JOINS IN SQL

SQL Series Part 9

-Mayuri Dandekar

JOINS

JOIN is a method of **combining information** from two tables.

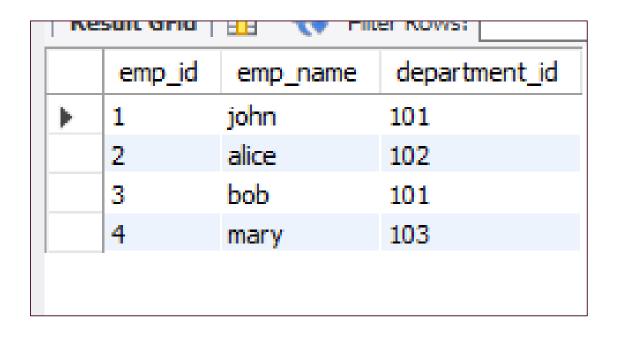
INNER JOIN -- Returns records that have matching values in both tables

LEFT JOIN -- Returns all records from the left table, and the matched records from the right table

RIGHT JOIN -- Returns all records from the right table, and the matched records from the left table

FULL JOIN -- Returns all records when there is a match in either left or right table

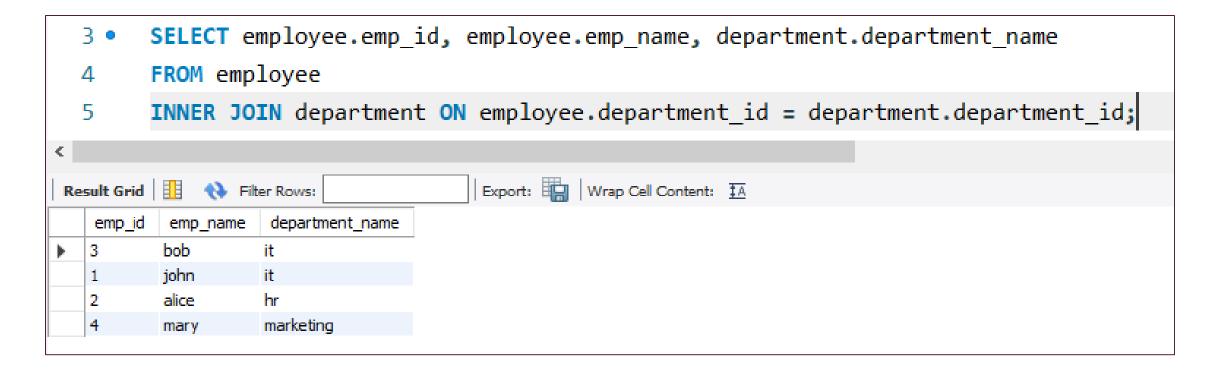
Sample dataset used



	department_id	department_name	
>	101	it	
	102	hr	
	103	marketing	
	104	sales	
	-		

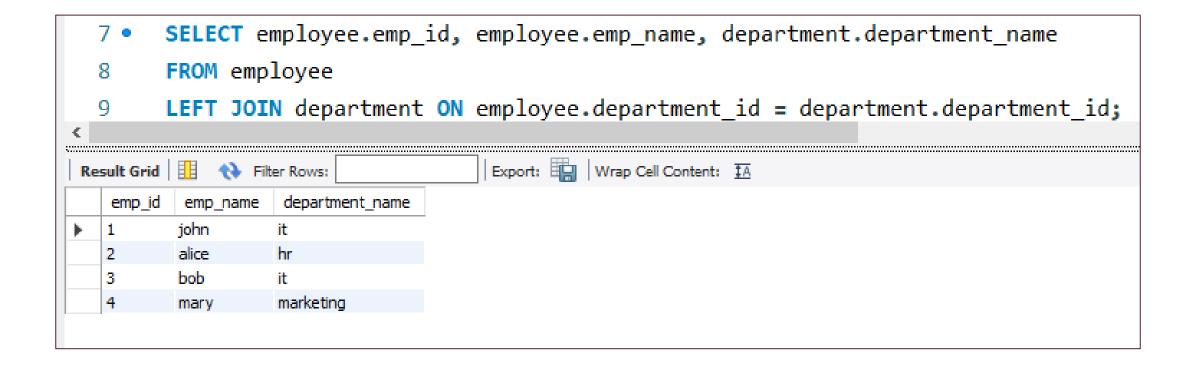
INNER JOIN

An INNER JOIN retrieves rows from both tables where there is a match in the specified columns.



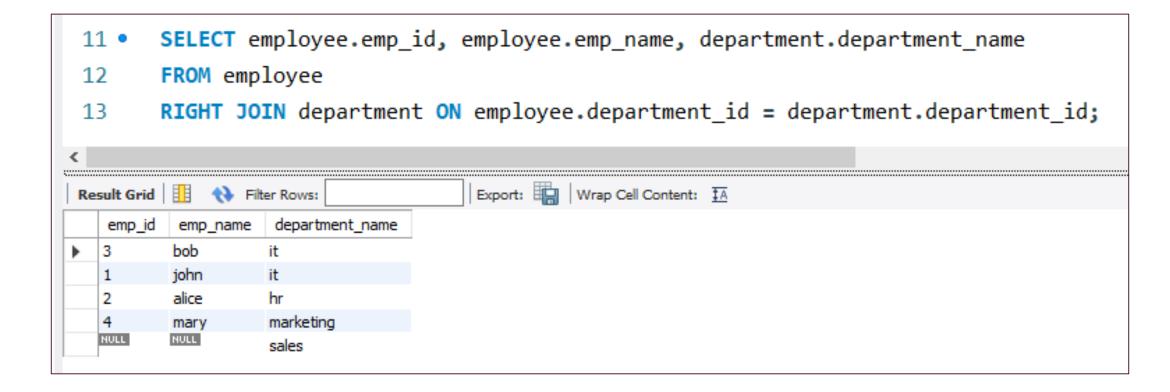
LEFT JOIN

A LEFT JOIN returns all rows from the left table and matching rows from the right table, with NULL values where there is no match in the right table.



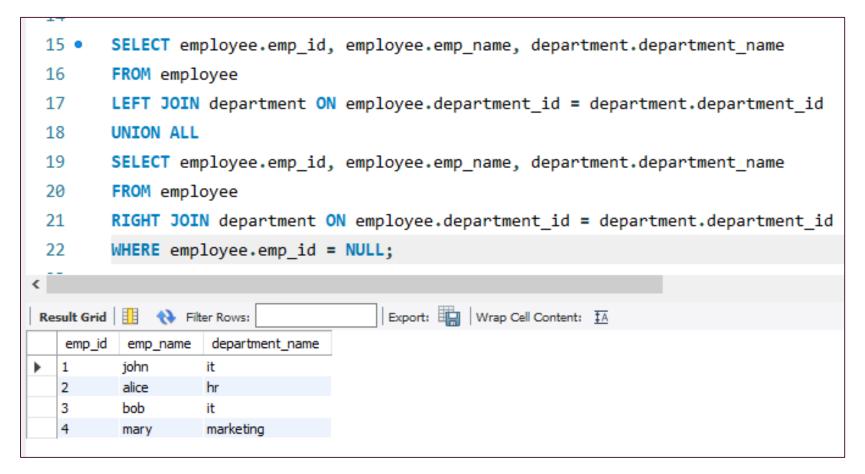
RIGHT JOIN

A RIGHT JOIN returns all rows from the right table and matching rows from the left table, with NULL values where there is no match in the left table



FULL JOIN

A FULL JOIN returns all rows from both tables and NULL values where there is no match.

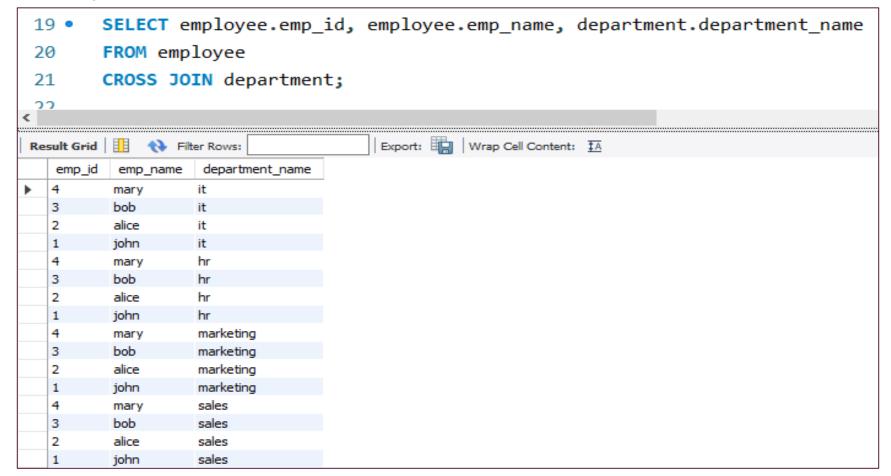


Note—

My database does not support full join directly, so I tried it by combining LEFT JOIN, RIGHT JOIN & UNION ALL

CROSS JOIN

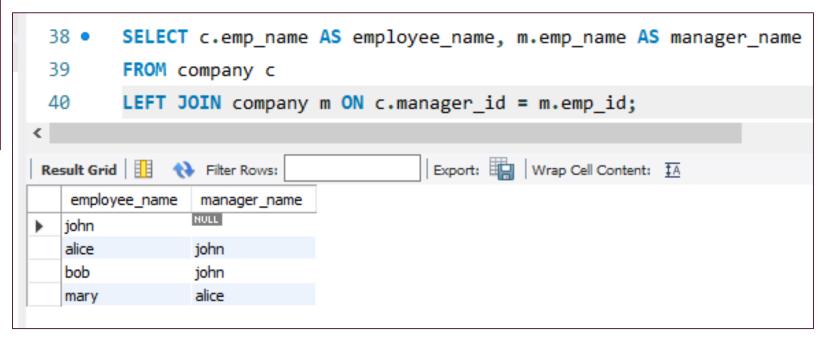
A CROSS JOIN returns the Cartesian product of the two tables, meaning it combines every row from the first table with every row from the second table.



SELF JOIN

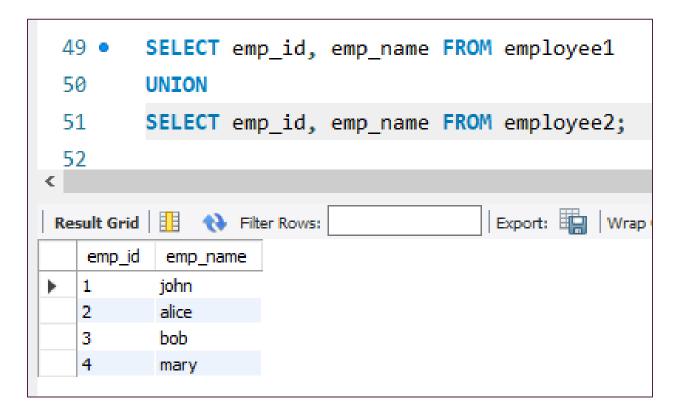
A self join is a special type of join where a table is joined with itself. This is useful when you have hierarchical data or need to compare rows within the same table.

	emp_id	emp_name	manager_id
>	1	john	0
	2	alice	1
	3	bob	1
	4	mary	2



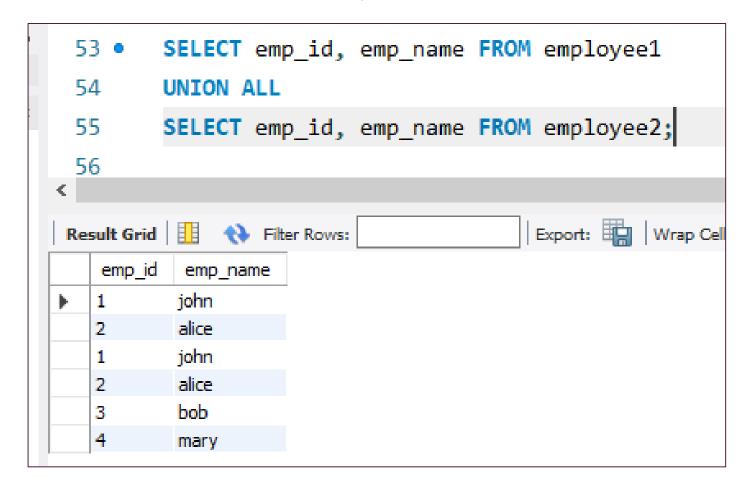
UNION

UNION is used to combine the results of two or more SELECT statements into a single result set. It removes duplicate rows by default



UNION ALL

UNION ALL is similar to UNION, but it retains duplicate rows from the combined result sets.



THANK YOU!!!

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