

## 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 / km<sup>2</sup>) 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).**