

Subqueries in Oracle

What is a subquery in Oracle?

In Oracle, a subquery is a query within a query. We can create subqueries within our SQL statements. These subqueries can reside in the WHERE clause, in the FROM clause, or in the SELECT clause.

```
SELECT MAX( SAL ) FROM EMPLOYEE;
```

```
SELECT * FROM EMPLOYEE WHERE SAL = 5000;
```

```
SELECT * FROM EMPLOYEE WHERE SAL = (SELECT MAX( SAL ) FROM EMPLOYEE);
```

Subqueries in Oracle

A query inside another query is called a subquery or nested query in Oracle. The subquery is having two more queries. those are as follows,

1. **Inner / Child / Sub query**
2. **Outer / Parent / Main query**

Syntax: `SELECT * FROM <TN> WHERE <CONDITION> (SELECT * FROM);`

As per the execution process of the subquery, it is again classified into two categorized.

1. **Non-Correlated Subqueries:** In non-correlated subqueries, first, the inner query will execute and return value, and later outer query will execute.
2. **Correlated Subqueries:** In Correlated subqueries first outer query will execute and return value and later inner query will execute.

The Non-Correlated Subqueries are again classified into 4 types are as follows.

1. **Single Row Subquery**
2. **Multiple Row Subquery**

3. Multiple Column Subquery

4. Inline View Subquery

Single Row Subquery in Oracle

Multiple Row Subquery in Oracle

Multiple Column Subquery in Oracle

Pseudo Columns in Oracle

Inline View Subquery in Oracle

Analytical Functions in Oracle