

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 *trips\_amount*, and print it, too. Sort the results by the *trips\_amount* field in descending order.

```
SELECT
    cabs.company_name AS company_name,
    COUNT(trips.cab_id) AS trips_amount
FROM cabs
INNER JOIN trips ON trips.cab_id = cabs.cab_id
WHERE
    trips.start_ts::date BETWEEN '2017-11-15' AND '2017-11-16'

GROUP BY
    company_name
ORDER BY
    trips_amount DESC;
```

2. 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.

```
SELECT
    cabs.company_name AS company_name,
    COUNT(trips.cab_id) AS trips_amount
FROM cabs
INNER JOIN trips ON trips.cab_id = cabs.cab_id
WHERE
    trips.start_ts::date BETWEEN '2017-11-01' AND '2017-11-07'
    AND
    cabs.company_name LIKE '%Yellow%'
GROUP BY
    company_name

UNION

SELECT
    cabs.company_name AS company_name,
    COUNT(trips.cab_id) AS trips_amount
FROM cabs
INNER JOIN trips ON trips.cab_id = cabs.cab_id
WHERE
    trips.start_ts::date BETWEEN '2017-11-01' AND '2017-11-07'
    AND
    cabs.company_name LIKE '%Blue%'
```

GROUP BY  
company\_name

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.

```
SELECT
CASE
    WHEN cabs.company_name = 'Flash Cab' THEN 'Flash Cab'
    WHEN cabs.company_name = 'Taxi Affiliation Services' THEN 'Taxi Affiliation
Services'
    ELSE 'Other'
END AS company,

COUNT(trips.start_ts) AS trips_amount
FROM cabs
INNER JOIN trips ON trips.cab_id = cabs.cab_id

WHERE
    trips.start_ts::date BETWEEN '2017-11-01' AND '2017-11-07'
GROUP BY
    company
ORDER BY
    trips_amount DESC;
```

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

```
SELECT *
FROM
    neighborhoods

WHERE
    name LIKE '%Hare' OR name LIKE 'Loop';
```

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.

```
SELECT
    ts,
    CASE
        WHEN weather_records.description LIKE '%rain%'
        OR weather_records.description LIKE '%storm%' THEN 'Bad'
        ELSE 'Good'
    END AS weather_conditions
FROM
    weather_records;
```

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.
```

```
SELECT
    start_ts::timestamp AS start_t,
    CASE
        WHEN weather_records.description LIKE '%rain%' OR
        weather_records.description LIKE '%storm%' THEN 'Bad'
        ELSE 'Good'
    END AS weather_conditions,
    duration_seconds
```

```
FROM trips
```

```
    INNER JOIN weather_records ON weather_records.ts::timestamp =
trips.start_ts::timestamp
```

```
INNER JOIN neighborhoods ON neighborhoods.neighborhood_id =  
trips.pickup_location_id
```

```
WHERE
```

```
(trips.pickup_location_id = 50 AND trips.dropoff_location_id = 63 ) AND  
EXTRACT (isodow from trips.start_ts::timestamp) = 6
```

```
GROUP BY
```

```
start_ts,  
weather_conditions,  
duration_seconds,  
trip_id
```

```
ORDER BY
```

```
trip_id;
```