

Agenda

a. Window Analytical Function

- iv. Lag Lead
- v. First Value
- vi. Nth Value
- vii. NTile

b. Date and Time Functions

①

Rows (Physical)	Range (logical)	Sum Row
① A	19/01 200	200 750
② B	19/01 300	300 750
③ C	19/01 250	250 750

Range

Unique (Range) = Row

Row-number

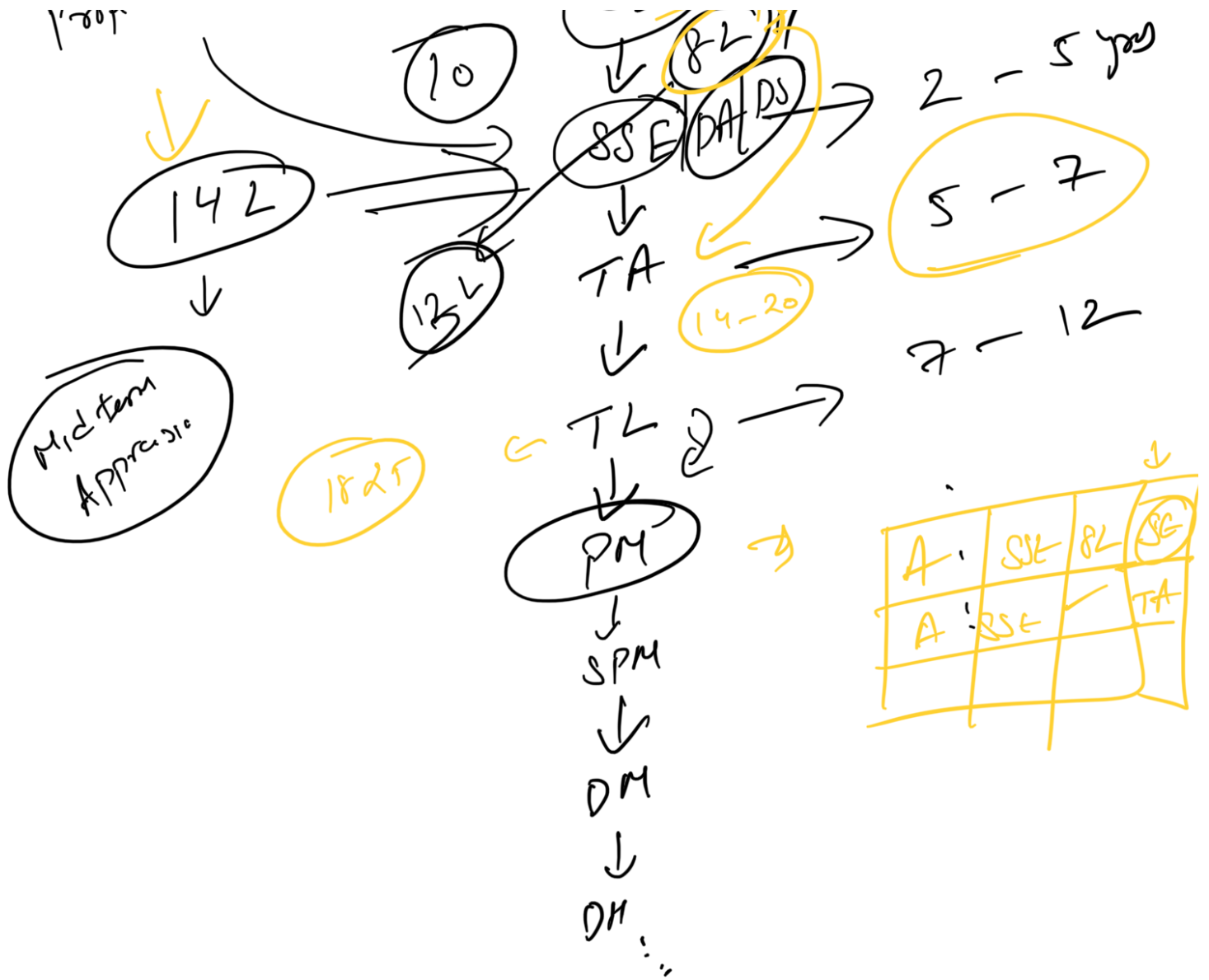
P1

P2

Row-number	over (P1 Sal)	order by eid
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

over (order by eid)





① Lag

② Lead

Sal / 10% Lead

PI

id	Design	Sal	10% Lead	2560	40k
1	SE	21000	null	2560	40k
1	SSE	25600	21000	40000	null
1	TA	40000	25600	null	null
2	TL	50000			
2	PM	80000			

10% Lead

Syntax

Lag (exp, (N))
over (P B 0 B)
lead (exp, N)

- ⇒ lag (Salary) over (Partition by empid)
- ⇒ lead (Salary, 2) over (P B empid)
- ⇒ lag (Salary) over ()

Nth - value () select *

Select

dem = - - - - - 5th

100
↳ (5)

from

table

where

P. rank = 5

Syntax

Nth - value (expression, N)

over ()

... value (sal, 7)

Column

(5)

1 row

nth

1	50	1000	300	N	N	300
2	50	900	300	N	N	300
3	50	800	300	N	N	300
4	50	600	300	N	N	300
5	50	500	300	N	N	300
6	50	400	300	N	N	300
7	50	300	300	N	N	300
8	50	200	300	N	N	300

nth-value(salary, 7) over (P B dept-id salary desc) ;
 Range b/w UP and CR

1000

UP = 0

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

CR = 1000

Range b/w UP and UF

UP = 0

CR = 1000

① First-value

→ nth-value(sal(1))

1. / col)

Syntax = first-value L over L) :

NTILE

B.tech → MBA → Bank

CAT

%
%ile

371
400
%ile
100%

Aa → 350
Ab → 370
Arit → 280
Abhi → 365
Amen → 371
360
365
371
280
70% → 85

11M-A
90
80
100%
99.99
99.9
99
90
80

100
98.9

NTILE (4)
over L

11M4

NTILE

1	100	2	99.9	3	99	4	98.9
1	100	2	99.9	3	99	4	98.9
1	100	2	99.9	3	99	4	98.9
1	100	2	99.9	3	99	4	98.9

while (4)
PB (order by %)

Preceding

Doubt clearing session

	temp	tieman
1	-90	-60
2	-90	-30
3	-60	30
4	30	35
5	35	null

-30 -30
35
null

→ lead(temp) over (order by temp) +1

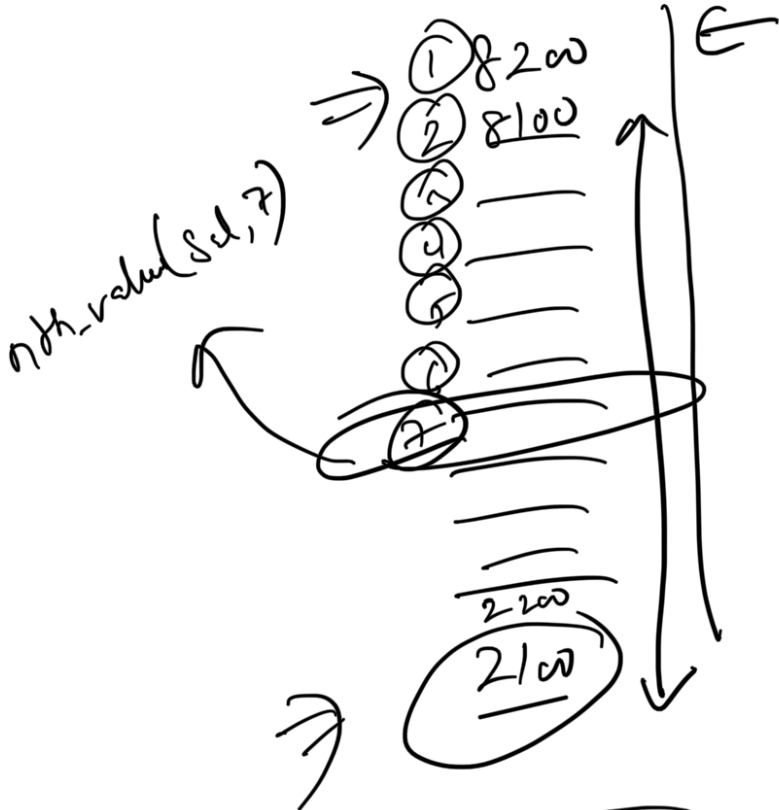
→ select (temp - tieman) as diff

(select *
lead(temp) over (order by temp)

lead (temp, 2) \downarrow 4

as aman

low temperature) + ;



$$\begin{aligned} \checkmark UP &= 0 \\ UF &= 8100 \dots 2100 \\ CR &= 8200 \end{aligned}$$

$$CR + UF$$

$$\begin{aligned} UP &= 2200, 8200 \\ UF &= 0 \\ CR &= 2100 \end{aligned}$$

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

nth-value(sel, 5)
over (order by
sel desc)

denormal