29/10/25

Task 5: Writing Join Queries, Equivalent AND / OR Recursive Queries.

Aim: To write the join queries, equivalend AND / OR the Recursive queries.

Title: Implementation of different types of join & the 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 key word INNER is optional.

Objective: To implement different types of joints and recursive queries.

Theory: The SQL joins & 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 table_name 1, table_name 2 where table_name 1.0 Col name = table_name 2 Column name:

Types of Joins

1. Simple Join
2. Self Join
3. Outer Join

Output

Cust_name	item_name
John	Laptop
Bob	key Board
Jane	Mouse

Output

Item_name	Price
Laptop	1200
Monitor	450

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.

Ex:- Select from item, cust where item id=customers;

In the above statement, item_id=cust_id perform the join statement. It reterives rows from both the tables Porovided the both have the same id an specified by the where clause.

. To insert records in target table.

. To update records on target table.

. To create view.

Non-Equi-join:-

It specifies the relationship blw column belonging to different tables by making the relational operation other than "=".

Ex:- It specifies the relationship between Columns belonging to different tables by making use of relational operators other than "=".

Select * from items, cust where item_id < cust_id;

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 query

output

ename	Salary
Alice	75000
charlie	60000
Eve	80000

output

e_name	Salary
Alice	75000
charlie	60000
Eve	80000

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.

Ex:

Select * from emp x, emp y where x salary >= (Select avg (Salary) from x.emp where x.deptno. = y.deptno;

Outer Join:

It extends the result of a simple join as well as those rows from the tables. 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 = table2.Column_name;

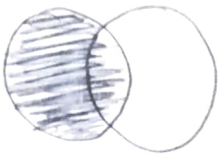
Left (outer) Join: Return all records from the left table and the matched records from right table.

Select column_name(s) FROM table left Join table 2 ON table1.column_name table2.column_name;

Right (outer) Join: Return all records from the right table and matches records from the ~~right~~ left table.

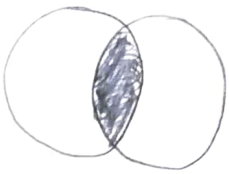
Select Column_name(s) From table1 Right Join Table2 ON Table1.Column_name = table2.Column_name();

Full (Outer) Join: Return all records when there is a match in either left (or) right Select Column_name(s) FROM table1. Full outer Join table2 ON table1.Column_name2 table2.column_name;



Left join

Right join



Inner join

Full outer join

Result:

Thus, the writing join queries, equivalent AND/OR Recursive Queries is checked is verified successfully.

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~~EXNO~~	5
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	20
SIGN WITH DATE	