

Intro of Set Operators ==>

* Just like Mathematics , Oracle also allows us to use SET OPERATORS on table data.

* SET OPERATORS combine the results from two or more SELECT statements to form a single result set.

Set Operators V/s Joins ==>

* SET OPERATORS are different from JOINS in that JOINS are used to combine columns from each joined table into one row.

* On the other hand , SET OPERATORS compare completed rows between the SELECT queries and return a distinct set of rows.

Types Of Set Operators ==>

SET OPERATOR	PURPOSE
=====	=====
UNION ALL	: Returns all rows from both SELECT queries
UNION DUPLICATES	: Returns a set of rows from both SELECT queries with NO
INTERSECT	: Returns COMMON ROWS in both SELECT queries
MINUS	: Returns DISTINCT ROWS that appear in the first input
query result but	not in the subsequent ones.

Syntax :-

- SELECT column_list_1 FROM <table 1> <SET OPERATOR> SELECT column_list_2 FROM <table 2>;

Restrictions On Set Operators ==>

* All queries that are used with SET OPERATORS must conform to the following conditions:-

- All SELECT queries must retrieve the same number of columns.

- The data types of each column must match the corresponding column (by order in the column list) for each of the SELECT queries or at least the data types of all SELECT queries must be IMPLICITLY CONVERTIBLE to the data types of the first SELECT query

- The ORDER BY clause may not be used in the individual queries and may only be used at the end of the query, where it applies to the entire result of the SET OPERATION.

- Column names are derived from the first SELECT query.

* Each SELECT query is processed separately and then the SET OPERATOR is applied.

* When using UNION and INTERSECT, the operators are commutative (in other words, the order of the queries doesn't matter).

* However, when using MINUS, the order is important because this set operation uses the first SELECT query result as the base for comparison with other results.

Consider the following three tables.

CLIENT_MASTER (Contains records of all the CLIENTS of the company)

- Client_Id
- Client_Name
- City

SALESMAN_MASTER (Contains records of all the SALESMEN of the company)

- Salesman_Id
- Salesman_Name
- City

ORDER_MASTER (Contains records of all the ORDERS received by the company)

- Order_Id
- Client_Id
- Salesman_Id
- Order_Date

WAQ to display the NAME of those CLIENTS and SALESMEN who live in BHOPAL.

- SELECT Client_Name FROM Client_Master WHERE City = 'BHOPAL'

UNION

SELECT Salesman_Name FROM Salesman_Master WHERE City = 'BHOPAL';

WAQ to display the NAME of those SALESMEN whose efforts have resulted into at least one sale transaction.

- SELECT Salesman_Name FROM Salesman_Master

INTERSECT

SELECT Salesman_Master.Salesman_Name FROM Salesman_Master, Order_Master WHERE Salesman_Master.Salesman_Id=Order_Master.Salesman_Id;

WAQ to display the ID of those SALESMEN who haven't made any sales yet.

- SELECT Salesman_Id FROM Salesman_Master

MINUS

SELECT Salesman_Id FROM Order_Master;