### **Lab 12- Simple Statement to SQL Query PostgreSQL**

Here's a lab exercise for generating SQL queries in PostgreSQL based on English statements:

**Create a table:**

CREATE TABLE students (

student\_id SERIAL PRIMARY KEY,

student\_name VARCHAR(50),

age INT,

grade CHAR(1)

);

**Insert sample data:**

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

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

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

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

English statements and their SQL equivalents:

a. English: "Retrieve all columns from the students table."

SELECT \* FROM students;

b. English: "Retrieve the names of all students."

SELECT student\_name FROM students;

c. English: "Retrieve students aged 20 or younger."

SELECT \* FROM students WHERE age <= 20;

d. English: "Retrieve students with a grade of 'A'."

SELECT \* FROM students WHERE grade = 'A';

e. English: "Retrieve students ordered by age in descending order."

SELECT \* FROM students ORDER BY age DESC;

These examples demonstrate the translation of common English statements into SQL queries in PostgreSQL. Execute these queries in your PostgreSQL database to familiarize yourself with the process of generating SQL queries based on English instructions.