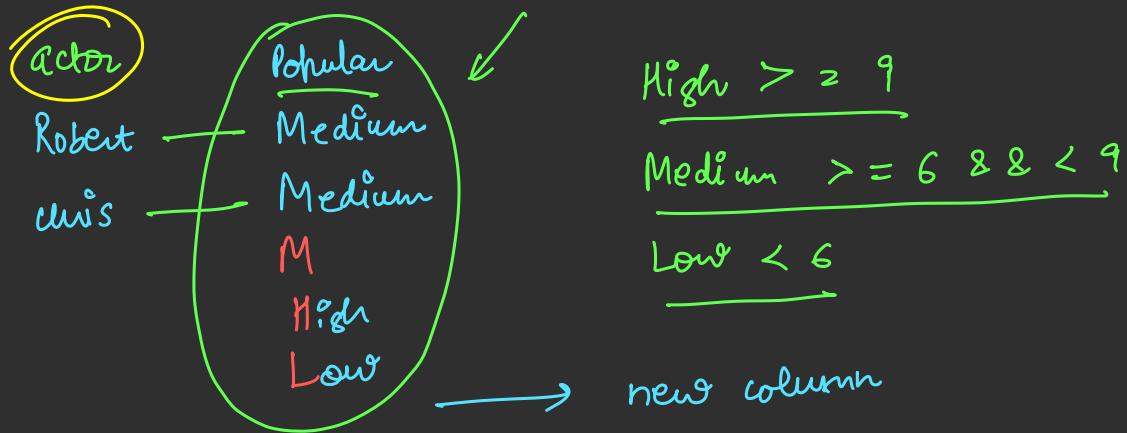


actor		superhero_alias	platform	followers	posts	engagement_rate	avg_likes	avg_comments
Robert Downey Jr.	Tony Stark	Iron Man	M	Instagram	500000	200	8.20	12000
Chris Evans	Steve Rogers	Captain America	M	Twitter	300000	150	6.50	8000
Scarlett Johansson	Natasha Romanoff	Black Widow	M	Instagram	700000	300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

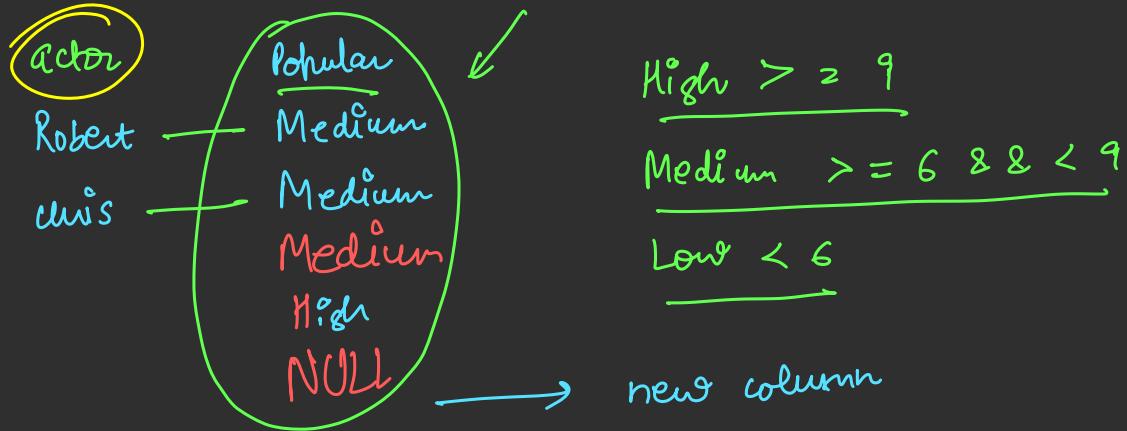


I<sup>st</sup> Select actor, posts,  
Case WHEN condition THEN result  
WHEN condition 2 THEN result 2  
ELSE result 3 END as popular

e<sub>-</sub> sr  $\geq 9$  → 'High'  
e<sub>-</sub> n  $\geq 6$  AND e<sub>-</sub> sr  $< 9$  → 'Medium'  
'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
Chris Evans	Steve Rogers	Captain America	M	Twitter	300000	150	6.50	8000
Scarlett Johansson	Natasha Romanoff	Black Widow	M	Instagram	700000	300	7.80	15000
Chris Hemsworth	Thor	Thor	H	YouTube	400000	100	9.10	20000
Mark Ruffalo	Bruce Banner	Hulk	L	Twitter	200000	80	5.30	6000



I<sup>st</sup> Select actor, posts,  
Case WHEN condition THEN result  
WHEN condition 2 THEN result  
END as popular

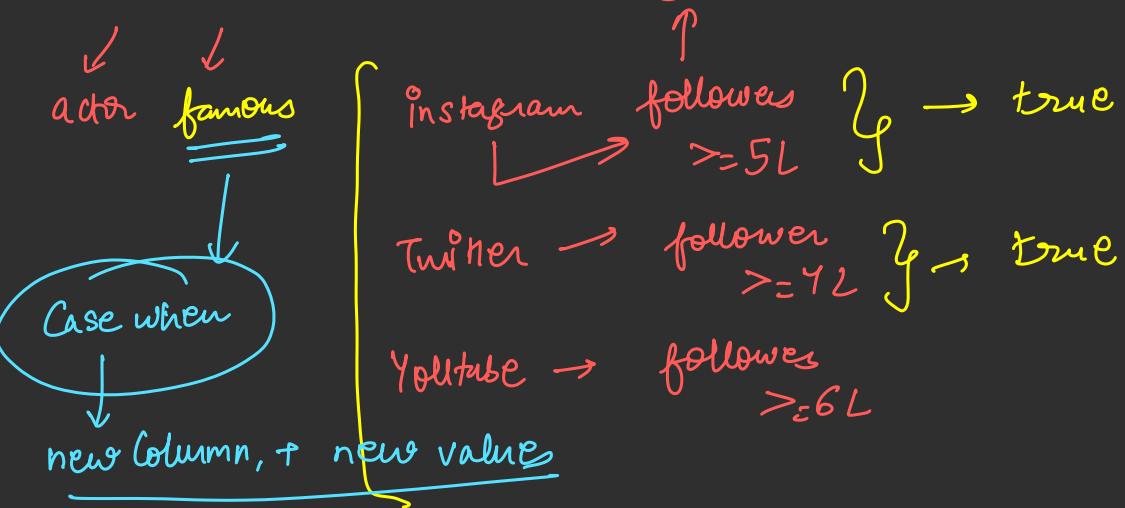
$e\_sr \geq 9 \rightarrow \text{High}$

$e\_sr \geq 6 \text{ AND } e\_sr < 9 \rightarrow \text{Medium}$

$e\_sr < 6 \rightarrow \text{Low}$

there it can have 2  
NULL value

actor		superhero_alias	platform	followers	posts	engagement_rate	avg_likes	avg_comments
Robert Downey Jr.	Tony Stark	Iron Man	Instagram	500000	F 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

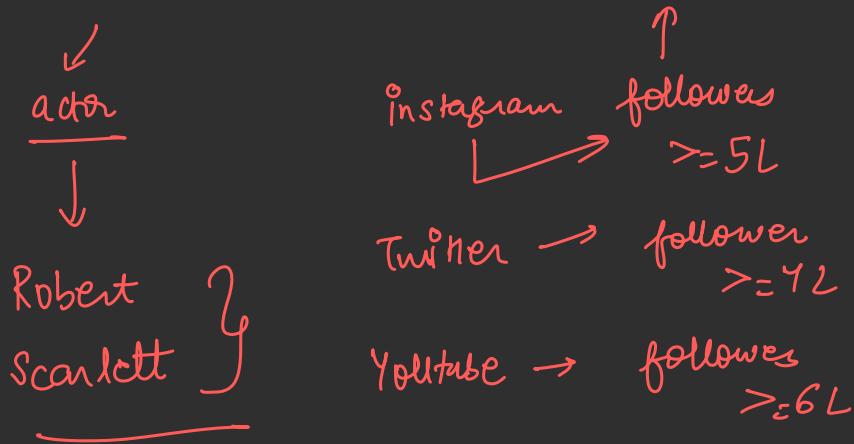
WHEN platform = 'Twitter' THEN followers ≥ 400000

END as famous

FROM avenger

→ avengers

actor		superhero_alias	platform	followers	posts	engagement_rate	avg_likes	avg_comments
Robert Downey Jr.	Tony Stark	Iron Man	Instagram	500000 F	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 from avengers

WHERE C  
Case  
WHEN platform = 'Insta' THEN  
WHEN platform = 'Twitter' THEN  
END);

↓  
followers > 500000  
followers > 400000

# → avengers

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 avengers

$20000 \rightarrow \text{Great}$   
 $15000 \rightarrow \text{Good}$   
 $< 15000 \rightarrow \text{Bad}$

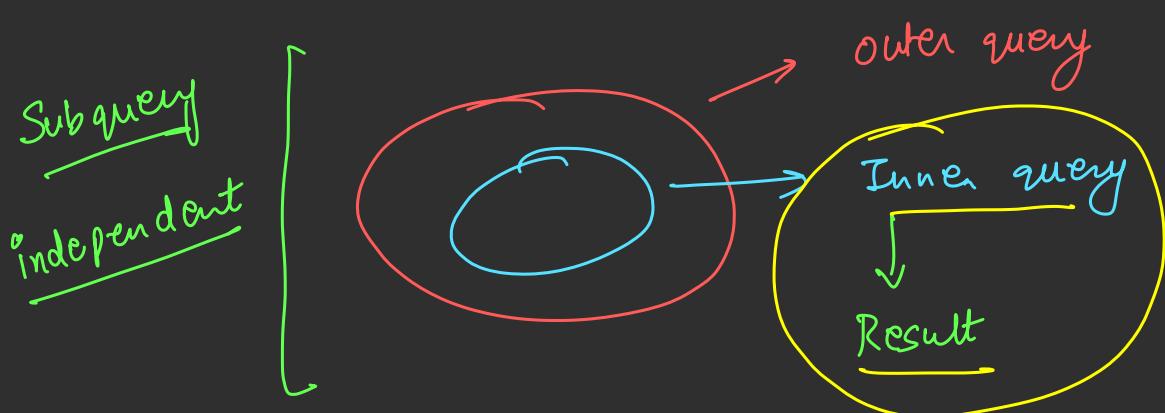
## Subquery Table Example

$650000 \rightarrow \text{Avg}$

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

Avg revenue of all concerts  $\rightarrow$  Avg

Select Avg (concert-revenue) from concert



Select  $\rightarrow$  from concerts  $650000$

WHERE  $\text{concert\_revenue} >$

(Select Avg (concert-revenue) from concert)

2<sup>nd</sup> Variety → Correlated Subquery

3<sup>rd</sup> 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)

2<sup>nd</sup> 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 | = C2

Select count(\*) from concert as C2

WHERE C2.concert\_revenue >

C1.concert\_revenue  
600000

Printing  
Concert