

Goal 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,
    COUNT(trips.trip_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
    cabs.company_name
ORDER BY
    trips_amount DESC;
```

Result	
company_name	trips_amount
Flash Cab	19558
Taxi Affiliation Services	11422
Medallion Leasin	10367
Yellow Cab	9888
Taxi Affiliation Service Yellow	9299
Chicago Carriage Cab Corp	9181
City Service	8448
Sun Taxi	7701

Goal 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.

```

SELECT cabs.company_name,
COUNT(trips.trip_id) AS trips_amount
FROM trips
Join
    cabs 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;
```

Result

company_name	trips_amount
Blue Diamond	6764
Blue Ribbon Taxi Association Inc.	17675
Taxi Affiliation Service Yellow	29213
Yellow Cab	33668

Goal 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.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;
```

Result	
company	trips_amount
Other	335771
Flash Cab	64084
Taxi Affiliation Services	37583

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

```
SELECT
    neighborhood_id,
    name
FROM neighborhoods
WHERE
```

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

Result

neighborhood_id	name
50	Loop
63	O'Hare

Goal 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 description LIKE
    '%rain%' OR description LIKE
    '%storm%' THEN 'Bad'
    ELSE 'Good'
    END AS weather_conditions
FROM
weather_records;
```

Result

ts	weather_conditions
2017-11-01 00:00:00	Good
2017-11-01 01:00:00	Good
2017-11-01 02:00:00	Good
2017-11-01 03:00:00	Good
2017-11-01 04:00:00	Good
2017-11-01 05:00:00	Good
2017-11-01 06:00:00	Good
2017-11-01 07:00:00	Good

Goal 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
  trips.start_ts,
  CASE
    WHEN weather_records.description LIKE '%rain%'
      OR weather_records.description LIKE '%storm%' THEN 'Bad'
    ELSE 'Good'
  END AS weather_conditions,
  trips.duration_seconds
FROM trips
JOIN weather_records
  ON trips.start_ts = weather_records.ts
WHERE
  trips.pickup_location_id = 50
  AND trips.dropoff_location_id = 63
  AND EXTRACT(DOW FROM trips.start_ts) = 6
ORDER BY trips.trip_id;
```

Result

start_ts	weaher_conditions	duration_seconds
2017-11-25 12:00:00	Good	1380
2017-11-25 16:00:00	Good	2410
2017-11-25 14:00:00	Good	1920
2017-11-25 12:00:00	Good	1543
2017-11-04 10:00:00	Good	2512
2017-11-11 07:00:00	Good	1440
2017-11-11 04:00:00	Good	1320
2017-11-04 16:00:00	Bad	2969