**SQL Data Analysis Case Study**

This project is for the **Taste Of The World Café**, a restaurant that has diverse menu offerings and serves generous portions.

**Project Assignment**

The taste of the world cage debuted a new menu at the start of the year. I have seen asked as a data analyst to see which menu items are doing well/not well and what the top customers like best.

**Objectives**

1. Explore the menu\_items table to get an idea of the data that is on the current menu.
2. Explore the order\_details table to get an idea of the data that has been collected.
3. Use both tables to understand how customers are reacting and recommending based on the analysis for the new menu.

**Objective 1) Analysis Item Table**

**-- View the Menu Item Table**

select count(restaurant\_db.menu\_items.menu\_item\_id) from restaurant\_db.menu\_items;

**-- What is the most expensive item in the menu?**

select max(restaurant\_db.menu\_items.price) from restaurant\_db.menu\_items;

**-- What is the least expensive item in the menu?**

select min(restaurant\_db.menu\_items.price) from restaurant\_db.menu\_items;

**-- Show list prices in order from max to min or min to max**

select restaurant\_db.menu\_items.price from restaurant\_db.menu\_items order by price desc;

select restaurant\_db.menu\_items.price from restaurant\_db.menu\_items order by price asc;

**-- How meny Italian dishes are on the menu?**

select count(\*) from restaurant\_db.menu\_items where restaurant\_db.menu\_items.category = 'Italian';

**-- What are the least and most expensive dishes on the menu?**

select \* from restaurant\_db.menu\_items where restaurant\_db.menu\_items.category = 'Italian' order by price asc;

select \* from restaurant\_db.menu\_items where restaurant\_db.menu\_items.category = 'Italian' order by price desc;

**-- How meny dishes are on each category?**

select restaurant\_db.menu\_items.category,count(restaurant\_db.menu\_items.menu\_item\_id) as menu\_item from restaurant\_db.menu\_items group by restaurant\_db.menu\_items.category;

**-- What is the average dish price in each category?**

select restaurant\_db.menu\_items.category,count(restaurant\_db.menu\_items.menu\_item\_id) as menu\_item, avg(restaurant\_db.menu\_items.price) as average\_price from restaurant\_db.menu\_items group by restaurant\_db.menu\_items.category;

**Objective 2) Analyse Order table**

**-- View order table**

SELECT \* FROM restaurant\_db.order\_details;

**-- Find date table**

select \* from restaurant\_db.order\_details order by restaurant\_db.order\_details.order\_date;

**-- Find the date range of the table**

select min(restaurant\_db.order\_details.order\_date) as min\_order\_date, max(restaurant\_db.order\_details.order\_date) as max\_order\_date from restaurant\_db.order\_details;

**-- How meny orders were made?**

select restaurant\_db.order\_details.order\_id, count(restaurant\_db.order\_details.order\_details\_id) from restaurant\_db.order\_details group by restaurant\_db.order\_details.order\_id;

select count(distinct restaurant\_db.order\_details.order\_id) as total from restaurant\_db.order\_details;

**-- Which order has the most number of items?**

select order\_details.order\_id, count(order\_details.item\_id) as item from order\_details group by order\_id order by item desc;

**-- Show number of orders has more than twelve item.**

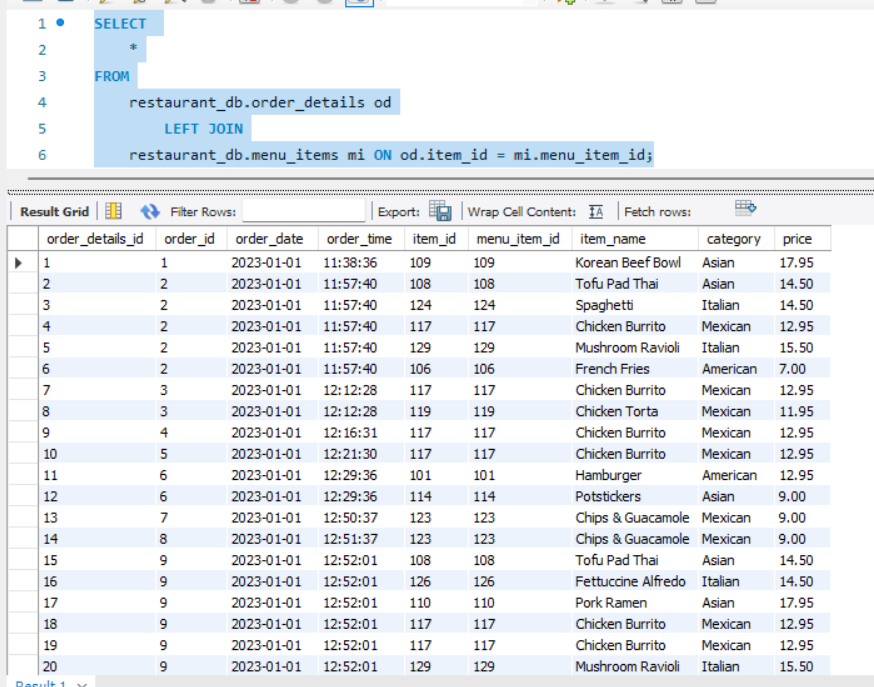
select order\_details.order\_id, count(order\_details.item\_id) as item from order\_details group by order\_id having item > 12;

**-- How meny orders have more than 12 item?**

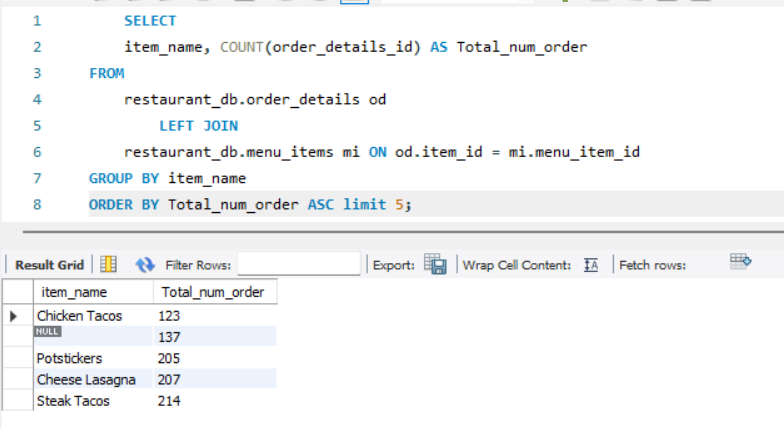
select count(\*) from (select order\_details.order\_id, count(order\_details.item\_id) as item from order\_details group by order\_id having item > 12) as num\_order;

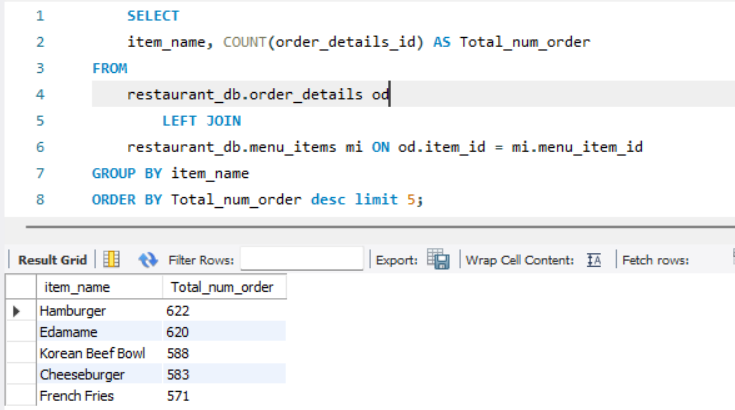
**Objective 3) Analysis Customer behaviour**

**-- Combine the menu item and Order detail table into a single table.**

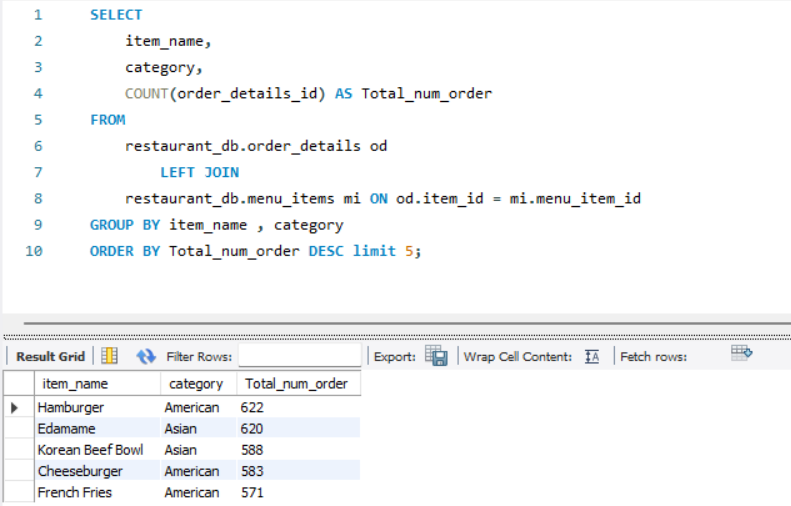


**-- What were the least and most popular order item? what items were they in?**

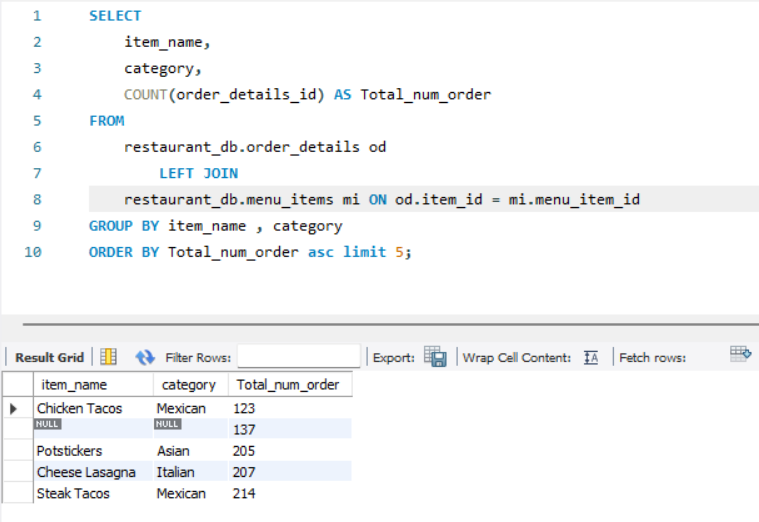




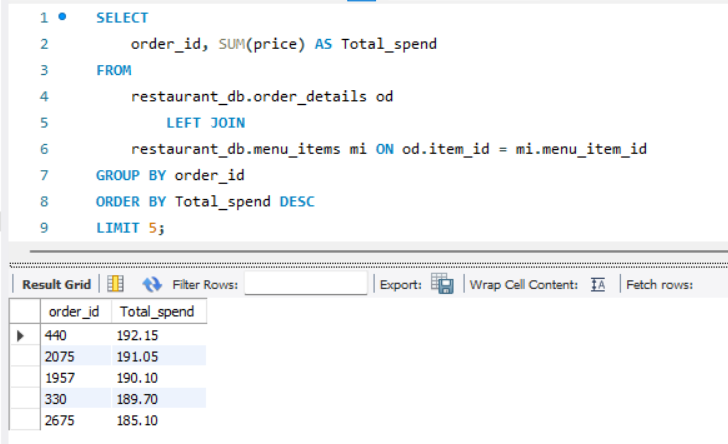
**-- Which are the most popular items by Category?**

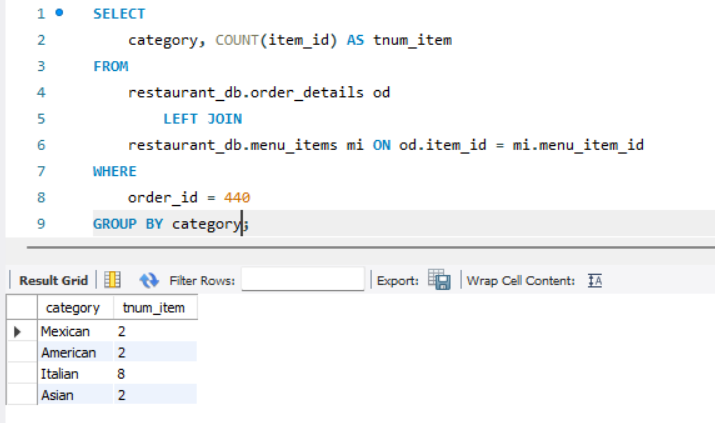


**-- Which are the least popular items by Category?**

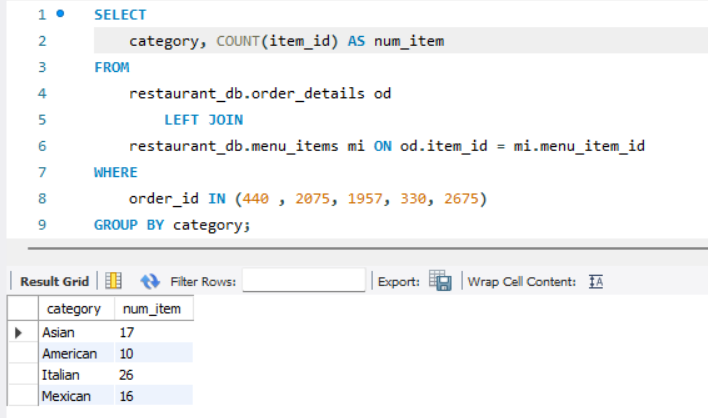


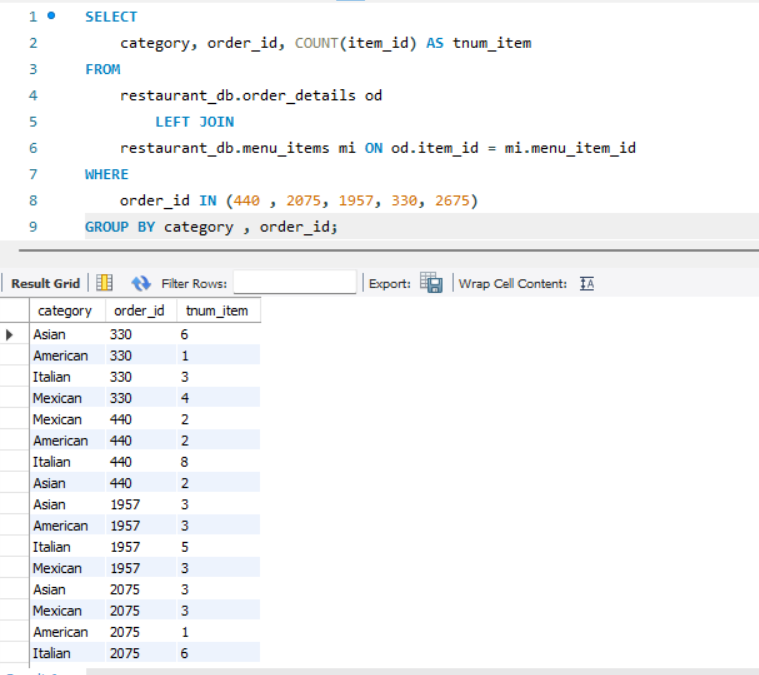
**-- What were the top five orders that spend the most money?**



**-- View the detail of the highest spend order.**

**-- View the detail of the highest spend order by Category.**



**-- View the detail of the highest spend order by Category and order\_id.**

**Recommendation:**

1. Chicken Tacos is the least popular and should have to do something about it. I will suggest taking customer feed back about this product and take necessary action about it.
2. Hamburger and Edamame are the top two most popular items, so it should be on the list.
3. The most popular item by category is American and Asin. The least order item is the Mexican food. Some of the Mexican items are not doing well and to think about it.
4. The top five customer orders are most of the high spend order for the Italian food. I will recommend keeping expensive Italian dishes on the menu as people seems to be ordering lot specially the higher spend customer.