

Practical 2 – Spatial Queries I

E-Learning

With the same data as we have it available in the database (userdemo schema):
<https://postgis.net/workshops/postgis-intro/index.html> see Chapters 6-12

Exercise 1

Based on the New York City sample data (in the userdemo schema), design (spatial) SQL queries to solve the following tasks. More details regarding the New York City sample data, please refer to https://postgis.net/workshops/postgis-intro/about_data.html

- a) How many census blocks does each borough contain?
- b) Which borough has the biggest population? Borough with the biggest Asian population?
- c) What is the total area of each borough?
- d) Which borough has the biggest population density? (population density = total_population / total_area)
- e) Which neighbourhood has the smallest area?
- f) What is the WKT text representation of the boundary of the “West Village” neighbourhood? SVG text? JSON text?
- g) What is the total length of primary streets in New York City?
- h) How many subway stations does the “West Village” neighbourhood contain?
- i) What is the total length of streets in the “West Village” neighbourhood?