Experiment 11

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AIM

* Implementation of set operators, nested queries and Join queries

THEORY

UNION is used to combine the results of two or more `SELECT` statements. However it will eliminate duplicate rows from its resultset. In case of union, number of columns and datatype must be the same in both the tables, on which UNION operation is being applied.

UNION ALL operation is similar to Union. But it also shows the duplicate rows.

INTERSECT operation is used to combine two `SELECT` statements, but it only returns the records which are common from both `SELECT` statements. In case of **Intersect** the number of columns and datatype must be the same.

The **MINUS** operation combines results of two `SELECT` statements and returns only those in the final result, which belongs to the first set of the result.

A **JOIN** clause is used to combine rows from two or more tables, based on a related column between them.

Here are the different types of the JOINs in SQL:

- **(INNER) JOIN**: Returns records that have matching values in both tables

- **LEFT (OUTER) JOIN**: Returns all records from the left table, and the matched records from the right table
- **RIGHT (OUTER) JOIN**: Returns all records from the right table, and the matched records from the left table
- **FULL (OUTER) JOIN**: Returns all records when there is a match in either left or right table

A **Subquery** or Inner query or a Nested query is a query within another SQL query and embedded within the WHERE clause.

Execution steps:

1. Execute the batch script for the 11th Experiment (Exp11) using either of the following commands after using the database.
    a. `mysql> source Exp11.txt`
    b. `mysql> \. Exp11.txt`