Agenda

a. Window Analytical Function

iv. Lag Lead

v. First Value

vi. Nth Value

vii. NTile

b. Date and Time Functions

Rows (Physical) Range (Logical) Sum Row

1	A	19/01	200	200	750
2	B	19/01	300	500	750
3	C	19/01	250	750	750

Range

Unique (Range) = Row

Row_number

1	A	1000	1	1
2	B	1000	2	2
3	C	1000	3	3
4	D	900	1	4
5	E	900	2	5
6	F	800	1	6 → P3
7	G	700	1	7 → P4
8	H	600	1	8 → P5

P1 P2

row_no

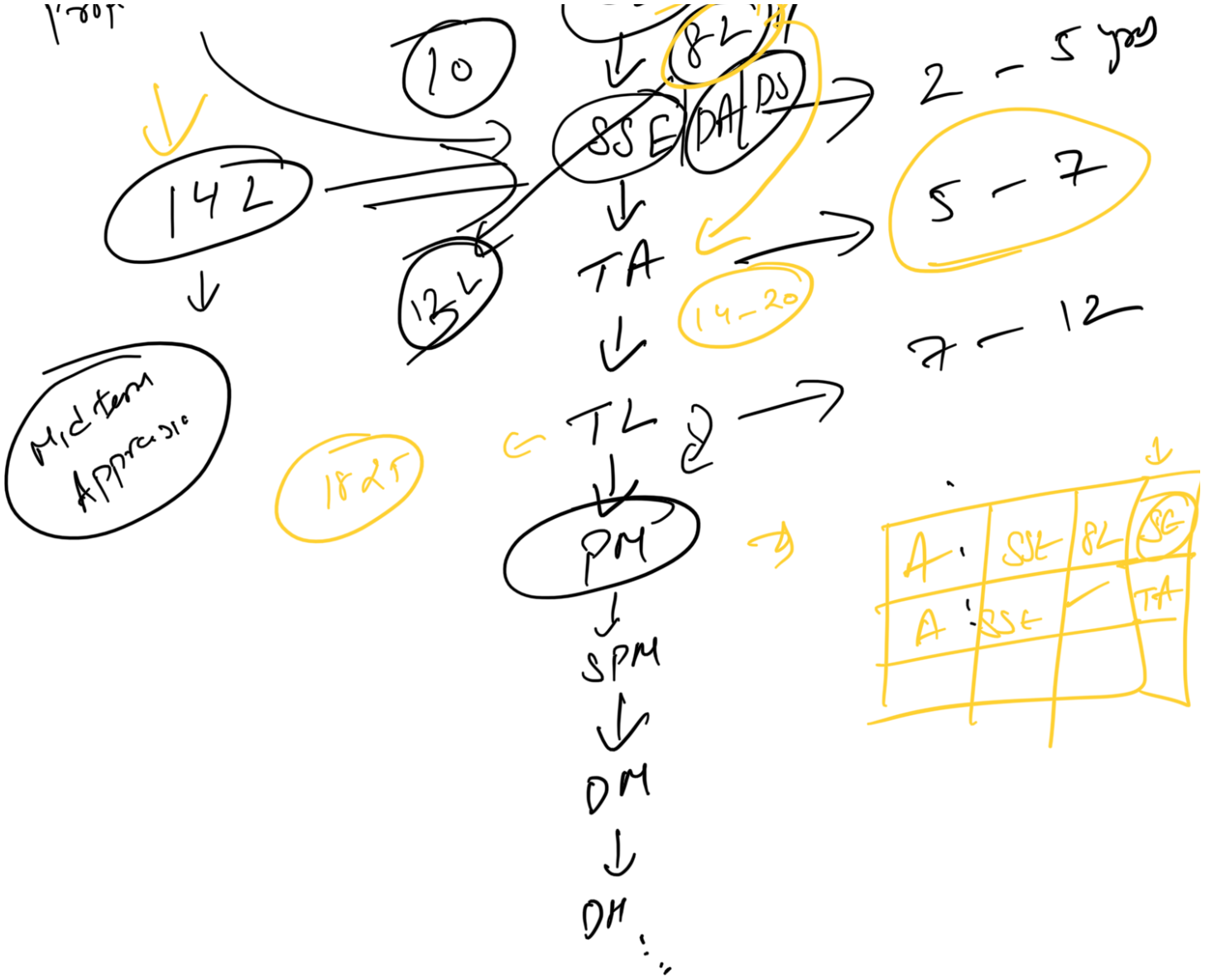
row_number() over (P1 Sal order by eid)

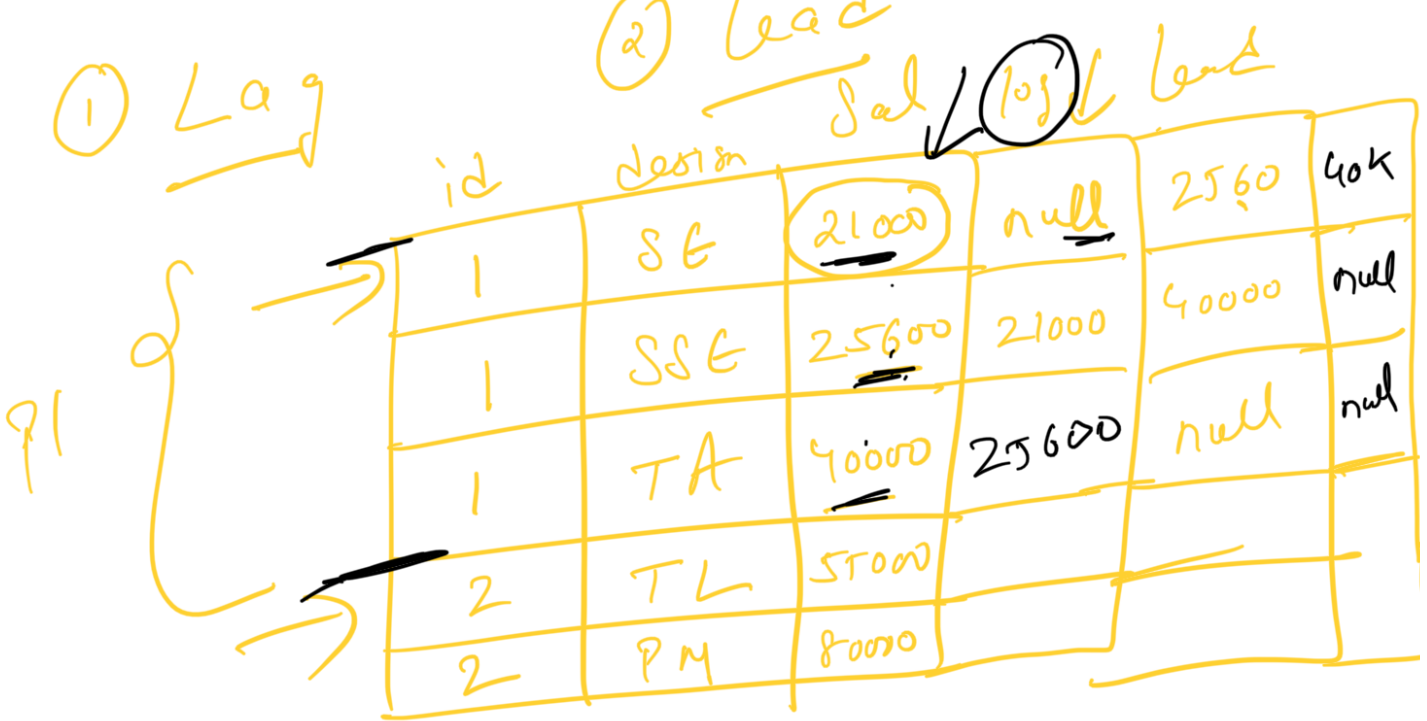
row_no() over (order by eid)

Conf → Trainee → 6 months

20 → SE → 6 - 2 yrs

Direct (AVG)


10
8L
12L
SSE
DA
DS
2 - 5 yrs
TA
5 - 7
14-20
7 - 12
TL
PM
SPM
DM
DH
Mid term Appraisal
A
SSE
8L
SG
TA


① Lag
② Lead
id
design
Sal
Loj
1
SE
21000
null
2560
40K
1
SSE
25600
21000
40000
null
1
TA
40000
25600
null
null
2
TL
50000
2
PM
80000

Syntax Lag (expr, (N))
over (P B O B)
lead (expr, N)

⇒ lag (Salary) over (Partition by emp_id)
⇒ lead (Salary, 2) over (P B emid)
⇒ lag (salary) over ()

Nth_value()

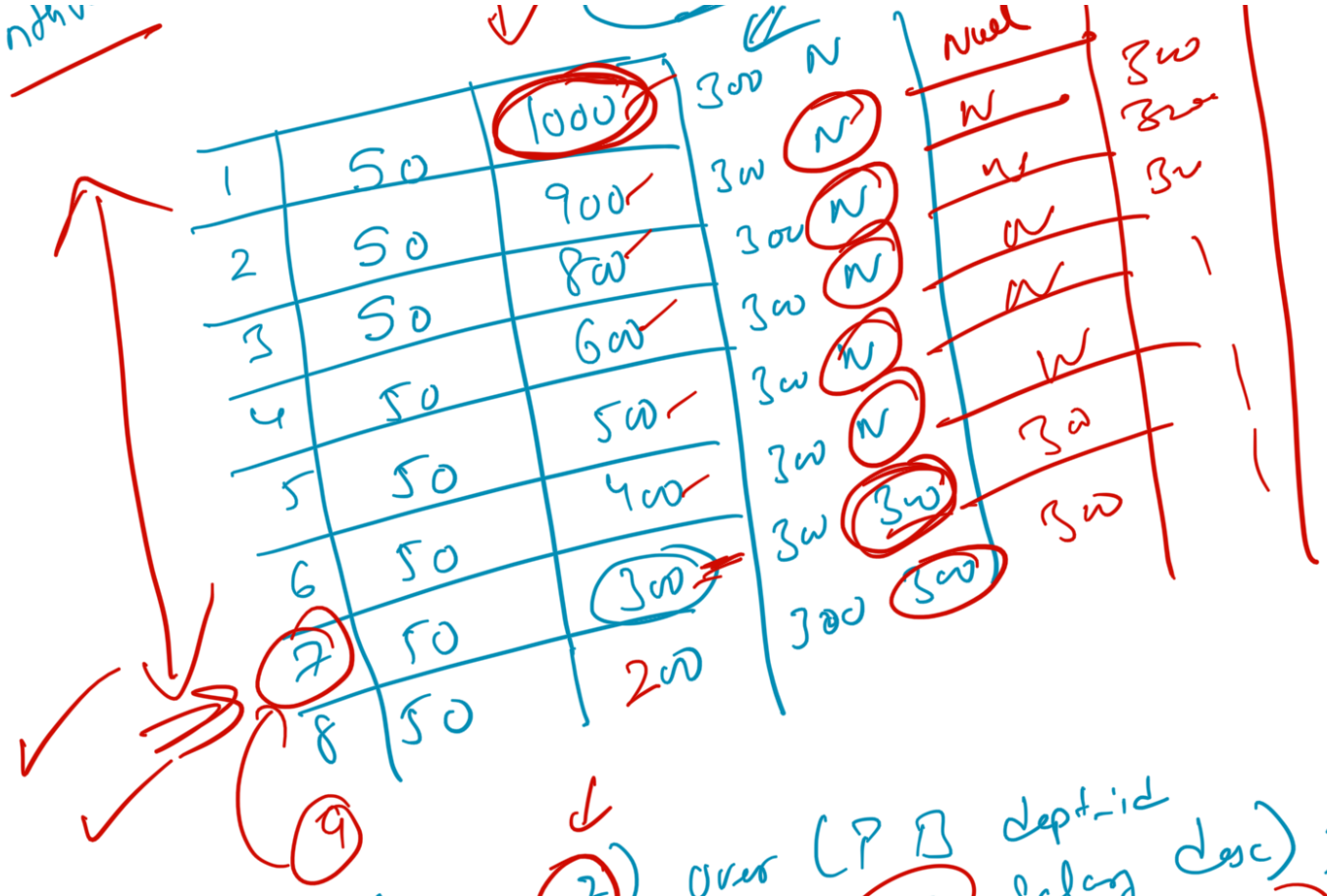
Select *
(
Select
dem ---------- rnk
from
table
)
where P.rnk = 5;

100 → 5

Syntax
Nth_value (expression, N) over ()
column
5

..value(sal, 7)

| zero |



nth_value(salary, 7) over (PB dept_id order by salary desc);

⇒ Range b/w UP and CR

Range b/w UP and UF

1000

UP = 0

UF = 900, 800, 700, 600, 500, 400, 300, 200

CR = 1000

UP = 0

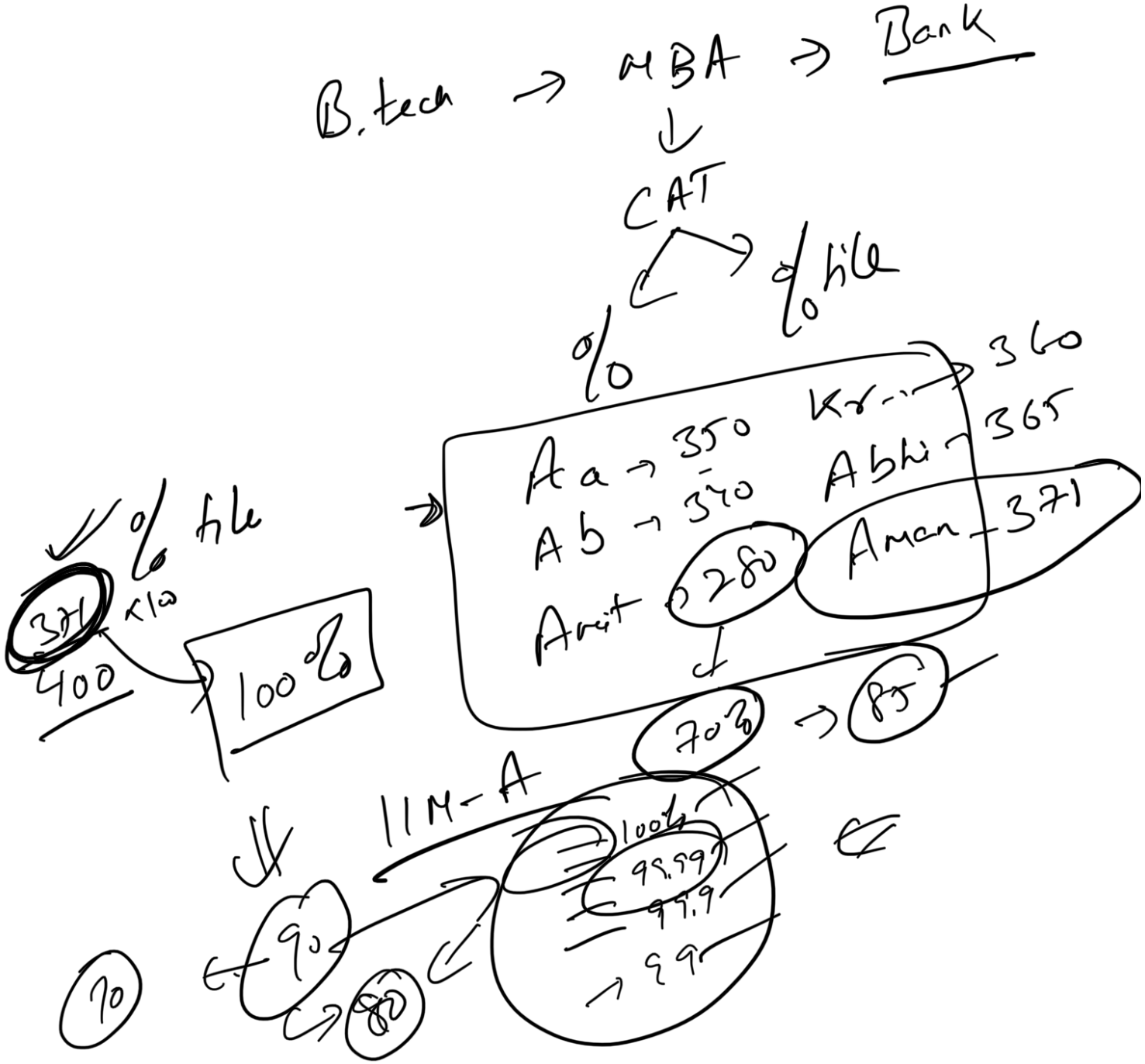
CR = 1000

⇒ nth_value(sal, 1)

(1) First_value

Syntax = first_value( ) over ( ) :

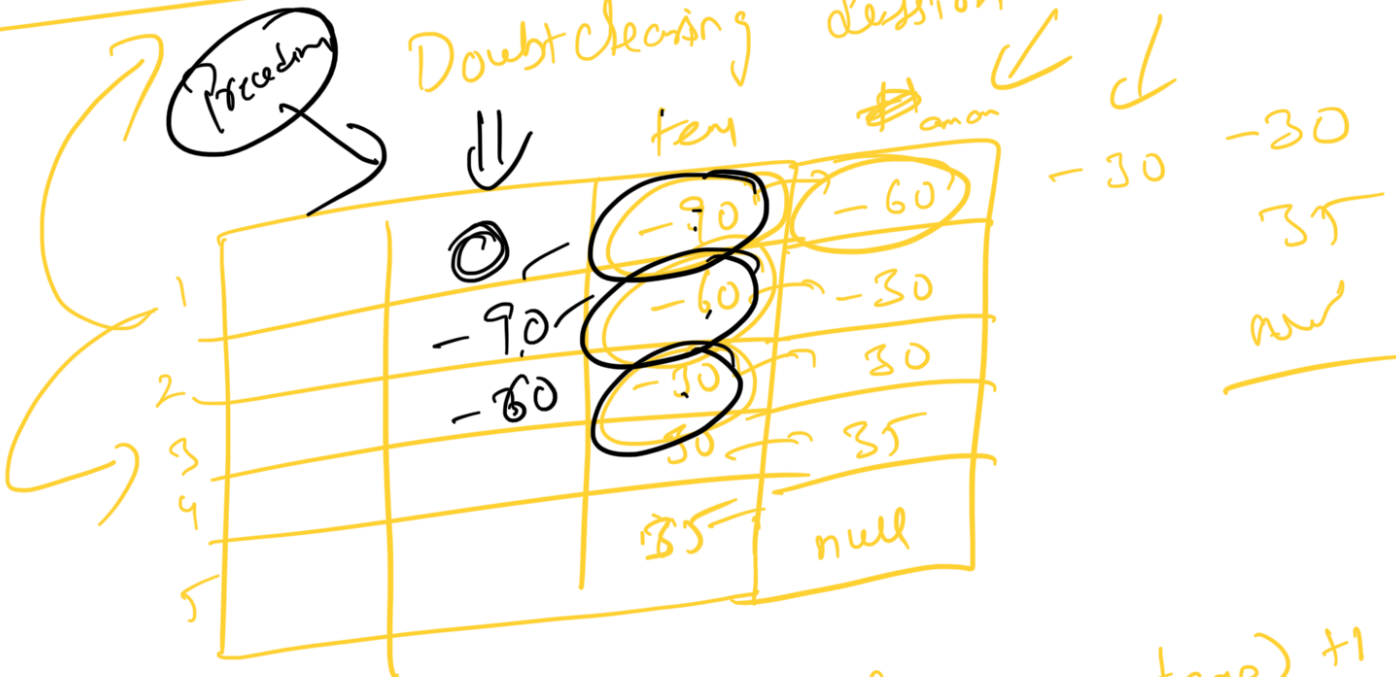
NTILE



NTILE (4) over ( )

100
98.9

ntile(4) over (order by id)



→ lead(temp) over (order by temp) +1

⇒ Select (temp - taman) as diff

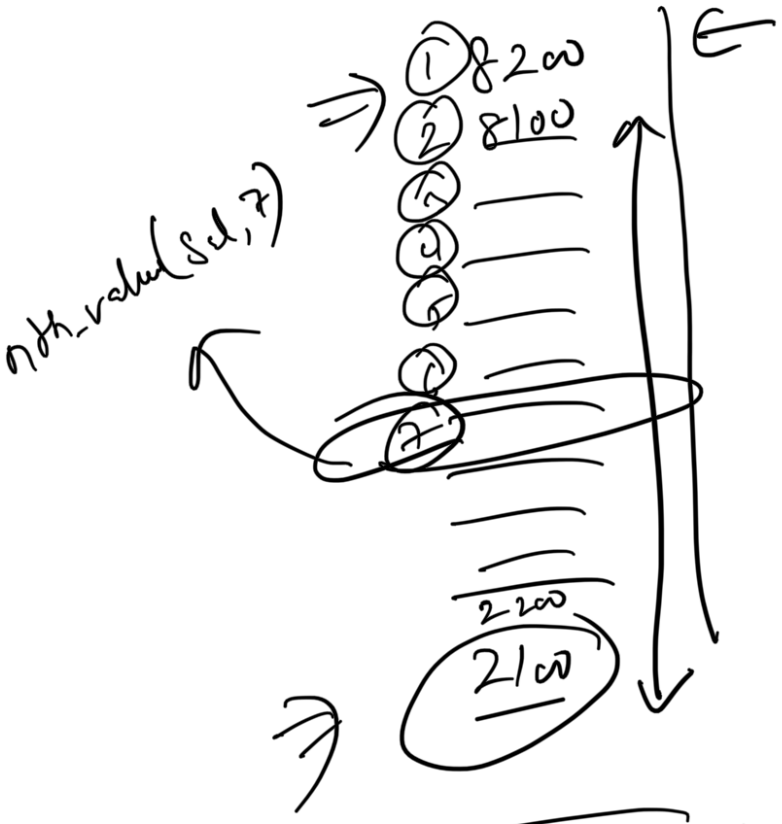
(Select *,

lead(temp) over (order by temp)

lead (temp, 2)

(as aman

from temperature) + ;



UP = 0

UF = 8100 2100

CR = 8200

CR + UF

UP = 2200, 8200

UF = 0

CR = 2100

1	10	10000	1000
1	10	10000	1000
1	10	10000	1000
1	10	10000	1000
1	10	10000	1000
2	10	9000	
3	10	8000	
4	10	7000	
5	10	6000	

nth_value(sal, 5)
over (order by
sal desc)

denserank