First, we have two data sources

The first source is the virtual_kitchen_ubereats_hours table, which contains business hours information for restaurants on the UberEats platform

The second source is the virtual_kitchen_grubhub_hours table, which contains business hours information for restaurants on the Grubhub platform

We have three main query files for the analysis

- 1. The first file, ueats.sql, contains queries to explore and extract relevant data from the virtual kitchen ubereats hours table
- 2. One query selects the first few rows for exploration
- 3. Another query extracts start and end times from the regular hours JSON field
- 1. The second file, ghub.sql, contains queries to explore and extract data from the virtual kitchen grubhub hours table
- 2. One query selects the first few rows for exploration
- It includes additional queries to extract and analyze business hours from the response JSON field
- 1. The third file, query.sql, is the main file with the query to compute business hour mismatch between Grubhub and UberEats restaurants
- 2. The query performs the following steps
- 3. It extracts relevant fields like slug open hours start and end times for both platforms using subqueries with JSON extractors
- 4. It joins the Grubhub and UberEats data based on a condition
- 5. In the main select statement, it compares the Grubhub open time with UberEats start and end times
- 6. Using a case statement, it determines if the Grubhub time is in range out of range or within a close threshold of UberEats hours

The key assumptions are as follows

- 1. The b_name vb_name tuple can identify the same restaurant across tables
- 2. For UberEats, the first menu section is assumed to represent business hours
- 3. For Grubhub the response field contains the business hours data under a specific path
- 4. If multiple entries exist for a restaurant, the entry with the latest timestamp should be used
- 5. The analysis utilizes JSON parsing techniques, avoiding regular expressions
- 6. The slug field is a unique identifier for each restaurant

The expected output includes the following columns

- 1. gh slug is the unique Grubhub restaurant identifier
- 2. gh open hours string is a string representation of Grubhub open hours
- 3. ue slug is the unique UberEats restaurant identifier
- 4. ue_start_time and ue_end_time represent UberEats business hours
- 5. is_out_of_range, indicating if Grubhub hours are in range out of range or within a close threshold of UberEats hours

This output enables the identification and analysis of business hour mismatches between virtual restaurants on Grubhub and UberEats, treating UberEats as the ground truth.