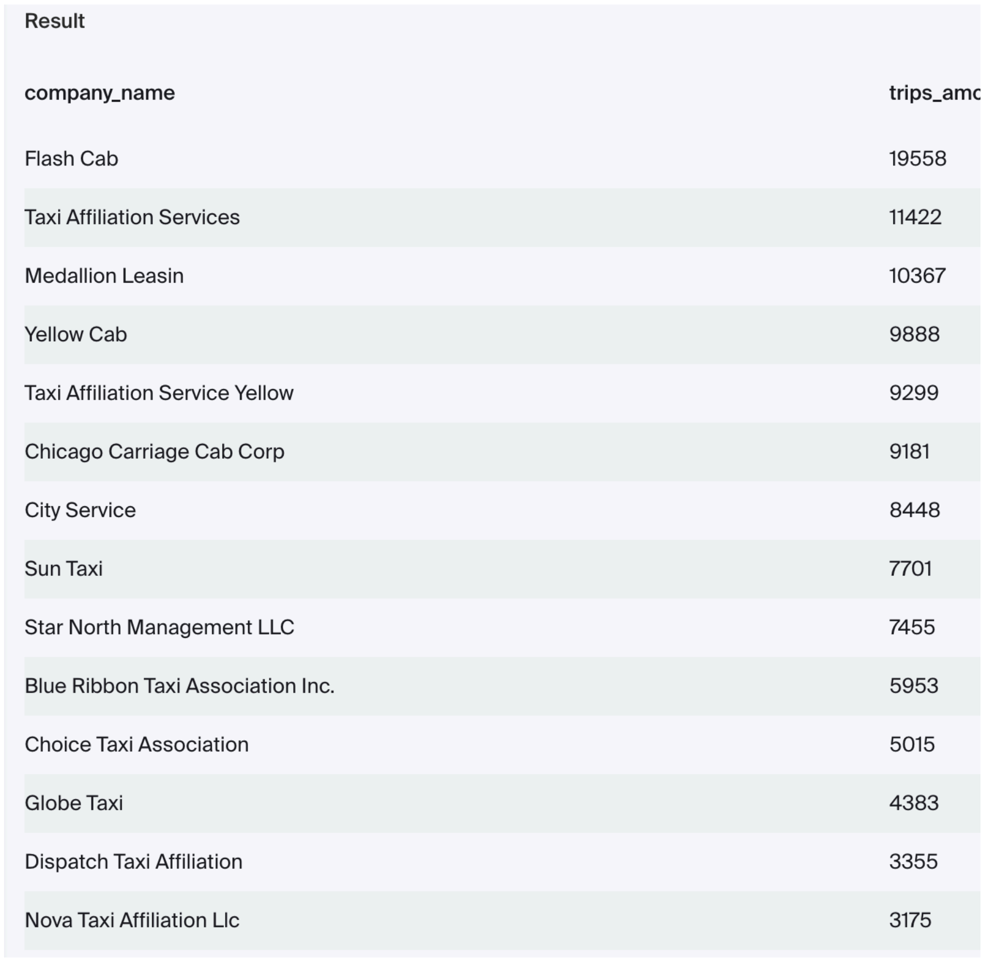
1.

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
c.company_name,
COUNT(*) AS trips_amount
FROM
trips t
   JOIN cabs c ON t.cab_id = c.cab_id
WHERE
date(t.start_ts) BETWEEN '2017-11-15' AND '2017-11-16'
GROUP BY
c.company_name
ORDER BY
trips_amount DESC;
```

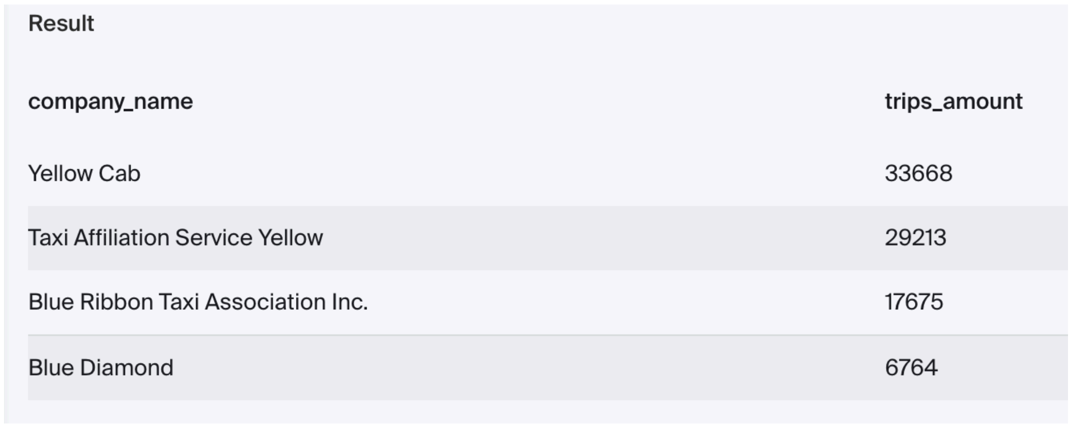


Result

company_name	trips_amc
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
Star North Management LLC	7455
Blue Ribbon Taxi Association Inc.	5953
Choice Taxi Association	5015
Globe Taxi	4383
Dispatch Taxi Affiliation	3355
Nova Taxi Affiliation Llc	3175

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
c.company_name,
COUNT(*) AS trips_amount
FROM
trips t
JOIN
cabs c ON t.cab_id = c.cab_id
WHERE
(c.company_name LIKE '%Yellow%' OR c.company_name LIKE '%Blue%')
AND
DATE(t.start_ts) BETWEEN '2017-11-01' AND '2017-11-07'
GROUP BY
c.company_name
ORDER BY
trips_amount DESC;
```


Result

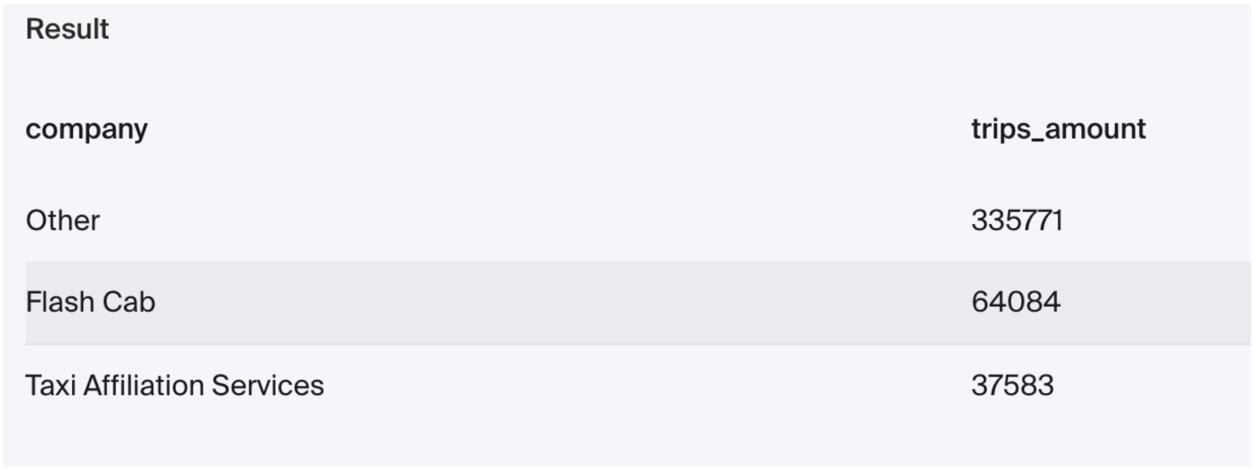
company_name	trips_amount
Yellow Cab	33668
Taxi Affiliation Service Yellow	29213
Blue Ribbon Taxi Association Inc.	17675
Blue Diamond	6764

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*.

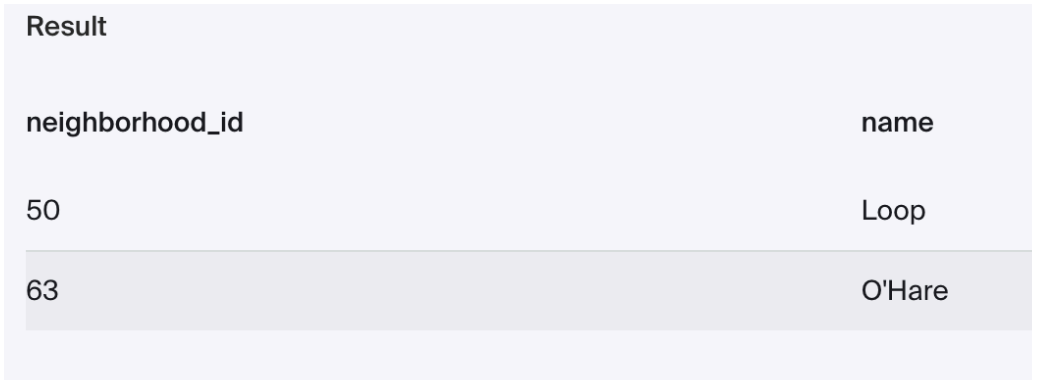
```
SELECT
 CASE
   WHEN company_name = 'Flash Cab' THEN 'Flash Cab'
   WHEN company_name = 'Taxi Affiliation Services' THEN 'Taxi Affiliation
Services'
ELSE 'Other'
END AS company,
COUNT(trips.trip_id) AS trips_amount
FROM cabs
INNER JOIN trips ON trips.cab_id = cabs.cab_id
WHERE CAST(trips.start_ts AS date) BETWEEN '2017-11-01' AND
'2017-11-07'
GROUP BY company
ORDER BY trips_amount DESC;
```


Result

company	trips_amount
Other	335771
Flash Cab	64084
Taxi Affiliation Services	37583

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'
```

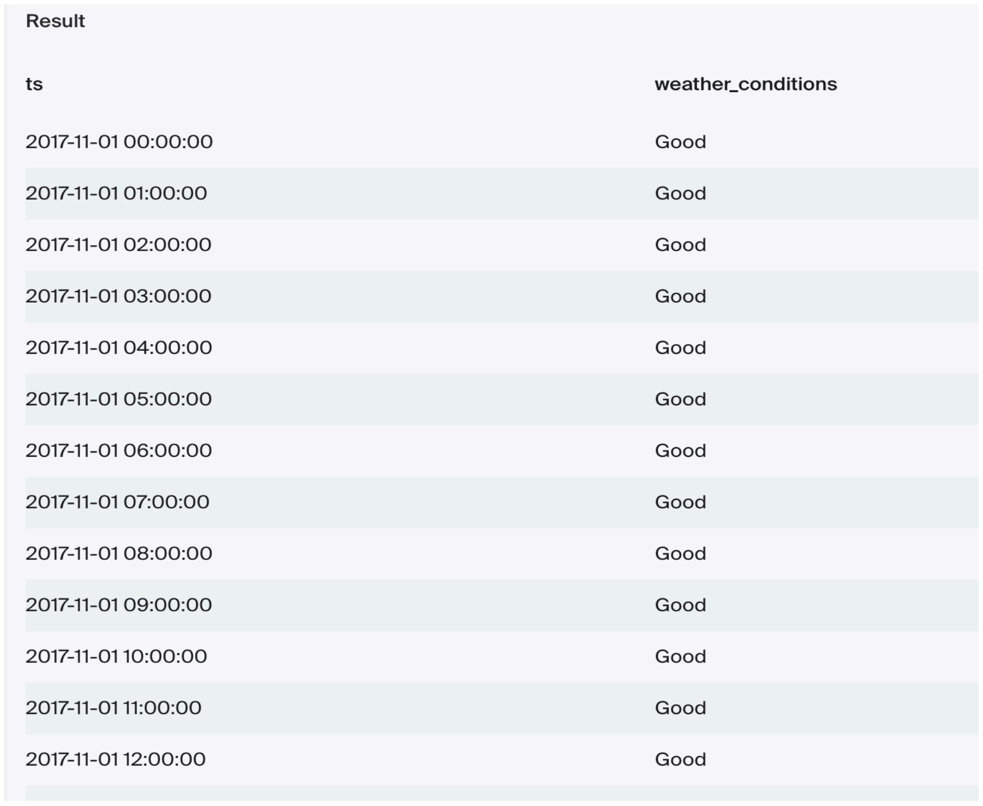

Result

neighborhood_id	name
50	Loop
63	O'Hare

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
DATE_TRUNC('hour', ts) AS ts,
CASE
   WHEN description ILIKE '%rain%' OR description ILIKE '%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
2017-11-01 08:00:00	Good
2017-11-01 09:00:00	Good
2017-11-01 10:00:00	Good
2017-11-01 11:00:00	Good
2017-11-01 12:00:00	Good

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.

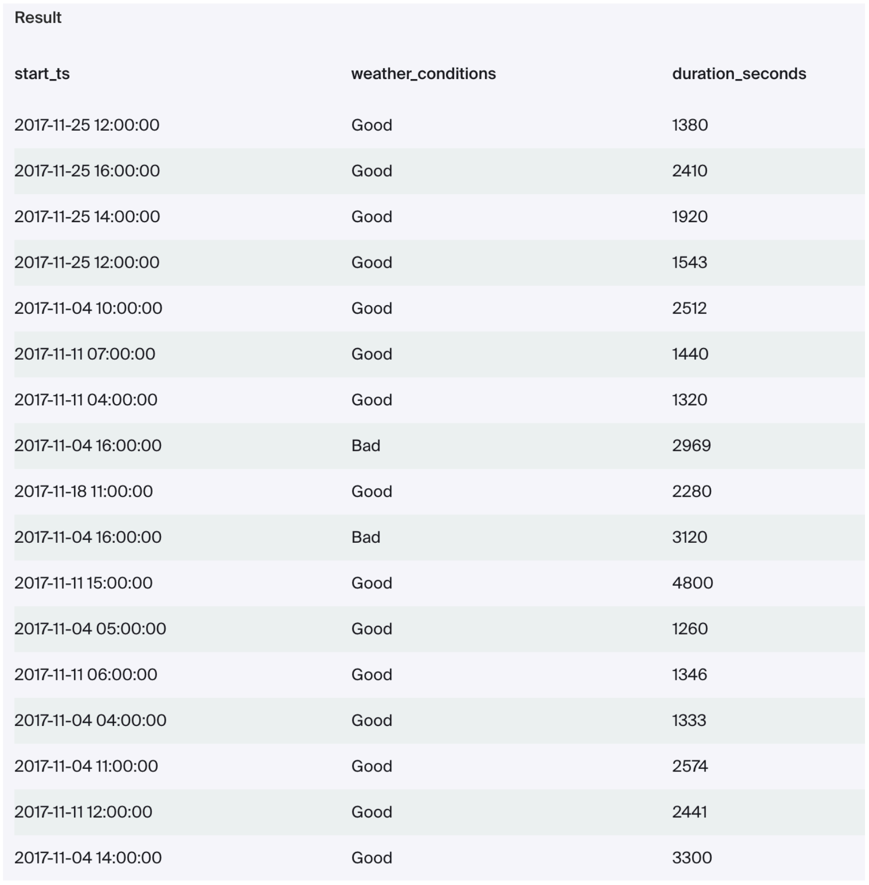
The table columns should be in the following order:

start_ts
weather_conditions
duration_seconds

Sort by *trip_id.*

```
        SELECT
    start_ts,
    T.weather_conditions,
    duration_seconds
```

```
FROM
    trips
INNER JOIN (
    SELECT
        ts,
        CASE
            WHEN description LIKE '%rain%' OR description LIKE '%storm%'
THEN 'Bad'
            ELSE 'Good'
        END AS weather_conditions
    FROM
        weather_records
) T ON T.ts = trips.start_ts
WHERE
    pickup_location_id = 50 AND dropoff_location_id = 63 AND EXTRACT
(DOW from trips.start_ts) = 6
ORDER BY trip_id
```



Result

start_ts	weather_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
2017-11-18 11:00:00	Good	2280
2017-11-04 16:00:00	Bad	3120
2017-11-11 15:00:00	Good	4800
2017-11-04 05:00:00	Good	1260
2017-11-11 06:00:00	Good	1346
2017-11-04 04:00:00	Good	1333
2017-11-04 11:00:00	Good	2574
2017-11-11 12:00:00	Good	2441
2017-11-04 14:00:00	Good	3300