The SQLice of Pizza"
(Data Served Fresh!)

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INTRODUCTION

This project explores pizza sales data using SQL to uncover key business insights. It involves analyzing orders, revenue, and customer preferences through joins, aggregations, window functions, and date-time analysis.

The goal was to identify top-selling pizzas, most profitable categories, and order trends — helping strengthen real-world SQL and data analytics skills.

RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

```sql
select count(order_id) as total_orders from orders;
```

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

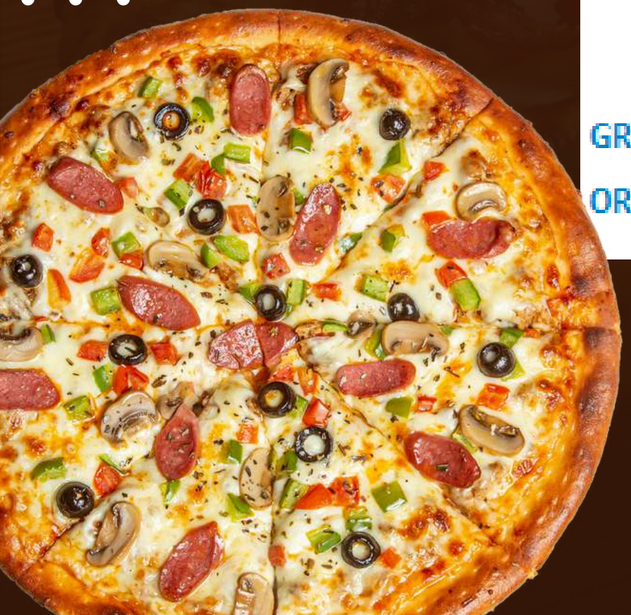
```sql
SELECT
    ROUND(SUM(order_details.quantity * pizzas.price))
FROM
    order_details
        JOIN
    pizzas ON pizzas.pizza_id = order_details.pizza_id;
```

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;
```

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;
```



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

```sql
SELECT
    pizza_types.name, SUM(order_details.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 SUM(order_details.quantity) DESC
LIMIT 5;
```

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

```sql
SELECT
    pizza_types.category, SUM(order_details.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.category
ORDER BY SUM(order_details.quantity) DESC;
```

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

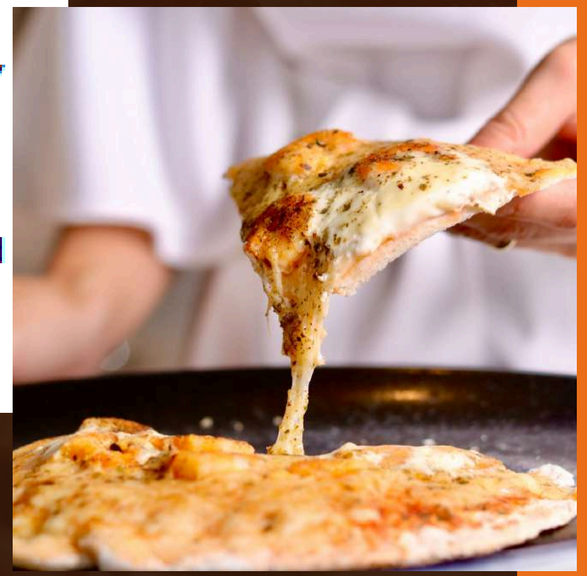
```sql
SELECT
    HOUR(order_time), COUNT(order_id)
FROM
    orders
GROUP BY HOUR(order_time);
```

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

```
SELECT
    category, COUNT(name)
FROM
    pizza_types
GROUP BY category;
```

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

```sql
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;
```



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

```sql
SELECT
    pizza_types.name,
    SUM(order_details.quantity * pizzas.price) AS revenue
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 revenue DESC
LIMIT 3;
```

CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.

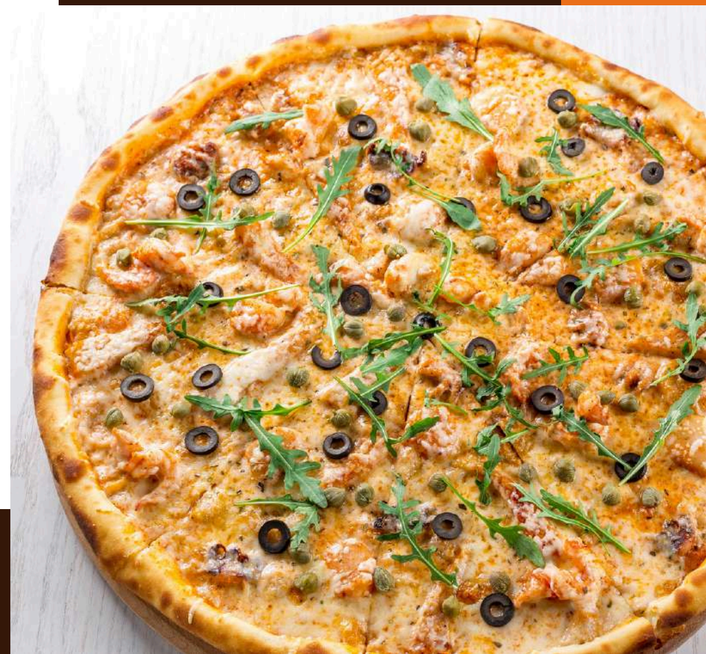
```sql
SELECT
    pizza_types.category,
    ROUND(SUM(order_details.quantity * pizzas.price) / (SELECT
                    ROUND(SUM(order_details.quantity * pizzas.price))
                FROM
                    order_details
                        JOIN
                    pizzas ON pizzas.pizza_id = order_details.pizza_id) * 100,
            2) AS revenue
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.category
ORDER BY revenue DESC;
```

ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.

```sql
select order_date,
sum(revenue) over (order by order_date) as cum_revenue
from
(select orders.order_date,
sum(order_details.quantity* pizzas.price) as revenue
from order_details join pizzas
on order_details.pizza_id= pizzas.pizza_id
join orders
on orders.order_id= order_details.order_id
group by orders.order_date ) as sales;
```

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

```sql
select name ,revenue from
(select category ,name,revenue,
rank() over (partition by category order by revenue desc) as rn
from
(select pizza_types.category , pizza_types.name,
sum(( order_details.quantity)* pizzas.price )as revenue
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.category,pizza_types.name ) as a) as b
where rn <= 3;
```



CONCLUSION

This SQL project helped me analyze pizza sales data and extract valuable business insights using advanced SQL techniques.

- Applied real-world SQL queries on a structured sales dataset
- Identified best-selling pizzas and top revenue-generating categories
- Used JOINs, GROUP BY, ORDER BY, and aggregations
- Implemented CTEs and window functions like RANK() and SUM() OVER
- Explored sales trends by date, time, and pizza size

"Every slice of data tells a story — thank you for being a part of mine." 🍕

THANK YOU FOR ATTENTION