SQL Zuber Database

Requirements:
- Find the number of taxi rides for each taxi company for November 15-16, 2017. Name the resulting field trips_amount and print it along with the company_name field. Sort the results by the trips_amount field in descending order.
- Find the number of rides for every taxi company whose name contains the words "Yellow" or "Blue" for November 1-7, 2017. Name the resulting variable trips_amount. Group the results by the company_name field.
- In November 2017, the most popular taxi companies were Flash Cab and Taxi Affiliation Services. Find the number of rides for these two companies and name the resulting variable trips_amount. Join the rides for all other companies in the group "Other." Group the data by taxi company names. Name the field with taxi company names 'company'. Sort the result in descending order by trips_amount.
- Retrieve the identifiers of the O'Hare and Loop neighborhoods from the neighborhoods table.
- For each hour, retrieve the weather condition records from the weather_records table. Using the CASE operator, break all hours into two groups: "Bad" if the description field contains the words "rain" or "storm," and "Good" for others. Name the resulting field weather_conditions. The final table must include two fields: date and hour (*ts*) and weather_conditions.
- Retrieve from the trips table all the rides that started in the Loop (neighborhood_id: 50) and ended at O'Hare (neighborhood_id: 63) on a Saturday. Get the weather conditions for each ride. Use the method you applied in the previous task. Also retrieve the duration of each ride. Ignore rides for which data on weather conditions is not available.

Data Source:
- Zuber Database

Tools Used:
- SQL

Steps:
Query 1:
- Printed the company_name field. Found the number of taxi rides for each taxi company for November 15-16, 2017, named the resulting field trips_amount and printed it, too. Sorted the results by the trips_amount field in descending order.

Query 2:

- Found the number of rides for every taxi companies whose name contains the words "Yellow" or "Blue" for November 1-7, 2017. Named the resulting variable trips_amount. Grouped the results by the company_name field.

Query 3:
- For November 1-7, 2017, the most popular taxi companies were Flash Cab and Taxi Affiliation Services. Found the number of rides for these two companies and named the resulting variable trips_amount. Joined the rides for all other companies in the group "Other." Grouped the data by taxi company names. Named the field with taxi company names company. Sorted the result in descending order by trips_amount.

Query 4:
- Retrieved the identifiers of the O'Hare and Loop neighborhoods from the neighborhoods table.

Query 5:
- For each hour, retrieved the weather condition records from the weather_records table. Using the CASE operator, broke all hours into two groups: Bad if the description field contained the words rain or storm, and Good for others. Named the resulting field weather_conditions. The final table must include two fields: date and hour (ts) and weather_conditions.

Query 6:
- Retrieved from the trips table all the rides that started in the Loop (pickup_location_id: 50) on a Saturday and ended at O'Hare (dropoff_location_id: 63). Got the weather conditions for each ride. Used the method I applied in the previous task. Also, retrieved the duration of each ride. Ignored rides for which data on weather conditions is not available. Sorted by trip_id

Results and conclusions:
- On November 15-16, 2017, the 3 taxi companies with the highest number of trips were Flash Cab (19,558 rides), Taxi Affiliation Services (11,422 rides), and Medallion Leasin (10,367 rides).
- For taxi companies with names containing "Blue" of "Yellow" between November 1-7, 2017, the number of rides per company were as follows: Yellow Cab (33,668 rides), Taxi Affiliation Service Yellow (29,213 rides), Blue Ribbon Taxi Association (17,675 rides), and Blue Diamond (6,764 rides).

- For November 1-7, 2017, Flash Cab and Taxi Affiliation Services (the 2 most popular taxi companies) had trip counts of 64,084 (Flash Cab) and 37,583 (Taxi Affiliation Services).
- In the *neighborhoods* table, the Loop neighborhood's ID is '50' and the O'Hare neighborhood's ID is '63'.
- Between November 1-9, 2017, weather was typically 'Good'. Rainy weather did pop up periodically on Nov. 2, Nov. 4, Nov. 5, and Nov. 7.
- For trips that started in the Loop and ended in O'Hare, rides performed during bad weather were typically slightly longer than rides performed during good weather.