

actor		superhero_alias	platform	followers	posts	engagement_rate	avg_likes	avg_comments
Robert Downey Jr.	Tony Stark	Iron Man	M Instagram	500000	200	8.20	12000	800
Chris Evans	Steve Rogers	Captain America	M Twitter	300000	150	6.50	8000	500
Scarlett Johansson	Natasha Romanoff	Black Widow	M Instagram	700000	300	7.80	15000	1000
Chris Hemsworth	Thor	Thor	H YouTube	400000	100	9.10	20000	1200
Mark Ruffalo	Bruce Banner	Hulk	L Twitter	200000	80	5.30	6000	400

actor

Robert

Chris

Popular

Medium

Medium

M

High

Low

High ≥ 9

Medium ≥ 6 & $8 < 9$

Low < 6

new column

1st

Select actor, posts,

Case

WHEN condition1 THEN result1

WHEN condition2 THEN result2

ELSE result3

END as Popular

$e_r \geq 9$

'HIGH'

↳ 'Medium'

$e_r \geq 6$ AND

$e_r < 9$

'LOW'

optional

actor		superhero_alias	platform	followers	posts	engagement_rate	avg_likes	avg_comments
Robert Downey Jr.	Tony Stark	Iron Man	M Instagram	500000	200	8.20	12000	800
Chris Evans	Steve Rogers	Captain America	M Twitter	300000	150	6.50	8000	500
Scarlett Johansson	Natasha Romanoff	Black Widow	M Instagram	700000	300	7.80	15000	1000
Chris Hemsworth	Thor	Thor	H YouTube	400000	100	9.10	20000	1200
Mark Ruffalo	Bruce Banner	Hulk	L Twitter	200000	80	5.30	6000	400

actor

Robert

Chris

Popular

Medium

Medium

Medium

High

NULL

High ≥ 9

Medium ≥ 6 & $8 < 9$

Low < 6

new column

1st

Select actor, posts,

Case

WHEN condition1 THEN result1

WHEN condition2 THEN result2

END as Popular

$e_r \geq 9$

'HIGH'

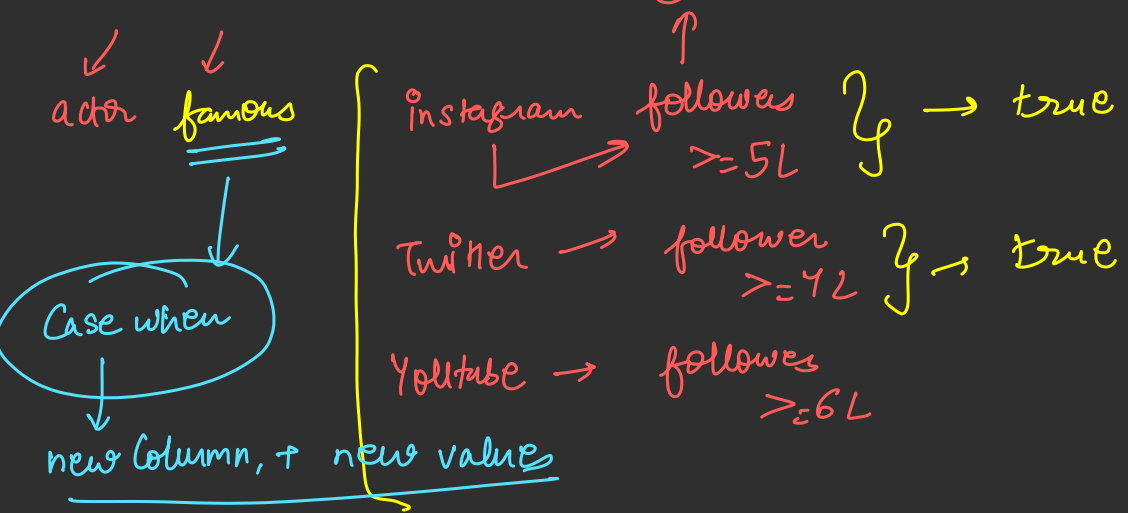
↳ 'Medium'

$e_r \geq 6$ AND

$e_r < 9$

there it can have }
NULL value

actor		superhero_alias	platform	followers	posts	engagement_rate	avg_likes	avg_comments
Robert Downey Jr.	Tony Stark	Iron Man	Instagram	500000	T 200	8.20	12000	800
Chris Evans	Steve Rogers	Captain America	Twitter	300000	F 150	6.50	8000	500
Scarlett Johansson	Natasha Romanoff	Black Widow	Instagram	700000	T 300	7.80	15000	1000
Chris Hemsworth	Thor	Thor	YouTube	400000	F 100	9.10	20000	1200
Mark Ruffalo	Bruce Banner	Hulk	Twitter	200000	F 80	5.30	6000	400



Select actor,

Case

```

  WHEN platform = 'Insta' THEN followers >= 500000
  WHEN platform = 'Twitter' THEN followers >= 400000
  END as famous
FROM avenger

```

→ avenges

actor		superhero_alias	platform	followers	posts	engagement_rate	avg_likes	avg_comments
Robert Downey Jr.	Tony Stark	Iron Man	Instagram	500000	T 200	8.20	12000	800
Chris Evans	Steve Rogers	Captain America	Twitter	300000	F 150	6.50	8000	500
Scarlett Johansson	Natasha Romanoff	Black Widow	Instagram	700000	T 300	7.80	15000	1000
Chris Hemsworth	Thor	Thor	YouTube	400000	F 100	9.10	20000	1200
Mark Ruffalo	Bruce Banner	Hulk	Twitter	200000	F 50	5.30	6000	400

actor
↓
Robert
Scarlett }

↑
Instagram → followers
 ≥ 5L
Twitter → follower
 ≥ 4L
Youtube → followers
 ≥ 6L

Select actor from avenges

WHERE C

Case

WHEN platform = 'Insta' THEN followers > 500000

WHEN platform = 'Twitter' THEN followers > 400000

END);

→ averages

actor		superhero_alias	platform	followers	posts	engagement_rate	avg_likes	avg_comments
Robert Downey Jr.	Tony Stark	Iron Man	Instagram	500000	200	8.20	12000	800
Chris Evans	Steve Rogers	Captain America	Twitter	300000	150	6.50	8000	500
Scarlett Johansson	Natasha Romanoff	Black Widow	Instagram	700000	300	7.80	15000	1000
Chris Hemsworth	Thor	Thor	YouTube	400000	100	9.10	20000	1200
Mark Ruffalo	Bruce Banner	Hulk	Twitter	200000	80	5.30	6000	400

```
select actor,  
case avg_likes  
  WHEN 20000 THEN 'GREAT'  
  WHEN 15000 THEN 'GOOD'  
  ELSE 'BAD'  
END as PostQuality  
FROM averages
```

20000 → Great
15000 → Good
< 15000 → Bad

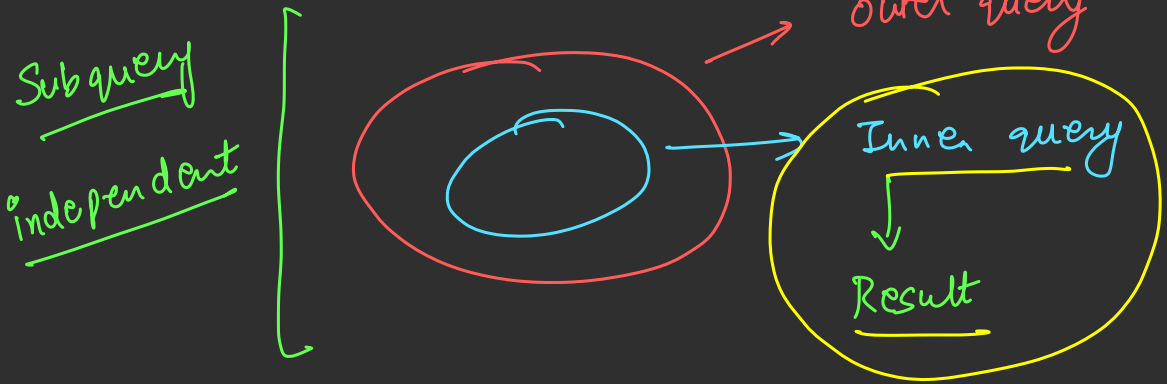
Subquery Table Example

650000 → Avg

artist_id	artist_name	genre	concert_revenue	year_of_formation	country	number_of_members	album_released	label
103	Taylor Swift	Pop	700000 ✓	2004 3	United States	1	9	Republic Records
104	BTS	K-Pop	800000 ✓	2013	South Korea	7	7	Big Hit Music
105	Adele	Pop	600000 ✗	2006	United Kingdom	1	3	Columbia Records
109	Blackpink	K-Pop	450000 ✗	2016	South Korea	4	5	YG Entertainment
110	Maroon 5	Pop	550000 ✗	1994	United States	5	7	Interscope Records

Avg revenue of all concerts → Avg

Select Avg (concert - revenue) from concert ✓



Select * from concerts

WHERE concert_revenue >

650000

(Select Avg (concert - revenue) from concert)

2nd variety → Correlated Subquery

3rd highest

Subquery Table Example

artist_id	artist_name	genre	concert_revenue	year_of_formation	country	number_of_members	album_released	label
103	Taylor Swift	Pop	700000 → 2	2004	United States	1	9	Republic Records
104	BTS	K-Pop	800000 → 1	2013	South Korea	7	7	Big Hit Music
105	Adele	Pop	600000 → 3	2006	United Kingdom	1	3	Columbia Records
109	Blackpink	K-Pop	450000 → 4	2016	South Korea	4	5	YG Entertainment
110	Maroon 5	Pop	550000 → 5	1994	United States	5	7	Interscope Records

Select artist + from concert
ORDER BY concert_revenue DESC
OFFSET 2
LIMIT 1

greater than this

800000 → 0 (highest)
700000 → 1 (2nd highest)
600000 → 2 (3rd highest)

2nd variety → Correlated Subquery

Subquery Table Example

artist_id	artist_name	genre	concert_revenue	year_of_formation	country	number_of_members	album_released	label
103	Taylor Swift	Pop	700000	2004	United States	1	9	Republic Records
104	BTS	K-Pop	800000	2013	South Korea	7	7	Big Hit Music
105	Adele	Pop	600000	2006	United Kingdom	1	3	Columbia Records
109	Blackpink	K-Pop	450000	2016	South Korea	4	5	YG Entertainment
110	Maroon 5	Pop	550000	1994	United States	5	7	Interscope Records

Select * from concert as (C1) → outer query

WHERE 1 = C

Select cont(*) from concert as C2

WHERE C2.concert_revenue >

(C1).concert_revenue

→ 600000

For Finding
Concert }

(C1)