**SQL Group By**

1. **What is the GROUP BY clause in SQL? How is it used with aggregate functions?**

The GROUP BY clause groups rows that have the same values in specified columns into summary rows. It's mainly used with aggregate functions like COUNT(), SUM(), AVG(), MAX(), and MIN() to perform calculations on each group.

Example:

SELECT department\_id, COUNT(\*) AS employee\_count

FROM employees

GROUP BY department\_id;

This query counts the number of employees in each department.

**2. Difference between GROUP BY and ORDER BY**

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| **Aspect** | **GROUP BY** | **ORDER BY** |
| Purpose | Groups rows based on column values to perform aggregation | Sorts the result set in ascending or descending order |
| Used With | Aggregate functions (COUNT, SUM, AVG, etc.) | Any column(s) to order results |
| Output | One row per group | All rows, ordered |