Sprint 2 Project Tasks and Code (SQL)

Zuber Database

A screenshot of a computer

Description automatically generated

Task 1:

Print the *company\_name* field. Find the number of taxi rides for each taxi company for November 15-16, 2017, name the resulting field t*rips\_amount* and print it, too. Sort the results by the *trips\_amount* field in descending order.

Code:

* SELECT
* cabs.company\_name AS company\_name,
* COUNT(trips.trip\_id) AS trips\_amount
* FROM
* trips
* INNER JOIN cabs ON cabs.cab\_id = trips.cab\_id
* WHERE
* CAST(trips.start\_ts AS date) BETWEEN '2017-11-15' AND '2017-11-16'
* GROUP BY
* cabs.company\_name
* ORDER BY
* trips\_amount DESC;

Task 2:

Find the number of rides for every taxi companies 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.

Code:

* SELECT
  + company\_name,
  + COUNT(trips.trip\_id) AS trips\_amount
* FROM
  + Cabs
  + INNER JOIN trips ON trips.cab\_id = cabs.cab\_id
* WHERE
  + (CAST(trips.start\_ts AS date) BETWEEN '2017-11-01' AND '2017-11-07')
  + AND (cabs.company\_name LIKE '%Yellow%' OR cabs.company\_name LIKE '%Blue%')
* GROUP BY
* cabs.company\_name;

Task 3:

For November 1-7, 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*.

Code:

* SELECT
* CASE
* WHEN company\_name = 'Flash Cab' THEN 'Flash Cab'
* WHEN company\_name = 'Taxi Affiliation Services' THEN 'Taxi Affiliation Services'
* ELSE 'Other'
* END AS company,
* COUNT(trips.trip\_id) AS trips\_amount
* FROM
* cabs
* INNER JOIN trips ON trips.cab\_id = cabs.cab\_id
* WHERE
* CAST(trips.start\_ts AS date) BETWEEN '2017-11-01' AND '2017-11-07'
* GROUP BY
* company
* ORDER BY
* trips\_amount DESC;

Task 4:

Retrieve the identifiers of the O'Hare and Loop neighborhoods from the *neighborhoods* table.

Code:

* SELECT
* neighborhood\_id,
* name
* FROM
* neighborhoods
* WHERE
* name LIKE '%Hare%' OR name LIKE 'Loop';

Task 5:

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*.

Code:

* SELECT
* ts,
* CASE
* WHEN description LIKE '%rain%' OR description LIKE '%storm%' THEN 'Bad'
* ELSE 'Good'
* END AS weather\_conditions
* FROM
* weather\_records;

Task 6:

Retrieve 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). 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.

The table columns should be in the following order:

* *start\_ts*
* *weather\_conditions*
* *duration\_seconds*

Sort by *trip\_id.*

Code:

* SELECT
* trips.start\_ts AS start\_ts,
* CASE
* WHEN description LIKE '%rain%' OR description LIKE '%storm%' THEN 'Bad'
* ELSE 'Good'
* END AS weather\_conditions,
* trips.duration\_seconds
* FROM
* trips
* INNER JOIN weather\_records ON weather\_records.ts = trips.start\_ts
* WHERE
* trips.pickup\_location\_id = 50
* AND trips.dropoff\_location\_id = 63
* AND EXTRACT(isodow from trips.start\_ts) = 6
* AND trips.trip\_id IS NOT NULL
* ORDER BY
* trips.trip\_id;