21-8-25

TASK-5: Writing Join Queries, Equivalent AND/OR Queries

Title: Implementation of different types of joins and recursive queries.

Objective:-

To implement different types of joins 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. The join is actually performed by the 'where' clause which combines specified rows of tables.

Syntax:

Select column 1, column 2, column 3 from table_name 1, table_name 2. where table_name 1. column name = table_name 2. column name;

Types of Joins: Simple, Self, outer

Simple Join:

Select * from item, cust where item.id = cust.id;

Select * from item, cust where item.id < cust.id;

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

INNER Join:

Select Column_name(s) From table 1 inner join table 2 ON table 1. column_name = table 2. column_name;

create table member(memno number(3), name varchar(9));

Sql>insert into member values(1, 'lucky');
insert into member values(2, 'kala');
insert into member values(3, 'adithya');
insert into member values(4, 'anjali');

Output of select * from member;

MEMNO	NAME
1	lucky
2	kala
3	adithya
4	anjali

2. borrowed

create table borrowed(memno number(3), book_id number(4));

Data Inserted:

insert into borrowed values(2, 101);
insert into borrowed values(3, 102);
insert into borrowed values(5, 103); – Notice memno=5 not present in member

Output of select * from borrowed;

MEMNO	BOOK_ID
2	101
3	102
5	103

Join Queries Outputs

1. INNER JOIN

select borrowed.memno, member.name
from member inner join borrowed
on member.memno = borrowed.memno;

Output:

MEMNO	NAME
2	kala
3	adithya

2. RIGHT JOIN

select borrowed.memno, member.name
from member right join borrowed
on member.memno = borrowed.memno;

Output:

MEMNO NAME
---- -------
2 kala
3 adithya
5 (null)

3. LEFT JOIN

```
select borrowed.memno, member.name
from member left join borrowed
on member.memno = borrowed.memno;
```

Output:

MEMNO NAME
---- -------
2 kala
3 adithya
(null) anjali
(null) lucky

4. FULL JOIN

```
select borrowed.memno, member.name
from member full join borrowed
on member.memno = borrowed.memno;
```

Output:

MEMNO NAME
---- -------
(null) lucky
2 kala
3 adithya
(null) anjali
5 (null)

Result: The above writing join queries has been executed Successfully.

VEL TECH	
EX NO.	6
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	20

Left (outer) Join:

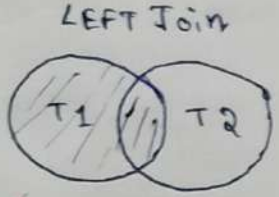
Select column_name(s) From table Left Join table2 on table1.column_name = table2.column_name;

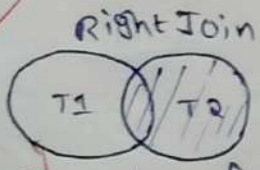
Right (outer) Join:

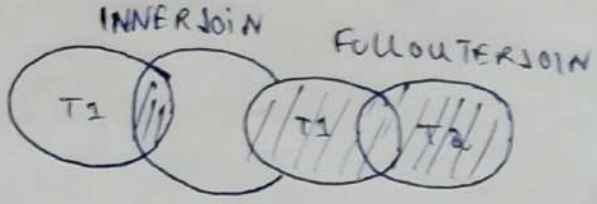
Select column_name(s) From table1 Right Join table2 on table1.column_name = table2.column_name;

Full (outer) Join:

Full outer Join table2 ON table1.column_name = table2.column_name;







Consider the following two tables - member & borrowed.

INNER Join Query:

Select borrowed.membno, member.NAME from member inner Join borrowed ON borrowed.membno = member.membno;

Left Join Query:

Select member.name, borrowed.membno from member Left Join borrowed on borrowed.membno = member.membno;

SQL Right Join keyword:

Select member.NAME, borrowed.membno from member Right Join borrowed on borrowed.membno = member.membno;

SQL full outer Join keyword:

Select member.Name, borrowed.membno from member Full Join borrowed on borrowed.membno;

Result: the program Query has been executed Successfully