

# Restaurant Orders

## Uncovering Customer and Menu Insights Using SQL

This project presents a comprehensive analysis of restaurant order data using MySQL. The focus is on delivering key insights related to menu pricing, ordering behavior, and customer preferences, showcasing advanced SQL skills through structured queries and data exploration techniques.

Two relational tables were used for this project:

- menu\_items – contains item name, category, and price
- order\_details – records all order transactions with date, time, and item references

## 1. Menu Items Analysis

- Determine the total number of items on the menu

```
num_items
32
```

- Identify the least expensive items

item_name	price
Edamame	5.00

- Identify the most expensive items

item_name	price
Shrimp Scampi	19.95

- Highlight Italian cuisine availability and pricing

num_italian_dishes
9

item_name	category	price
Fettuccine Alfredo	Italian	14.50
Spaghetti	Italian	14.50
Cheese Lasagna	Italian	15.50
Mushroom Ravioli	Italian	15.50
Eggplant Parmesan	Italian	16.95
Chicken Parmesan	Italian	17.95
Meat Lasagna	Italian	17.95
Spaghetti & Meatballs	Italian	17.95
Shrimp Scampi	Italian	19.95

- Analyze pricing trends and item distribution by category

category	num_of_dishes	avg_price_per_dish
Italian	9	16.75
Mexican	9	11.80
Asian	8	13.48
American	6	10.07

## 2. Order Analysis

- Identify the active date range of order data

first_date	last_date
2023-01-01	2023-03-31

- Count total orders and total items sold

num_orders
5370

num_items
12234

- Pinpoint orders with the highest item quantities

orders	num_items
330	14
440	14
443	14
1957	14
2675	14
3473	14
4305	14
1274	13
1569	13
1685	13
1734	13
2075	13
2126	13
2188	13
2725	13
3583	13
4482	13
4836	13
5066	13

- Assess how often large orders (12+ items) occur

num_large_orders
20

### 3. Customer Behavior Analysis

- Determine the most and least ordered items and their categories

item_name	num_items	category
Chicken Tacos	123	Mexican

item_name	num_items	category
Hamburger	622	American

- Rank the top 5 highest-spending orders

order_id	spent
440	192.15
2075	191.05
1957	190.10
330	189.70
2675	185.10

- Explore detailed breakdowns of top-value orders

order_id	category	num_items
330	Asian	6
330	American	1
330	Italian	3
330	Mexican	4
440	Mexican	2
440	American	2
440	Italian	8
440	Asian	2
1957	Asian	3
1957	American	3
1957	Italian	5
1957	Mexican	3
2075	Asian	3
2075	Mexican	3
2075	American	1
2075	Italian	6
2675	American	3
2675	Asian	3
2675	Italian	4
2675	Mexican	4

The insight I've gathered from the top 5 orders is that the high priced italian food items are the most popular especially from the highest spent customers.