

Theory & Concept

Assignment #5

Objective:- to implement the concept of Joins

Joint Multiple Table (Equi Join): Some times we require to treat more than one table as though manipulate data from all the tables as though the tables were not separate object but one single entity. To achieve this we have to join tables. Tables are joined on column that have same data type and data with in tables.

The tables that have to be joined are specified in the FROM clause and the joining attributes in the WHERE clause.

Algorithm for JOIN in SQL:

1. Cartesian product of tables (specified in the FROM clause)
2. Selection of rows that match (predicate in the WHERE clause)
3. Project column specified in the SELECT clause.

1. Cartesian product:-

Consider two table student and course

```
Select B.*,P.*  
FROM student B, course P;
```

2. INNER JOIN:

Cartesian product followed by selection

```
Select B.*,P.*  
FROM student B, Course P  
WHERE B.course # P.course # ;
```

3. LEFT OUTER JOIN:

LEFT OUTER JOIN = Cartesian product + selection but include rows from the left table which are unmatched with nulls in the values of attributes belonging to the second table

Exam:

```
Select B.*,P.*  
FROM student B left join course p  
ON B.course # P.course #;
```

4. RIGHT OUTER JOIN:

RIGHT OUTER JOIN = Cartesian product + selection but include rows from right table which are unmatched

Exam:

```
Select B.*,P.*  
From student B RIGHT JOIN course P
```

B.course# = P course # ;

5. FULL OUTER JOIN

Exam

Select B.*,P.*

From student B FULL JOIN course P

On B.course # = P course # ;

ASSIGNMENT NO. 5

OBJECTIVE: Answer the following Questionries:

Questionstion.

1. Find out the product which has been sold to 'Ivan Sayross.'
2. Find out the product and their quantities that will have do delivered.
3. Find the product_no and description of moving products.
4. Find out the names of clients who have purchased 'CD DRIVE'
5. List the product_no and s_order_no of customers haaving qty ordered less than 5 from the order details table for the product "1.44 floppies".
6. Find the products and their quantities for the orders placed by 'Vandan Saitwal ' and "Ivan Bayross".
7. Find the products and their quantities for the orders placed by client_no " C00001" and "C00002"
8. Find the order No,, Client No and salesman No. where a client has been received by more than one salesman.
9. Display the s_order_date in the format "dd-mm-yy" e.g. "12- feb-96"
10. Find the date , 15 days after date.