Window functions

Sales data

Sales-date	Shop-id	Sales-amount
14-Feb	S1	200
15-Feb	S1	300
14-Feb	S2	600
15-Feb	S3	500
18-Feb	S1	400
17-feb	S2	250
20-Feb	S3	300

Sum(Sales-amount) over (Partition By Shop-id   order By Sales-amount dec)

Window function

Partition By   Order By

OVER
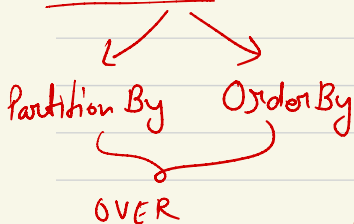
Sales-date	shop-id		Sales-amount	(sum)
18-Feb	S1	w1	400	900
15-Feb	S1		300	900
14-Feb	S1		200	900
14-Feb	S2	w2	600	850
17-Feb	S2		250	850
15-Feb	S3	w3	500	800
20-Feb	S3		300	800

Syntax

agg-function ( )
    +   → Over (Partition By Col1, Col2, Col3   Order By C4, C5)
Window function ( )

Frame Clause in Window Junctions

- ↳ ROWS BETWEEN → (define upper bound & lower bound of Row to be covered)
- ↳ RANGE BEWEEN → (define upper & lower range of value for a Column to be covered)

N, M numbers of Row

Partition

UNBOUNDED PRECEDING

N PRECEDING

↑ N ROWS ↓

Current Row →

↑ M ROWS ↓

M Following

UNBOUNDED Following
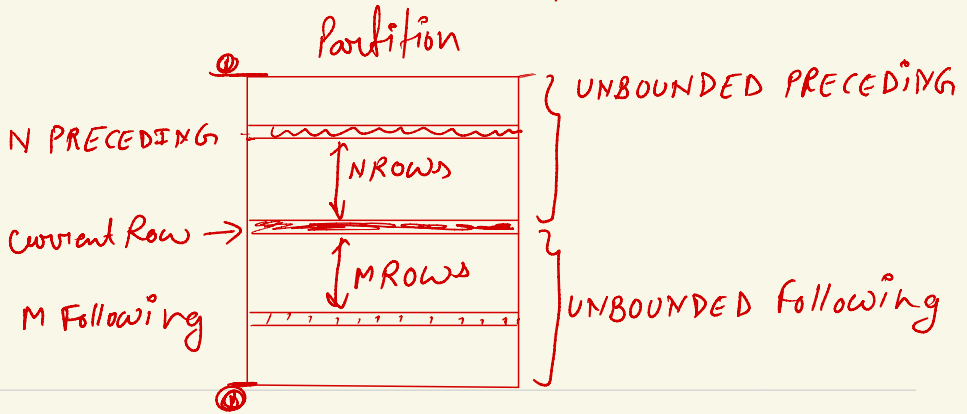
RowsBetween

Sum (Col1) over (Partition By Col2 Order by Col3 ....
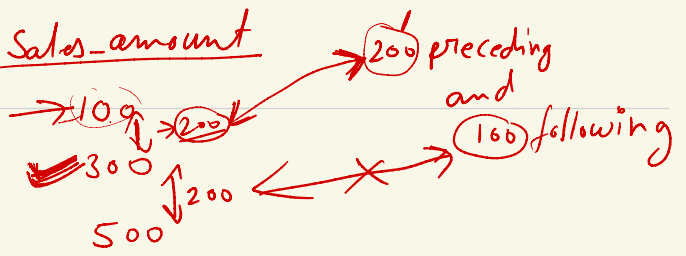   RowsBetween N Preceeding and m Following)
                              ①
                        UNBOUNDED ————→ ○
                        KURRENT ROW ——↗

Range Between

Sum(c1) over (Partition By Col2 Order By C3 Range Between diff1 preceding and diff2 following)

<u>Sales_amount</u>

→ 100 → 200 → 200 preceding

and

300 ↑200 ← × → 160 following

500

660

800