### **Lab 11- Order By Clause in Select Statement PostgreSQL**

Here's a lab exercise demonstrating the usage of the ORDER BY clause with various options in a SELECT statement in PostgreSQL:

Suppose you have a table named students with the following columns: student\_id, student\_name, age, and grade.

**Insert sample data:**

INSERT INTO students (student\_id, student\_name, age, grade)

VALUES (1, 'John Doe', 20, 'A'),

(2, 'Jane Smith', 22, 'B'),

(3, 'Michael Johnson', 21, 'C'),

(4, 'Emily Williams', 20, 'A');

Perform a SELECT query using the ORDER BY clause with different options:

**-- Ascending order (default)**

SELECT \* FROM students ORDER BY student\_name;

**-- Descending order**

SELECT \* FROM students ORDER BY age DESC;

**-- Order by multiple columns**

SELECT \* FROM students ORDER BY grade, age DESC;

**-- NULLS FIRST**

SELECT \* FROM students ORDER BY student\_id NULLS FIRST;

**-- NULLS LAST**

SELECT \* FROM students ORDER BY age NULLS LAST;

These queries demonstrate the usage of the ORDER BY clause with various options, including sorting by a single column, multiple columns, and handling NULL values.

Execute these queries in your PostgreSQL database to familiarize yourself with the ORDER BY clause and its different sorting options, enabling you to sort result sets based on specific columns in ascending or descending order and handle NULL values according to your requirements.