

ADB HW1

- A. (25%) Write down the answer and show how you solve the question with SQL statements. Several SQL statements are allowed. **Please make sure you load the data as same as lab 1.**
- a. The subways routes are categorized by different colors. We want to know **how many victims within 200 meters of each color routes**. (Hint: One station may be passed through by many color routes, you need to take them separately.)
 - b. What are the **top 3 population density** (people / km²) of neighborhoods? Please Provide the name of neighborhoods and population density.
 - c. Please accelerate the speed of SQL execution time of question b. Write down what you did, and show **the original time and the time after speeding up**. (Hint: EXPLAIN ANALYZE QUERY can show the query execution time)
- B. (75%) You need to find **at least two kinds of spatial data** online and use them to **find interesting results** (at least two) by using spatial SQL. E.g. Show the subway routes with most unbalanced racial ratio. Explain what you did and show your results on google map (using .kml format).