2918/25 Task 5 :- Writing Join Queries, Equivalent AND/OR Recursive Queries

Title :- Implementation of different types of Join & Recursive Queries.

- A SQL JOIN combines records from two tables.
- A Join locates related column values in the two tables.
- A query can contain zero, one or multiple join operation.
- Inner Join is the same as JOIN; the keyword Inner is optional.

Objective :- TO implement different types of joins and recursive queries.

Theory :- The SQL joins d clause is used to combine records from two or more tables in a database. A Join is a means for combining, Fields From two tables by using values common to each.

Syntax:

Select col 1, col 2, col 3 . . . . from tab-name 1, table_name 2, where table_name 10 col name = table-name 2 - column name:

Types of Joins

1. Simple Join
2. Self Join
3. outer Join

Simple Join :- It is the most common type of Join. It retrives the rows from 2 tables having a common column and is further classified into.

Equal Join :- A-Join, which is based on equalition is called equal- Join.

Eg:- Select from item, Cust where item id_ In the above statements, item-id = cus-id perform the join statement. It retrive rows from both the tables provided the both have the same_id as specified by the where clause.

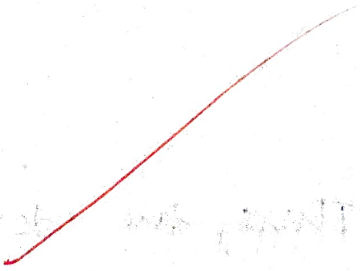
- TO insert records in target table.

output:

Cust_name	item_name
John	Laptop
Bob	Keyboard
Jane	Mouse

output

Item_name	price
Laptop	1200
Monitor	450

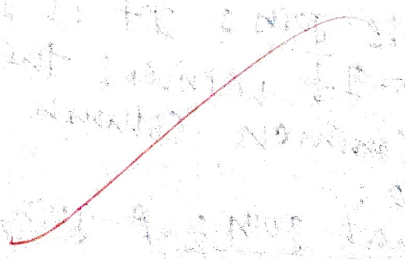


output

e_name	salary
Alice	75000
Charlie	60000
Eve	80000

output

ename	salary
Alice	75000
Charlie	60000
eve	80000



- To update records in target table
- To create view.

Non Equi-join :-
It specifies the relationship blw columns belonging to different tables by making relational operator other than "=".
Eg :- It specifies the relationship between columns belonging to different tables by making use of relational operations. other than "=".
Eg :- select * from items, cust where item_id<cust,

Table Aliases :-
Table Aliases are used to make multiple table queries shorted and more readable we give an alias name to the table in the from, clause and use it instead of the name throughout the query.

Self Join :- Joining of a table to itself is known as self-join. It joins one row in a table to another. It can compare each, row of the table to itself and also with other rows of the same table.
Eg :- select * from emp x, emp y where x.salary >= (select avg(salary) from x-emp where x.dept no = y=dept no);

Outer join :-
It extends the results of a simple join as well as those rows from the table.
The symbol (+) represents outer join.

Different types of SQL Joins :-
Here are the different types of the joins in SQL;
(INNER) Join : Returns records that have matching values in both tables.
Select column-name from table1 Inner Join

table 2 ON table . column_name = table 2 column_name;

Left (outer) Join :- Return all records from the left table and the matched records from the right table.

Select column_name(s) From table Left Join table 2 ON table 1. column_name table 2 column_name;

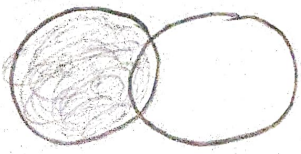
Right (outer) Join :- Return all records from the right table, and the matched records from the right table.

Select column_name(s) From table 1
Right Join table 2 on table 1. Column_name = table 2. column_name

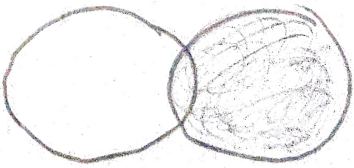
FULL (OUT(2) JOIN :- Return all records when there is a match in either left (or) right table Select column_name(s) From table 1.

FULL outer Join table 2 ON table 1. column_name = table 2. column, name;

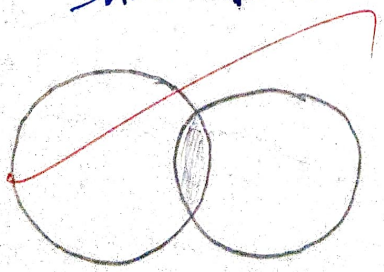
Left Join



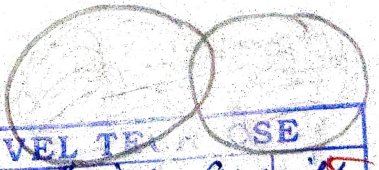
Right Join



Inner Join



FULL Outer Join



Result :- Thus, the writing Join queries equivalent recursive Queries executed successfully.