Assignment No A3

Title: SQL Queries – all types of Join, Sub-Query and View:
Write at least10 SQL queries for suitable database application using SQL DML statements.

Objective: Understand the concept of Join, Sub-Query and View.

Software Required: MYSQL Workbench

Theory:

Join:-

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. Consider the following two tables

Types of join:-

- INNER JOIN

- OUTER JOIN

  - Left outer join

  - Right outer join

  - full outer join

INNER JOIN:- This is a simple JOIN in which the result is based on matched data as per the equality condition specified in the query.

Inner Join Syntax is:-

SELECT column-name-list from
table-name1
INNER JOIN
table-name2
WHERE table-name1.column-name = table-name2.column-name;

OUTER JOIN:- Outer Join is based on both matched and unmatched data.

Outer Joins 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 and null for the right table's column.

Left Outer Join syntax is,

SELECT column-name-list from table-name1

LEFT OUTER JOIN

table-name2

on table-name1.column-name = table-name2.column-name;

Right Outer Join:-

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

Right Outer Join Syntax is,

select column-name-list

from table-name1

RIGHT OUTER JOIN

table-name2

on table-name1.column-name = table-name2.column-name;

Full Outer Join:-

The full outer join returns a result table with the matched data of two table then remaining rows of both left table and then the right table.

Full Outer Join Syntax is,

select column-name-list

from table-name1

FULL OUTER JOIN

table-name2

on table-name1.column-name = table-name2.column-name;

Conclusion: Here we understood the concept of SQL join operation and its types. Learned how to design sub queries using join.