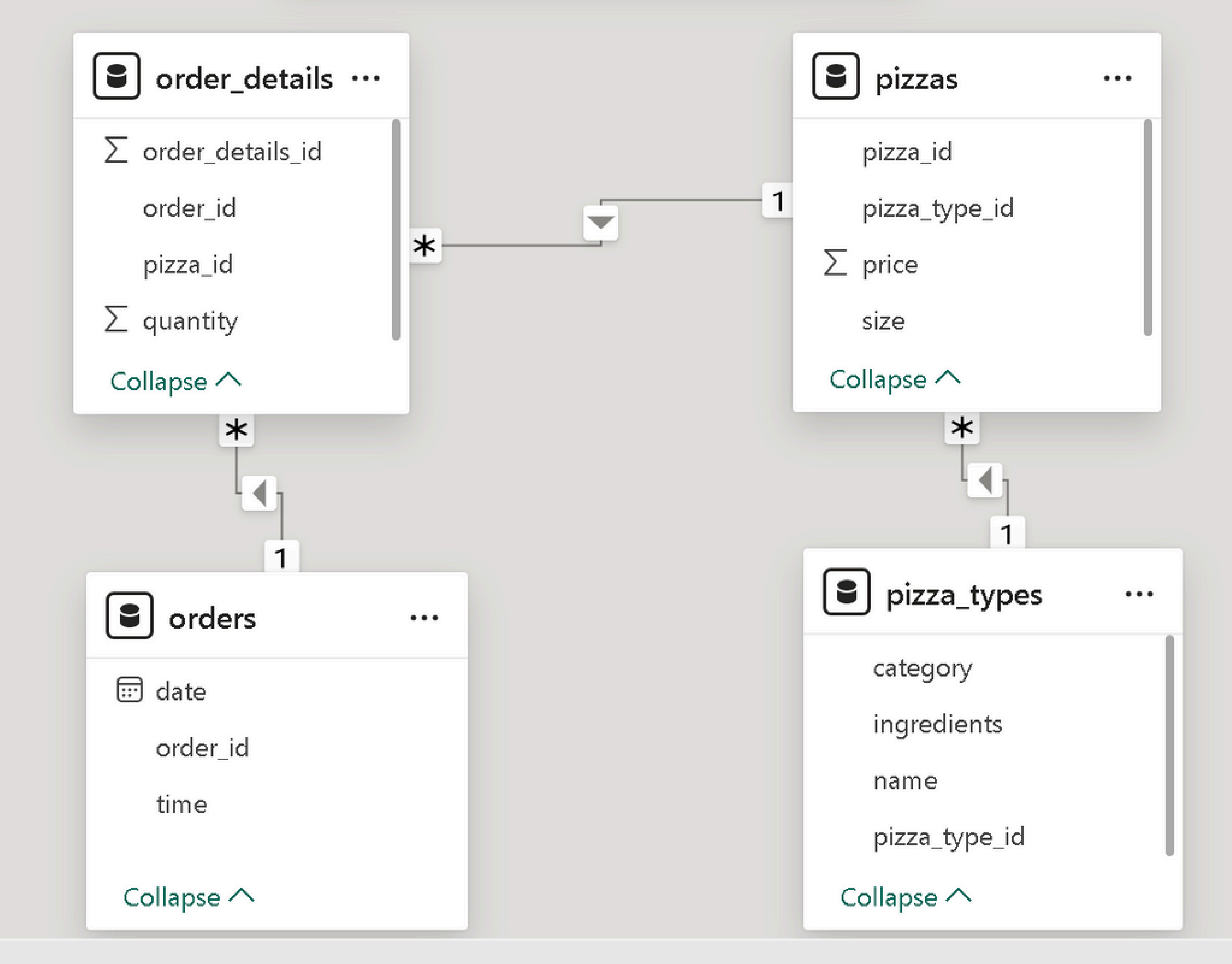
Majestic Pizza Emporium

HELLO!

-- Hello, my name is Talha Shahzad and today I will write SQL queries related to pizza sales.
-- We will explore various aspects of the data to gain meaningful insights.
-- This includes analyzing orders, revenue, and popular pizza types.
-- Let's get started with seeing schema

SCHEMA



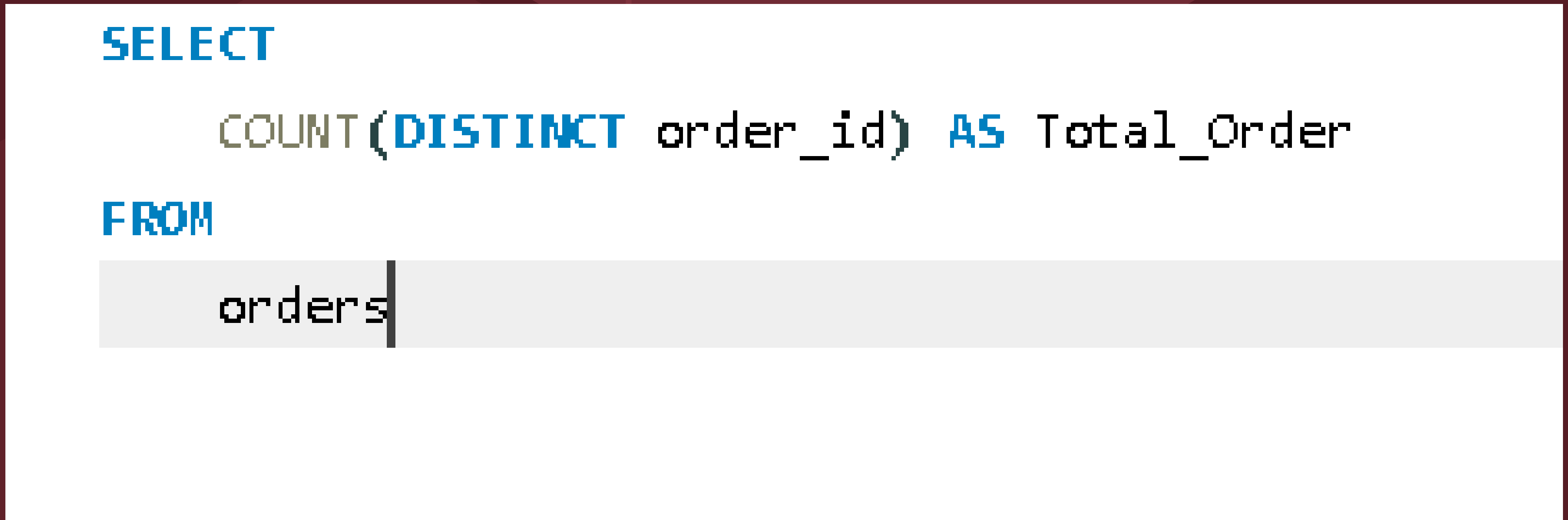
order_details ···
∑ order_details_id
order_id
pizza_id
∑ quantity
Collapse

pizzas ···
pizza_id
pizza_type_id
∑ price
size
Collapse

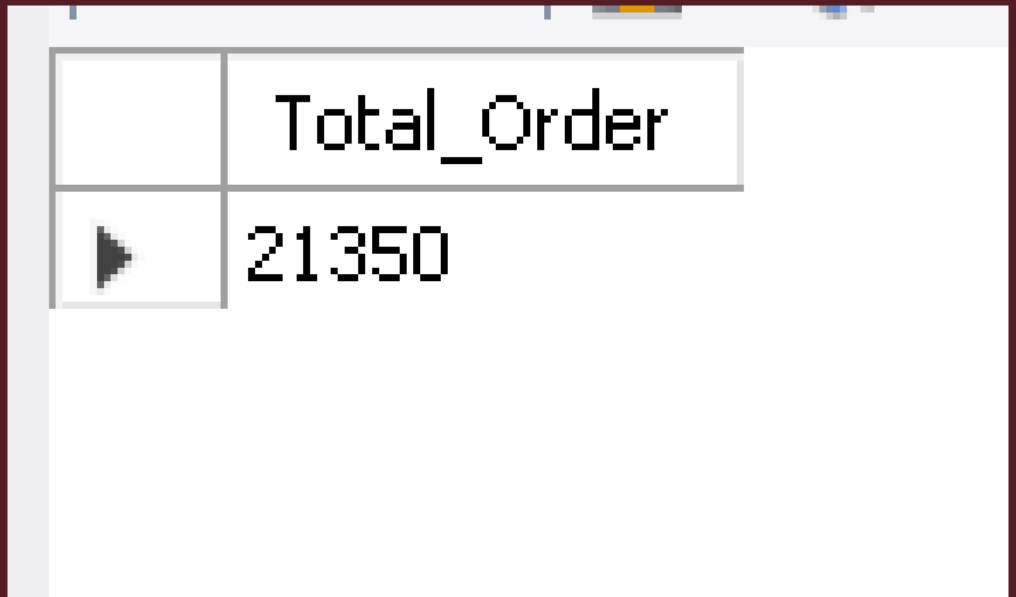
orders ···
date
order_id
time
Collapse

pizza_types ···
category
ingredients
name
pizza_type_id
Collapse

Retrieve the total number of orders placed.

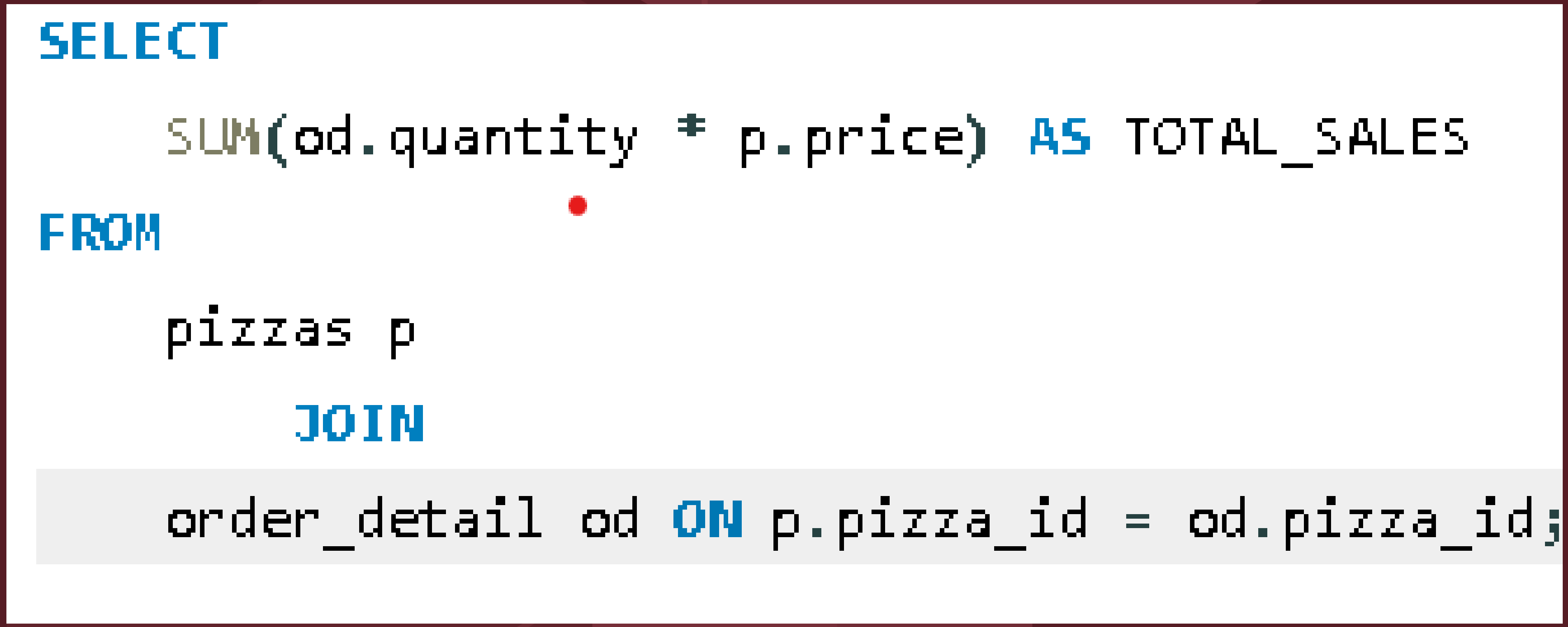


```
SELECT
    COUNT(DISTINCT order_id) AS Total_Order
FROM
    orders
```

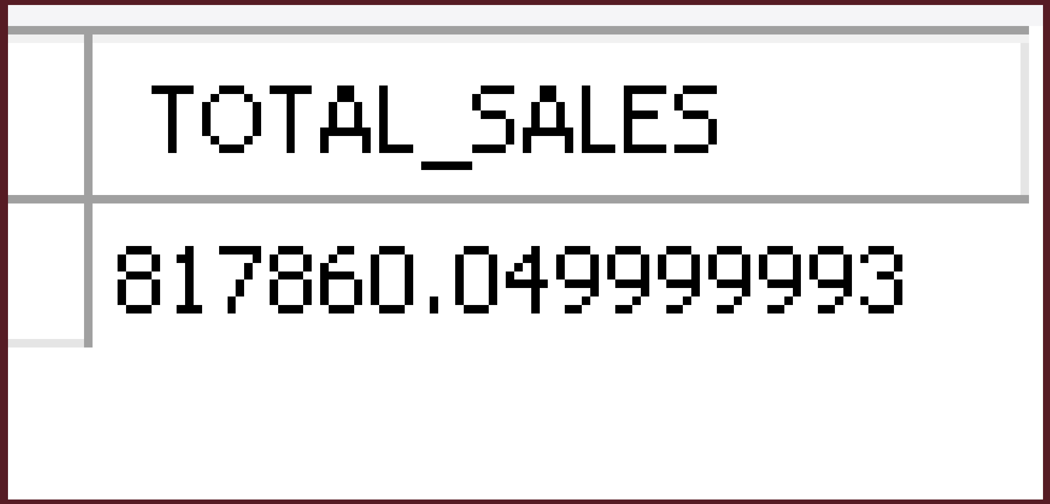


```
Total_Order
21350
```

Calculate the total revenue generated from pizza sales.

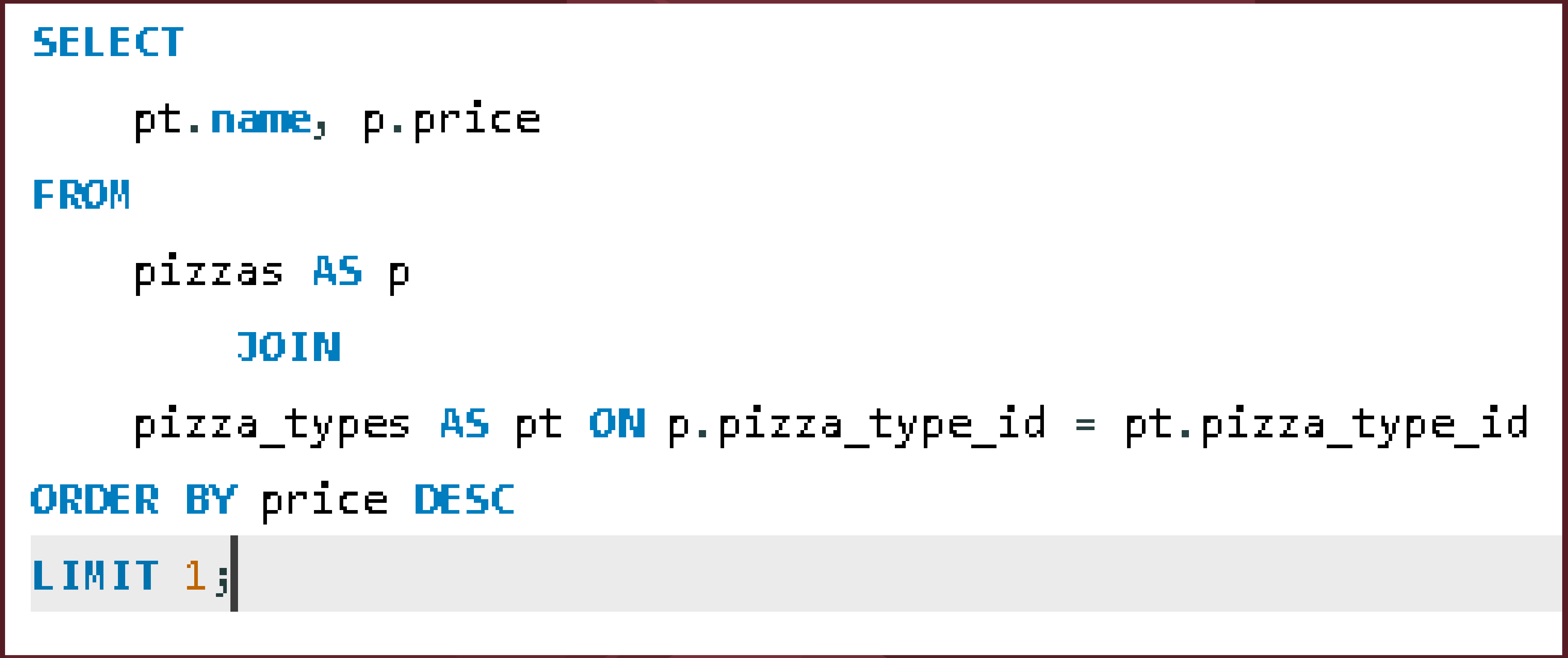


```
SELECT
    SUM(od.quantity * p.price) AS TOTAL_SALES
FROM
    pizzas p
        JOIN
    order_detail od ON p.pizza_id = od.pizza_id;
```

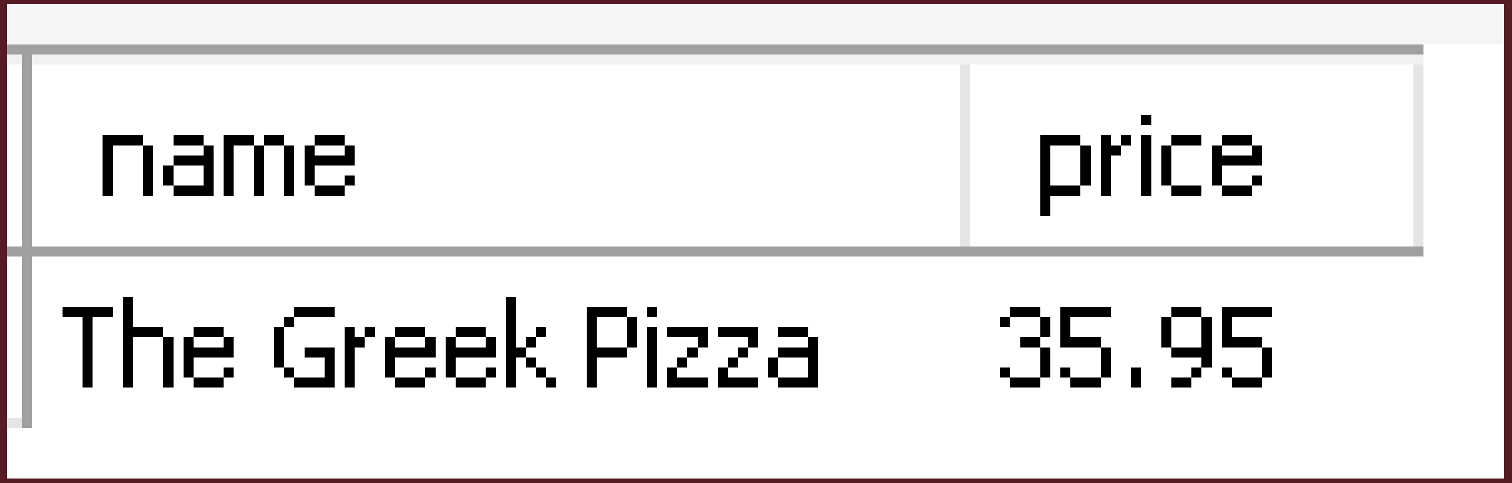


```
TOTAL_SALES
817860.049999993
```

Identify the highest-priced pizza.

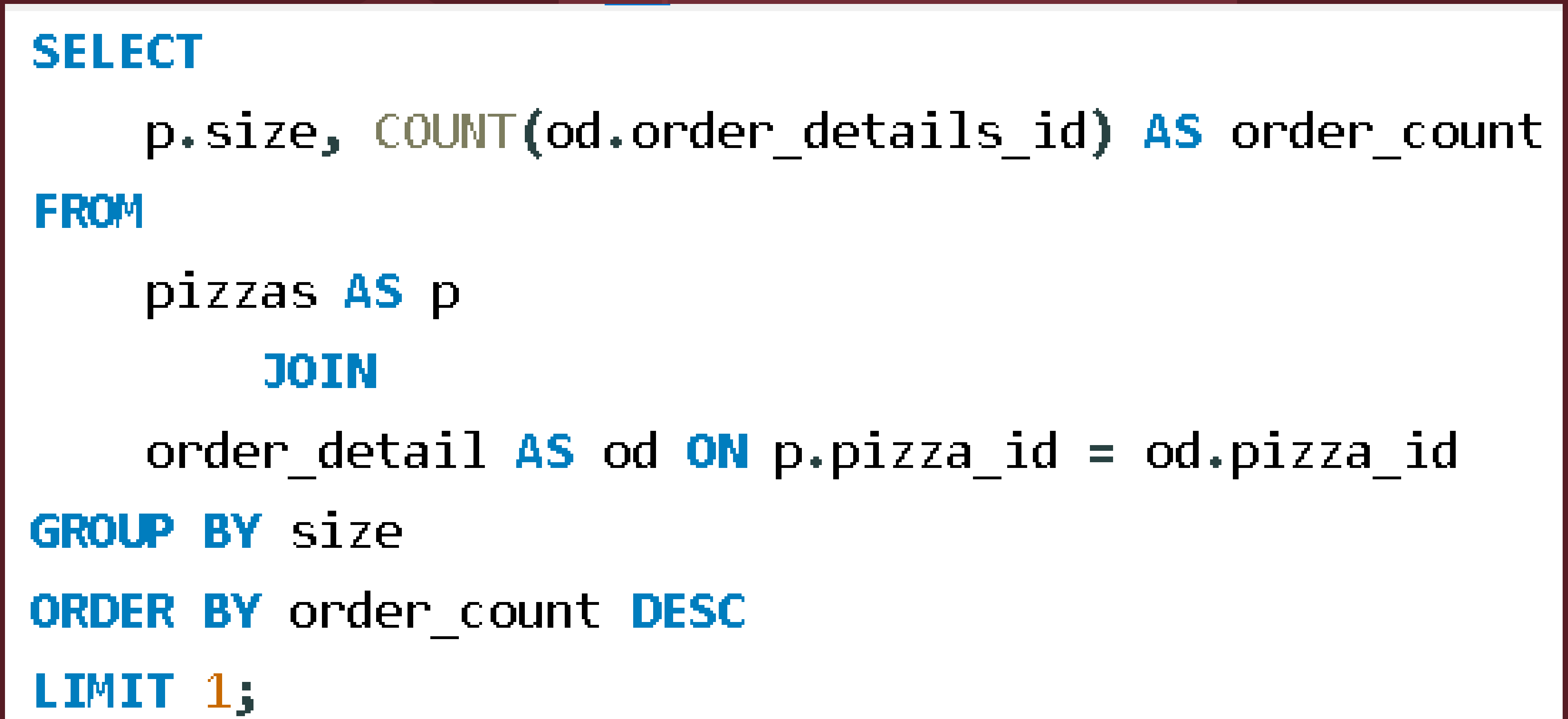


```
SELECT
    pt.name, p.price
FROM
    pizzas AS p
        JOIN
    pizza_types AS pt ON p.pizza_type_id = pt.pizza_type_id
ORDER BY price DESC
LIMIT 1;
```

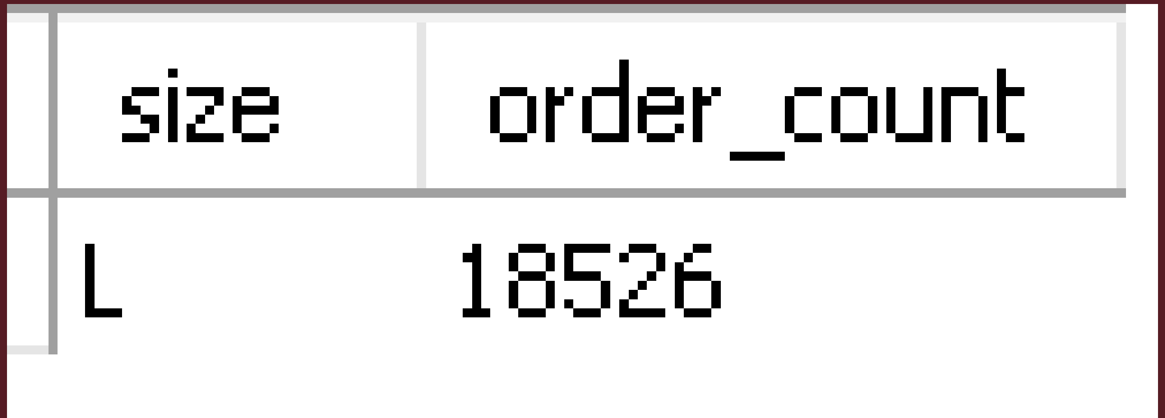


name	price
The Greek Pizza	35.95

Identify the most common pizza size ordered.

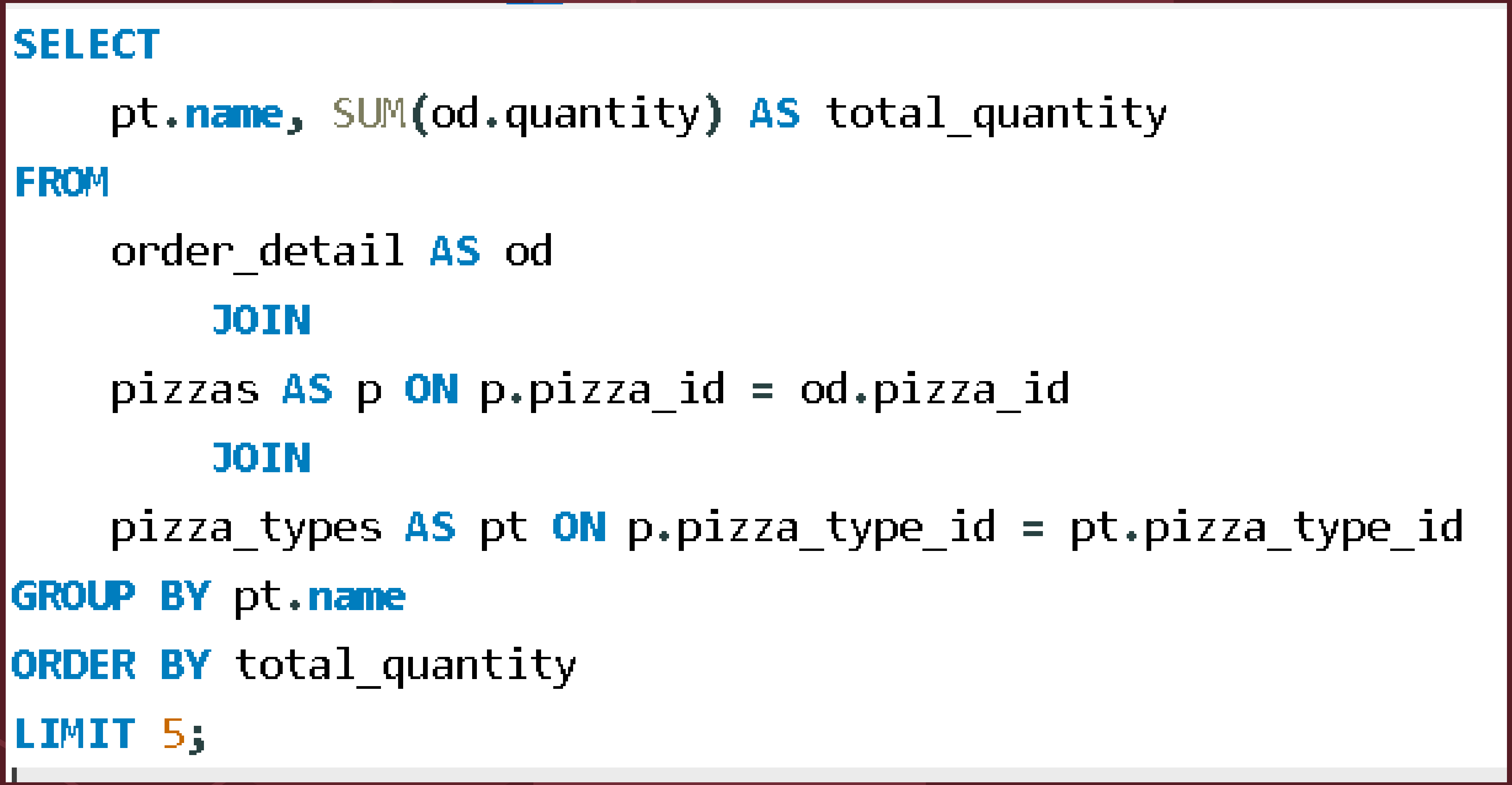


```
SELECT
    p.size, COUNT(od.order_details_id) AS order_count
FROM
    pizzas AS p
        JOIN
    order_detail AS od ON p.pizza_id = od.pizza_id
GROUP BY size
ORDER BY order_count DESC
LIMIT 1;
```

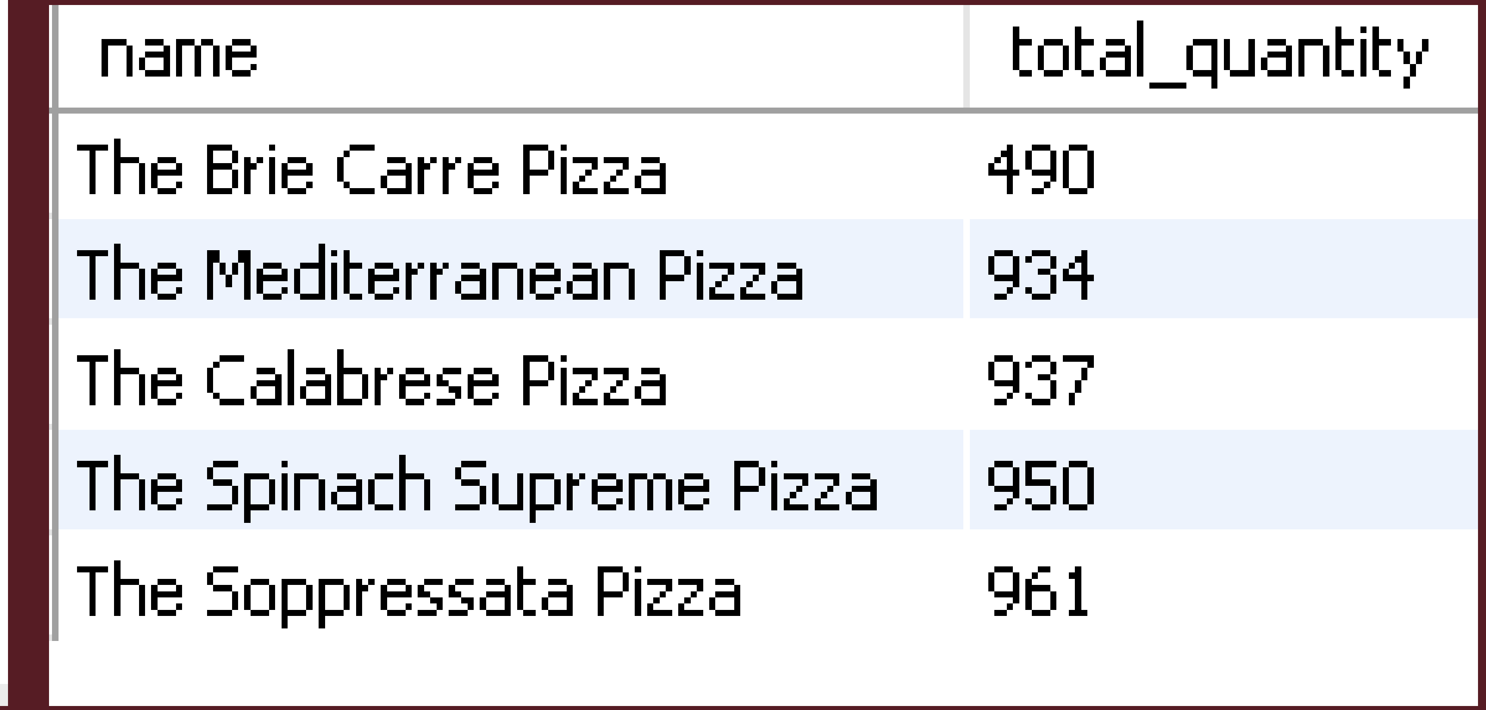


size	order_count
L	18526

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

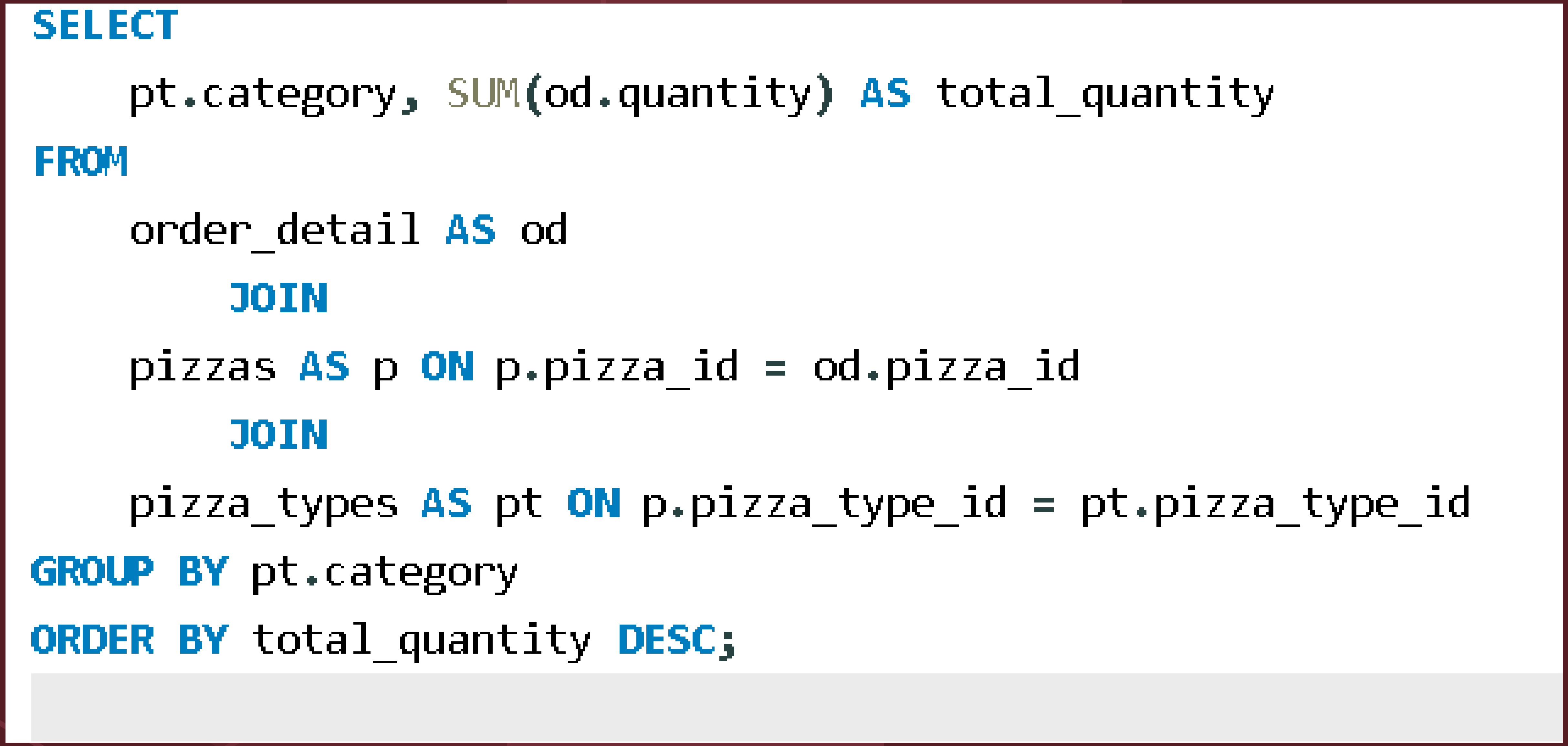


```
SELECT
    pt.name, SUM(od.quantity) AS total_quantity
FROM
    order_detail AS od
        JOIN
    pizzas AS p ON p.pizza_id = od.pizza_id
        JOIN
    pizza_types AS pt ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.name
ORDER BY total_quantity
LIMIT 5;
```

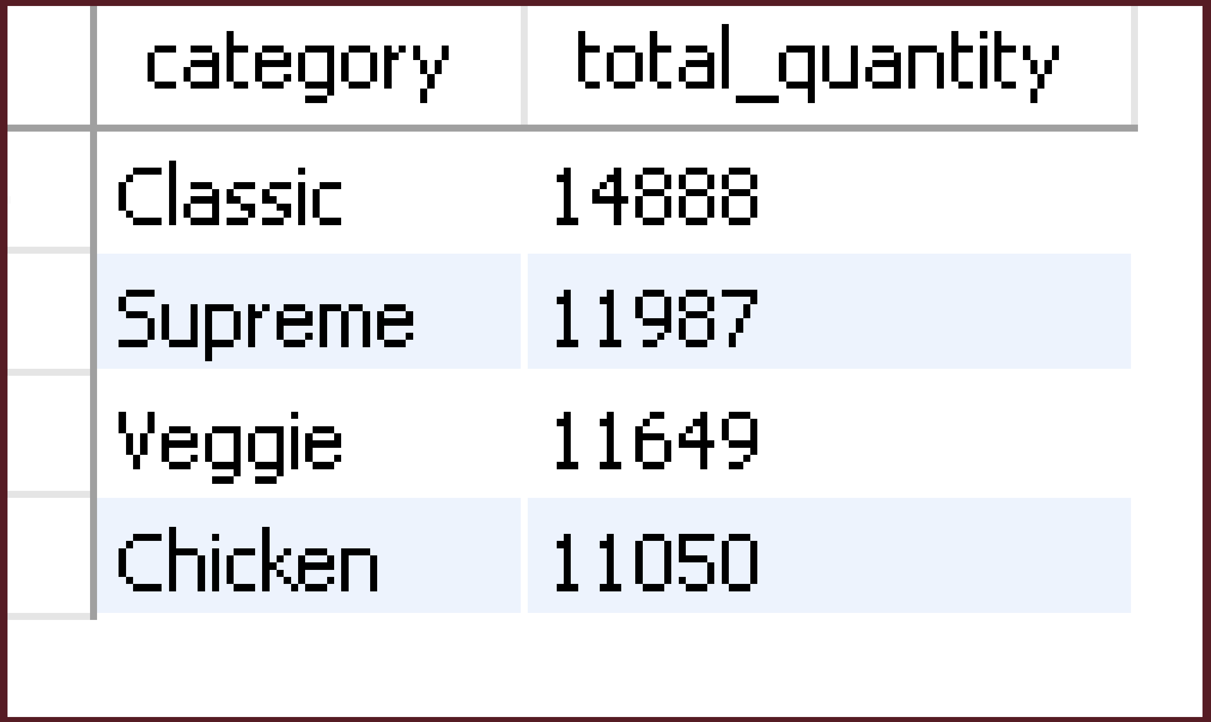


name	total_quantity
The Brie Carre Pizza	490
The Mediterranean Pizza	934
The Calabrese Pizza	937
The Spinach Supreme Pizza	950
The Soppressata Pizza	961

Join the necessary tables to find the total quantity of each pizza category ordered.

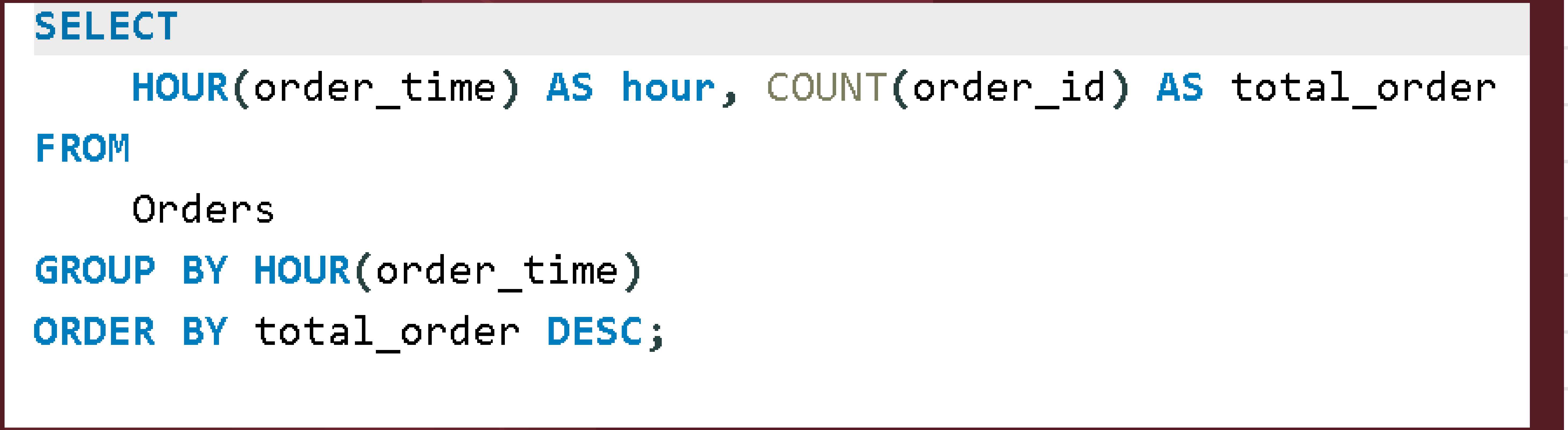


```
SELECT
    pt.category, SUM(od.quantity) AS total_quantity
FROM
    order_detail AS od
        JOIN
    pizzas AS p ON p.pizza_id = od.pizza_id
        JOIN
    pizza_types AS pt ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.category
ORDER BY total_quantity DESC;
```

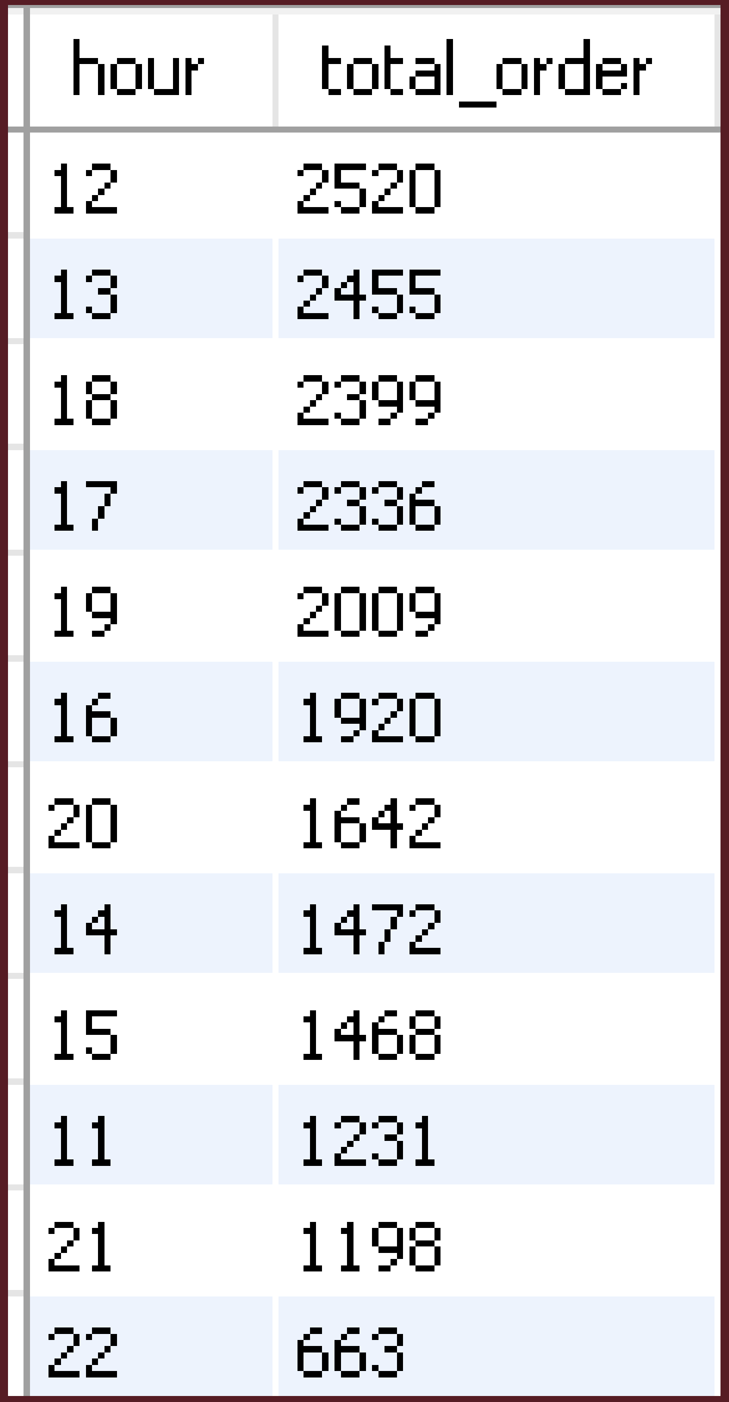


category	total_quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

Determine the distribution of orders by hour of the day.

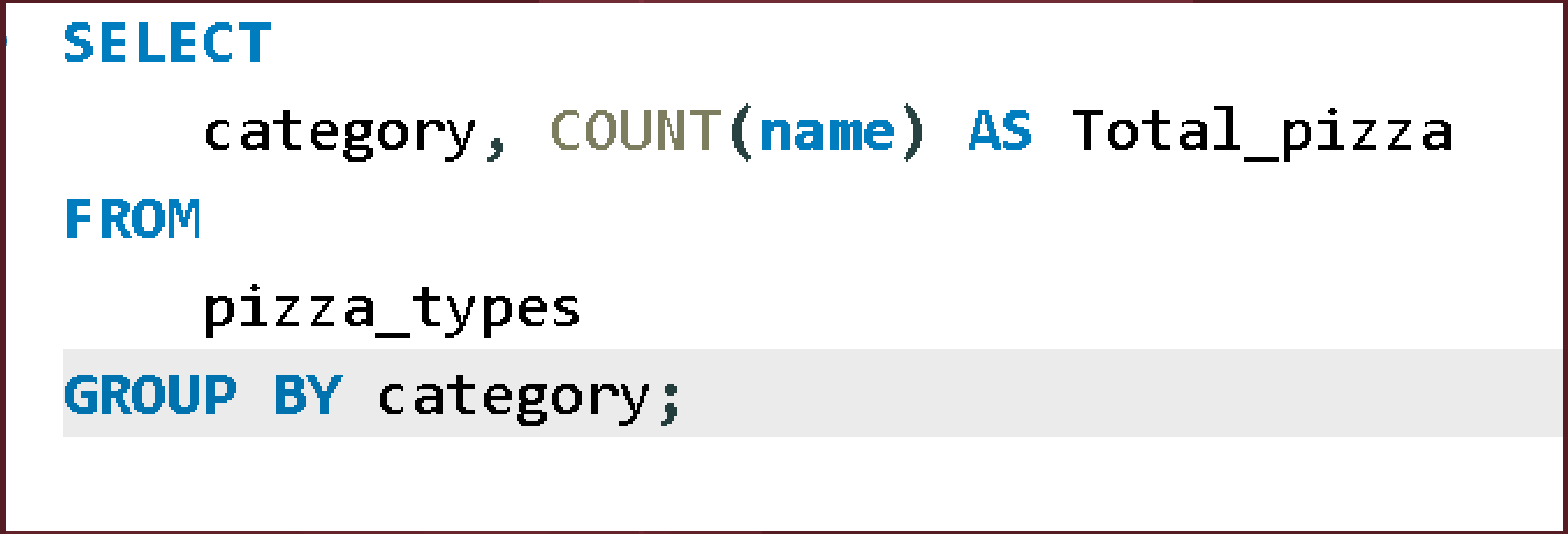


```
SELECT
    HOUR(order_time) AS hour, COUNT(order_id) AS total_order
FROM
    Orders
GROUP BY HOUR(order_time)
ORDER BY total_order DESC;
```

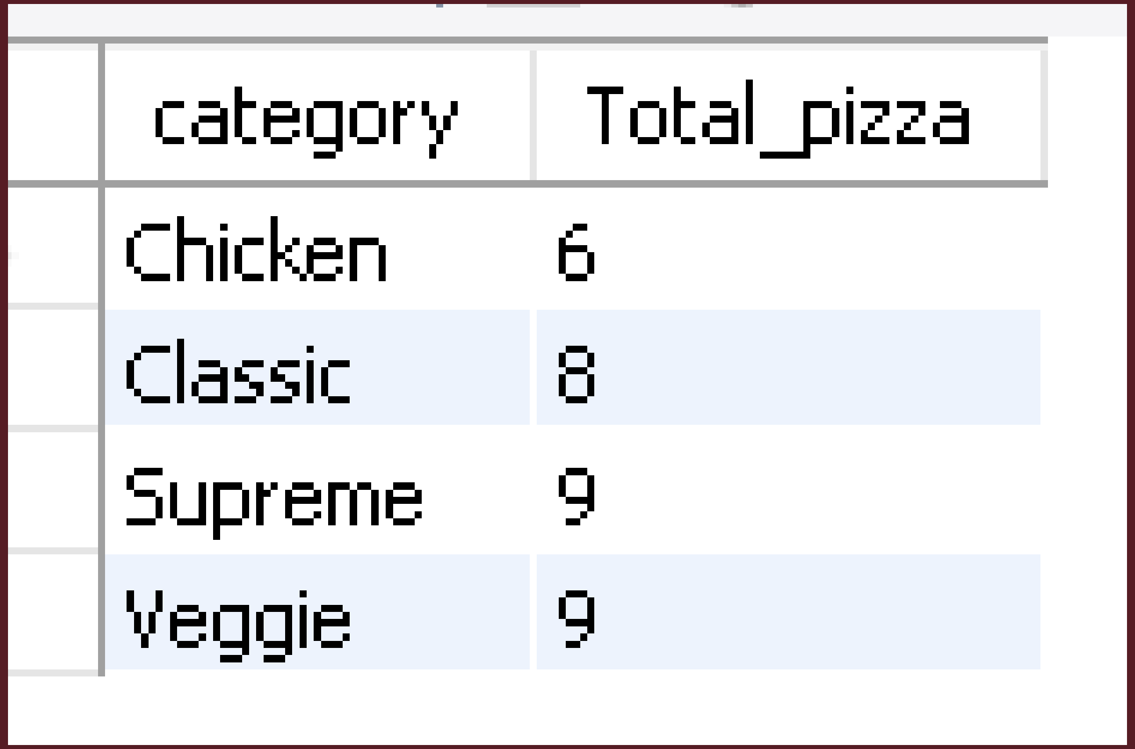


hour	total_order
12	2520
13	2455
18	2399
17	2336
19	2009
16	1920
20	1642
14	1472
15	1468
11	1231
21	1198
22	663

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

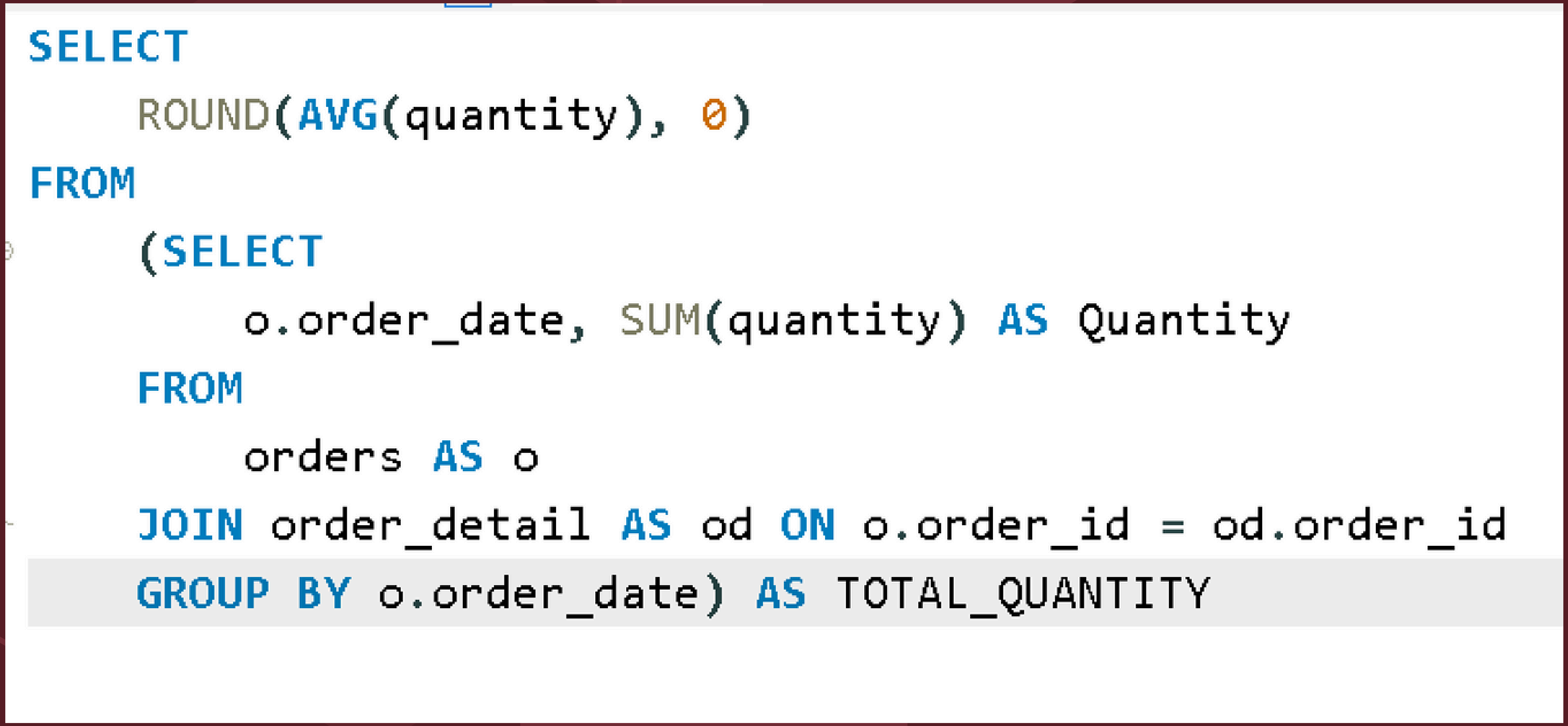


```sql
SELECT
    category, COUNT(name) AS Total_pizza
FROM
    pizza_types
GROUP BY category;
```

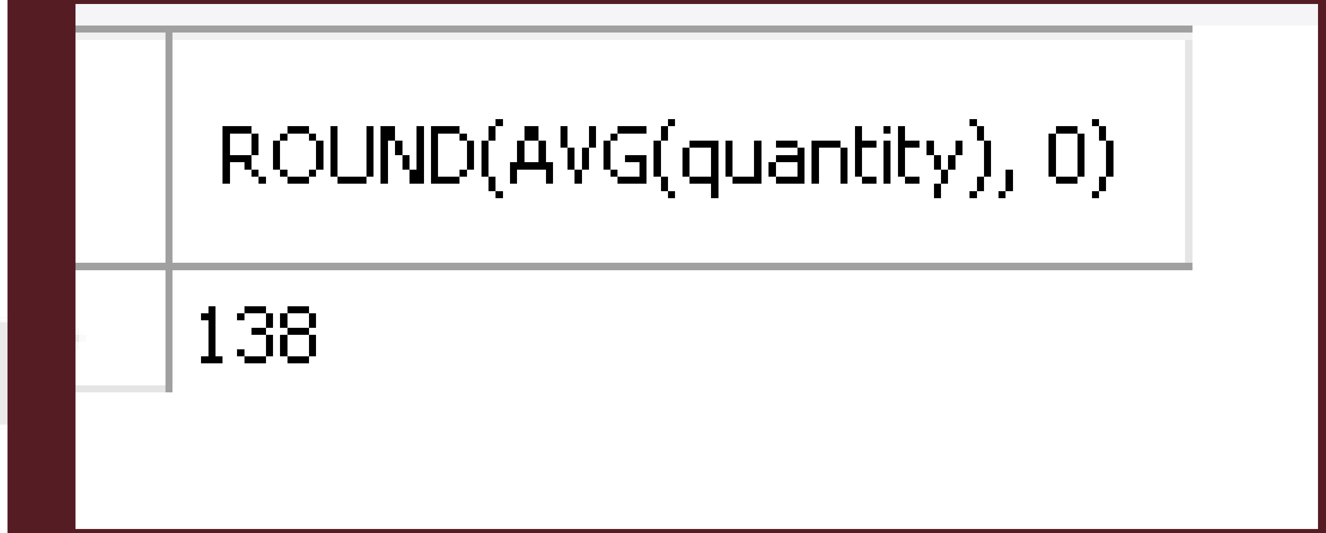


category	Total_pizza
Chicken	6
Classic	8
Supreme	9
Veggie	9

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

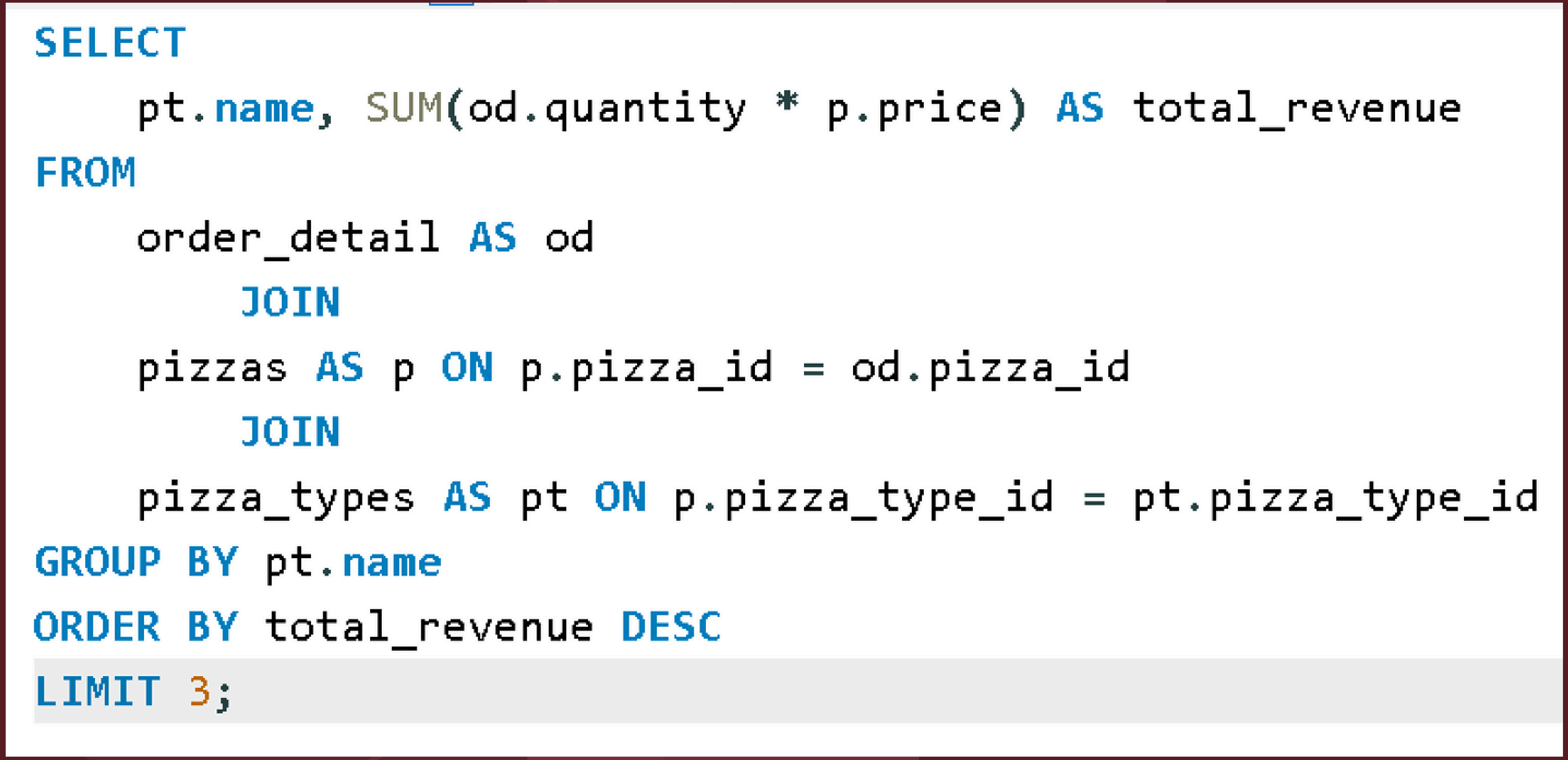


```sql
SELECT
    ROUND(AVG(quantity), 0)
FROM
    (SELECT
        o.order_date, SUM(quantity) AS Quantity
    FROM
        orders AS o
    JOIN order_detail AS od ON o.order_id = od.order_id
    GROUP BY o.order_date) AS TOTAL_QUANTITY
```

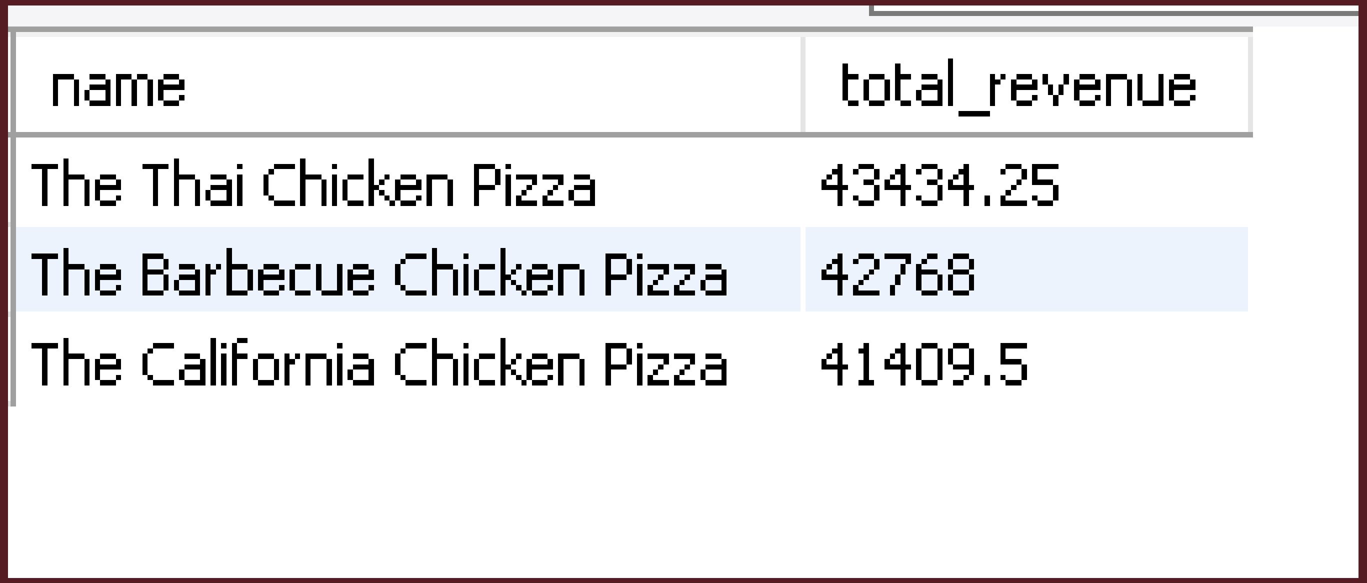


ROUND(AVG(quantity), 0)
138

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

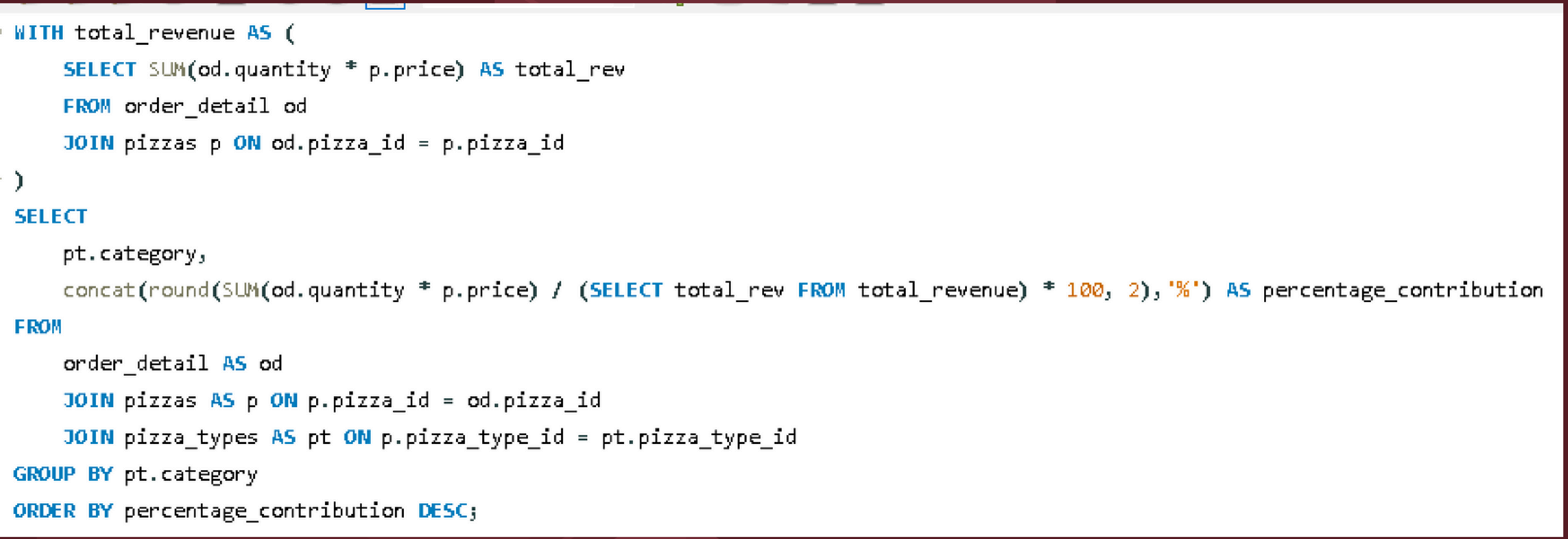


```
SELECT
    pt.name, SUM(od.quantity * p.price) AS total_revenue
FROM
    order_detail AS od
        JOIN
    pizzas AS p ON p.pizza_id = od.pizza_id
        JOIN
    pizza_types AS pt ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.name
ORDER BY total_revenue DESC
LIMIT 3;
```

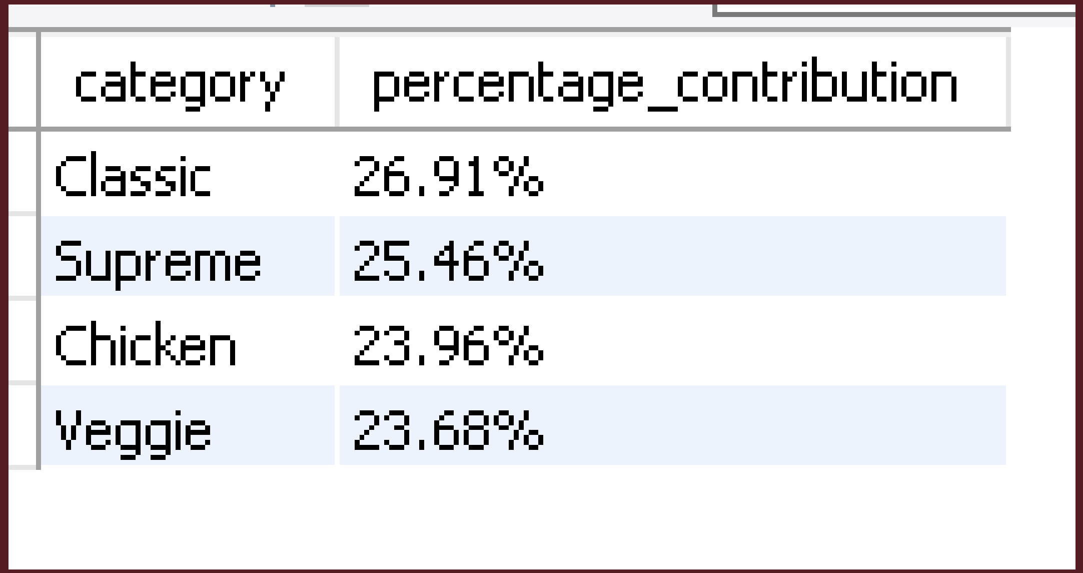


name	total_revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5

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

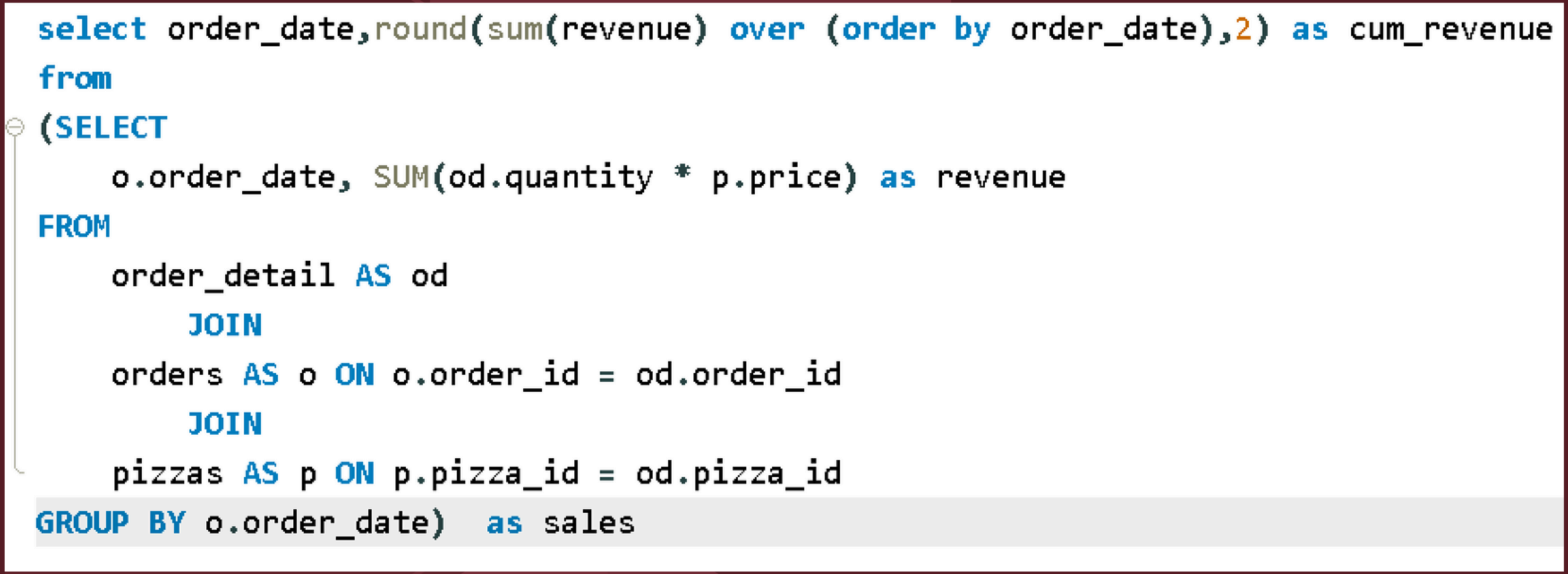


```
WITH total_revenue AS (
    SELECT SUM(od.quantity * p.price) AS total_rev
    FROM order_detail od
    JOIN pizzas p ON od.pizza_id = p.pizza_id
)
SELECT
    pt.category,
    concat(round(SUM(od.quantity * p.price) / (SELECT total_rev FROM total_revenue) * 100, 2),'%') AS percentage_contribution
FROM
    order_detail AS od
    JOIN pizzas AS p ON p.pizza_id = od.pizza_id
    JOIN pizza_types AS pt ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.category
ORDER BY percentage_contribution DESC;
```

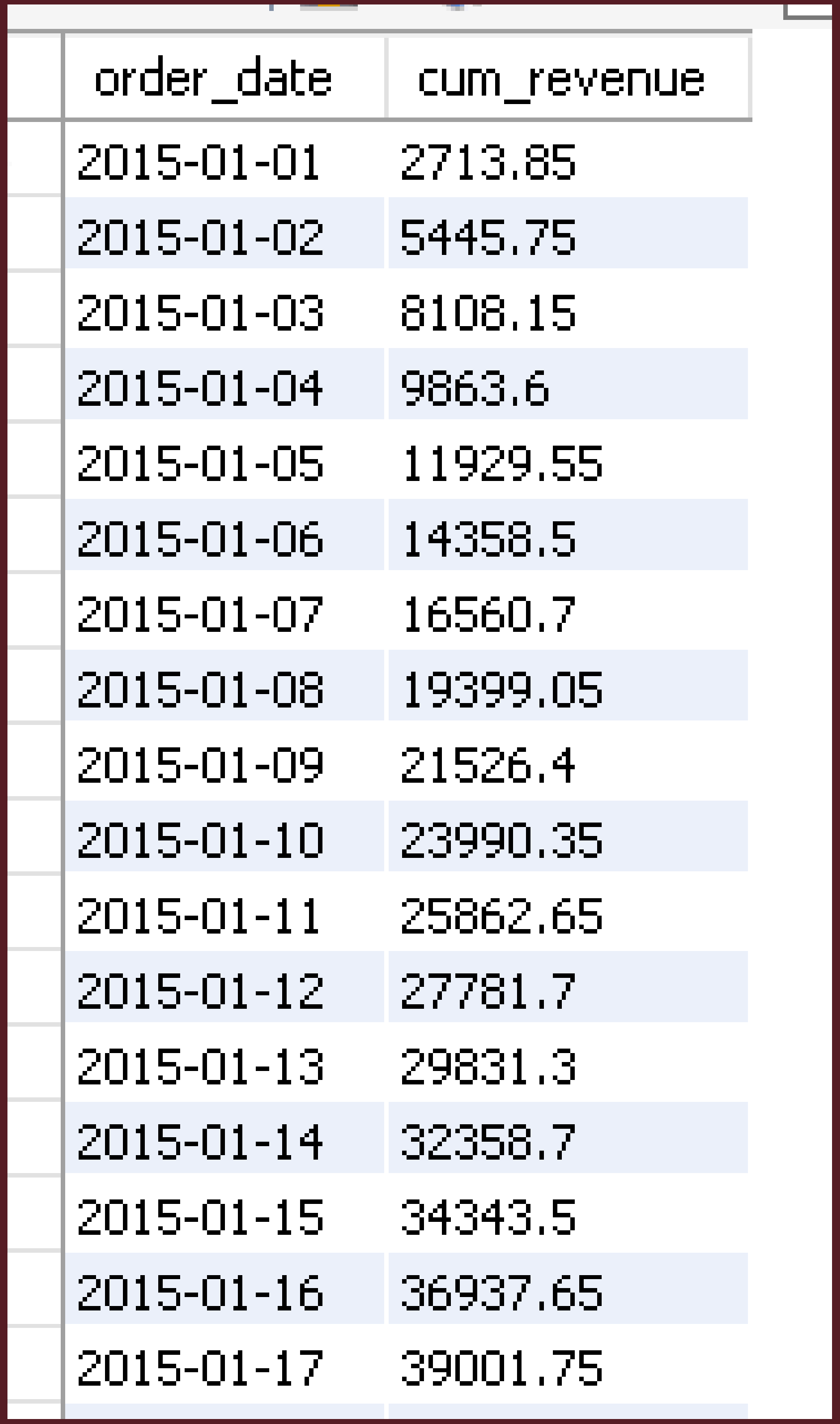


category	percentage_contribution
Classic	26.91%
Supreme	25.46%
Chicken	23.96%
Veggie	23.68%

Analyze the cumulative revenue generated over time.

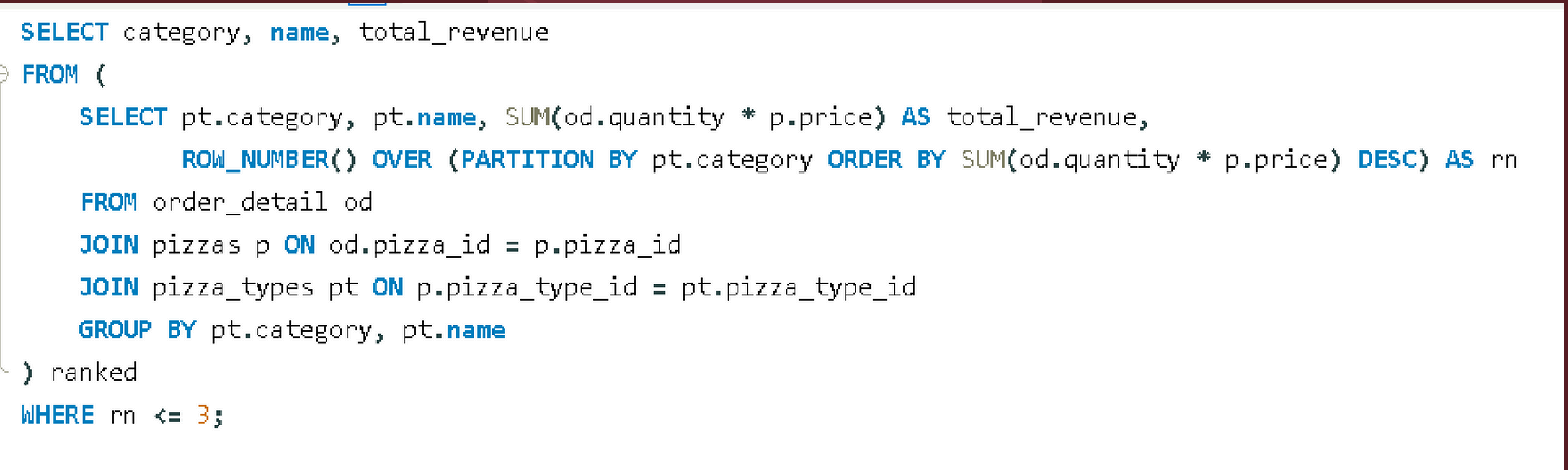


```
select order_date,round(sum(revenue) over (order by order_date),2) as cum_revenue
from
(SELECT
    o.order_date, SUM(od.quantity * p.price) as revenue
FROM
    order_detail AS od
        JOIN
    orders AS o ON o.order_id = od.order_id
        JOIN
    pizzas AS p ON p.pizza_id = od.pizza_id
GROUP BY o.order_date)  as sales
```

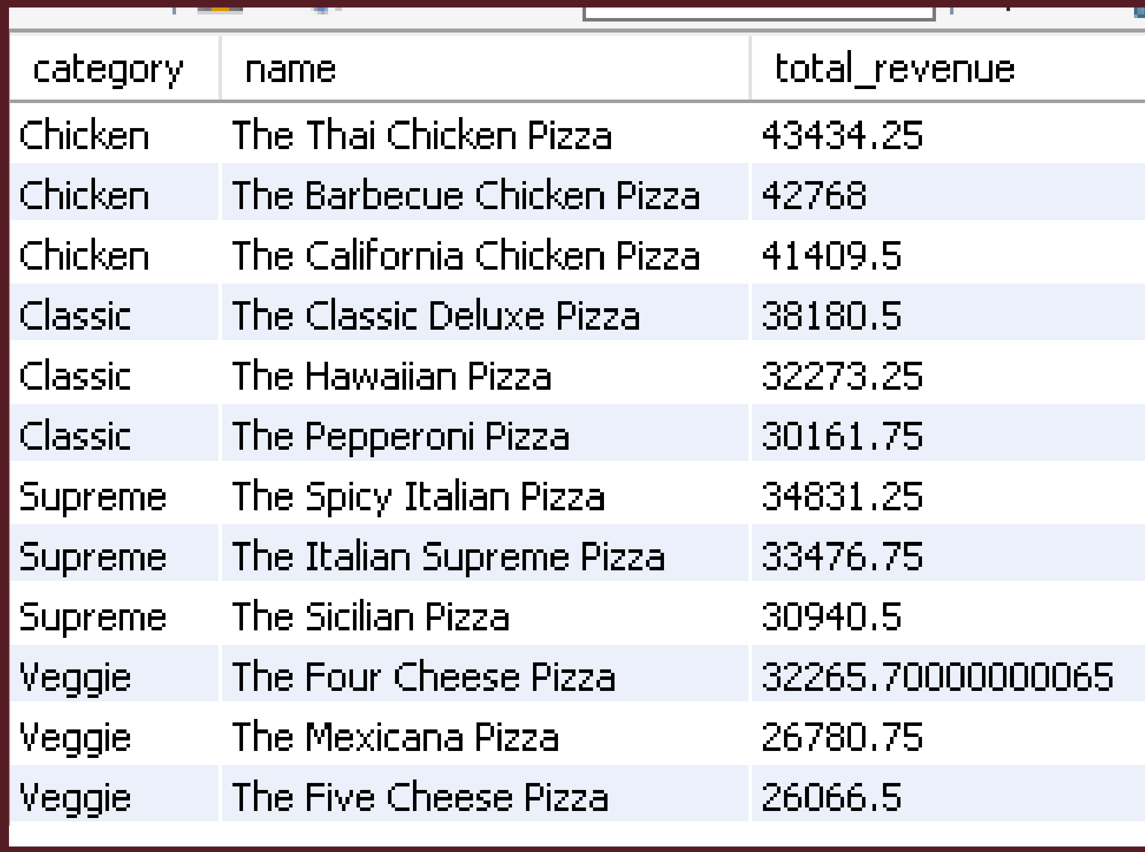


order_date	cum_revenue
2015-01-01	2713.85
2015-01-02	5445.75
2015-01-03	8108.15
2015-01-04	9863.6
2015-01-05	11929.55
2015-01-06	14358.5
2015-01-07	16560.7
2015-01-08	19399.05
2015-01-09	21526.4
2015-01-10	23990.35
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.3
2015-01-14	32358.7
2015-01-15	34343.5
2015-01-16	36937.65
2015-01-17	39001.75

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



```
SELECT category, name, total_revenue
FROM (
    SELECT pt.category, pt.name, SUM(od.quantity * p.price) AS total_revenue,
           ROW_NUMBER() OVER (PARTITION BY pt.category ORDER BY SUM(od.quantity * p.price) DESC) AS rn
    FROM order_detail od
    JOIN pizzas p ON od.pizza_id = p.pizza_id
    JOIN pizza_types pt ON p.pizza_type_id = pt.pizza_type_id
    GROUP BY pt.category, pt.name
) ranked
WHERE rn <= 3;
```



category	name	total_revenue
Chicken	The Thai Chicken Pizza	43434.25
Chicken	The Barbecue Chicken Pizza	42768
Chicken	The California Chicken Pizza	41409.5
Classic	The Classic Deluxe Pizza	38180.5
Classic	The Hawaiian Pizza	32273.25
Classic	The Pepperoni Pizza	30161.75
Supreme	The Spicy Italian Pizza	34831.25
Supreme	The Italian Supreme Pizza	33476.75
Supreme	The Sicilian Pizza	30940.5
Veggie	The Four Cheese Pizza	32265.70000000065
Veggie	The Mexicana Pizza	26780.75
Veggie	The Five Cheese Pizza	26066.5

Ingoude Company

THANK YOU

02 May, 2024