JOINS IN SQL

Employees

emp_id	name	dept_id
1	Alice	101
2	Bob	102
3	Charlie	103
4	David	NULL
5	Eva	101

Departments

dept_id	dept_name
101	HR
102	IT
103	Marketing
104	Finance

SQL JOIN Work Programs / Questions

1. **INNER JOIN**
   - Write a query to display employee names and their corresponding department names using INNER JOIN.

2. **LEFT JOIN**
   - Write a query to list all employees along with their department names. If an employee has no department, show NULL.

3. **RIGHT JOIN**

o Write a query to list all departments and the employees working in them. If a department has no employee, show NULL.

4. **FULL OUTER JOIN**

   o Write a query to display all employees and departments, even if there is no match between them.

5. **CROSS JOIN**

   o Write a query to show a combination of every employee with every department.

6. **SELF JOIN**

   o Write a query to find pairs of employees who work in the same department (excluding self-pairs).

7. **JOIN with WHERE clause**

   o Write a query to list employees in the "HR" department using a join and WHERE condition.

8. **JOIN and ORDER BY**

   o Write a query to join employees and departments and sort the result by department name.

9. **JOIN with alias**

   o Use table aliases (E, D) to write a query that shows employee name and department name.

10. **JOIN with GROUP BY**

    o Write a query to count how many employees work in each department.