Subquery

* 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.
* It is useful when we need to select rows from a table with condition that depends on the data in the table itself.
* The subquery is often referred to as a nested SELECT, sub-SELECT and inner SELECT statement.

For Example: select last\_name, salary from employees where salary >(select salary from employees where last\_name =‘Abel’);

Using places of Subquery

* Where clause
* Having clause
* From clause

(N.B Comparison condition fall into two clauses: (i) single-row operators (>,=,>=,<,<>,<=) (ii) multiple-row operators(IN,ANY,ALL)).

Guidelines for Using Subqueries

* A subquery must be enclosed in parentheses.
* Place subqueries on the right side of the comparison condition for readability.
* The order by clause if not needed unless we are not using TOP-N analysis.
* Use single row operators with single-row subqueries and multiple row operators with multiple row queries.

Types of Subqueries

1. **Single-row subquery:** Queries that return only one row from inner select statement.
2. **Multiple-row subquery:** Queries that return more than one row from the inner select statement.