

A close-up, slightly blurred photograph of a large stack of pizzas. The pizzas are topped with various ingredients, including pepperoni, basil leaves, cheese, and what appears to be a green pesto or herb sauce. The colors are vibrant, with reds from the pepperoni and tomatoes, greens from the basil and pesto, and yellows from the cheese.

HAVE A SLICE!

IT'S A  
PIZZA  
PARTY!



# PIZZA SALES SQL ANALYSIS

*SQL queries for  
insights on pizza order  
and revenue*



Pizza is the answer, no matter the question.



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- Course: Data Analysis



# PROJECT OVERVIEW

## Objective:

- Analyze pizza sales using SQL to gain insights into order patterns, revenue, and pizza preferences.

## Tools Used:

- SQL
- Database: Pizza Sales DB

## Categories:

- Basic Queries
- Intermediate Queries
- Advanced Queries



# BASIC QUERY

- Query 1: Total Number of Orders
- Query 2: Total Revenue Generated
- Query 3: Highest-Priced Pizza
- Query 4: Most Common Pizza Size Ordered
- Query 5: Top 5 Most Ordered Pizza Types



# SNAPSHOTS OF BASIC QUERY

```
-- Retrieve the total number of orders placed.  
SELECT  
    COUNT(order_id) AS total_orders  
FROM  
    orders;  
  
-- Calculate the total revenue generated from pizza sales.  
SELECT  
    ROUND(SUM(order_details.quantity * pizzas.price),  
        2) AS total_sales  
FROM  
    order_details  
    JOIN  
    pizzas ON pizzas.pizza_id = order_details.pizza_id;  
  
-- Identify the highest-priced pizza.  
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.  
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 quantity.  
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;
```



# INTERMEDIATE QUERY

- Query 1: Total Quantity by Pizza Category
- Query 2: Orders Distribution by Hour
- Query 3: Category-wise Pizza Distribution
- Query 4: Average Pizzas Ordered per Day
- Query 5: Top 3 Pizza Types Based on Revenue



# SNAPSHOTS OF INTERMEDIATE QUERY

```
-- Join the necessary tables to find the total quantity of each pizza category
SELECT
    pizza_types.category,
    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.category
ORDER BY quantity DESC;
```

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

```
-- Join relevant tables to find the category-wise distribution
SELECT
    category, COUNT(name)
FROM
```

```
-- Group the orders by date and calculate the average number of pizzas per day
SELECT
    ROUND(AVG(quantity), 0) as avg_pizzas_per_day
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
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
```



# ADVANCE QUERY

- Query 1: Percentage Contribution of Each Pizza Type to Revenue
- Query 2: Cumulative Revenue Over Time
- Query 3: Top 3 Pizza Types by Revenue per Category



# SNAPSHOTS OF ADVANCE QUERY

```
-- Calculate the percentage contribution of each pizza type to total sales
SELECT
    pizza_types.category,
    (SUM(order_details.quantity * pizzas.price) / (SELECT
        ROUND(SUM(order_details.quantity * pizzas.price),
        2) AS total_sales
    FROM order_details JOIN
        pizzas ON pizzas.pizza_id = order_details.pizza_id))
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.
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
group by pizza_types.category, pizza_types.name) as a
order by 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
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

- Deeper analysis of sales trends.
- Customer behavior segmentation.
- Insights from each level: Basic, Intermediate, Advanced.



# FOOD Diary

**every sunday  
8:00am**

**only on our channel**

