

Assignment - IV

Title :-

Design at least 10 SQL queries for suitable database application using SQL DML statements, All types of join, subquery & view.

Problem Statement :-

Design at least 10 SQL queries for suitable database application using DML statements, All types of join, subquery & view.

Objective :-

- To understand
- Types of joiners
 - subquery & its types
 - complex view

S/W & H/W requirements :-

MySQL, 64 bit Fedora OS.

Concept related theory :-

JOIN : SQL join is used to refer data from two or more tables which is joined to appear as single set of data. SQL join is used for combining columns from two or more tables.

minimum required condition for joining table is $(n-1)$ where n is no. of tables

Types of Join :

Cross Join : this type of join returns the cartesian product of rows from tables. In join it will return a table which consist of records which combines each row from the first table with each row of second table.

```
select column_name_list
from table_name-1
```

cross join.

tablename2

Inner Join : This is simple join in which the result is based on matched data as per the equality condition specified in the query.

```
select column_name_list
from table_name 1
```

```
inner join
table_name 2
```

```
where table_name 1.column_name =
table_name 2.column_name;
```


Natural join :-

A natural join is a type of inner join which is based on column having same name & same datatype present in both the tables to be joined.

```
select * from  
table-name1  
natural join  
tablename2.
```

Outer join :-

Outer join is based on both matched & unmatched data. Outer join subdivide further into

- left outer join
- right outer join
- Full outer join

left outer join :-

The left outer join returns a result table with the matched data of two tables then remaining rows of the left table & null for the right table column.

```
select column-name-list  
from tablename1  
left outer join  
table name2 on
```


value name 1 . column name =
~~tablename 1~~ . tablename 2 . column name ;

Right Outer join :-

The right outer join returns a result table with matched data of two tables the remaining rows of the right table & null the left table columns

```
select column_name-list  
from tablename1  
right outer join  
tablename2 on  
tablename1 . column name =  
tablename2 . column name ;
```

Full Outer join :-

returns a result table with matched data of two table then remaining rows of left table & right table

Conclusion :-

We successfully designed SQL queries for suitable database applications using SQL DML statements.