SQL Queries

- **ROW_NUMBER() vs RANK() vs DENSE_RANK()**

```
106 •  SELECT product_code,
107      sales_amount,
108      ROW_NUMBER() OVER
109                 (PARTITION BY product_code
110                  ORDER BY sales_amount DESC) as RowNumber,
111      RANK() OVER
112           (PARTITION BY product_code
113            ORDER BY sales_amount DESC) as RankValues,
114      DENSE_RANK() OVER
115                 (PARTITION BY product_code
116                  ORDER BY sales_amount DESC) as DenseRankValues
117    FROM transactions
118    WHERE product_code IS NOT NULL
119    AND product_code IN ('Prod003','Prod003','Prod049', 'Prod279')
120    AND sales_amount IN ('250', '833', '204');
121
```

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Result Grid Filter Rows: Search Export:

product_co...	sales_amount	RowNumber	RankValues	DenseRankValues
Prod049	833	1	1	1
Prod049	833	2	1	1
Prod279	833	1	1	1
Prod279	833	2	1	1
Prod279	833	3	1	1
Prod279	833	4	1	1
Prod279	833	5	1	1
Prod279	833	6	1	1

Result Grid Filter Rows: Search Export:

product_co...	sales_amount	RowNumber	RankValues	DenseRankValues
Prod279	250	7	7	2
Prod279	250	8	7	2
Prod279	250	9	7	2
Prod279	250	10	7	2
Prod279	250	11	7	2
Prod279	250	12	7	2
Prod279	250	13	7	2
Prod279	250	14	7	2

```sql
SELECT product_code,
    COUNT(CASE WHEN product_code = 'prod279' THEN product_code END) AS PRD1,
    COUNT(CASE WHEN product_code = 'prod278' THEN product_code END) AS PRD2,
    COUNT(CASE WHEN product_code = 'prod281' THEN product_code END) AS PRD3
    FROM transactions
    WHERE product_code IN ('prod279', 'prod278', 'prod281')
    GROUP BY product_code;
```

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Result Grid Filter Rows: Search Export:

product_co...	PRD1	PRD2	PRD3
Prod279	1477	0	0
Prod278	0	1455	0
Prod281	0	0	1858

```sql
SELECT movie_id,
       title,
       industry,
       imdb_rating,
       CASE WHEN imdb_rating > 7 THEN 'Good'
            WHEN imdb_rating < 7 THEN 'Bad'
            ELSE 'Average'
       END AS Performance
FROM movies;
```

100% 13:96

Result Grid Filter Rows: Search Export:

movie_id	title	industry	imdb_rating	Performance
101	K.G.F: Chapter 2	Bollywood	8.4	Good
102	Doctor Strange in the Multiverse of Madness	Hollywood	7	Average
103	Thor: The Dark World	Hollywood	6.8	Bad
104	Thor: Ragnarok	Hollywood	7.9	Good
105	Thor: Love and Thunder	Hollywood	6.8	Bad
107	Dilwale Dulhania Le Jayenge	Bollywood	8	Good
108	3 Idiots	Bollywood	8.4	Good
109	Kabhi Khushi Kabhie Gham	Bollywood	7.4	Good
110	Bajirao Mastani	Bollywood	7.2	Good
111	The Shawshank Redemption	Hollywood	9.3	Good
113	Interstellar	Hollywood	8.6	Good
115	The Pursuit of Happyness	Hollywood	8	Good
116	Gladiator	Hollywood	8.5	Good
117	Titanic	Hollywood	7.9	Good

```sql
WITH t AS
(
SELECT DISTINCT title
FROM movies
WHERE industry = 'Hollywood'
AND imdb_rating > 6
),
ry AS
(
SELECT DISTINCT release_year
FROM movies
WHERE release_year = '2022'
AND imdb_rating > 6
)
SELECT title, release_year, imdb_rating
FROM movies
WHERE release_year IN (SELECT release_year FROM ry)
AND title IN (SELECT title FROM t)
ORDER BY imdb_rating DESC;
```

Result Grid Filter Rows: Search Export:

title	release_year	imdb_rating
Doctor Strange in the Multiverse of Madness	2022	7

```sql
SELECT m.movie_id, title, budget, revenue, currency, unit
FROM movies m
LEFT JOIN financials f
ON m.movie_id=f.movie_id;
```

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Result Grid Filter Rows: Search Export:

movie_id	title	budget	revenue	currency	unit
101	K.G.F: Chapter 2	1	12.5	INR	Billions
102	Doctor Strange in the Multiverse of Madness	200	954.8	USD	Millions
103	Thor: The Dark World	165	644.8	USD	Millions
104	Thor: Ragnarok	180	854	USD	Millions
105	Thor: Love and Thunder	250	670	USD	Millions
107	Dilwale Dulhania Le Jayenge	400	2000	INR	Millions
108	3 Idiots	550	4000	INR	Millions
109	Kabhi Khushi Kabhie Gham	390	1360	INR	Millions
110	Bajirao Mastani	1.4	3.5	INR	Billions
111	The Shawshank Redemption	25	73.3	USD	Millions

```
29 •   SELECT release_year, COUNT(*) as movies_count
30     FROM movies
31     GROUP BY release_year
32     having movies_count>2
33     ORDER BY movies_count desc;
34
```

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Result Grid Filter Rows: Search Export:

release_year	movies_count
2022	5
2015	3
2014	3
2018	3