04 - Summarizing Data

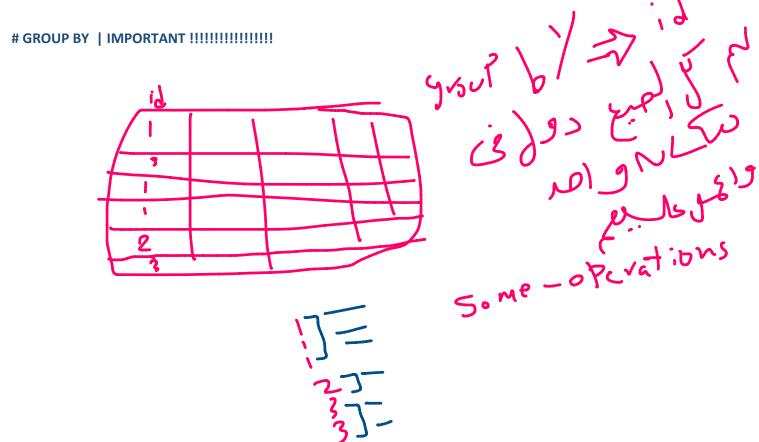
Monday, April 1, 2024 3:09 PM

Aggregate Functions

Functions are used to summarize data like

- MIN
- MAX
- COUNT
- SUM
- AVG

SELECT AVG(payment_total) **FROM** invoices



GROUP BY EXAMPLE

SELECT p.date , pm.name , SUM(p.amount)
FROM payments p
JOIN payment_methods pm
ON p.payment_method = pm.payment_method_id
GROUP BY p.date,p.payment_method
ORDER BY p.date ASC

HAVING CLAUSE

What's problem that having try to solve?

SELECT p.date , pm.name , SUM(p.amount)
FROM payments p
GROUP BY p.date

Say I asked you to filter that if sum less than X don't consider it how to do that?

WHERE CLAUSE?

SELECT p.date , pm.name , SUM(p.amount) AS sum FROM payments p WHERE sum >= X GROUP BY p.date

The problem is that the grouped when [WHERE] turn to execute don't become computed yet so you will get an error!

HAVING IS HERE

SELECT p.date , pm.name , SUM(p.amount) AS 'sum'
FROM payments p
GROUP BY p.date
HAVING sum > X

HAVING:

You can Filter only with columns selected in the select statement
NOT THE COLMUN ALICE THE REAL NAME

VS

WHERE You can USE any

The ROLLUP

Super helpful operator that used to sum the aggregation function automatic

SELECT customer_id , SUM(points)
FROM customers
GROUP BY customer_id WITH ROLLUP
SELECT pm.name , SUM(p.amount)

FROM payments p
JOIN payment_methods pm
ON p.payment method = pm.payment method id

GROUP BY pm.name WITH ROLLUP