

Joins & Subqueries

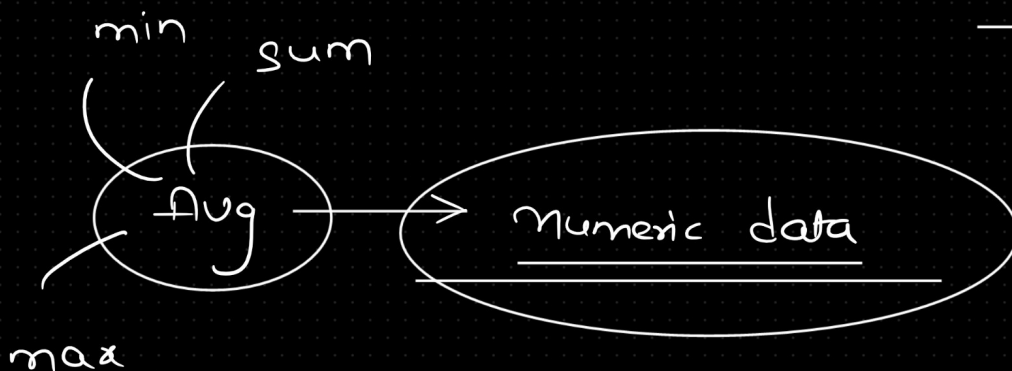
Window
function

- Over & Partition By
- Row-Number() vs Rank() vs
 Order by Dense-Rank()
- use-cases

count(*) → Return the num of rows
in a given table.

count(learnerFirstName) → first search
the field name "learnerFirstName"

↓
count the
non-null num of
records



SBI Bank Accounts Join

What & Why? transaction

Primary key

table 1

id	name

200 people

table 2

acc-id	dt	value
	timestamp	

10 people (March Month)

Analyze

id, name, num of transaction, total value march

dec 2024

Output

id	num_trans.	total
4185	24	20,000
4180	34	50,000
7147	null	null

190 people

SELECT id, COUNT(dt) as num_trans, SUM(value) as total

FROM accounts

JOIN transaction ON accounts.id =

→ filter
WHERE MONTH(id) = 3 ✓
By default, Inner Join ✓

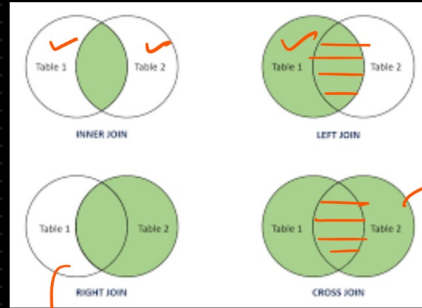
Group by id.

4 types of

Join

JOIN
ORDER BY total DESC; ✓

Left Join ✓



cross join

Right Join

Syntax

SELECT column

FROM table 1 JOIN table 2

Left

table

Left

Join

Right

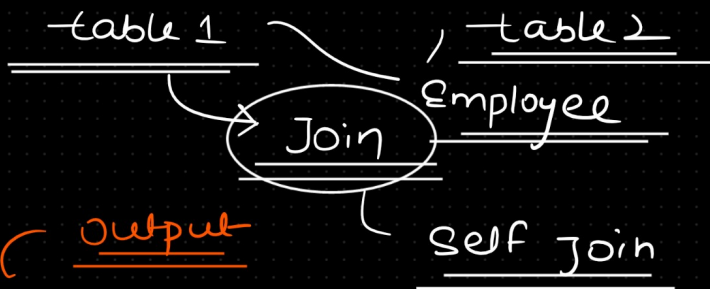
table

ON

table1.id = table2.acc_id

Similar

column



Employee
Joe

Output

SELECT emp1.name as Employee
FROM Employee emp1
JOIN Employee emp2
ON emp1.managerId = emp2.id AND emp1.salary > emp2.salary

Easy

emp 1

Self Join

Employee table:

id	name	salary	managerId
1	Joe	70000	3
2	Henry	80000	4
3	Sam	60000	Null
4	Max	90000	Null

emp 2

Employee table:

id	name	salary	managerId
1	Joe	70000	3
2	Henry	80000	4
3	Sam	60000	Null
4	Max	90000	Null

Which courses have the highest enrollment rates?

Data Analysis

SQL Query

