Project 5

Step I: Parsing HTML

Write a code to parse the data on weather in Chicago in November 2017 from the website:

[https://code.s3.yandex.net/data-analyst-eng/chicago weather 2017.html)

The name of the DataFrame should be weather_records, and it should be specified when you search: attrs={"id": "weather_records"} . Print the DataFrame in its entirety.

ANSWER:

```
import requests
from bs4 import BeautifulSoup
import pandas as pd
URL_chicago = 'https://code.s3.yandex.net/data-analyst-eng/chicago_weather_2017.html'
req = requests.get(URL_chicago)
soup=BeautifulSoup(req.text, 'lxml')
##HEADERS
table = soup.find("table",attrs={"id": "weather_records"})
heading_table = []
for row in table.find_all('th'):
    heading_table.append(row.text)
#print(heading table)
##BODY
content=[]
for row in table.find_all('tr'):
    if not row.find_all('th'):
      content.append([element.text for element in row.find_all('td')])
#print(content)
```

weather_records = pd.DataFrame(content, columns=heading_table)
print(weather_records)

Step II: Working with Databases

Task I:

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.

ANSWER:

PRINT COMPANY_NAME FIELD:

SELECT

company_name

FROM

cabs

COMPANY_NAME

Dispatch Taxi Affiliation

Taxi Affiliation Services

Star North Management LLC

Dispatch Taxi Affiliation

Blue Ribbon Taxi Association Inc.

Blue Ribbon Taxi Association Inc.

Taxi Affiliation Services

Dispatch Taxi Affiliation

Taxi Affiliation Services

| Taxi Affiliation Services |
|--|
| Dispatch Taxi Affiliation |
| Taxi Affiliation Services |
| Star North Management LLC |
| Taxi Affiliation Services |
| Taxi Affiliation Services |
| Dispatch Taxi Affiliation |
| Taxi Affiliation Services |
| Blue Ribbon Taxi Association Inc. |
| Dispatch Taxi Affiliation |
| Blue Ribbon Taxi Association Inc. |
| Taxi Affiliation Services |
| Star North Management LLC |
| Taxi Affiliation Services |
| Taxi Affiliation Services |
| Star North Management LLC |
| Tani Affiliation Compies |
| Taxi Affiliation Services |
| Taxi Affiliation Services Taxi Affiliation Services |
| |
| Taxi Affiliation Services |

Chicago Medallion Management

Star North Management LLC

Taxi Affiliation Services

Taxi Affiliation Services

Star North Management LLC

Taxi Affiliation Services

Star North Management LLC

Star North Management LLC

Choice Taxi Association

Taxi Affiliation Services

Taxi Affiliation Services

Chicago Medallion Leasing INC

Star North Management LLC

Star North Management LLC

Taxi Affiliation Services

Star North Management LLC

Star North Management LLC

Dispatch Taxi Affiliation

Choice Taxi Association

Star North Management LLC Taxi Affiliation Services Taxi Affiliation Services Dispatch Taxi Affiliation Star North Management LLC Chicago Medallion Management Taxi Affiliation Services Taxi Affiliation Services Dispatch Taxi Affiliation Dispatch Taxi Affiliation Taxi Affiliation Services Star North Management LLC Top Cab Affiliation Dispatch Taxi Affiliation Star North Management LLC Dispatch Taxi Affiliation Dispatch Taxi Affiliation Taxi Affiliation Services Star North Management LLC

| Т | axi Affiliation Services |
|---|----------------------------------|
| D | Dispatch Taxi Affiliation |
| Т | axi Affiliation Services |
| Т | axi Affiliation Services |
| D | Dispatch Taxi Affiliation |
| S | tar North Management LLC |
| S | tar North Management LLC |
| В | lue Ribbon Taxi Association Inc. |
| Т | axi Affiliation Services |
| D | Dispatch Taxi Affiliation |
| Т | axi Affiliation Services |
| D | Dispatch Taxi Affiliation |
| S | tar North Management LLC |
| D | Dispatch Taxi Affiliation |
| S | tar North Management LLC |
| D | Dispatch Taxi Affiliation |
| Т | axi Affiliation Services |
| D | Dispatch Taxi Affiliation |
| D | Dispatch Taxi Affiliation |
| D | Dispatch Taxi Affiliation |
| | |

Dispatch Taxi Affiliation Taxi Affiliation Services Taxi Affiliation Services Blue Ribbon Taxi Association Inc. Blue Ribbon Taxi Association Inc. Taxi Affiliation Services Dispatch Taxi Affiliation Chicago Medallion Leasing INC Dispatch Taxi Affiliation Star North Management LLC Dispatch Taxi Affiliation Dispatch Taxi Affiliation Star North Management LLC Dispatch Taxi Affiliation Top Cab Affiliation Dispatch Taxi Affiliation Star North Management LLC Dispatch Taxi Affiliation Blue Ribbon Taxi Association Inc.

Star North Management LLC

Taxi Affiliation Services

Dispatch Taxi Affiliation

Blue Ribbon Taxi Association Inc.

Star North Management LLC

Star North Management LLC

Taxi Affiliation Services

Taxi Affiliation Services

Taxi Affiliation Services

Dispatch Taxi Affiliation

Star North Management LLC

Taxi Affiliation Services

Taxi Affiliation Services

Star North Management LLC

Taxi Affiliation Services

Blue Ribbon Taxi Association Inc.

Taxi Affiliation Services

Blue Ribbon Taxi Association Inc.

Taxi Affiliation Services

Star North Management LLC

Star North Management LLC

Taxi Affiliation Services

Star North Management LLC

Taxi Affiliation Services

4623 - 27290 Jay Kim

Star North Management LLC

KOAM Taxi Association

Taxi Affiliation Services

Taxi Affiliation Services

Blue Ribbon Taxi Association Inc.

Taxi Affiliation Services

Star North Management LLC

Dispatch Taxi Affiliation

Star North Management LLC

KOAM Taxi Association

Star North Management LLC

Chicago Independents

Taxi Affiliation Services

KOAM Taxi Association

| Blue Ribbon Taxi Association Inc. |
|-----------------------------------|
| Taxi Affiliation Services |
| Taxi Affiliation Services |
| Dispatch Taxi Affiliation |
| Dispatch Taxi Affiliation |
| Taxi Affiliation Services |
| Taxi Affiliation Services |
| Star North Management LLC |
| Taxi Affiliation Services |
| Blue Ribbon Taxi Association Inc. |
| Taxi Affiliation Services |
| Top Cab Affiliation |
| Choice Taxi Association |
| Dispatch Taxi Affiliation |
| Star North Management LLC |
| Star North Management LLC |
| Taxi Affiliation Services |
| Star North Management LLC |
| |
| Taxi Affiliation Services |

Star North Management LLC Dispatch Taxi Affiliation Taxi Affiliation Services Star North Management LLC Choice Taxi Association Top Cab Affiliation Star North Management LLC Taxi Affiliation Services Chicago Medallion Leasing INC Taxi Affiliation Services Taxi Affiliation Services Blue Ribbon Taxi Association Inc. Choice Taxi Association Taxi Affiliation Services Choice Taxi Association Star North Management LLC Star North Management LLC Taxi Affiliation Services

Top Cab Affiliation

Taxi Affiliation Services

Top Cab Affiliation

Star North Management LLC

Taxi Affiliation Services

Star North Management LLC

Taxi Affiliation Services

Blue Ribbon Taxi Association Inc.

Taxi Affiliation Services

Taxi Affiliation Services

Taxi Affiliation Services

Star North Management LLC

Check

PART II:

SELECT

cabs.company_name AS company_name,

COUNT (distinct trip_id) AS trips_amount

FROM

trips

INNER JOIN cabs ON cabs.cab_id = trips.cab_id

WHERE

CAST(trips.start_ts:: date AS date) BETWEEN '2017-11-15' AND '2017-11-16'

GROUP BY

company_name

ORDER BY

trips_amount DESC;

| 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 |
| 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 |
| Patriot Taxi Dba Peace Taxi Associat | 2235 |

| COMPANY_NAME | TRIPS_AMOUNT |
|----------------------------------|--------------|
| Checker Taxi Affiliation | 2216 |
| Blue Diamond | 2070 |
| Chicago Medallion Management | 1955 |
| 24 Seven Taxi | 1775 |
| Chicago Medallion Leasing INC | 1607 |
| Checker Taxi | 1486 |
| American United | 1404 |
| Chicago Independents | 1296 |
| KOAM Taxi Association | 1259 |
| Chicago Taxicab | 1014 |
| Top Cab Affiliation | 978 |
| Gold Coast Taxi | 428 |
| Service Taxi Association | 402 |
| 5 Star Taxi | 310 |
| 303 Taxi | 250 |
| Setare Inc | 230 |
| American United Taxi Affiliation | 210 |
| Leonard Cab Co | 147 |
| Metro Jet Taxi A | 146 |
| Norshore Cab | 127 |

| COMPANY_NAME | TRIPS_AMOUNT |
|--|--------------|
| 6742 - 83735 Tasha ride inc | 39 |
| 3591 - 63480 Chuks Cab | 37 |
| 1469 - 64126 Omar Jada | 36 |
| 6743 - 78771 Luhak Corp | 33 |
| 0118 - 42111 Godfrey S.Awir | 33 |
| 6574 - Babylon Express Inc. | 31 |
| Chicago Star Taxicab | 29 |
| 1085 - 72312 N and W Cab Co | 29 |
| 2809 - 95474 C & D Cab Co Inc. | 29 |
| 2092 - 61288 Sbeih company | 27 |
| 3011 - 66308 JBL Cab Inc. | 25 |
| 3620 - 52292 David K. Cab Corp. | 21 |
| 4615 - 83503 Tyrone Henderson | 21 |
| 3623 - 72222 Arrington Enterprises | 20 |
| 5074 - 54002 Ahzmi Inc | 16 |
| 2823 - 73307 Lee Express Inc | 15 |
| 4623 - 27290 Jay Kim | 15 |
| 3721 - Santamaria Express, Alvaro Santamaria | 14 |
| 5006 - 39261 Salifu Bawa | 14 |
| 2192 - 73487 Zeymane Corp | 14 |

| COMPANY_NAME | TRIPS_AMOUNT |
|---|--------------|
| 6057 - 24657 Richard Addo | 13 |
| 5997 - 65283 AW Services Inc. | 12 |
| Metro Group | 11 |
| 5062 - 34841 Sam Mestas | 8 |
| 4053 - 40193 Adwar H. Nikola | 7 |
| 2733 - 74600 Benny Jona | 7 |
| 5874 - 73628 Sergey Cab Corp. | 5 |
| 2241 - 44667 - Felman Corp, Manuel Alonso | 3 |
| 3556 - 36214 RC Andrews Cab | 2 |

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Task II:

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.

ANSWER:

SELECT

 $cabs.company_name\ AS\ company_name,$

COUNT (distinct trip_id) AS trips_amount

FROM

trips

INNER JOIN cabs ON cabs.cab_id = trips.cab_id

WHERE

((company_name LIKE '%Yellow%') OR (company_name LIKE '%Blue%')) AND (CAST(trips.start_ts:: date AS date) BETWEEN '2017-11-1' AND '2017-11-07')

GROUP BY

company_name

| COMPANY_NAME | TRIPS_AMOUNT |
|-----------------------------------|--------------|
| Blue Diamond | 6764 |
| Blue Ribbon Taxi Association Inc. | 17675 |
| Taxi Affiliation Service Yellow | 29213 |
| Yellow Cab | 33668 |

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Task III:

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*.

ANSWER:

SELECT

CASE

WHEN (cabs.company_name LIKE '%Flash Cab%') THEN cabs.company_name

WHEN (cabs.company_name LIKE '%Taxi Affiliation Services%') THEN cabs.company_name

ELSE 'Other'

END AS company,

COUNT (distinct trip_id) AS trips_amount

FROM

trips

INNER JOIN cabs ON cabs.cab_id = trips.cab_id

WHERE

CAST(trips.start_ts:: date AS date) BETWEEN '2017-11-1' AND '2017-11-07'

GROUP BY

company

ORDER BY

trips_amount DESC

| COMPANY | TRIPS_AMOUNT |
|---------------------------|--------------|
| Other | 335771 |
| Flash Cab | 64084 |
| Taxi Affiliation Services | 37583 |

Task IV:

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

ANSWER:

SELECT

neighborhoods.neighborhood_id as neighborhood_id, neighborhoods.name as name

FROM

neighborhoods

WHERE

name LIKE '%Hare' OR name LIKE 'Loop'

| | NEIGHBORHOOD_ID | NAME |
|----|-----------------|--------|
| 50 | | Loop |
| 63 | | O'Hare |
| | | |

Task V:

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*.

ANSWER:

SELECT

DATE_TRUNC('hour', weather_records.ts) as TS,

CASE

WHEN (weather_records.description LIKE '%rain%') THEN 'Bad'

WHEN (weather_records.description LIKE '%storm%') THEN 'Bad'

ELSE 'Good'

END AS weather_conditions

FROM weather_records

| 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 |
| 2017-11-01 13:00:00 | Good |
| 2017-11-01 14:00:00 | Good |
| 2017-11-01 15:00:00 | Good |
| 2017-11-01 16:00:00 | Good |
| 2017-11-01 17:00:00 | Good |
| 2017-11-01 18:00:00 | Good |

| тѕ | WEATHER_CONDITIONS |
|---------------------|--------------------|
| 2017-11-01 19:00:00 | Good |
| 2017-11-01 20:00:00 | Good |
| 2017-11-01 21:00:00 | Good |
| 2017-11-01 22:00:00 | Good |
| 2017-11-01 23:00:00 | Good |
| 2017-11-02 00:00:00 | Good |
| 2017-11-02 01:00:00 | Good |
| 2017-11-02 02:00:00 | Good |
| 2017-11-02 03:00:00 | Bad |
| 2017-11-02 04:00:00 | Bad |
| 2017-11-02 05:00:00 | Bad |
| 2017-11-02 06:00:00 | Bad |
| 2017-11-02 07:00:00 | Bad |
| 2017-11-02 08:00:00 | Good |
| 2017-11-02 09:00:00 | Good |
| 2017-11-02 10:00:00 | Good |
| 2017-11-02 11:00:00 | Good |
| 2017-11-02 12:00:00 | Bad |
| 2017-11-02 13:00:00 | Good |
| 2017-11-02 14:00:00 | Good |
| | |

| TS | WEATHER_CONDITIONS |
|---------------------|--------------------|
| 2017-11-02 15:00:00 | Good |
| 2017-11-02 16:00:00 | Good |
| 2017-11-02 17:00:00 | Good |
| 2017-11-02 18:00:00 | Good |
| 2017-11-02 19:00:00 | Good |
| 2017-11-02 20:00:00 | Bad |
| 2017-11-02 21:00:00 | Bad |
| 2017-11-02 22:00:00 | Good |
| 2017-11-02 23:00:00 | Good |
| 2017-11-03 00:00:00 | Bad |
| 2017-11-03 01:00:00 | Good |
| 2017-11-03 02:00:00 | Good |
| 2017-11-03 03:00:00 | Good |
| 2017-11-03 04:00:00 | Good |
| 2017-11-03 05:00:00 | Good |
| 2017-11-03 06:00:00 | Good |
| 2017-11-03 07:00:00 | Good |
| 2017-11-03 08:00:00 | Good |
| 2017-11-03 09:00:00 | Good |
| 2017-11-03 10:00:00 | Good |

| TS | WEATHER_CONDITIONS |
|---------------------|--------------------|
| 2017-11-03 11:00:00 | Good |
| 2017-11-03 12:00:00 | Good |
| 2017-11-03 13:00:00 | Good |
| 2017-11-03 14:00:00 | Good |
| 2017-11-03 15:00:00 | Good |
| 2017-11-03 16:00:00 | Good |
| 2017-11-03 17:00:00 | Good |
| 2017-11-03 18:00:00 | Good |
| 2017-11-03 19:00:00 | Good |
| 2017-11-03 20:00:00 | Good |
| 2017-11-03 21:00:00 | Good |
| 2017-11-03 22:00:00 | Good |
| 2017-11-03 23:00:00 | Good |
| 2017-11-04 00:00:00 | Good |
| 2017-11-04 01:00:00 | Good |
| 2017-11-04 02:00:00 | Good |
| 2017-11-04 03:00:00 | Good |
| 2017-11-04 04:00:00 | Good |
| 2017-11-04 05:00:00 | Good |
| 2017-11-04 06:00:00 | Good |

| WEATHER_CONDITIONS |
|--------------------|
| Good |
| Bad |
| Bad |
| Bad |
| Good |
| Bad |
| Good |
| |

| тѕ | WEATHER_CONDITIONS |
|---------------------|--------------------|
| 2017-11-05 03:00:00 | Good |
| 2017-11-05 04:00:00 | Bad |
| 2017-11-05 05:00:00 | Bad |
| 2017-11-05 06:00:00 | Good |
| 2017-11-05 07:00:00 | Good |
| 2017-11-05 08:00:00 | Good |
| 2017-11-05 09:00:00 | Good |
| 2017-11-05 10:00:00 | Good |
| 2017-11-05 11:00:00 | Good |
| 2017-11-05 12:00:00 | Good |
| 2017-11-05 13:00:00 | Good |
| 2017-11-05 14:00:00 | Bad |
| 2017-11-05 15:00:00 | Good |
| 2017-11-05 16:00:00 | Bad |
| 2017-11-05 17:00:00 | Good |
| 2017-11-05 18:00:00 | Bad |
| 2017-11-05 19:00:00 | Bad |
| 2017-11-05 20:00:00 | Bad |
| 2017-11-05 21:00:00 | Good |
| 2017-11-05 22:00:00 | Good |

| TS | WEATHER_CONDITIONS |
|---------------------|--------------------|
| 2017-11-05 23:00:00 | Good |
| 2017-11-06 00:00:00 | Good |
| 2017-11-06 01:00:00 | Good |
| 2017-11-06 02:00:00 | Good |
| 2017-11-06 03:00:00 | Good |
| 2017-11-06 04:00:00 | Good |
| 2017-11-06 05:00:00 | Good |
| 2017-11-06 06:00:00 | Good |
| 2017-11-06 07:00:00 | Good |
| 2017-11-06 08:00:00 | Good |
| 2017-11-06 09:00:00 | Good |
| 2017-11-06 10:00:00 | Good |
| 2017-11-06 11:00:00 | Good |
| 2017-11-06 12:00:00 | Good |
| 2017-11-06 13:00:00 | Good |
| 2017-11-06 14:00:00 | Good |
| 2017-11-06 15:00:00 | Good |
| 2017-11-06 16:00:00 | Good |
| 2017-11-06 17:00:00 | Good |
| 2017-11-06 18:00:00 | Good |

| тѕ | WEATHER_CONDITIONS |
|---------------------|--------------------|
| 2017-11-06 19:00:00 | Good |
| 2017-11-06 20:00:00 | Good |
| 2017-11-06 21:00:00 | Good |
| 2017-11-06 22:00:00 | Good |
| 2017-11-06 23:00:00 | Good |
| 2017-11-07 00:00:00 | Good |
| 2017-11-07 01:00:00 | Good |
| 2017-11-07 02:00:00 | Good |
| 2017-11-07 03:00:00 | Good |
| 2017-11-07 04:00:00 | Good |
| 2017-11-07 05:00:00 | Good |
| 2017-11-07 06:00:00 | Good |
| 2017-11-07 07:00:00 | Good |
| 2017-11-07 08:00:00 | Good |
| 2017-11-07 09:00:00 | Good |
| 2017-11-07 10:00:00 | Good |
| 2017-11-07 11:00:00 | Good |
| 2017-11-07 12:00:00 | Good |
| 2017-11-07 13:00:00 | Good |
| 2017-11-07 14:00:00 | Good |

| TS | WEATHER_CONDITIONS |
|---------------------|--------------------|
| 2017-11-07 15:00:00 | Good |
| 2017-11-07 16:00:00 | Good |
| 2017-11-07 17:00:00 | Good |
| 2017-11-07 18:00:00 | Good |
| 2017-11-07 19:00:00 | Good |
| 2017-11-07 20:00:00 | Good |
| 2017-11-07 21:00:00 | Good |
| 2017-11-07 22:00:00 | Good |
| 2017-11-07 23:00:00 | Bad |
| 2017-11-08 00:00:00 | Bad |
| 2017-11-08 01:00:00 | Good |
| 2017-11-08 02:00:00 | Good |
| 2017-11-08 03:00:00 | Good |
| 2017-11-08 04:00:00 | Good |
| 2017-11-08 05:00:00 | Good |
| 2017-11-08 06:00:00 | Good |
| 2017-11-08 07:00:00 | Good |
| 2017-11-08 08:00:00 | Good |
| 2017-11-08 09:00:00 | Good |
| 2017-11-08 10:00:00 | Good |

| TS | WEATHER_CONDITIONS |
|---------------------|--------------------|
| 2017-11-08 11:00:00 | Good |
| 2017-11-08 12:00:00 | Good |
| 2017-11-08 13:00:00 | Good |
| 2017-11-08 14:00:00 | Good |
| 2017-11-08 15:00:00 | Good |
| 2017-11-08 16:00:00 | Good |
| 2017-11-08 17:00:00 | Good |
| 2017-11-08 18:00:00 | Good |
| 2017-11-08 19:00:00 | Good |
| 2017-11-08 20:00:00 | Good |
| 2017-11-08 21:00:00 | Good |
| 2017-11-08 22:00:00 | Good |
| 2017-11-08 23:00:00 | Good |
| 2017-11-09 00:00:00 | Good |
| 2017-11-09 01:00:00 | Good |
| 2017-11-09 02:00:00 | Good |
| 2017-11-09 03:00:00 | Good |
| 2017-11-09 04:00:00 | Good |
| 2017-11-09 05:00:00 | Good |
| 2017-11-09 06:00:00 | Good |

| TS | WEATHER_CONDITIONS |
|----|--------------------|
| | |

2017-11-09 07:00:00

Good

Next

Task VI:

6. Retrieve from the *trips* table all the rides that started in the Loop (*neighborhood_id*: 50) on a Saturday and ended at O'Hare (*neighborhood_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*.

ANSWER:

SELECT

```
DATE_TRUNC('hour', weather_records.ts) AS start_ts,
```

CASE

WHEN (weather records.description LIKE '%rain%') THEN 'Bad'

WHEN (weather_records.description LIKE '%storm%') THEN 'Bad'

ELSE 'Good'

END AS weather_conditions,

trips.duration_seconds AS 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 (DOW from trips.start_ts) = 6

ORDER BY

trip_id

| 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 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 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 |
| 2017-11-11 14:00:00 | Good | 2460 |
| 2017-11-11 12:00:00 | Good | 2040 |
| 2017-11-18 06:00:00 | Good | 1500 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-04 11:00:00 | Good | 2040 |
| 2017-11-11 08:00:00 | Good | 1470 |
| 2017-11-04 08:00:00 | Good | 1546 |
| 2017-11-11 16:00:00 | Good | 2100 |
| 2017-11-25 13:00:00 | Good | 60 |
| 2017-11-04 12:00:00 | Good | 2640 |
| 2017-11-25 10:00:00 | Good | 1502 |
| 2017-11-11 12:00:00 | Good | 1915 |
| 2017-11-04 12:00:00 | Good | 2769 |
| 2017-11-11 13:00:00 | Good | 2250 |
| 2017-11-11 04:00:00 | Good | 1260 |
| 2017-11-18 14:00:00 | Good | 2826 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-04 14:00:00 | Good | 3360 |
| 2017-11-04 14:00:00 | Good | 3180 |
| 2017-11-25 20:00:00 | Good | 2100 |
| 2017-11-04 10:00:00 | Good | 1800 |
| 2017-11-11 12:00:00 | Good | 2289 |
| 2017-11-04 08:00:00 | Good | 1494 |
| 2017-11-11 11:00:00 | Good | 1560 |
| 2017-11-18 12:00:00 | Bad | 1980 |
| 2017-11-11 13:00:00 | Good | 2115 |
| 2017-11-11 10:00:00 | Good | 1506 |
| 2017-11-04 12:00:00 | Good | 2580 |
| 2017-11-04 17:00:00 | Bad | 2460 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-11 09:00:00 | Good | 1620 |
| 2017-11-04 06:00:00 | Good | 1163 |
| 2017-11-04 05:00:00 | Good | 1533 |
| 2017-11-11 04:00:00 | Good | 1477 |
| 2017-11-11 19:00:00 | Good | 1984 |
| 2017-11-04 13:00:00 | Good | 2940 |
| 2017-11-04 07:00:00 | Good | 1320 |
| 2017-11-04 06:00:00 | Good | 1440 |
| 2017-11-11 06:00:00 | Good | 1260 |
| 2017-11-11 08:00:00 | Good | 1560 |
| 2017-11-04 09:00:00 | Good | 1683 |
| 2017-11-11 05:00:00 | Good | 1343 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-18 06:00:00 | Good | 1742 |
| 2017-11-04 09:00:00 | Good | 1560 |
| 2017-11-11 08:00:00 | Good | 1358 |
| 2017-11-11 12:00:00 | Good | 1980 |
| 2017-11-04 16:00:00 | Bad | 2760 |
| 2017-11-18 12:00:00 | Bad | 2460 |
| 2017-11-18 10:00:00 | Bad | 1440 |
| 2017-11-25 14:00:00 | Good | 1620 |
| 2017-11-11 08:00:00 | Good | 1415 |
| 2017-11-25 05:00:00 | Good | 1325 |
| 2017-11-18 06:00:00 | Good | 2100 |
| 2017-11-11 08:00:00 | Good | 1320 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-11 10:00:00 | Good | 1260 |
| 2017-11-11 06:00:00 | Good | 1260 |
| 2017-11-11 08:00:00 | Good | 1200 |
| 2017-11-25 08:00:00 | Good | 1320 |
| 2017-11-11 18:00:00 | Good | 2280 |
| 2017-11-25 10:00:00 | Good | 1320 |
| 2017-11-04 06:00:00 | Good | 1140 |
| 2017-11-11 18:00:00 | Good | 2520 |
| 2017-11-18 16:00:00 | Bad | 3000 |
| 2017-11-11 19:00:00 | Good | 1920 |
| 2017-11-04 18:00:00 | Bad | 2363 |
| 2017-11-04 14:00:00 | Good | 3084 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-11 08:00:00 | Good | 1380 |
| 2017-11-11 08:00:00 | Good | 1380 |
| 2017-11-04 09:00:00 | Good | 1380 |
| 2017-11-04 09:00:00 | Good | 1380 |
| 2017-11-11 12:00:00 | Good | 2213 |
| 2017-11-11 08:00:00 | Good | 1140 |
| 2017-11-11 10:00:00 | Good | 1435 |
| 2017-11-04 10:00:00 | Good | 2460 |
| 2017-11-11 07:00:00 | Good | 1200 |
| 2017-11-04 15:00:00 | Good | 3201 |
| 2017-11-11 11:00:00 | Good | 2074 |
| 2017-11-18 11:00:00 | Good | 2843 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-11 17:00:00 | Good | 2426 |
| 2017-11-04 09:00:00 | Good | 1740 |
| 2017-11-25 07:00:00 | Good | 2340 |
| 2017-11-18 05:00:00 | Good | 2075 |
| 2017-11-18 07:00:00 | Bad | 1511 |
| 2017-11-11 18:00:00 | Good | 2220 |
| 2017-11-04 10:00:00 | Good | 2551 |
| 2017-11-11 16:00:00 | Good | 2062 |
| 2017-11-04 12:00:00 | Good | 2999 |
| 2017-11-04 08:00:00 | Good | 1677 |
| 2017-11-04 06:00:00 | Good | 1177 |
| 2017-11-11 06:00:00 | Good | 1475 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-25 08:00:00 | Good | 1277 |
| 2017-11-11 04:00:00 | Good | 1213 |
| 2017-11-18 13:00:00 | Bad | 4044 |
| 2017-11-04 21:00:00 | Good | 1680 |
| 2017-11-04 18:00:00 | Bad | 1980 |
| 2017-11-25 18:00:00 | Good | 2760 |
| 2017-11-11 09:00:00 | Good | 1380 |
| 2017-11-11 07:00:00 | Good | 1380 |
| 2017-11-18 08:00:00 | Bad | 1320 |
| 2017-11-11 16:00:00 | Good | 2591 |
| 2017-11-11 08:00:00 | Good | 1260 |
| 2017-11-11 07:00:00 | Good | 1380 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-11 10:00:00 | Good | 1440 |
| 2017-11-04 14:00:00 | Good | 3240 |
| 2017-11-04 16:00:00 | Bad | 2782 |
| 2017-11-04 14:00:00 | Good | 3120 |
| 2017-11-04 19:00:00 | Good | 1869 |
| 2017-11-11 06:00:00 | Good | 1218 |
| 2017-11-11 11:00:00 | Good | 1620 |
| 2017-11-11 10:00:00 | Good | 1380 |
| 2017-11-11 08:00:00 | Good | 1380 |
| 2017-11-11 09:00:00 | Good | 1380 |
| 2017-11-11 07:00:00 | Good | 1320 |
| 2017-11-04 14:00:00 | Good | 3300 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-04 13:00:00 | Good | 3060 |
| 2017-11-11 13:00:00 | Good | 2100 |
| 2017-11-18 14:00:00 | Good | 3540 |
| 2017-11-11 21:00:00 | Good | 1920 |
| 2017-11-11 17:00:00 | Good | 2160 |
| 2017-11-11 13:00:00 | Good | 2123 |
| 2017-11-11 07:00:00 | Good | 1384 |
| 2017-11-11 10:00:00 | Good | 1260 |
| 2017-11-18 15:00:00 | Good | 3480 |
| 2017-11-11 12:00:00 | Good | 2071 |
| 2017-11-18 13:00:00 | Bad | 3300 |
| 2017-11-25 13:00:00 | Good | 1560 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-04 12:00:00 | Good | 2760 |
| 2017-11-18 12:00:00 | Bad | 3024 |
| 2017-11-11 11:00:00 | Good | 1380 |
| 2017-11-25 06:00:00 | Good | 1200 |
| 2017-11-11 06:00:00 | Good | 1667 |
| 2017-11-18 18:00:00 | Good | 2056 |
| 2017-11-11 10:00:00 | Good | 1473 |
| 2017-11-11 17:00:00 | Good | 2460 |
| 2017-11-11 10:00:00 | Good | 1740 |
| 2017-11-11 14:00:00 | Good | 2340 |
| 2017-11-04 16:00:00 | Bad | 3180 |
| 2017-11-04 11:00:00 | Good | 2220 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-11 12:00:00 | Good | 2240 |
| 2017-11-04 14:00:00 | Good | 2778 |
| 2017-11-18 06:00:00 | Good | 1420 |
| 2017-11-04 14:00:00 | Good | 3480 |
| 2017-11-25 20:00:00 | Good | 1980 |
| 2017-11-18 10:00:00 | Bad | 2055 |
| 2017-11-11 15:00:00 | Good | 2380 |
| 2017-11-04 08:00:00 | Good | 1539 |
| 2017-11-25 10:00:00 | Good | 1591 |
| 2017-11-18 14:00:00 | Good | 2588 |
| 2017-11-11 07:00:00 | Good | 0 |
| 2017-11-04 22:00:00 | Good | 1380 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-04 12:00:00 | Good | 2220 |
| 2017-11-04 08:00:00 | Good | 1380 |
| 2017-11-04 14:00:00 | Good | 2820 |
| 2017-11-11 09:00:00 | Good | 0 |
| 2017-11-18 09:00:00 | Bad | 1260 |
| 2017-11-18 13:00:00 | Bad | 2940 |
| 2017-11-18 16:00:00 | Bad | 2340 |
| 2017-11-18 12:00:00 | Bad | 2220 |
| 2017-11-25 11:00:00 | Good | 1140 |
| 2017-11-11 10:00:00 | Good | 1239 |
| 2017-11-04 16:00:00 | Bad | 3130 |
| 2017-11-18 15:00:00 | Good | 2877 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-11 03:00:00 | Good | 1162 |
| 2017-11-04 14:00:00 | Good | 3060 |
| 2017-11-11 13:00:00 | Good | 1680 |
| 2017-11-04 10:00:00 | Good | 2112 |
| 2017-11-04 11:00:00 | Good | 2328 |
| 2017-11-11 05:00:00 | Good | 1504 |
| 2017-11-04 06:00:00 | Good | 1439 |
| 2017-11-18 16:00:00 | Bad | 2811 |
| 2017-11-18 11:00:00 | Good | 2094 |
| 2017-11-11 06:00:00 | Good | 1430 |
| 2017-11-18 12:00:00 | Bad | 3026 |
| 2017-11-04 14:00:00 | Good | 3120 |

| START_TS | WEATHER_CONDITIONS | DURATION_SECONDS |
|------------------------|--------------------|------------------|
| 2017-11-25 12:00:00 | Good | 1380 |
| 2017-11-18 14:00:00 | Good | 2994 |
| 2017-11-11 11:00:00 | Good | 1620 |
| 2017-11-04 12:00:00 | Good | 2640 |
| 2017-11-18 00:00:00 | Bad | 480 |
| 2017-11-18 19:00:00 | Good | 0 |
| 2017-11-11 10:00:00 | Good | 1414 |
| 2017-11-11 12:00:00 | Good | 1981 |
| 2017-11-11 08:00:00 | Good | 1200 |
| 2017-11-04 11:00:00 | Good | 2160 |
| 2017-11-11 15:00:00 | Good | 2400 |
| 2017-11-11 20:00:00 | Good | 1500 |