

Oracle官方文档SQL Language Reference阅读笔记 SQL Queries and Subqueries

About Queries and Subqueries :

A query is an operation that retrieves data from one or more tables or views.

Creating Simple Queries :

Hierarchical Queries :

The UNION (ALL), INTERSECT, MINUS Operators : to combine multiple queries.

eg :

```
select 3 from dual
intersect
select 3f from dual;
```

eg :

```
select to_binary_float(3) from dual
intersect
select 3f from dual;
```

eg :

```
select product_id from order_items
union (all)
select product_id from inventories
order by product_id;
```

eg :

```
select product_id from inventories
minus
select product_id from order_items
order by product_id;
```

Sorting Query Results :

order by

Joins : A join is a query that combines rows from two or more tables, views, or materialized views.

Join Conditions : Most joins contain at least one join condition, either in the from clause or in the where clause. The join conditions compares two columns, each from a different table.

Equijoins : a join with a join condition containing an equality operator.

Self Joins : a join of a table to itself.

Cartesian Products : If two tables in a join query have no join conditions, then Oracle Database returns their Cartesian Products.

Inner Joins : or Simple Joins is a join of two or more tables that returns only those rows that satisfy the join condition.

Outer Joins : extends the result of a simple join.

Left Outer Joins

Right Outer Joins

eg :

```
select e1.employee_id, e1.manager_id, e2.employee_id
from employees e1, employees e2
where e1.employee_id(+) = e2.employee_id
order by e1.employee_id, e1.manager_id, e2.employee_id;
```

Antijoins : returns rows from the left side of the predicate for which there are not corresponding rows on the right side of the predicate.

Semijoins : returns rows that match an EXISTS subquery without duplicating rows from the left side of the predicate when multiple rows on the right side satisfy the criteria of the subquery.

Using Subqueries : A subquery answers multiple-part questions.

Use subqueries for the following purposes :

to define the set of rows to be inserted into the target table of an INSERT or CREATE TABLE statement.

To define the set of rows to be included in a view or materialized view in a CREATE VIEW or CREATE MATERIALIZED VIEW statement.

To define one or more values to be assigned to existing rows in an UPDATE statement.

To provide values for conditions in a WHERE clause, HAVING clause, or START WITH clause of SELECT, UPDATE, and DELETE statement.

To define a table to be operated on by a containing query.

Unnesting of Nested Subqueries : unnests and merges the body of subquery into the body of the statement that contains it, allowing the optimizer to consider them together when evaluating access paths and joins.

Selecting from the DUAL Table : Dual is a table automatically created by Oracle Dataase along with the data dictionary.

Distributed Queries : The Oracle Distributed database management system architecture lets you access data in remote databases using Oracle Net and an Oracle Database Server. You can identify a remote table, view, or materialized view by appending @dblink to the end of its name.