



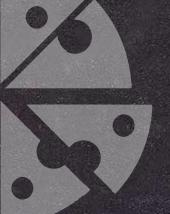
#### Introduction:

Hello, My name is Saumyasuteshnu Behera. In this project I have utilized SQL queries to solve the questions that are related to Pizza sales.



#### All questions I have solved in this project through SQL queries

- 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.
- List the top 5 most ordered pizza types along with their quantities.
- 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.
- 11. Calculate the percentage contribution of each pizza type to total revenue.
- 12. Analyze the cumulative revenue generated over time.
- 13. Determine the top 3 most ordered pizza types based on revenue for each pizza category.



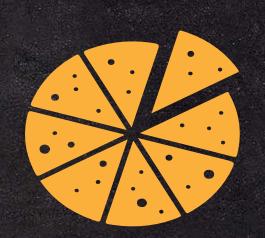
#### Retrieve the total number of orders placed?

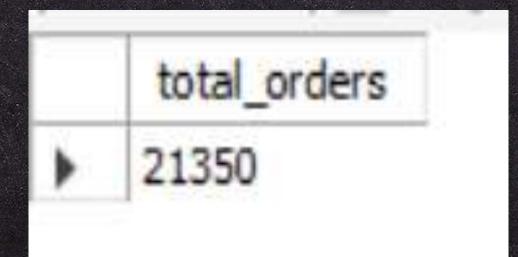
```
SELECT

COUNT(order_id) AS total_orders

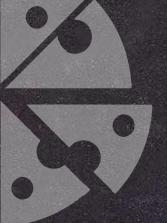
FROM

orders;
```









## Calculate the total revenue generated from pizza sales?

```
SELECT

ROUND(SUM(order_details.quantity * pizzas.price),

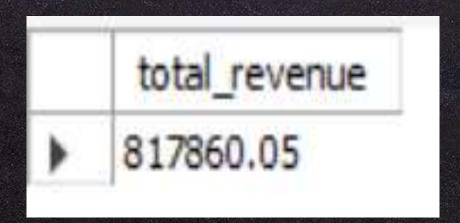
2) AS total_revenue

FROM

order_details

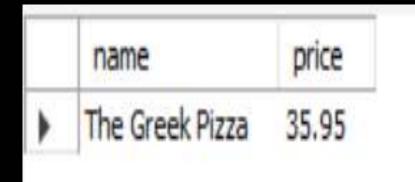
JOIN

pizzas ON pizzas.pizza_id = order_details.pizza_id
```

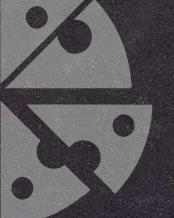


#### Identify the highest-priced pizza?

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

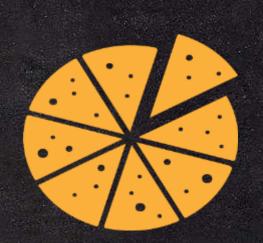






#### Identify the most common pizza size ordered?

```
SELECT
    p.size, COUNT(od.order_details_id) AS total_order
FROM
    pizzas p
         JOIN
    order_details od ON p.pizza_id = od.pizza_id
GROUP BY p.size
ORDER BY COUNT(od.order_details_id) DESC;
```



	size	total_order
•	L	18526
	M	15385
	S	14137
	XL	544
	XXL	28

List the top 5 most ordered pizza types along

with their quantities?

```
pt.name, SUM(od.quantity) AS quantity

FROM

    pizza_types pt
         JOIN

    pizzas p ON pt.pizza_type_id = p.pizza_type_id
         JOIN

    order_details od ON p.pizza_id = od.pizza_id

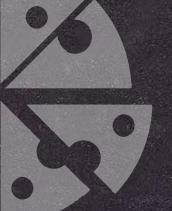
GROUP BY pt.name

ORDER BY COUNT(od.quantity) DESC

LIMIT 5;
```

	name	quantity
١	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?

```
SELECT
   pt.category, SUM(od.quantity) AS total_quantity
FROM
   pizza_types pt
        JOIN
   pizzas p ON pt.pizza_type_id = p.pizza_type_id
        JOIN
      order_details od ON p.pizza_id = od.pizza_id
GROUP BY pt.category
ORDER BY total_quantity DESC;
```



	category	total_quantity
١	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

Determine the distribution of orders by hour of the day?

```
SELECT

HOUR(order_time) AS hour, COUNT(order_id) AS order_count

FROM

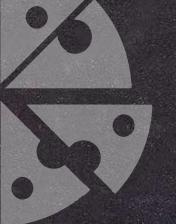
orders

GROUP BY HOUR(order_time)

ORDER BY HOUR(order_time);
```

	hour	order_count
•	9	1
	10	8
	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





# Join relevant tables to find the category-wise distribution of pizzas?

```
category, COUNT(name)

FROM

pizza_types

GROUP BY category;
```



	category	COUNT(name)
•	Chicken	6
	Classic	8
	Supreme	9
	Veggie	9

Group the orders by date and calculate the average number of pizzas ordered per day?

```
FROM

(SELECT

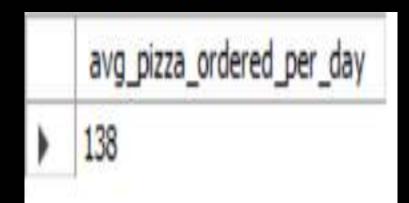
o.order_date, SUM(od.quantity) AS total_quantity

FROM

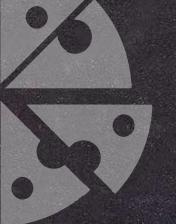
orders o

JOIN order_details od ON o.order_id = od.order_id

GROUP BY o.order_date) AS quantity_per_day;
```







## Determine the top 3 most ordered pizza types based on revenue ?

```
SELECT
    pt.name, SUM(p.price * od.quantity) AS revenue
FROM
    pizzas p
        JOIN
    pizza_types pt ON p.pizza_type_id = pt.pizza_type_id
        JOIN
    order_details od ON p.pizza_id = od.pizza_id
GROUP BY pt.name
ORDER BY revenue DESC
LIMIT 3;
```



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

Calculate the percentage contribution of each pizza type to total revenue?

```
SELECT
   pt.category,
   ROUND(SUM(p.price * od.quantity) / (SELECT
                    ROUND(SUM(p.price * od.quantity), 2) AS 'Total revenue'
                FROM
                    pizzas p
                        DOIN
                    order_details od ON p.pizza_id = od.pizza_id) * 100,
            2) AS revenue
FROM
   pizzas p
        DOIN
   pizza_types pt ON p.pizza_type_id = pt.pizza_type_id
        NIOU
   order_details od ON p.pizza_id = od.pizza_id
GROUP BY pt.category
ORDER BY revenue DESC
```

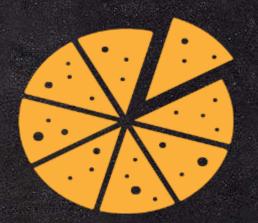
	category	revenue
•	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68





### Analyze the cumulative revenue generated over time?

```
select order_date,
sum(revenue) over (order by order_date) as cumulative_revenue
from
(select o.order_date,
round(sum(p.price*od.quantity),2) as revenue
from orders o
join order_details od on o.order_id=od.order_id
join pizzas p on od.pizza_id=p.pizza_id
group by o.order_date) as revenue_by_date
```



	order_date	cumulative_revenue
•	2015-01-01	2713.85
	2015-01-02	5445.75
	2015-01-03	8108.15
	2015-01-04	9863.6
	2015-01-05	11929.55
	2015-01-06	14358.5
	2015-01-07	16560.7
	2015-01-08	19399.05



Determine the top 3 most ordered pizza types based on revenue for each pizza category?

```
select name, revenue, rn 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;</pre>
```

name	revenue	rn
The Thai Chicken Pizza	43434.25	1
The Barbecue Chicken Pizza	42768	2
The California Chicken Pizza	41409.5	3
The Classic Deluxe Pizza	38180.5	1
The Hawaiian Pizza	32273.25	2
The Pepperoni Pizza	30161.75	3
The Spicy Italian Pizza	34831.25	1
The Italian Supreme Pizza	33476.75	2
The Sicilian Pizza	30940.5	3
The Four Cheese Pizza	32265.70000000065	1
The Mexicana Pizza	26780.75	2
The Five Cheese Pizza	26066.5	3
	The Thai Chicken Pizza The Barbecue Chicken Pizza The California Chicken Pizza The Classic Deluxe Pizza The Hawaiian Pizza The Pepperoni Pizza The Spicy Italian Pizza The Italian Supreme Pizza The Sicilian Pizza The Four Cheese Pizza The Mexicana Pizza	The Thai Chicken Pizza 43434.25 The Barbecue Chicken Pizza 42768 The California Chicken Pizza 41409.5 The Classic Deluxe Pizza 38180.5 The Hawaiian Pizza 32273.25 The Pepperoni Pizza 30161.75 The Spicy Italian Pizza 34831.25 The Italian Supreme Pizza 33476.75 The Sicilian Pizza 30940.5 The Four Cheese Pizza 32265.700000000065 The Mexicana Pizza 26780.75

