



*Today's special*

# PIZZA

**ORDER NOW**



## Hello, my name is Premshankar Saini

I am a data analyst with a focus on SQL-driven solutions for business insights. In my recent project, I analyzed pizza sales data to identify key trends, optimize sales strategies, and uncover actionable insights. By leveraging SQL queries, I explored customer behavior, product performance, and sales metrics to drive data-informed decisions for better business outcomes.

# Questions which are including in this project

## 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:

- 1). Join the necessary tables to find the total quantity of each pizza category ordered.
- 2). Determine the distribution of orders by hour of the day.
- 3). Join relevant tables to find the category-wise distribution of pizzas.
- 4). Group the orders by date and calculate the average number of pizzas ordered per day.
- 5). Determine the top 3 most ordered pizza types based on revenue.

## Advanced:

- 1). Calculate the percentage contribution of each pizza type to total revenue.
- 2). Analyze the cumulative revenue generated over time.
- 3). 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;
```

Result Grid	
	total_orders
1	21350

# Calculate the total revenue generated from pizza sales.

**SELECT**

```
ROUND(SUM(order_details.quantity * pizzas.price),  
      2) total_sales
```

**FROM**

```
order_details
```

```
JOIN
```

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

Result Grid	
	<u>total_sales</u>
▶	817860.05

# Identify the highest-priced pizza.

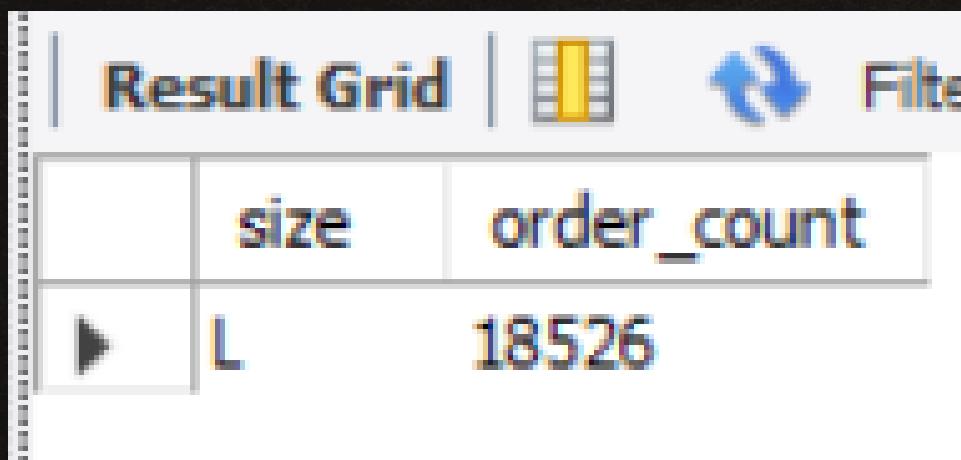
```
SELECT
    pizza_types.name, pizzas.price
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY pizzas.price DESC
LIMIT 1;
```

Result Grid | Filter Rows:

	name	price
▶	The Greek Pizza	35.95

# Identify the most common pizza size ordered..

```
SELECT
    pizzas.size,
    COUNT(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;
```



The screenshot shows a MySQL Workbench interface with a result grid. The grid has two rows: a header row and a data row. The header row contains the column names 'size' and 'order\_count'. The data row contains the value 'L' in the 'size' column and '18526' in the 'order\_count' column. There are navigation arrows at the bottom left of the grid.

	size	order_count
▶	L	18526

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

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

	name	total_quantities
▶	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(order_details.quantity) AS quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizza_types.category
ORDER BY quantity DESC;
```

Result Grid | Filter Rows

	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);
```

	hour	order_count
▶	11	1231
	12	2520
	13	2455
	14	1472
	15	1468
	16	1920
	17	2336
	18	2399

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

```
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)  
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;
```

	ROUND(AVG(quantity), 0)
▶	138

# 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 pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_details ON pizzas.pizza_id = order_details.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,
    round(SUM(order_details.quantity * pizzas.price)/(SELECT
        ROUND(SUM(order_details.quantity * pizzas.price),
        2) total_sales
    )
FROM
    order_details
        JOIN
    pizzas ON order_details.pizza_id = pizzas.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 pizzas.pizza_id = order_details.pizza_id
GROUP BY pizza_types.category
ORDER BY revenue DESC;
```

Result Grid | Filter Rows

	category	revenue
	Classic	26.91
	Supreme	25.46
	Chicken	23.96

# 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
join orders on orders.order_id = order_details.order_id
group by orders.order_date) as sales;
```

	order_date	cum_revenue
▶	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
	2015-01-14	32358.700000000004
	2015-01-15	34343.500000000001
	2015-01-16	36937.650000000001
	2015-01-17	39001.750000000001

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

```
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 pizzas.pizza_id = order_details.pizza_id
group by pizza_types.category,pizza_types.name) as a) as b where rn <=3;
```

	name	revenue
▶	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	32265.70000000065
	The Mexicana Pizza	26780.75
	The Five Cheese Pizza	26066.5