

1. What is Subquery?

Ans.

- A subquery is a SELECT statement that is embedded in a clause of another SELECT statement
- The subquery (inner query) executes once before the main query (outer query).
- The result of the subquery is used by the main query
- To avoid a Cartesian product, always include a valid join condition.

2. Types of Subqueries

Single-row subqueries: Queries that return only one row from the inner SELECT statement.

Multi-row subqueries: Queries that return more than one row from the inner SELECT statement.

3. What are the Guidelines for Using Subqueries?

- Enclose subqueries in parentheses.
- Place subqueries on the right side of the comparison condition.
- The ORDER BY clause in the subquery is not needed unless you are performing Top-N analysis.
- Use single-row operators with single-row subqueries, and use multiple-row operators with multiple-row subqueries.

4. Single-row subqueries

Single-row subqueries: Queries that return only one row from the inner SELECT statement

5. single row operator

=Equal to

>Greater than

>=Greater than or equal to

<Less than

<=Less than or equal to

<>Not equal to

6. multiple row sub query?

Sub queries that return more than one row are called multiple-row sub queries. You use a multiple-row operator, instead of a single-row operator, with a multiple-row sub query.

7. multiple row operator?

- Return more than one row
- Use multiple-row comparison operators
- ❖ **IN**
- ❖ **ANY :**
 - <ANY means less than the maximum.
 - >ANY means more than the minimum.
 - =ANY is equivalent to IN
- ❖ **ALL.**