

# **MySQL PROJECT ON PIZZA SALES**

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## ***Introduction: Analyzing Pizza Sales Data Using SQL Queries***

*In this project, I analyzed pizza sales data using SQL queries to gain insights into sales trends, customer preferences, and overall business performance. The dataset consisted of CSV files containing information about pizza orders, including details such as order date, pizza type, quantity, price, and Pizza's ingredients*



# Objective: The objective of this project was to:

- 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.
- 



- 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.

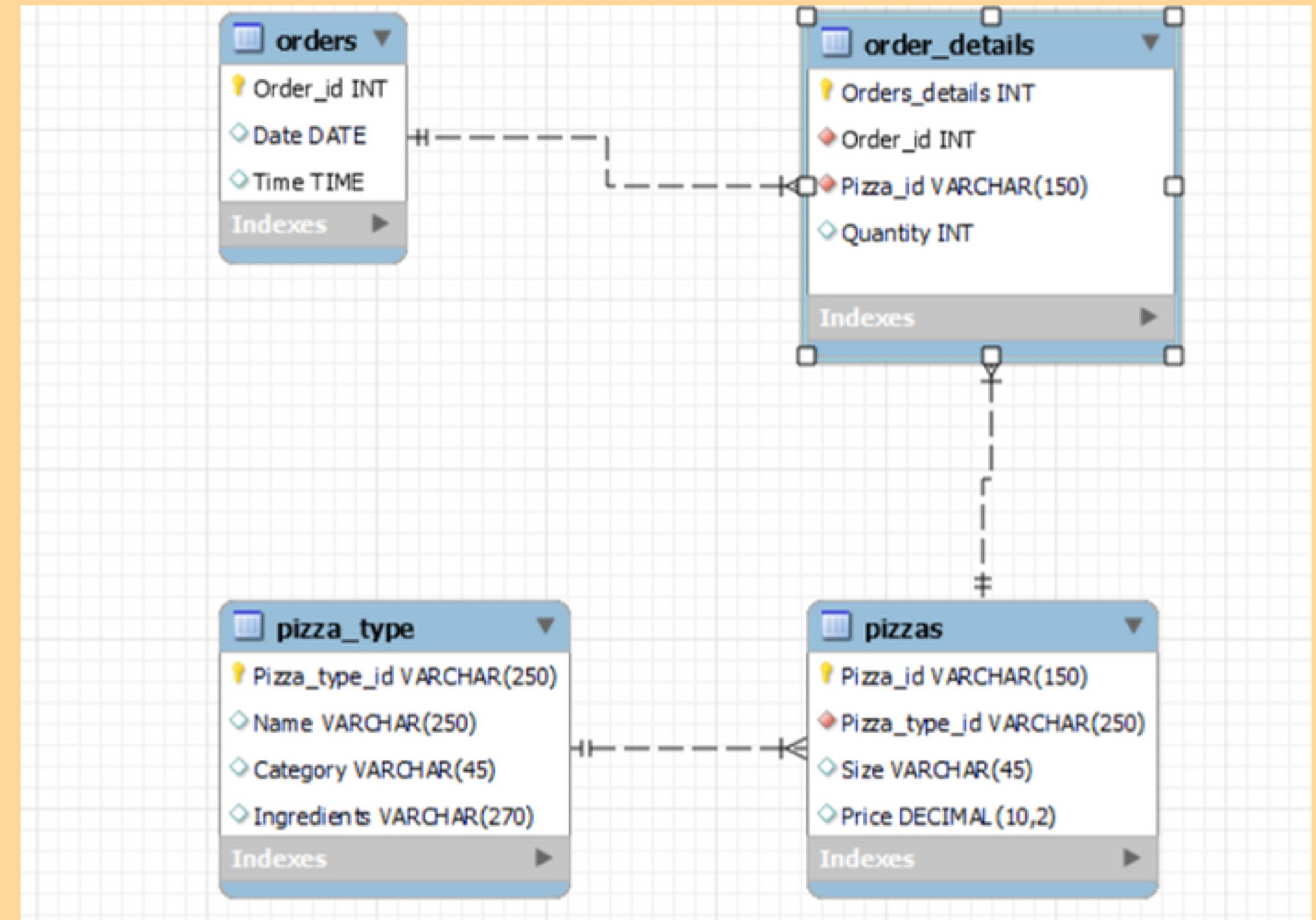


II) Calculate the percentage contribution of each pizza type to total revenue.

I2) Analyze the cumulative revenue generated over time.

I3) 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_received  
from orders;
```

Result Grid		 Filter Rows:	<input type="text"/>	Export: 	Wrap Cell Content: 
Total_orders_received					
21350					



# Calculate the total revenue generated from pizza sales.

- ```
select sum(Price*Quantity) as Total_Revenue_Generated
from pizzas p
join order_details o
on p.pizza_id=o.pizza_id;
```

|   | Total_Revenue_Generated |
|---|-------------------------|
| ▶ | 817860.05               |



# Identify the highest-priced pizza.

```
2 • select Name,Price  
3   from Pizzas p  
4   join pizza_type pt  
5   on p.Pizza_type_id=pt.Pizza_type_id  
6   where price=(select max(price) from pizzas);
```

| Result Grid |                 | Filter Rows: | Export: | Wrap Cell Content: |
|-------------|-----------------|--------------|---------|--------------------|
|             | Name            | Price        |         |                    |
| ▶           | The Greek Pizza | 35.95        |         |                    |



# Identify the most common pizza size ordered.

```
2 • with cte as(select size,sum(Quantity)  as total_orders  
3   from order_details o  
4   join pizzas p  
5   on o.Pizza_id=p.Pizza_id  
6   group by size)  
7   select size,total_orders  
8   from cte  
9   where total_orders=(select max(total_orders) from cte)
```

Result Grid | Filter Rows: \_\_\_\_\_ | Export: | Wrap Cell Content:

|   | size | total_orders |
|---|------|--------------|
| ▶ | L    | 18956        |



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

```
2 • with cte as(select Name,sum(quantity) as qty
3   from order_details od
4   join pizzas p
5   on od.pizza_id=p.pizza_id
6   join pizza_type pt
7   on p.pizza_type_id=pt.pizza_type_id
8   group by Name)
9   select Name,qty
10  from cte
11  order by qty desc
12  limit 5
```



| Name                       | qty  |
|----------------------------|------|
| 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 category,sum(Quantity) as qty_ordered  
from order_details od  
join pizzas p  
on od.pizza_id=p.pizza_id  
join pizza_type pt  
on pt.pizza_type_id=p.pizza_type_id  
group by category  
order by qty_ordered desc
```

|   | category | qty_ordered |
|---|----------|-------------|
| ▶ | Classic  | 14888       |
|   | Supreme  | 11987       |
|   | Veggie   | 11649       |
|   | Chicken  | 11050       |



# Determine the distribution of orders by hour of the day.

```
select hour(time) as Hour, count(order_id) as total_order_received  
from orders  
group by hour(time)
```

| Hour | total_order_received |
|------|----------------------|
| 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                   |

# find the category-wise distribution of pizzas.

```
select category, count(Pizza_type_id) as total_types_of_Pizzas  
from pizza_type  
group by category  
order by total_types_of_Pizzas desc
```

| category | total_types_of_Pizzas |
|----------|-----------------------|
| Supreme  | 9                     |
| Veggie   | 9                     |
| Classic  | 8                     |
| Chicken  | 6                     |

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

```
with cte as(select date,sum(quantity) as qty  
from order_details od  
join orders o  
on od.order_id=o.order_id  
group by date)  
select round(avg(qty),2) as Average_order_per_day  
from cte
```

| Result Grid           |        | Filter Rows: | Export: | Wrap Cell Content: |
|-----------------------|--------|--------------|---------|--------------------|
| Average_order_per_day |        |              |         |                    |
| ▶                     | 138.47 |              |         |                    |



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

```
with cte as(select Name,quantity,price  
from order_details od  
join pizzas p  
on od.pizza_id=p.pizza_id  
join Pizza_type pt  
on pt.Pizza_type_id=p.Pizza_type_id)  
select Name,sum(quantity*price) as Total_sum  
from cte  
group by Name  
order by Total_sum desc  
limit 3
```



| Result Grid |                              | Filter Rows: | Export: | Wrap Cell Content: |
|-------------|------------------------------|--------------|---------|--------------------|
|             | Name                         | Total_sum    |         |                    |
| ▶           | The Thai Chicken Pizza       | 43434.25     |         |                    |
|             | The Barbecue Chicken Pizza   | 42768.00     |         |                    |
|             | The California Chicken Pizza | 41409.50     |         |                    |

# Calculate the percentage contribution of each pizza type to total revenue.

```
with cte as(
    select Category,price,Quantity
    from pizza_type pt
    join pizzas p
    on pt.Pizza_type_id=p.Pizza_type_id
    join order_details od
    on od.Pizza_id=p.Pizza_id
),
cte1 as(select category,sum(price*quantity)  as x,
sum(price*quantity)  as y
from cte
group by category),
cte2 as (select category,x,sum(y) over() as t
from cte1)
select category,round(x*100/t,2) as pct_contribution_in_rev
from cte2
order by pct_contribution_in_rev desc
```



| category | pct_contribution_in_rev |
|----------|-------------------------|
| Classic  | 26.91                   |
| Supreme  | 25.46                   |
| Chicken  | 23.96                   |
| Veggie   | 23.68                   |

# Analyze the cumulative revenue generated over time.

```
with cte as(select date,sum(price*quantity) as t  
from pizzas pi  
join order_details od  
on pi.Pizza_id=od.pizza_id  
join orders o  
on o.order_id=od.Order_id  
group by date)  
select date,sum(t) over(order by date) as cumlative_revenue  
from cte
```



| date       | cumulative_revenue |
|------------|--------------------|
| 2015-01-01 | 2713.85            |
| 2015-01-02 | 5445.75            |
| 2015-01-03 | 8108.15            |
| 2015-01-04 | 9863.60            |
| 2015-01-05 | 11929.55           |
| 2015-01-06 | 14358.50           |
| 2015-01-07 | 16560.70           |
| 2015-01-08 | 19399.05           |
| 2015-01-09 | 21526.40           |
| 2015-01-10 | 23990.35           |
| 2015-01-11 | 25862.65           |
| 2015-01-12 | 27781.70           |
| 2015-01-13 | 29831.30           |
| 2015-01-14 | 32358.70           |
| 2015-01-15 | 34343.50           |
| 2015-01-16 | 36937.65           |
| 2015-01-17 | 39001.75           |
| 2015-01-18 | 40978.60           |
| 2015-01-19 | 43365.75           |
| 2015-01-20 | 45763.65           |
| 2015-01-21 | 47804.20           |
| 2015-01-22 | 50300.90           |
| 2015-01-23 | 52724.60           |
| 2015-01-24 | 55013.85           |
| 2015-01-25 | 56631.40           |
| 2015-01-26 | 58515.80           |
| 2015-01-27 | 61043.85           |
| 2015-01-28 | 63059.85           |
| 2015-01-29 | 65105.15           |
| 2015-01-30 | 67375.45           |
| 2015-01-31 | 69793.30           |
| 2015-02-01 | 72982.50           |

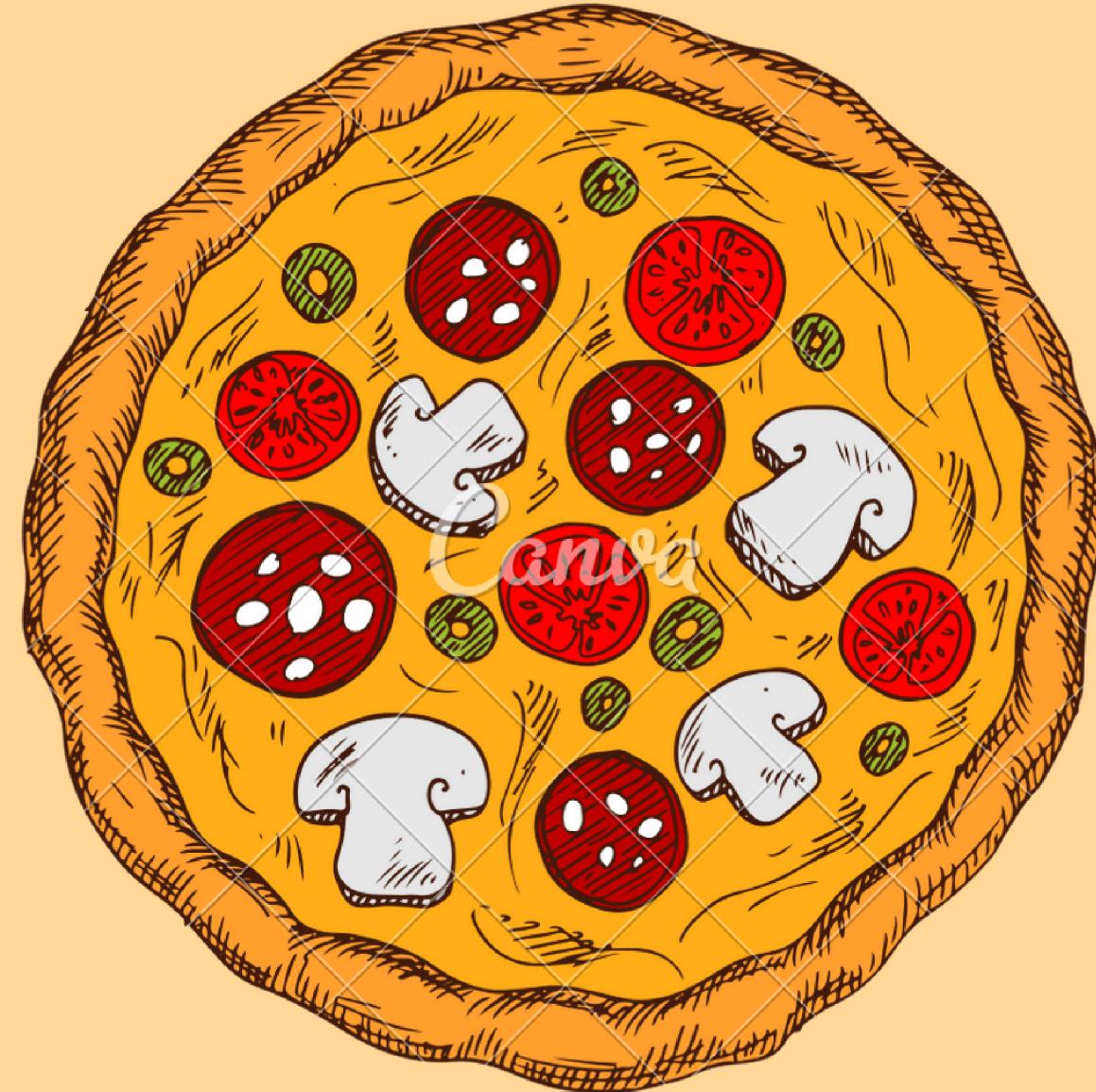
# Determine the top 3 most ordered pizza types based on revenue for each pizza category.

```
with cte as(select category, name, sum(price*quantity) as Total  
from pizza_type pt  
join pizzas pi  
on pt.pizza_type_id=pi.pizza_type_id  
join order_details od  
on pi.pizza_id=od.pizza_id  
group by category, name  
order by category, Total desc),  
cte1 as(select * ,rank() over(partition by category order by Total desc) as top_3  
from cte)  
select *  
from cte1  
where top_3<=3
```



| category | name                         | Total    | top_3 |
|----------|------------------------------|----------|-------|
| Chicken  | The Thai Chicken Pizza       | 43434.25 | 1     |
| Chicken  | The Barbecue Chicken Pizza   | 42768.00 | 2     |
| Chicken  | The California Chicken Pizza | 41409.50 | 3     |
| Classic  | The Classic Deluxe Pizza     | 38180.50 | 1     |
| Classic  | The Hawaiian Pizza           | 32273.25 | 2     |
| Classic  | The Pepperoni Pizza          | 30161.75 | 3     |

|         |                           |          |   |
|---------|---------------------------|----------|---|
| Supreme | The Spicy Italian Pizza   | 34831.25 | 1 |
| Supreme | The Italian Supreme Pizza | 33476.75 | 2 |
| Supreme | The Sicilian Pizza        | 30940.50 | 3 |
| Veggie  | The Four Cheese Pizza     | 32265.70 | 1 |
| Veggie  | The Mexicana Pizza        | 26780.75 | 2 |
| Veggie  | The Five Cheese Pizza     | 26066.50 | 3 |



**THANK  
YOU**

