

# PIZZA SALES ANALYSIS USING SQL



● WHERE EVERY SLICE TELLS A STORY





**SHODWE**  
Pizza Resto

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# ABOUT THE PROJECT

- **Aim:** To analyze pizza sales data using SQL queries
- **Dataset:** Pizza sales dataset with orders, details, pizzas, etc.
- **Tools:** MySQL



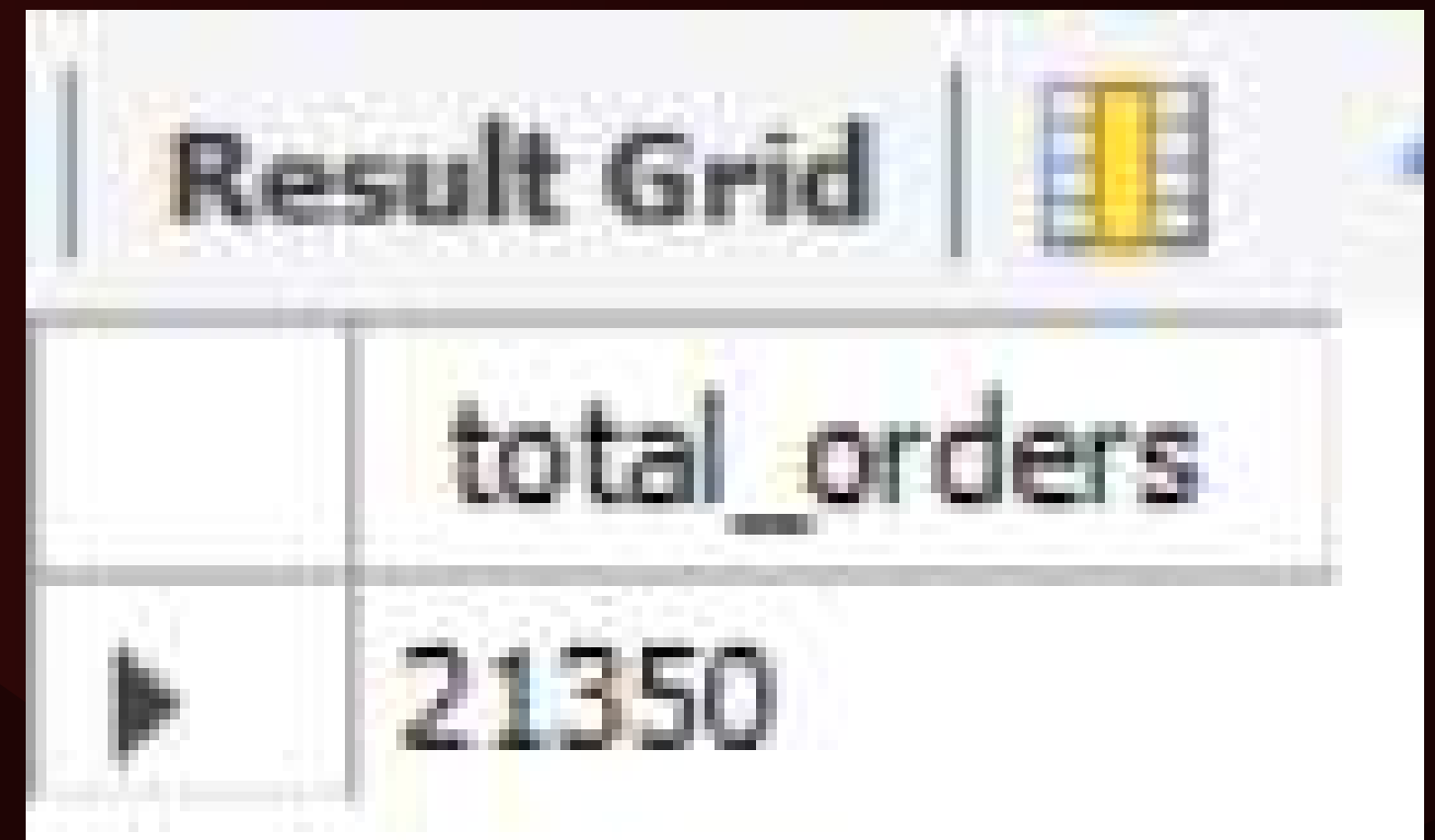


# STARTING OF QUERIES SECTION

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## Retrieve the total no of orders

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



Result Grid	
	total_orders
▶	21350



calculate the total revenue generated from pizza sales.

```
SELECT  
    ROUND(SUM(orders_details.quantity * pizzas.price),  
          2) AS total_sales  
FROM  
    orders_details  
    JOIN  
    pizzas ON pizzas.pizza_id = orders_details.pizza_id
```

Result Grid	
	total_sales
▶	817860.05

# 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;
```

Result Grid			Filter Rows:	
	name	price		
▶	The Greek Pizza	35.95		

# Identify the most common pizza size ordered.

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

Result Grid		
	size	order_count
▶	L	18526
	M	15385
	S	14137
	XL	544
	XXL	28



list the top 5 most ordered pizza types along with their quantities.

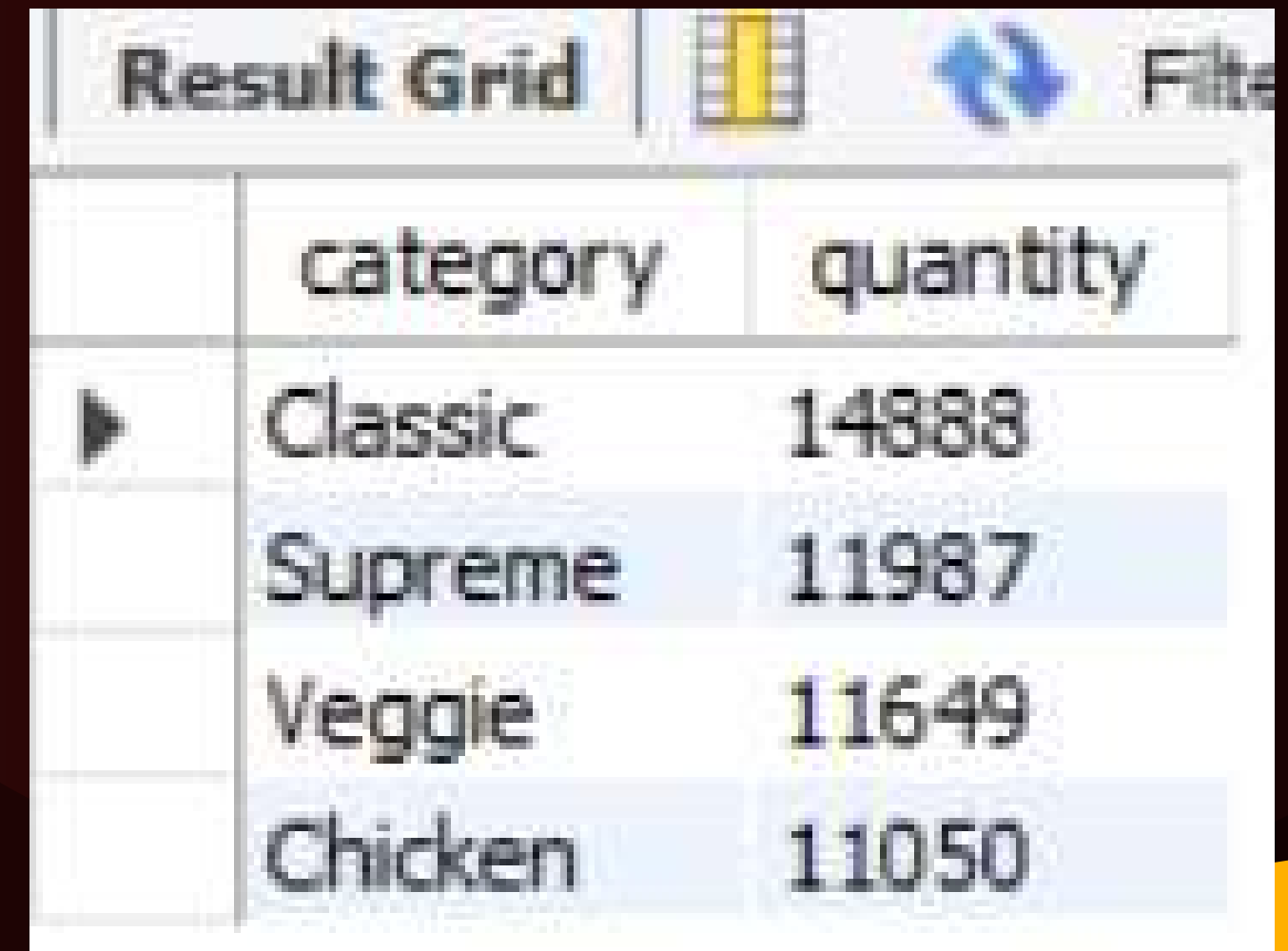
```
SELECT
    pizza_types.name, SUM(orders_details.quantity) AS quantity
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT 5;
```

Result Grid			Filter 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

```
SELECT
    pizza_types.category,
    SUM(orders_details.quantity) AS quantity
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY quantity DESC;
```



	category	quantity
▶	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);
```

Result Grid			Filter Rows
	hour	order_count	
▶	11	1231	
	12	2520	
	13	2455	
	14	1472	
	15	1468	
	16	1920	
	17	2336	
	18	2399	
	19	2009	
	20	1642	
	21	1198	
	22	663	

Joint relevant tables to find the category wise distribution

```
select category ,count(name) from pizza_types  
group by category;
```

Result Grid			Filter Rows:
	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.

```
SELECT  
    ROUND(AVG(quantity), 0) as avg_pizza_ordered_per_day  
FROM  
    (  
        SELECT  
            orders.order_date, SUM(orders_details.quantity) AS quantity  
        FROM  
            orders  
        JOIN orders_details ON orders.order_id = orders_details.order_id  
        GROUP BY orders.order_date) AS order_quantity;
```

Result Grid		Filter Rows:
	avg_pizza_ordered_per_day	
▶	138	

Determine the top 3 most ordered pizza types based on revenue

```
select pizza_types.name,  
sum(orders_details.quantity * pizzas.price) as revenue  
from pizza_types join pizzas  
on pizzas.pizza_type_id = pizza_types.pizza_type_id  
join orders_details  
on orders_details.pizza_id = pizzas.pizza_id  
group by pizza_types.name order by revenue desc limit 3 ;
```

Result Grid			Filter Rows:
	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
    pizza_types.category,
    SUM(orders_details.quantity * pizzas.price) / (SELECT
        ROUND(SUM(orders_details.quantity * pizzas.price),
            2) AS total_sales
    FROM
        orders_details
        JOIN
            pizzas ON pizzas.pizza_id = orders_details.pizza_id) * 100 AS revenue
FROM
    pizza_types
    JOIN
        pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
        orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY revenue DESC;
```

Result Grid			Filter Rows:
	category	revenue	
▶	Classic	26.90596025566967	
	Supreme	25.45631126009862	
	Chicken	23.955137556847287	
	Veggie	23.682590927384577	

analyze the cumulative revenue generated over time

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

Result Grid     Filter Rows: <input type="text"/>		
	order_date	cum_rev
▶	2015-01-01	2713.8500000000004
	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
	2015-01-09	21526.4
	2015-01-10	23990.350000000002
	2015-01-11	25862.65
	2015-01-12	27781.7
	2015-01-13	29831.300000000003



# CONCLUSION

- SQL helped extract valuable insights from pizza sales data:
  - Identified best-selling & least-selling pizzas
  - Observed sales trends by time/day

