SQL Joins

Link: https://www.youtube.com/watch?v=xUsY2jWQa1w&t=95s

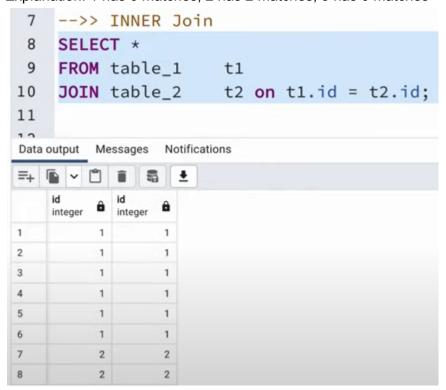
TABLE 1	TABLE 2
1	1
1	1
1	2
2	2
3	4
3	null
3	

Self Join (Default Join):

Fetches values that match to the left table.

Number of rows that will be extracted: 8

Explanation: 1 has 6 matches, 2 has 2 matches, 3 has 0 matches



Left Join:

Rule of thumb: Left join = inner join + fetch any additional records from left table which is not present in right table

Number of rows that will be extracted: 11 (8+3)

Explanation: inner[1 has 6 matches, 2 has 2 matches] + 3 has 3 matches in left table.

```
-->> LEFT Join

SELECT *

FROM table_1 t1

LEFT JOIN table_2 t2 on t1.id = t2.id;
```

	id integer	integer 🔓
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	2	2
8	2	2
9	3	[null]
10	3	[null]
11	3	[null]

Right Join:

The opposite of Left Join, mening: Right join = inner join + fetches any additional records from right table which is not present in left table

Number of rows that will be extracted: 10 (8+2)

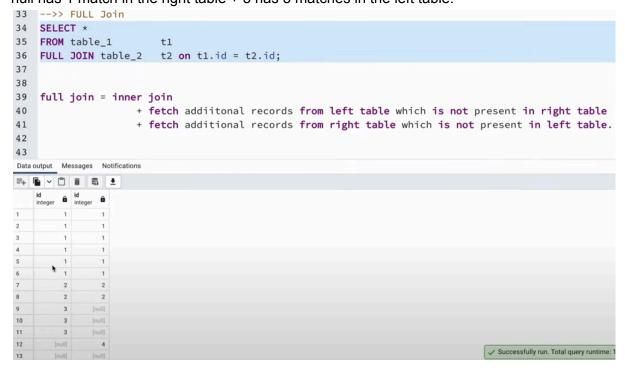
Explanation: inner[1 has 6 matches, 2 has 2 matches] + 4 has 1 match in right table + null has 1 match in right table

Full Join:

Full join = inner join

- + fetch additional records from left table which is not present in right table
- + fetch additional records from right table which is not present in left table Number of rows that will be extracted: 13 (8+2+3)

Explanation: inner[1 has 6 matches, 2 has 2 matches] + 4 has 1 match in the right table + null has 1 match in the right table + 3 has 3 matches in the left table.



Cross Join:

For every record in left table fetches all the records in right table Number of rows that will be extracted: 42

	TABLE 1	TABLE 2
6	1	1
6	1	1
6	1	2
6	2	2
6	3	4
6	3	null
6	3	