**Group By and Having Clause**

GROUP BY

-- The GROUP BY Statement in SQL is used to arrange identical data into groups with the help of some functions.

-- If a particular column has the same values in different rows then it will arrange these rows in a group.

-- Syntax:

*SELECT column1, function\_name(column2)*

*FROM table\_name*

*WHERE condition*

*GROUP BY column1, column2*

*ORDER BY column1, column2;*

-- GROUP BY clause is used with the SELECT statement.

-- In the query, the GROUP BY clause is placed after the WHERE clause.

-- In the query, the GROUP BY clause is placed before the ORDER BY clause if used.

1. Fetch total salary distribution for each department.

SELECT

dept.department\_name, SUM(emp.salary) as total\_salary

FROM

dev\_schema.employee as emp INNER JOIN dev\_schema.department as dept

ON emp.fk\_department\_id = dept.department\_id

GROUP BY dept.department\_name ORDER BY total\_salary DESC;

2. Fetch total number of employees and total amount of salary for each department.

SELECT

dept.department\_name, COUNT(employee\_id) as Total\_Employees, SUM(emp.salary) as Total\_Salary

FROM

dev\_schema.employee as emp INNER JOIN dev\_schema.department as dept

ON emp.fk\_department\_id = dept.department\_id

GROUP BY dept.department\_name ORDER BY Total\_Salary DESC;

3. Fetch average salary for each job title.

SELECT

job.job\_title, AVG(emp.salary) as avg\_salary

FROM

dev\_schema.employee as emp INNER JOIN dev\_schema.job as job

ON emp.fk\_job\_id = job.job\_id

GROUP BY job.job\_title ORDER BY avg\_salary DESC;