PIZZA SALES DATA ANALYSIS

USING SQL

By CRAFTING SQL QUERIES , THIS PROJECT DELIVERS INTO CRUCIAL ASPECTS OF PIZZA SALES .
THROUGH THESE QUERIES, WE AIM TO PINPOINT TRENDS, INDENTIFY TOP-PERFORMING ITEMS , AND UNEVEIL OPPORTUNITIES FOR ENHANCING SALES STRATEGIES AND CUSTOMER SATISFICATION.

SCHEMA USED

To make delicious pizza, you will need the following ingredients:

1.Order_details
order_details_id
order_id
pizza_id
quantity

2.orders
order_date
order_id
order_time

3.pizzas
pizza_id
pizza_type_id
size price

4.pizza_types
pizza_type_id
name
category
ingredients

PROBLEMS ON WHICH ARE GOING TO APPLY OUR SQL QUERIES:

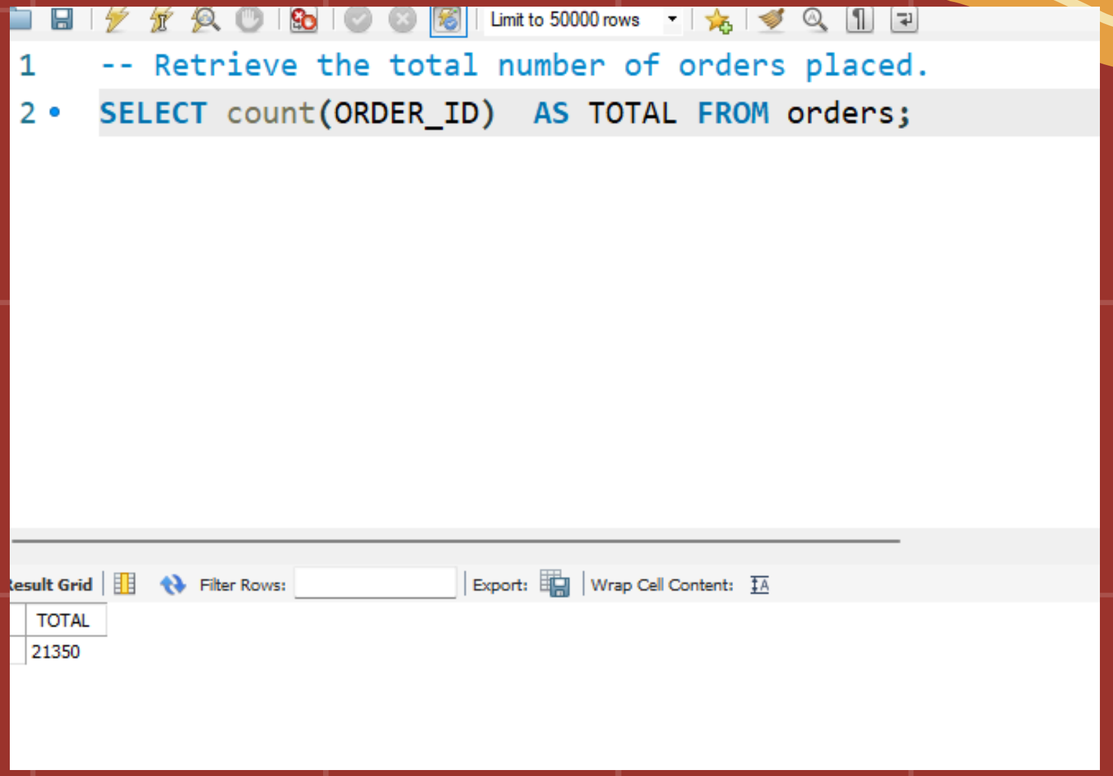
Basic:

1. Retrieve the total number of orders placed.
2. Calculate the total revenue generated from pizza sales.
3. Identify the highest-priced pizza.
4. Identify the most common pizza size ordered.
5. List the top 5 most ordered pizza types along with their quantities.

Intermediate:

6. Join the necessary tables to find the total quantity of each pizza category ordered.
7. Determine the distribution of orders by hour of the day.
8. Join relevant tables to find the category-wise distribution of pizzas
9. Group the orders by date and calculate the average number of pizzas ordered per day.
10. Determine the top 3 most ordered pizza types based on revenue.

RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED



CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```sql
-- Calculate the total revenue generated from pizza sales.--
SELECT
    ROUND(SUM(order_details.quantity * pizzas.price),2) AS SUM
FROM
    order_details
        JOIN
    pizzas ON pizzas.pizza_id = order_details.pizza_id
```

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

SUM
817860.05

IDENTIFY THE HIGHEST-PRICED PIZZA.

```sql
SELECT
    pizza_types.name, pizzas.price
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY pizzas.price DESC
LIMIT 1;
```

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

name	price
The Greek Pizza	35.95

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

```sql
SELECT
    pizzas.size,
    COUNT(order_details.order_details_id) AS order_count
FROM
    pizzas
        JOIN
    order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizzas.size
ORDER BY order_count DESC limit 1;
```

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

size	order_count
L	18526

LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES.

```sql
-- List the top 5 most ordered pizza types along with their quantities.

SELECT
    pizza_types.name, sum(order_details.quantity) as quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
    group by pizza_types.name order by quantity DESC LIMIT 5 ;

```

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

name	quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED.

```
2
3 •   SELECT
4         pizza_types.category,
5         SUM(order_details.quantity) AS quantity
6     FROM
7         pizza_types
8             JOIN
9         pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
10            JOIN
11        order_details ON order_details.pizza_id = pizzas.pizza_id
12    GROUP BY pizza_types.category
13    ORDER BY quantity DESC;
```

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

category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

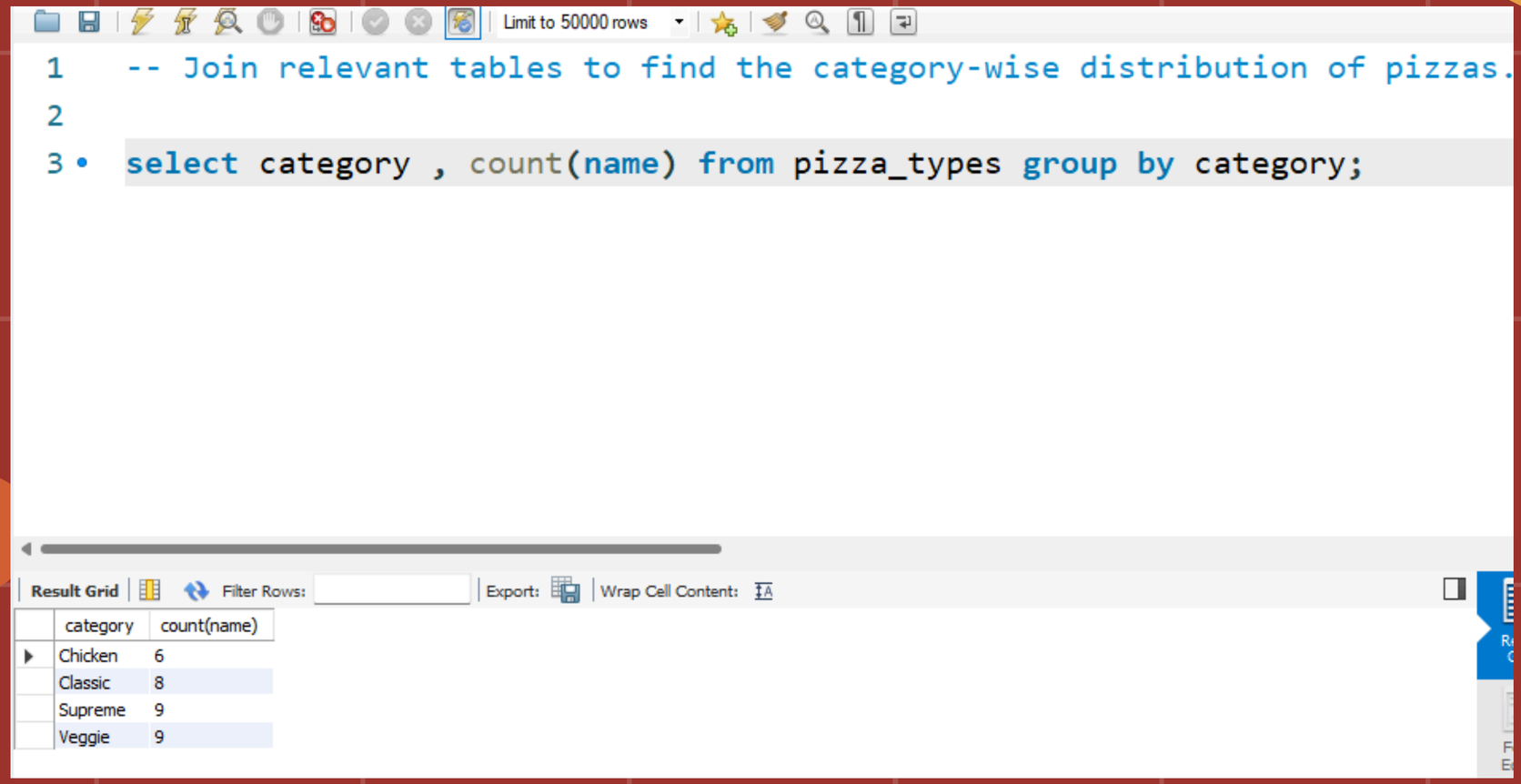
DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```sql
-- Determine the distribution of orders by hour of the day.
SELECT
    HOUR(order_time), COUNT(order_id)
FROM
    orders
GROUP BY HOUR(order_time);
```

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

HOUR(order_time)	COUNT(order_id)
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399
19	2009
20	1642
21	1198
22	663
23	28
10	8
9	1

JOIN RELEVANT TABLES TO FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS.



GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY.

```sql
-- Group the orders by date and calculate the average number of pizzas ordered per day.

    select round(AVG(quantity),0)
FROM
    (SELECT
        orders.order_date, SUM(order_details.quantity) as quantity
    FROM
        orders
    JOIN order_details ON orders.order_id = order_details.order_id
    GROUP BY orders.order_date) AS order_quantity;
```

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

round(AVG(quantity),0)
138

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE.

```sql
-- Determine the top 3 most ordered pizza types based on revenue.
SELECT
    pizza_types.name,
    SUM(order_details.quantity * pizzas.price) AS revenue
FROM
    pizza_types
        JOIN pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
    JOIN order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY revenue DESC
LIMIT 3;
```

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

name	revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5


THANK YOU