

SQL

Lalit Patil

ORDER BY

- ORDER BY is a clause in SQL used to sort the result set of a query based on one or more columns in ascending or descending order.

```
SELECT column1, column2, column3 FROM table_name ORDER BY  
column1 ASC, column2 DESC;
```

Scenario1: Find the 7th largest value (use limit)

Scenario2: Sort the employees on basis of Salary in Descending Order (desc)

Scenario3: Show me names and salary of top3 highest salaried peoples (limit)

Alias

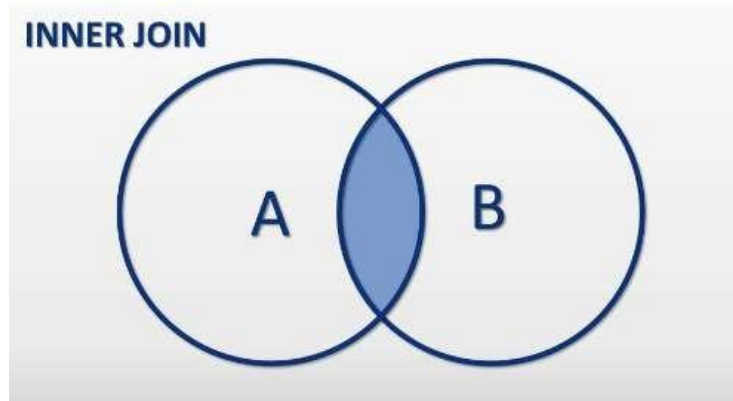
An alias is a temporary name assigned to a table or column in a SQL query. It provides a way to rename a table or column for the duration of that query.

```
SELECT col_1, CONCAT(col_2, ', ', col_3) AS Address  
FROM Customers;
```

JOINS in SQL

- INNER JOIN
- FULL OUTER JOIN
- LEFT JOIN
- RIGHT JOIN
- CROSS JOIN
- SELF JOIN

INNER JOIN



- `select * from emp_2 inner join dept on dept.dept_id = emp_2.did;`
- `select emp_2.fn,emp_2.ln,dept.dname from emp_2 inner join dept on dept.dept_id = emp_2.did;`

LEFT JOIN

- `select * from emp_2 left join dept on dept.dept_id = emp_2.did;`
- `select emp_2.fn,emp_2.ln,dept.dname from emp_2 left join dept on dept.dept_id = emp_2.did;`

RIGHT JOIN

- `select * from emp_2 right join dept on dept.dept_id = emp_2.did;`
- `select emp_2.fn,emp_2.ln,dept.dname from emp_2 right join dept on dept.dept_id = emp_2.did;`

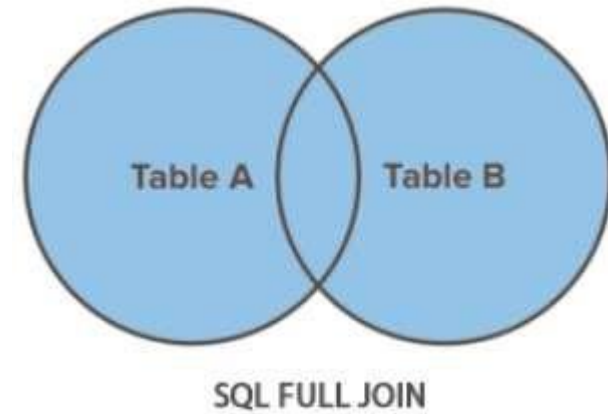
CROSS JOIN

- `select * from emp_2 cross join dept on dept.dept_id = emp_2.did;`
- `select emp_2.fn,emp_2.ln,dept.dname from emp_2 cross join dept;`

SELF JOIN

- `select e1.Fname, e2.lname, e2.mgr_id from emp_data e1
inner join emp_data e2 on e1.EmpID=e2.MGR_ID;`

FULL OUTER JOIN



```
SELECT *  
FROM emp_2  
LEFT JOIN dept ON emp_2.did = dept.dept_id  
UNION  
SELECT *  
FROM emp_2  
RIGHT JOIN dept ON emp_2.did = dept.dept_id  
WHERE emp_2.did IS NULL;
```

My SQL does not support full join directly

GROUP BY

GROUP BY is a clause in SQL used to group rows based on one or more columns. It is often used in conjunction with aggregate functions, such as SUM, COUNT, AVG, etc.

```
Select did, avg(sal) from emp_2 group by did;
```

Scenario: find the count of employees in each department who have a salary greater than 1,000.

```
select did,count(sal) from emp_2 where sal > 1000 group by emp_2.did ;
```

Thank You