
```

```
imdb_rating > (
    select
        avg(imdb_rating)
    from
        movies)
order by
imdb_rating desc;
```

### 22. Hollywood Movies Released After 2000 Making more than 500 Million in Profit

	movie_id [PK] integer	title character varying (100)	release_year integer	profit numeric
1	102	Doctor Strange in the Multiverse of Madness	2022	754.80
2	104	Thor: Ragnarok	2017	674.00
3	113	Interstellar	2014	536.80
4	119	Avatar	2009	2610.00
5	121	The Dark Knight	2008	821.00
6	125	Avengers: Endgame	2019	2398.00
7	126	Avengers: Infinity War	2018	1648.00
8	138	Captain America: The Winter Soldier	2014	537.40

```
with x as (
select
from
     movies
where
     industry = 'Hollywood'),
y as (
select
     (revenue-budget) as profit
from
     financials
where
     (revenue-budget) > 500 )
select
     y.profit
from
```

```
join y
on
     x.movie_id = y.movie_id
where
     release_year > 2000;
```

#### 23. Language-Wise Total Revenue

	language character varying (50)	total_movies bigint	total_revenue numeric	avg_revenue numeric
1	Bengali	1	100000.00	100000.000000000000
2	Hindi	12	33721.50	2810.12500000000000000
3	English	20	18577.90	928.8950000000000000
4	Telugu	3	22.10	7.366666666666667
5	Kannada	1	12.50	12.50000000000000000

#### 24. Number of Movies per Actor

	actor_name character varying (100)	total_movies bigint
1	Chris Hemsworth	5
2	Chris Evans	4
3	Aamir Khan	3
4	Anushka Sharma	2
5	Natalie Portman	2
6	Amitabh Bachchan	2
7	Tom Hiddleston	2
8	Leonardo DiCaprio	2
9	Shah Rukh Khan	2
10	Salman Khan	2
11	Sanjay Dutt	2
12	Robert Downey Jr.	2
13	Christian Bale	1
14	Marlon Brando	1
15	Kiara Advani	1
16	Sidharth Malhotra	1

Total rows: 67 Query complete 00:00:00.056

```
select
    a.name as actor_name,
    COUNT(ma.movie_id) as total_movies

from
    actors a

join movie_actor ma on
    a.actor_id = ma.actor_id

group by
    a.actor_id,
    a.name

order by
    total_movies desc;
```

#### 25. Highest Rated Actors

	name character varying (100)	total_movies bigint	avg_rating numeric
1	Robert Downey Jr.	2	8.4000000000000000
2	Leonardo DiCaprio	2	8.3500000000000000
3	Aamir Khan	3	8.266666666666667
4	Sanjay Dutt	2	8.2500000000000000
5	Chris Evans	4	7.8750000000000000
6	Anushka Sharma	2	7.8500000000000000
7	Amitabh Bachchan	2	7.7500000000000000
8	Shah Rukh Khan	2	7.70000000000000000
9	Chris Hemsworth	5	7.6600000000000000
10	Salman Khan	2	5.00000000000000000

```
with actor_movie_count as (
select
     COUNT(ma.movie_id) as total_movies
from
     movie_actor ma
group by
     ma.actor_id
),
top_actors as (
select
from
     actor_movie_count amc
order by
     total movies desc
limit 10
select
     a.name,
     COUNT(m.movie_id) as total_movies,
     AVG(m.imdb_rating) as avg_rating
from
     movie_actor ma
join top_actors ta on
join movies m on
```

```
join actors a on
    a.actor_id = ta.actor_id
group by
    a.name
order by
    avg_rating desc;
```

#### 26. ROI by Studio with High IMDB Ratings

	studio character varying (100)	total_movies bigint	avg_rating numeric	avg_roi numeric
1	Paramount Pictures	2	8.5500000000000000	24.7133333333333333
2	Zee Studios	1	8.3000000000000000	12.6360000000000000
3	Salman Khan Films	1	8.10000000000000000	11.98888888888888
4	Hombale Films	1	8.4000000000000000	11.50000000000000000
5	20th Century Fox	1	7.8000000000000000	11.0126582278481013
6	Universal Pictures	3	8.566666666666667	10.9065009783456386
7	[null]	3	8.0000000000000000	9.2413978494623656
8	Vinod Chopra Films	3	8.0333333333333333	6.7399286987522282
9	Columbia Pictures	1	8.0000000000000000	4.5836363636363636
10	Syncopy	1	9.0000000000000000	4.4378378378378378

```
select
    m.studio,
    COUNT(m.movie_id) as total_movies,
    AVG(m.imdb_rating) as avg_rating,
    AVG((f.revenue - f.budget) * 1.0 / f.budget) as avg_roi

from
    movies m
join financials f on
    m.movie_id = f.movie_id

where
    m.imdb_rating > 7.0
group by
    m.studio
order by
    avg_roi desc
limit 10;
```

#### 27. Year-Wise Trend of Movie Production

	release_year integer	total_movies bigint	â
1	1946		1
2	1955		1
3	1972		1
4	1975		1
5	1993		2
6	1994		1
7	1995		1
8	1997		1
9	2000		1
10	2001		1
11	2003		1
12	2006		1
13	2007		1
14	2008		1
15	2009		2
16	2010		1
17	2011		1
18	2013		1
19	2014		3
20	2015		3
21	2017		1
22	2018		3
23	2019		2
24	2021		2
25	2022		5

```
select
    release_year,
    COUNT(movie_id) as total_movies

from
    movies
group by
    release_year
order by
    release_year;
```