

Agenda :

- Clear all the doubts from Assign.
- FAANG - level question

Q : All the members in each team should have the same salary.

⇒

emp-id	Name	Salary
1	Andrew	5000
2	Erin	5000
3	Stacy	4700
4	Tim	8000
5	Oscar	8000

Each team → At least 2 employees

O/P

⇒

emp-id	Name	Salary	team-id
1	Andrew	5000	1
2	Erin	5000	1
4	Tim	8K	2
5	Oscar	8K	2

Query :

SELECT *, DENSE_RANK() OVER (ORDER BY salary) AS team-id
 FROM employees

WHERE salary NOT IN (

SELECT salary
FROM employees
GROUP BY salary
HAVING COUNT(*) = 1)

ORDER

Q: Winning Streak.

player-id	match-day	result	match-seq	win-seq.	Diff
1	13	Win	1	1	0
1	14	Win	2	2	0
1	15	Win	3	3	0
1	16	Draw	4	4	1
1	17	Win	5	0	1
1	18	Lose	1	1	0
1	19	LOSE	2	1	1
1	20	Win	1	1	0
1	21	Win	2	2	0
1	24	Lose	3	0	1

Annotations:

- Row 1: player-id 1, match-day 13, result Win, match-seq 1, win-seq 1, Diff 0. Circled '3' above row 1.
- Row 2: player-id 1, match-day 14, result Win, match-seq 2, win-seq 2, Diff 0. Circled '2' above row 2.
- Row 3: player-id 1, match-day 15, result Win, match-seq 3, win-seq 3, Diff 0. Circled '3' above row 3.
- Row 4: player-id 1, match-day 16, result Draw, match-seq 4, win-seq 4, Diff 1. Circled '4' above row 4.
- Row 5: player-id 1, match-day 17, result Win, match-seq 5, win-seq 0, Diff 1. Circled '0' above row 5.
- Row 6: player-id 1, match-day 18, result Lose, match-seq 1, win-seq 1, Diff 0. Circled '1' above row 6.
- Row 7: player-id 1, match-day 19, result LOSE, match-seq 2, win-seq 1, Diff 1. Circled '1' above row 7.
- Row 8: player-id 1, match-day 20, result Win, match-seq 1, win-seq 1, Diff 0. Circled '1' above row 8.
- Row 9: player-id 1, match-day 21, result Win, match-seq 2, win-seq 2, Diff 0. Circled '2' above row 9.
- Row 10: player-id 1, match-day 24, result Lose, match-seq 3, win-seq 0, Diff 1. Circled '0' above row 10.
- Column headers: ROW-NUMBER(R1) and ROW-NUMBER(R2).

O/P

playerid	longest-winstreak
1	3 ✓
2	0 ✓
3	2 ↴

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Diagram illustrating a query result set with annotations:

player_id	Date	Result	m.seq.no	Winsq	Rift
1	13	Win	1	1	0
1	14	Win	2	2	0
1	15	Win	3	3	0
1	17	Win	4	4	0
3	19	Win	1	1	0
3	21	Win	2	2	0

Annotations:

- Arrows point from the first two rows (player_id 1) to the 'Winsq' column.
- A bracket groups the last two rows (player_id 3) under the 'Winsq' column.
- A circled '1' is in the 'Winsq' column for player_id 1 at row 5.
- A circled '1' is in the 'Rift' column for player_id 3 at row 6.
- A circled '1' is in the 'Winsq' column for player_id 3 at row 6.

GROUP BY
↓
Consec-cont

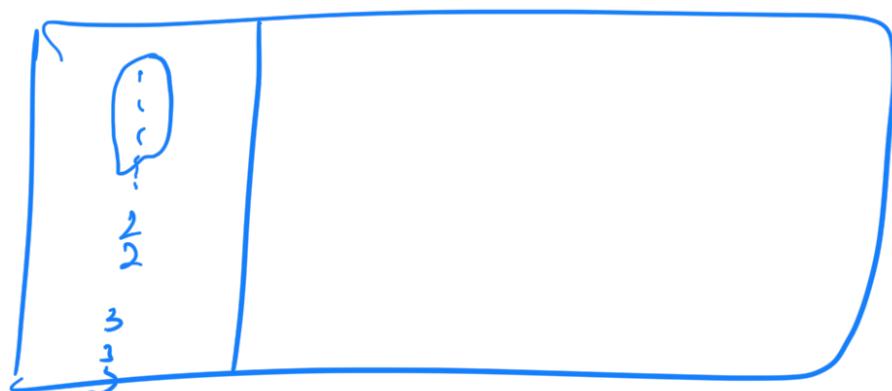
Playerid	consec-cont	RANK
1	3	1
1	1	2
2	2	1
3		

LEFT JOIN

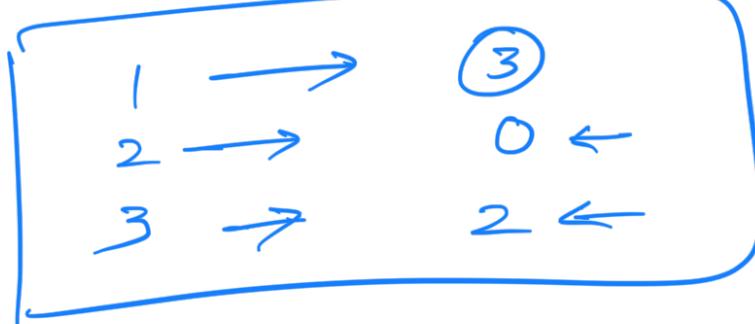
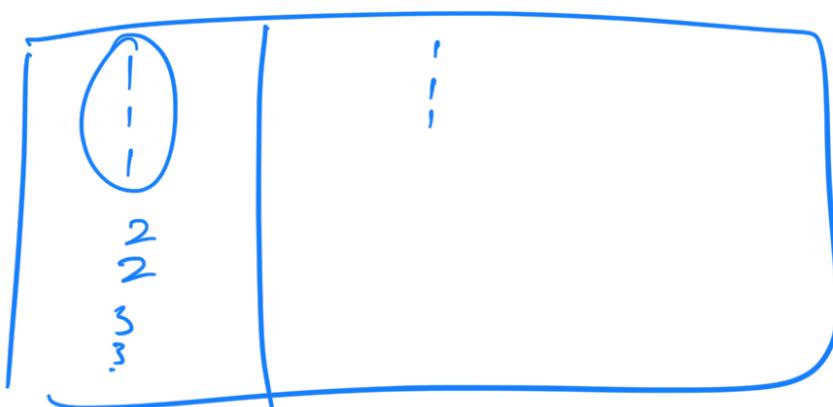


→ (2) → NULL
NULL

m.playerid	cc.playerid	cc.conscnt
1	1	1
2	2	2
2	NULL	2
2	NULL	2



create - $\text{rn } k = 1$



Island f Graph



water | ()

Q:

id	date	people
1	13	50
2	14	190
3	15	20
4	16	300 ↑
5	17	450 ↓
6	18	600
7	19	110
8	20	220
9		

① Three or more consecutive ids

② ≥ 100

Sample O/P

id	date	people
4		
5		
6		
7		
8		

Q:

Products

P-id	P-name
1	phone
2	T-shirt
3	shoes

$$\text{Sales} \quad \text{No. of} \quad \leftarrow 365 \times \frac{\text{avg-daily-sal}}{1}$$

P-id	start	end	avg-daily-sal
1	2020/01/25	2020/12/26	100 ←
2	2019/03/21	2021/08/22	10
3	2021/02/13	2022/09/29	1000

↓ 2019 → 2019/03/21 → 2019/02/31
 2020 → 01/01 → 12/31
 2021

product_id	name	report-year	total_out
1	phone	2020	—
2	:	2019	—
2	:	2020	—
3	!	2021	—