### **Lab 2- Create Database and Create Table in PostgreSQL**

Below is a lab exercise that covers creating a database and a table in PostgreSQL:

**Creating a Database:**

* Open the PostgreSQL command-line interface or a client such as pgAdmin. Execute the following command to create a new database:

CREATE DATABASE lab\_database;

* This command will create a database named lab\_database.

**Connecting to the Database:**

* Connect to the newly created database using the following command:

\c lab\_database;

**Creating a Table:**

* Create a sample table named students within the lab\_database with the following columns:

CREATE TABLE students (

id SERIAL PRIMARY KEY,

name VARCHAR(100) NOT NULL,

age INTEGER,

grade VARCHAR(2)

);

**Inserting Data:**

Insert some sample data into the students table:

INSERT INTO students (name, age, grade) VALUES ('John Doe', 20, 'A');

INSERT INTO students (name, age, grade) VALUES ('Jane Smith', 22, 'B');

**Viewing Data:**

* Retrieve and view the data from the students table:

SELECT \* FROM students;

This lab exercise demonstrates the process of creating a new database, connecting to it, creating a table within the database, inserting data into the table, and viewing the inserted data. You can execute these commands in the PostgreSQL command-line interface or any PostgreSQL client tool.