SQL Joins:
From Fundamentals to Advanced Techniques..!

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01

Query: 1

Show all the movies with their language names.

movies | languages | languages | movie_actor

Limit to 1000 rows

```
1   select
2       m.title, l.name
3   from movies m
4   join languages l
5   using (language_id)
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

title	name
Pather Panchali	Bengali
Doctor Strange in the Mul...	English
Thor: The Dark World	English
Thor: Ragnarok	English
Thor: Love and Thunder	English
The Shawshank Redempti...	English
Inception	English

Result 6

02

Query: 2

Show all Telugu movie names (assuming you don't know the language id for Telugu).

ovies | languages | languages | movie_actor

Limit to 1000 rows

```
1   select
2       title from movies m
3   join languages l
4   on m.language_id = l.language_id
5   where name = 'Telugu'
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

title
Pushpa: The Rise - Part 1
RRR
Baahubali: The Beginning

03

Query: 3

Show the language and number of movies released in that language

movies | languages | movie_actor

Limit to 1000 rows

```
1
2 • select l.name, count(m.movie_id) as no_movies
3   from languages l
4   join movies m using (language_id)
5   group by language_id
6   order by no_movies desc
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name	no_movies
English	21
Hindi	13
Telugu	3
Kannada	1
Bengali	1

Result 4

04

Query: 4

Generate a report of all Hindi movies sorted by their revenue amount in millions.

Print movie name, revenue, currency, and unit.

```sql
select
    title, revenue, currency, unit,
    case
        when unit = 'billions' then round(revenue*1000,2)
        when unit = 'thousands' then round(revenue/1000,2)
        else revenue
    end revenue_mln
from movies
join languages l on movies.language_id = l.language_id
join financials f on movies.movie_id = f.movie_id
where l.name = 'hindi'
order by revenue_mln desc
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

title	revenue	currency	unit	revenue_mln
Bajrangi Bhaijaan	11690.00	INR	Millions	11690.00
PK	8540.00	INR	Millions	8540.00
Sanju	5.90	INR	Billions	5900.00
3 Idiots	4000.00	INR	Millions	4000.00
Bajirao Mastani	3.50	INR	Billions	3500.00
The Kashmir Files	3409.00	INR	Millions	3409.00
Race 3	3.10	INR	Billions	3100.00

Result 31

05

Query: 5

Generate a report of movie name, and Actors names who's works in the movies.

title	actors
KGF2	Yash, Sanjay Dutt
Doctor Strange Multiverse	Benedict C, Elizabeth O

```
1 • SELECT
2       m.title as movies, group_concat(a.name separator ' | ' ) as actors
3   from movies m
4   join movie_actor ma on m.movie_id = ma.movie_id
5   join actors a on ma.actor_id = a.actor_id
6   group by m.movie_id
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

movies	actors
K.G.F: Chapter 2	Yash | Sanjay Dutt
The Pursuit of Happyness	Will Smith | Thandiwe Newton
The Shawshank Redempti...	Tim Robbins | Morgan Freeman
Parasite	Song Kang-ho | Lee Sun-kyun
Shershaah	Sidharth Malhotra | Kiara Advani
Dilwale Dulhania Le Jayenge	Shah Rukh Khan | Kajol
Munna Bhai M.B.B.S.	Sanjay Dutt | Sunil Dutt
Avatar	Sam Worthington | Zoe Saldana
Jurassic Park	Sam Neill | Laura Dern
Bajrangi Bhaijaan	Salman Khan | Nawazuddin Siddiqui

Result 23 ×

Output

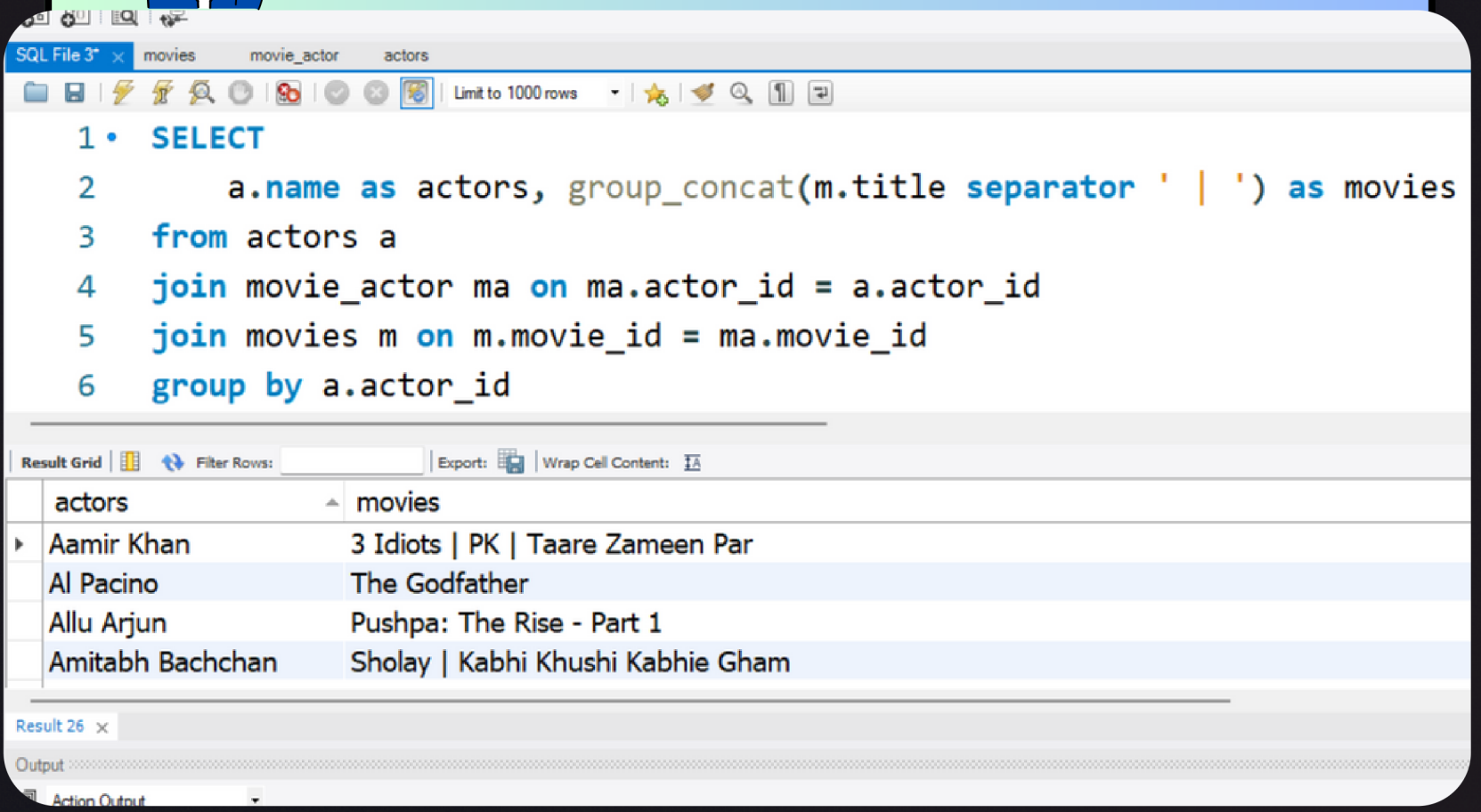
06

Query: 6

Generate a report of Actors name, along with their movies he worked upon.

like this

actor	movies
Sanjay Dutt	KGF 2,Munna Bhai M.B.B.S.
Chris Hemsworth	Thor: The Dark World ,Thor: Love and Thunder ,Avengers: Endgame,Thor: Ragnarok ,Avengers: Infinity War



07

Query: 7

Generate a report of actors names, showing number of movies they actored in most of the movies.

QL File 3* | movies | movie_actor | actors

Limit to 1000 rows

```
1 • SELECT
2       a.name as actors, group_concat(m.title separator ' | ') as movies,
3       count(m.title) as movie_cnt
4   from actors a
5   join movie_actor ma on ma.actor_id = a.actor_id
6   join movies m on m.movie_id = ma.movie_id
7   group by a.actor_id
8   order by movie_cnt desc
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

actors	movies	movie_cnt
Chris Hemsworth	Thor: The Dark World | Thor: Ragnarok | Thor: Love and Thunder | Ave...	5
Chris Evans	Avengers: Endgame | Avengers: Infinity War | Captain America: The First ...	4
Aamir Khan	3 Idiots | PK | Taare Zameen Par	3
Sanjay Dutt	K.G.F: Chapter 2 | Munna Bhai M.B.B.S.	2
Shah Rukh Khan	Dilwale Dulhania Le Jayenge | Kabhi Khushi Kabhie Gham	2
Leonardo DiCaprio	Titanic | Inception	2
Natalie Portman	Thor: The Dark World | Thor: Love and Thunder	2

Result 28

Output

08

Learning of the day:

- JOIN and ON clauses used together will enable you to merge two tables.
- By default, SQL performs an INNER JOIN
- LEFT, RIGHT and FULL JOINS are also called OUTER JOIN. UNION clause will enable you to perform FULL JOIN.
- CROSS JOIN is useful when you do not have any common column between two tables
- Entity Relationship Diagram (ERD) will help you to understand the relationship between the tables.
- Group_Concat Function will enable you to combine text from multiple rows to one row.

Found this Useful ?

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