SQL-08 Window functions continued & Date and Time functions.

Recap :

Lag, lead

Window frames

Aggregate

Range & Rows.

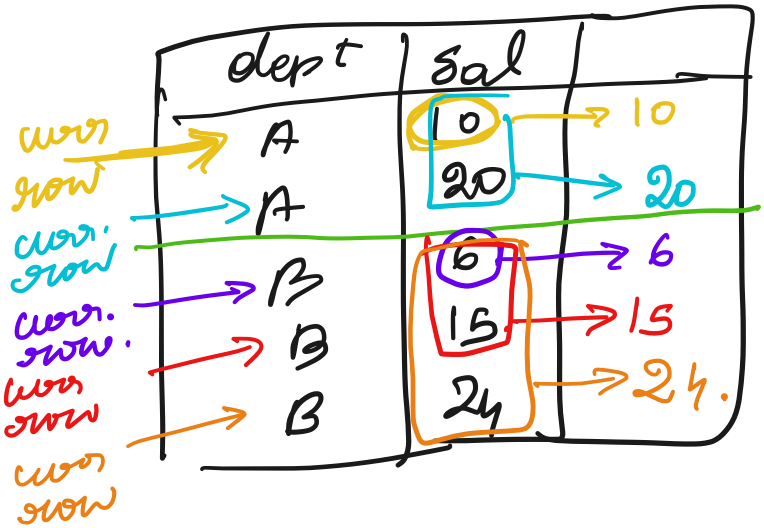
Preceding & following current.

Agenda :

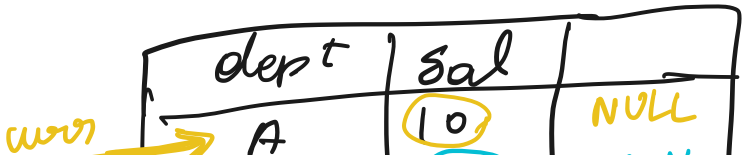
- Nth value, first & last.
- Date & time.

First value: It gives the first element in the column may be with / without the partition.

Last value: Inverse of first value

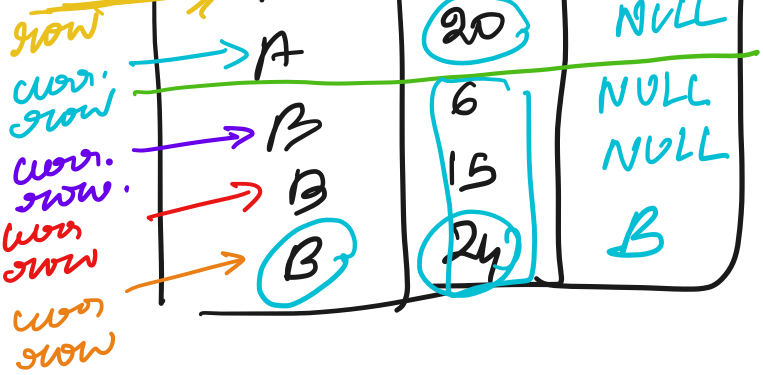


last value (salary) over (partition by dept order by sal)



nth (employee, 3)

The null value is



because there are no 3 rows to get the 3rd value.

What is the overall sales each year.

Date	Sales
2019-08-07	10
2019-9-20	40
2020-10-1	10
2020-11-2	20
2020-12-1	21

2019 → 50
2020 → 51

We will first have to extract the year from the date column and then group by year and find the sum(sales)

Convert string to date time.

"2019-03-02 8:00 AM."

"%Y-%m-%d %I:%M %p"

```
parse_datetime("%Y-%m-%D %I:%M %p",
        concat(Market_date, " ", start_time))
```

Extract: Extract function is used to extract different components from the date column.

```
extract(day from date_column)
extract(month from date_column)
   ⋮
```

Add time to the date time column:

```
date_add(market_start_datetime, interval 30 minute)
date_add(market_start_datetime, interval 1 hour)
date_add(market_start_datetime, interval 1 month)
date_add(market_start_datetime, interval 1 day)
```

We can subtract timeperiod by using date_sub

```
date_sub(market_start_datetime, interval 1 day)
```

↳ this will remove 1 day from the date column.

t session:

Doubl

M.K. Start time

Jan 1 — 9:00

Jan 2 — 11:00

Jan 3 — 14:00

Range. sum(sales) order by date

Date	Sales	Range	Row
Jan 1	100	400	100
Jan 1	300	400	400
Jan 2	200	600	600