

# ANALYSIS OF PIZZA SALES BY USING SQL





*Hello Everyone,*  
*My name is Leela Lakshmi Mekapothu, I have*  
*completed my graduation in Vignan's Nirula*  
*Institute of Technology and Science for Women in*  
*2024. I have done a project which is entitled as*  
*"Pizza Sales by using SQL".*

GitHub link:

<https://github.com/LEELALAKSHMIMEKAPOTHU?tab=repositories>

# DATABASE

UP TO

The SQL CREATE DATABASE statement is used to create a new SQL database.

Syntax: CREATE DATABASE databasename ;

# Calculate the total revenue generated from pizzas

```
SELECT
```

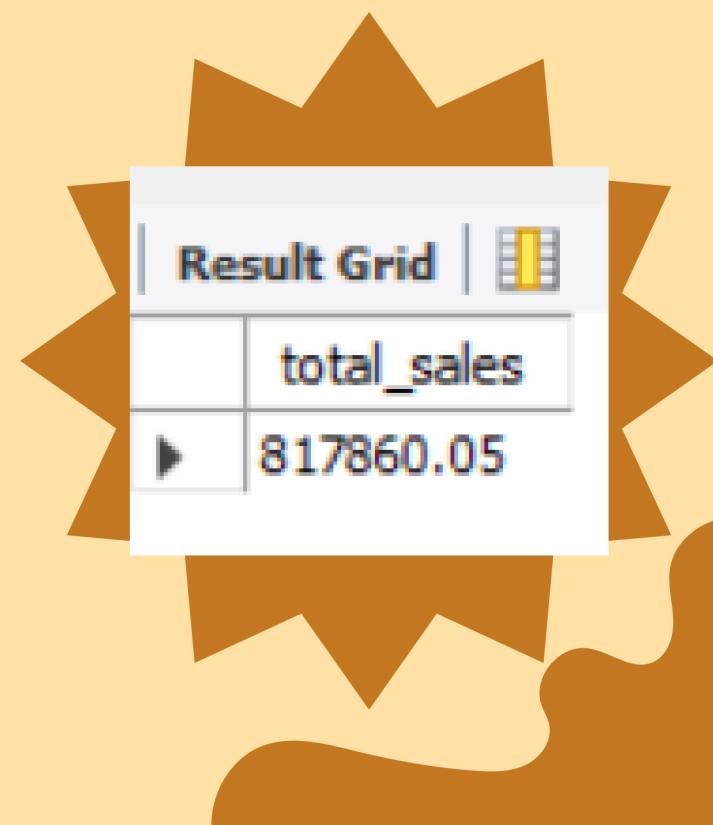
```
    ROUND(SUM(order_details.quantity*pizzas.price),  
          2) AS total_sales
```

```
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;
```

Result Grid | Filter Rows:

|  | name                         | price |
|--|------------------------------|-------|
|  | The Pepperoni Pizza          | 9.75  |
|  | The Greek Pizza              | 35.95 |
|  | The Greek Pizza              | 25.5  |
|  | The Brie Carre Pizza         | 23.65 |
|  | The Italian Vegetables Pizza | 21    |
|  | The Spinach Supreme Pizza    | 20.75 |
|  | The Barbecue Chicken Pizza   | 20.75 |
|  | The Spicy Italian Pizza      | 20.75 |
|  | The California Chicken Pizza | 20.75 |

# 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;
```

Result Grid | Filter Rows:

|   | 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(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;
```

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(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;
```

Result Grid | Filter

|   | 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 |

|  | hour | order_count |
|--|------|-------------|
|  | 18   | 2399        |
|  | 19   | 2009        |
|  | 20   | 1642        |
|  | 21   | 1198        |
|  | 22   | 663         |
|  | 23   | 28          |
|  | 10   | 8           |
|  | 9    | 1           |

# 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           |

# 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
    order_details ON order_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      |

# 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           |

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

| Result Grid |                              |          |
|-------------|------------------------------|----------|
|             |                              |          |
|             | 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  |