



SQL REPORT ON PIZZA SALES

presented by

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INTRODUCTION

Pizza, the universally adored comfort food, isn't just a delight to the taste buds; it also provides a goldmine of data for analysis. This project delves into the intricacies of our pizza sales, employing SQL to uncover patterns and trends that can drive business decisions. Through comprehensive queries and data examination, we aim to illuminate key sales metrics such as total revenue, sales by pizza type, peak sales periods, and regional preferences.

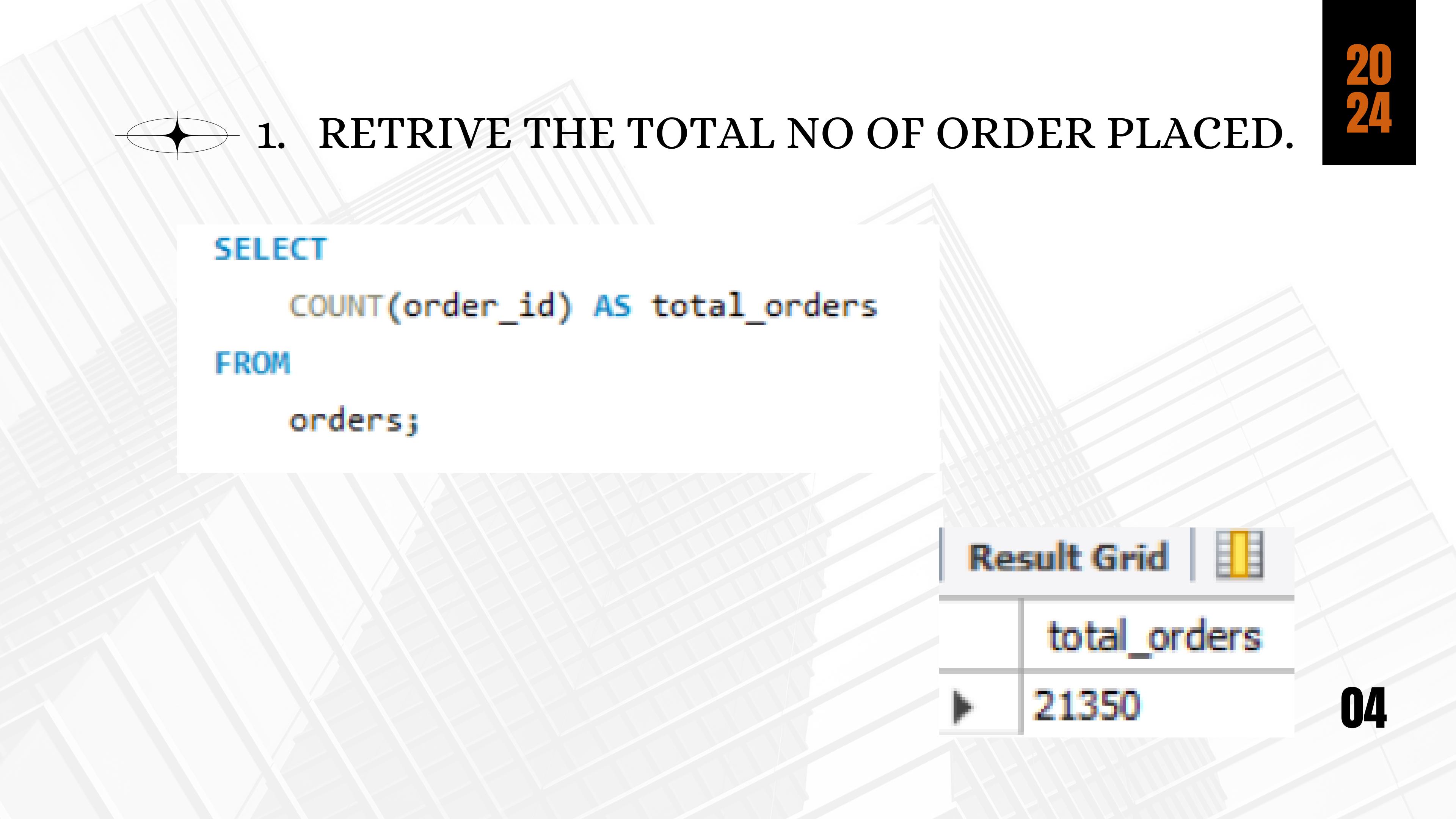


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PROBLEM STATEMENTS

1. RETRIEVE THE TOTAL NO OF ORDER 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 PIZZAS TYPES ALONG WITH THEIR QUANTITY.
6. JOIN THE NECESSARY TABLE TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATOGERY ORDERED.
7. DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.
8. JOIN RELEVANT TABLES TO FIND THE CATOGERY-WISE DISTRIBUTION OF PIZZAS.
9. GROUP THE ORDER BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZA 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 ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY



1. RETRIEVE THE TOTAL NO OF ORDER PLACED.

SELECT

COUNT(order_id) AS total_orders

FROM

orders;

Result Grid

total_orders

21350

2. CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```
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;
```

Result Grid	
	total_sales
▶	817860.05

3. 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

4. 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 |

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

5. LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITY

```
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

6. JOIN THE NECESSARY TABLE TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATOGERY 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

7. 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
	19	2009
	20	1642
	21	1198
	22	663
	23	28
	10	8
	9	1

8. JOIN RELEVANT TABLES TO FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS.

```
SELECT  
    category, COUNT(name)  
FROM  
    pizza_types  
GROUP BY category;
```

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

9. GROUP THE ORDER BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZA ORDERED PER DAY.

```
SELECT  
    ROUND(AVG(quantity), 0) AS avg_pizza_ordered_per_day  
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;
```

	Result Grid	 Filter Row
	ROUND(AVG(quantity),0)	
▶	138	

10.DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE.

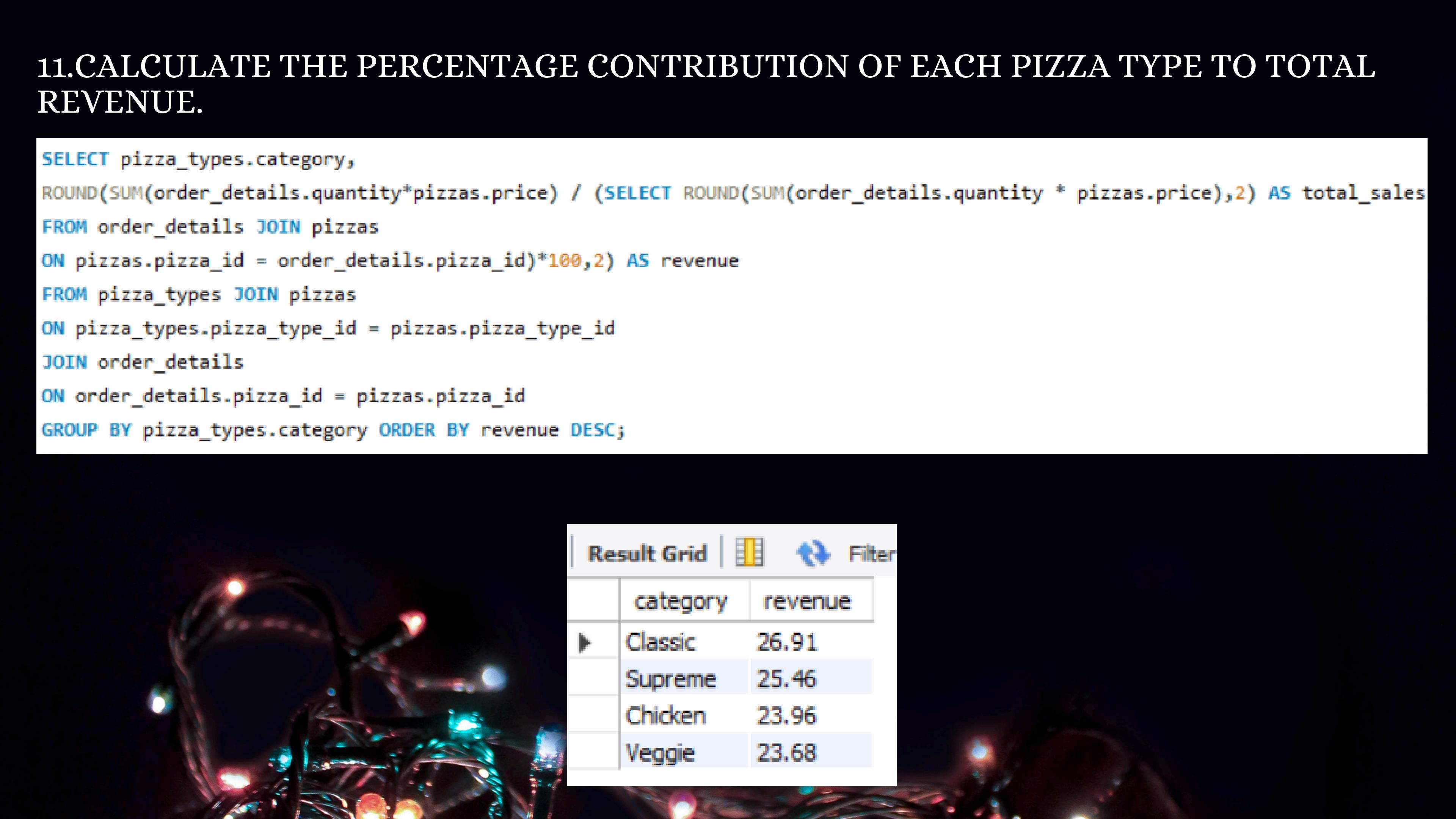
```
SELECT pizza_types.name,  
SUM(order_details.quantity * pizzas.price) AS revenue  
FROM pizza_types JOIN pizzas  
ON pizzas.pizza_type_id = pizza_types.pizza_type_id  
JOIN order_details  
ON order_details.pizza_id = pizzas.pizza_id  
GROUP BY pizza_types.name ORDER BY revenue DESC LIMIT 3;
```

Result Grid | Filter Rows:

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

11.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) AS total_sales  
FROM order_details JOIN pizzas  
ON pizzas.pizza_id = order_details.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 order_details.pizza_id = pizzas.pizza_id  
GROUP BY pizza_types.category ORDER BY revenue DESC;
```



A screenshot of a MySQL Workbench interface showing the results of a SQL query. The results are displayed in a grid with two columns: 'category' and 'revenue'. The 'category' column lists four pizza types, and the 'revenue' column shows their respective contributions to total sales. The results are ordered by revenue in descending order.

	category	revenue
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

12. 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;
```

Result Grid		Filter Rows:
	order_date	cum_revenue
▶	2015-01-01	2713.850000000004
	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

13.DETERMINE THE TOP 3 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;
```

	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

THANK YOU