Project Title: Food Delivery Data Insights

Objective:

To derive actionable insights from food delivery order data using advanced SQL techniques, supporting business goals such as marketing optimization, customer retention, and operational efficiency.

File: *noon_sql_project_script.txt*

Purpose: To create and populate a mock ***orders*** table used for the delivery insights SQL analysis.

Schema Defined:

Table Name: *orders*

Column Name	Data Type	Description
Order_id	VARCHAR(20)	Unique identifier for each order
Customer_code	VARCHAR(20)	Unique identifier for each customer
Placed_at	DATETIME	Timestamp when the order was placed
Restaurant_id	VARCHAR(10)	Identifier for the restaurant
Cuisine	VARCHAR(20)	Cuisine type of the restaurant
Order_status	VARCHAR(20)	Status of the order (e.g., Delivered)
Promo_code_Name	VARCHAR(20)	Promo code used (if any)

Sample Data Includes:

- Multiple restaurants per cuisine (e.g., LEBANESE2, ITALIAN2)
- Several customers placing one or multiple orders
- A mix of orders with and without promotional codes
- Order dates primarily in **January 2025**

How It Supports the Project:

This mock data is crucial for:

- Testing SQL logic and query performance
- Simulating real-world analytics scenarios (like tracking promo effectiveness, user behavior, churn, etc.)

Key Analyses Performed:

1. **Top Outlets by Cuisine (Without LIMIT/TOP):**
    - Uses a ROW_NUMBER() window function partitioned by Cuisine to find the top restaurant per cuisine based on order count.
    - **Use Case:** Identifying top-performing restaurants for each cuisine category.
2. **Daily New Customer Count Since Launch:**
    - Finds the first order date per customer and aggregates this over all dates.
    - **Use Case:** Tracks user acquisition over time for growth monitoring.
3. **One-Time Customers in January 2025:**
    - Identifies users who placed exactly one order in January 2025 and never returned.
    - **Use Case:** Helps marketing teams target possible app deserters.

4. **Inactive Users with First Promo Order (Last 7 Days Inactivity):**
    - Combines acquisition timing with recent inactivity and promotional use on the first order.
    - **Use Case:** Identifies recent drop-offs who were initially enticed with a promo—ideal for re-engagement campaigns.

Techniques Used:

- Common Table Expressions (CTEs)
- Window Functions (ROW_NUMBER)
- Date Aggregations
- Joins and Anti-Joins
- Subqueries and Optimizations (e.g., replacing NOT IN with LEFT JOIN WHERE NULL)

Summary:

Project Name: Food Delivery Insights

Tools Used: SQL (CTEs, Window Functions, Joins, Aggregations)

Dataset: Simulated orders data with rich attributes

Insights Extracted:

- Top outlets per cuisine
- Customer acquisition trends
- App deserters and user churn
- Promo-driven first orders and inactive user detection