--------LECTURE- 10--------

☆ What are Subqueries?

A **subquery** is just a **query inside another query**.
Think of it like this:
👉 The inner query finds something first.
👉 The outer query uses that result to do more work.
It's like asking two questions, but the second question depends on the first answer.

☆ Why do we use subqueries?

Because sometimes one SELECT is not enough.
You need to find something **before** you can get the final answer.
Subqueries help you:

- filter rows based on another query
- compare values
- get data from multiple steps
- calculate something first, then use it outside

☆ Simple Example

Find employees whose salary is above the average salary.
Step 1 (inner query):
SELECT AVG(salary) FROM employees;
Step 2 (outer query uses the result):
SELECT name, salary
FROM employees
WHERE salary > (SELECT AVG(salary) FROM employees);
Here:

- (SELECT AVG(salary) ...) → **subquery**
- The outer query uses it in WHERE.

☆ Types of Subqueries

1 Single-row subquery

Returns only **one value**.
Example: average salary.

2 Multi-row subquery

Returns **more than one value**.
Example: list of departments with max sales.

3 Correlated subquery

The inner query depends on the outer query row.
Like checking something for each employee one by one.