**SQL Joins**

# Inner Join

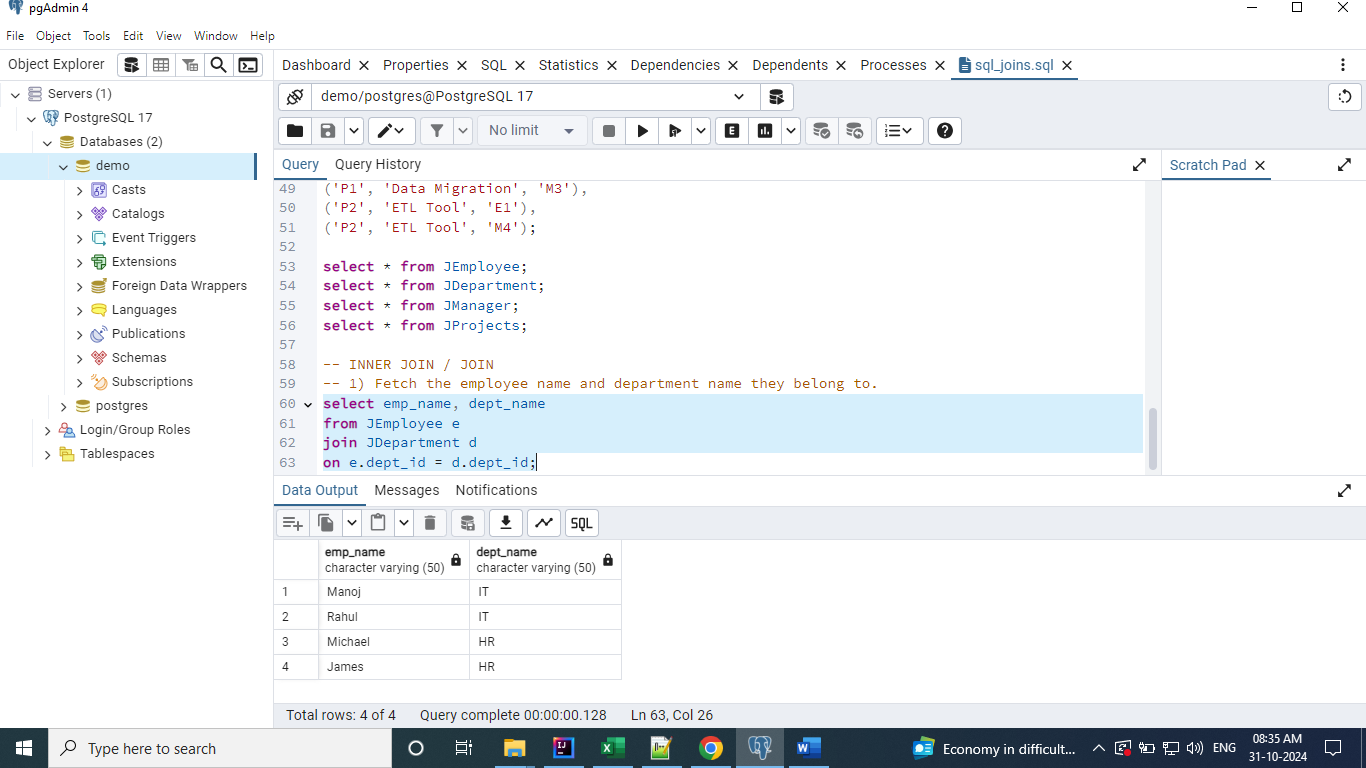
## Fetch the employee’s name and department name they belong to.

**select emp\_name, dept\_name**

**from JEmployee e**

**join JDepartment d**

**on e.dept\_id = d.dept\_id;**



# Left Join

LEFT JOIN [INNER JOIN + Any additional records in the left table]

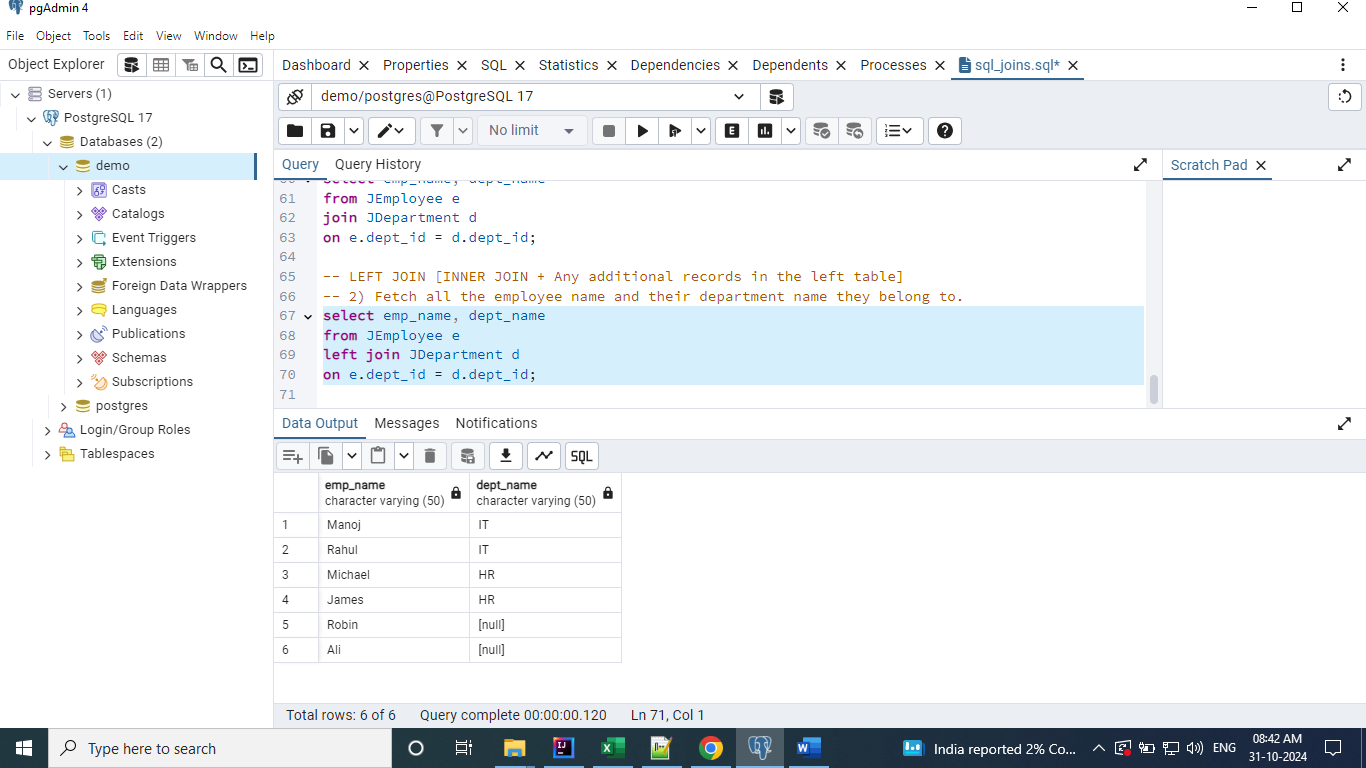
## Fetch all the employee’s name and their department name they belong to.

**select emp\_name, dept\_name**

**from JEmployee e**

**left join JDepartment d**

**on e.dept\_id = d.dept\_id;**



# Right Join

RIGHT JOIN [INNER JOIN + Any additional records in the right table]

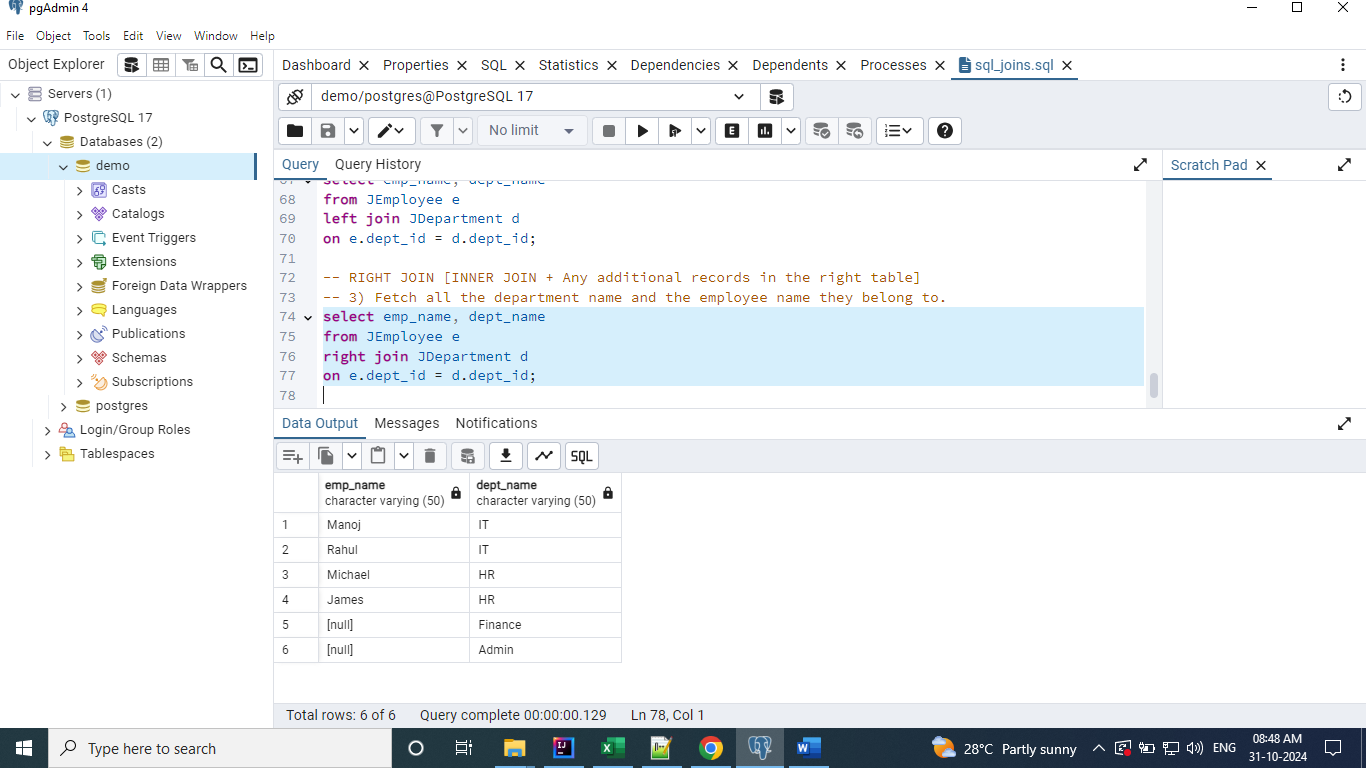
## Fetch all the department name and the employee’s name they belong to.

**select emp\_name, dept\_name**

**from JEmployee e**

**right join JDepartment d**

**on e.dept\_id = d.dept\_id;**



# Inner\_Left\_Right Join

## Fetch the details of all employees, their manager, their department and the projects they work on.

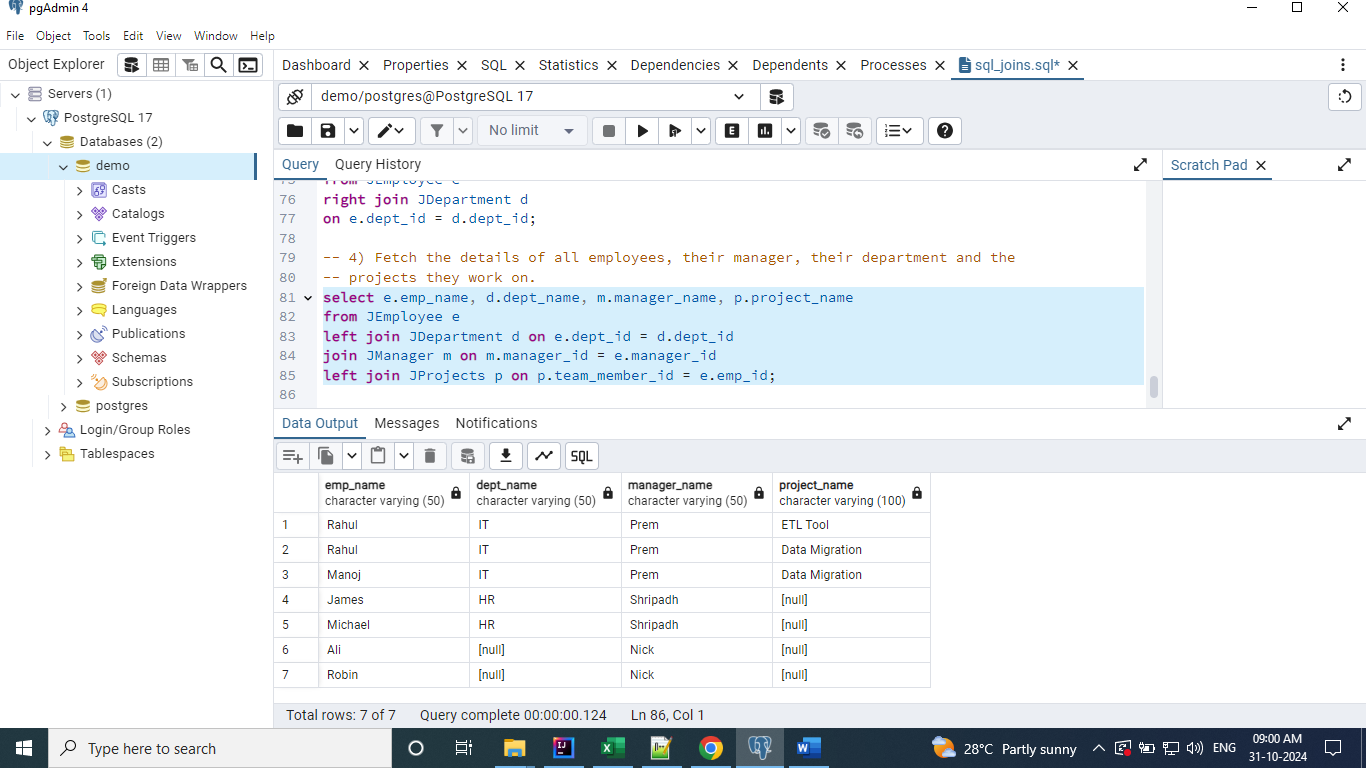
**select e.emp\_name, d.dept\_name, m.manager\_name, p.project\_name**

**from JEmployee e**

**left join JDepartment d on e.dept\_id = d.dept\_id**

**join JManager m on m.manager\_id = e.manager\_id**

**left join JProjects p on p.team\_member\_id = e.emp\_id;**



# Full Outer Join / Full Join

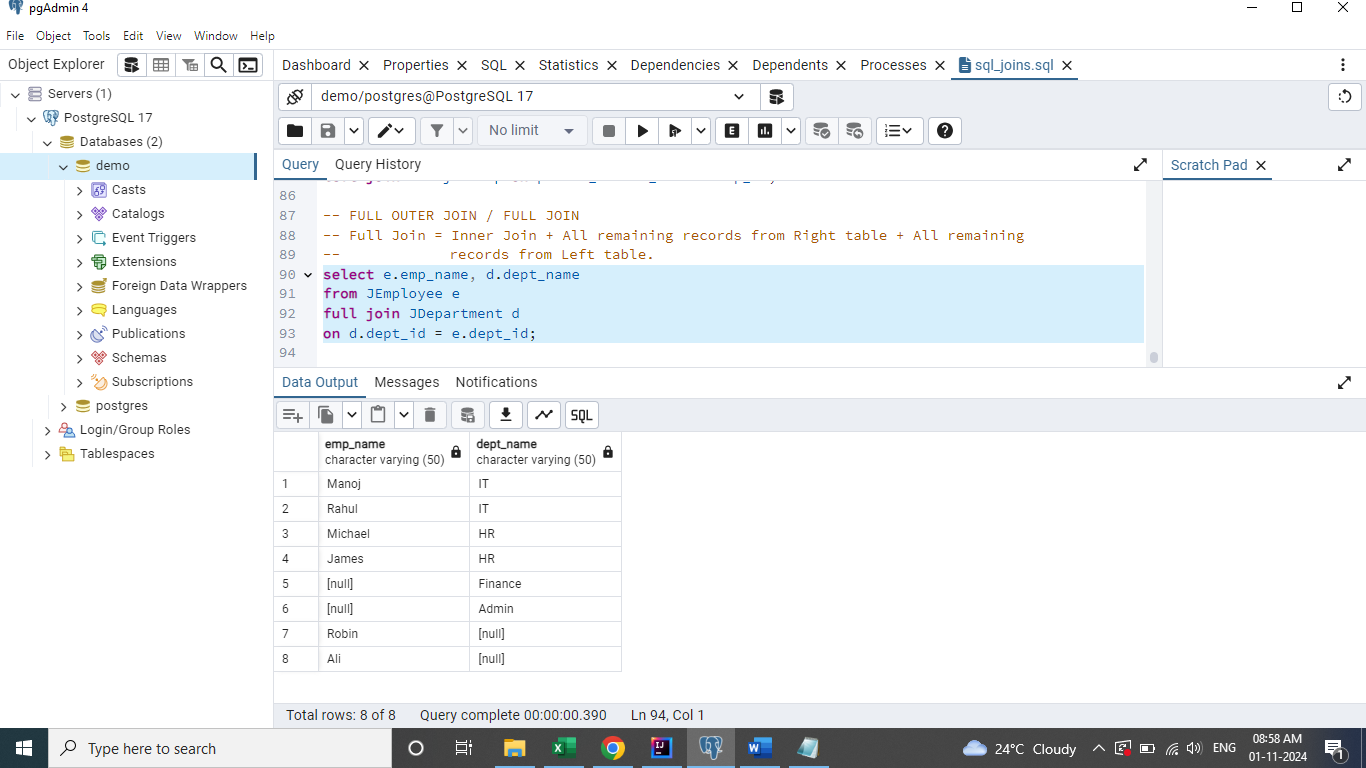
**Full Join = Inner Join + All remaining records from Right table + All remaining records from Left table.**

**select e.emp\_name, d.dept\_name**

**from JEmployee e**

**full join JDepartment d**

**on d.dept\_id = e.dept\_id;**



# Cross Join [Cartesian Product]

## Write a query to fetch the employee’s name and their corresponding department name. Also make sure to display the company name and the company location corresponding to each employee.

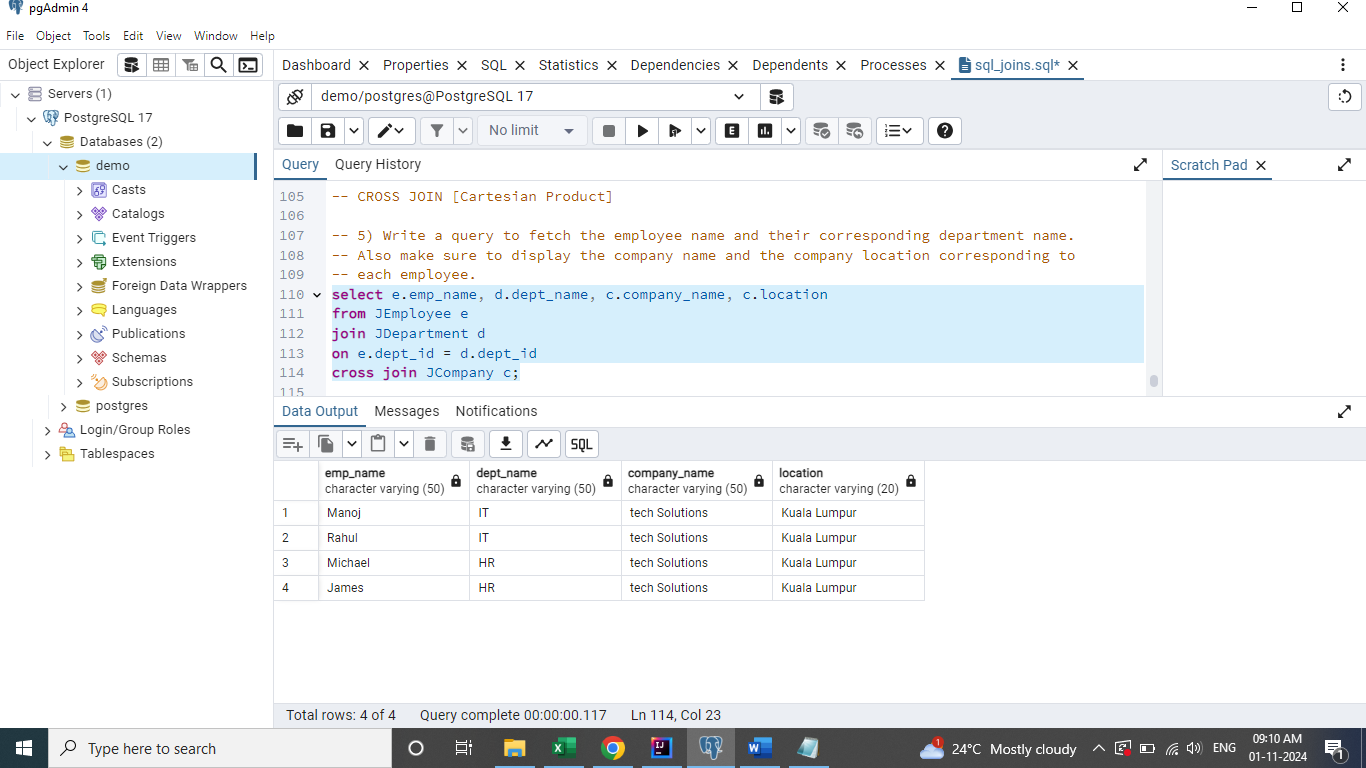
**select e.emp\_name, d.dept\_name, c.company\_name, c.location**

**from JEmployee e**

**join JDepartment d**

**on e.dept\_id = d.dept\_id**

**cross join JCompany c;**



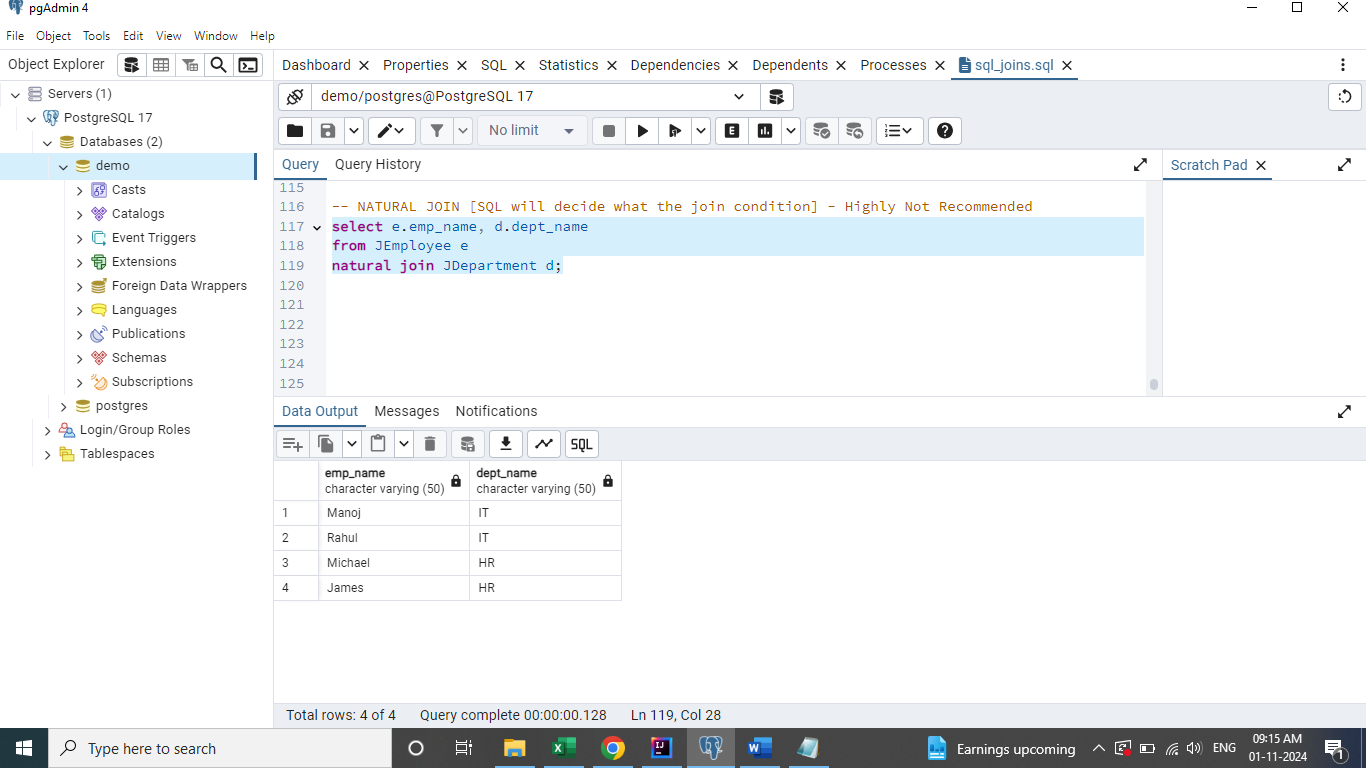
# Natural Join

**NATURAL JOIN [SQL will decide what the join condition] - Highly Not Recommended**

**select e.emp\_name, d.dept\_name**

**from JEmployee e**

**natural join JDepartment d;**



Self-Join [When we join a table to itself]

## Write a query to fetch the child’s name and their age corresponding to their parent’s name and parent age.

**select child.name as child\_name, child.age as child\_age,**

**parent.name as parent\_name, parent.age as parent\_age**

**from family as child**

**join family as parent**

**on child.parent\_id = parent.member\_id;**

