**Lab 04. Spatial Relationship**

**Due date:** Thursday, Feb 20 submitted as Word document to Canvas ***Lab03*** link. This lab counts 9 % toward your total grade.

**Objectives:**

1. Understand and apply logical operators to filter datasets.

2. Utilize Data Query Language (DQL) to retrieve and summarize data.

3. Perform Data Manipulation Language (DML) operations to update and modify records.

4. Use Data Definition Language (DDL) to alter table structures.

5. Implement subqueries to perform complex queries.

**Format of answer:** Submit your answers as a **Word document or pdf** with graphs (screenshot of your result table) and answer in SQL.

**Notice:** All SQL commands are in blue color

1. Set up the environment.

Ensure you are connected to your PostgreSQL database using python.

On your own:

Task: Explore how spatial patterns vary between different types of streets (residential vs. primary).

Task 1. **Multi-Criteria Spatial Analysis**

Identify streets that:

1. **Intersect** with at least one subway station.
2. Are **within** 1 km of subway station.
3. Are classified as **primary** or **secondary** streets.