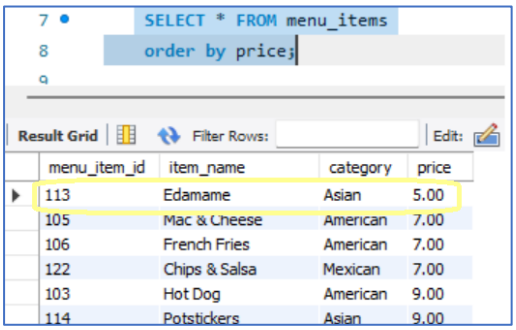
Dataset used

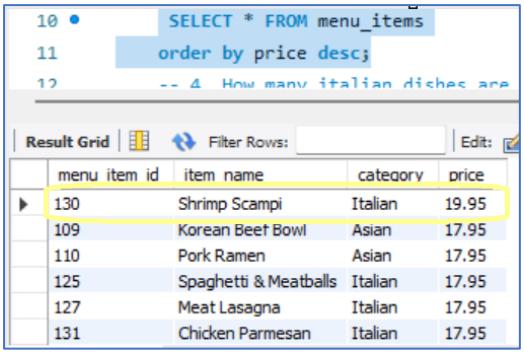
https://mavenanalytics.io/data-playground?search=restaurant%20orders

There are two CSV files in this dataset, one containing order details and the other containing menu item details. We want to analyze both tables to understand the restaurant's order patterns.

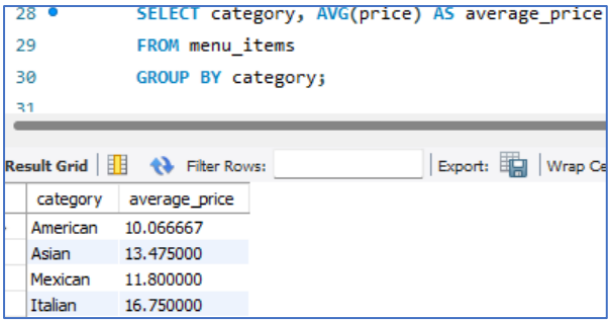
Understanding menu items table

1. The least expensive item on the menu is 'Edamame' and the most expensive item is 'Shrimp Scampi'.





2. The average dish price in each category is different. Italian is the most expensive cuisine.



3. The Italian and Mexican cuisines have the most items on the menu.

```
24 •    SELECT category, COUNT(menu_item_id) AS num_of_dishes
25      FROM menu_items
26      GROUP BY category;
27      -- 7. What is the average dish price in each category
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

category	num_of_dishes
American	6
Asian	8
Mexican	9
Italian	9

Understanding order details table

1. The orders with the greatest quantity of items are selected, with a maximum of 14 items.

```
19 •    SELECT order_id, COUNT(item_id) as num_of_items
20      FROM order_details
21      GROUP BY order_id
22      ORDER BY num_of_items DESC;
23
```

Result Grid | Filter Rows: | Export: | Wrap C

order_id	num_of_items
4305	14
3473	14
1957	14
330	14
440	14
443	14

2. Orders that have more than 12 items are considered big orders. The number of big orders in the data is 20.

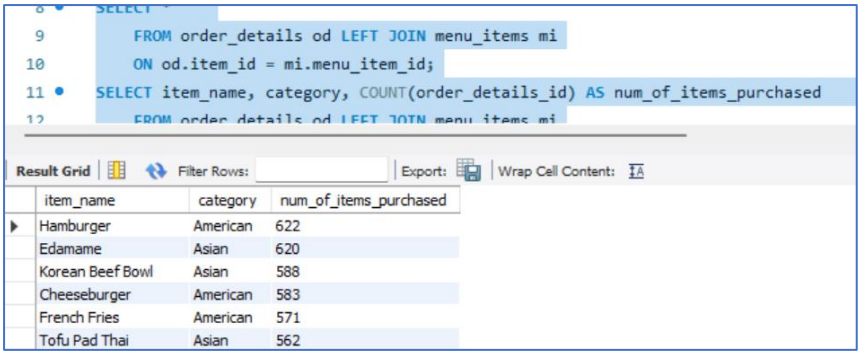
```
25 •    SELECT COUNT(*) FROM
26        (SELECT order_id, COUNT(item_id) as num_of_items
27      FROM order_details
28      GROUP BY order_id
29      HAVING num_of_items > 12) AS NUM_ITEMS_MORETHAN12;
```

Result Grid | Filter Rows: | Export: | Wrap Cell C

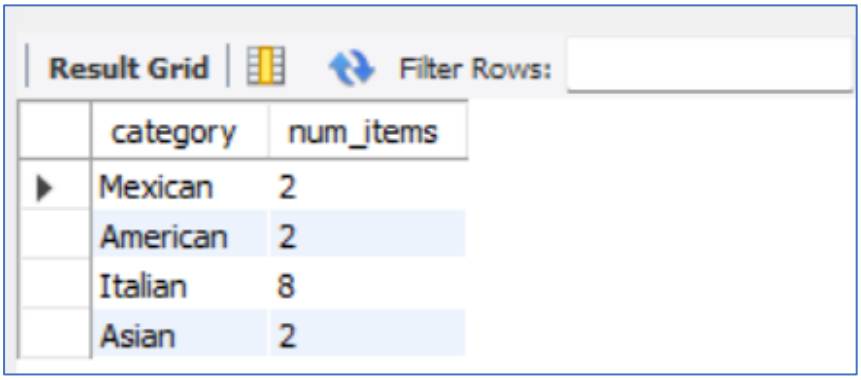
COUNT(*)
20

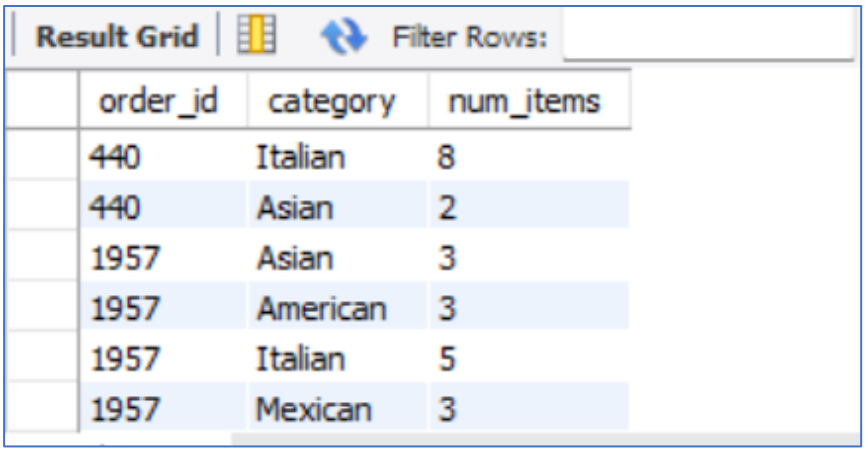
Getting insights from both tables

1. The most popular item on the menu is ‘Hamburger’. It is in American cuisine.



2. We find the top 5 highest spend orders and try to find out what they ordered. We find that Italian is the most popular cuisine in those orders.





Results

1. Despite being the most expensive cuisine, Italian dishes are consistently ordered by those who enjoy indulging in high-quality food, making it a necessary addition to the menu.
2. Hamburgers are the most popular choice among all other orders, it is important to keep them on the menu.