Food Orders Analytics (SQL Project)

Overview

This is an end-to-end SQL project analyzing food delivery data across orders, users, restaurants, and menus. The project includes data exploration, cleaning, and more than 20 business questions to uncover insights on sales, customer behavior, cuisines, and city-level performance.

Dataset

- **Orders** – transactional details with date, sales quantity, and revenue
- **Users** – customer demographics such as age, gender, occupation, and marital status
- **Restaurant** – information on city, cuisine type, and rating
- **Menu** – food items with cuisine category and price

SQL Concepts

- Joins and aggregations (SUM, COUNT, AVG)
- Window functions (RANK with PARTITION BY)
- Grouping and filtering (GROUP BY, HAVING)
- Time-based analysis (year, quarter, month)

Business Questions Answered

1. Which are the **top 5 restaurants** by revenue in the last year?
2. Who are the **top 10 users** with the highest purchases?
3. Which **cities generate the highest revenue** by year and quarter?
4. Which are the **bottom 3 restaurants** based on performance last year?
5. Which restaurant had the **highest overall revenue**?
6. What are the **top 3 cities with high orders** and the **bottom 3 with low orders**?
7. Which **occupation group** of people shows more interest in food orders?
8. Which **10 cuisines** generated the greatest sales last year?
9. Which restaurants had the **most user orders with high ratings** year-wise?
10. What are the **most popular cuisines by age group**?
11. Which **city recorded the highest sales** overall?
12. Which restaurant sold the **maximum product units by cuisine**?
13. What are the **top-rated cuisines** and the **lowest-rated cuisines**?
14. What is the **average rating of restaurants** in a given city?
15. Which cuisines were in **high demand in the last two months**?

16. What are the **average cuisine orders by age group**?
17. Which cuisine has the **highest unit sales** overall?
18. Which user placed the **maximum number of orders**, along with restaurant and cuisine details?
19. How are **orders distributed across different occupations**?
20. What are the **top 5 years with the highest total revenue**?

Key Insights

- A small set of top restaurants drive the majority of revenue
- Occupation and age groups strongly influence cuisine preferences
- Certain cities contribute disproportionately to total sales and orders
- Seasonal cuisines show higher demand in the last two months of the year

Tools

- SQL (PostgreSQL)
- Database client: pgAdmin

Author

Agalya A

- LinkedIn: https://www.linkedin.com/in/agalya-angamuthuanalyst/
- GitHub: https://github.com/AgalyaAbi/Food_Orders_Analytics