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PIZZA SALES ANALYSIS

Objective

“In this project , I have utilized SQL queries to solve questions related to pizza sales.”

Problems

Problem 1

calculate total number of orders placed

Problem 2

calculate total revenue generated from pizza sales

Problem 3

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

Problem 4

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

Problem 5

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

Problem 6

Determine the distribution of orders by hour of the day

Problem 7

Analyze the cumulative revenue generated over time

Problem 8

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

Problem 9

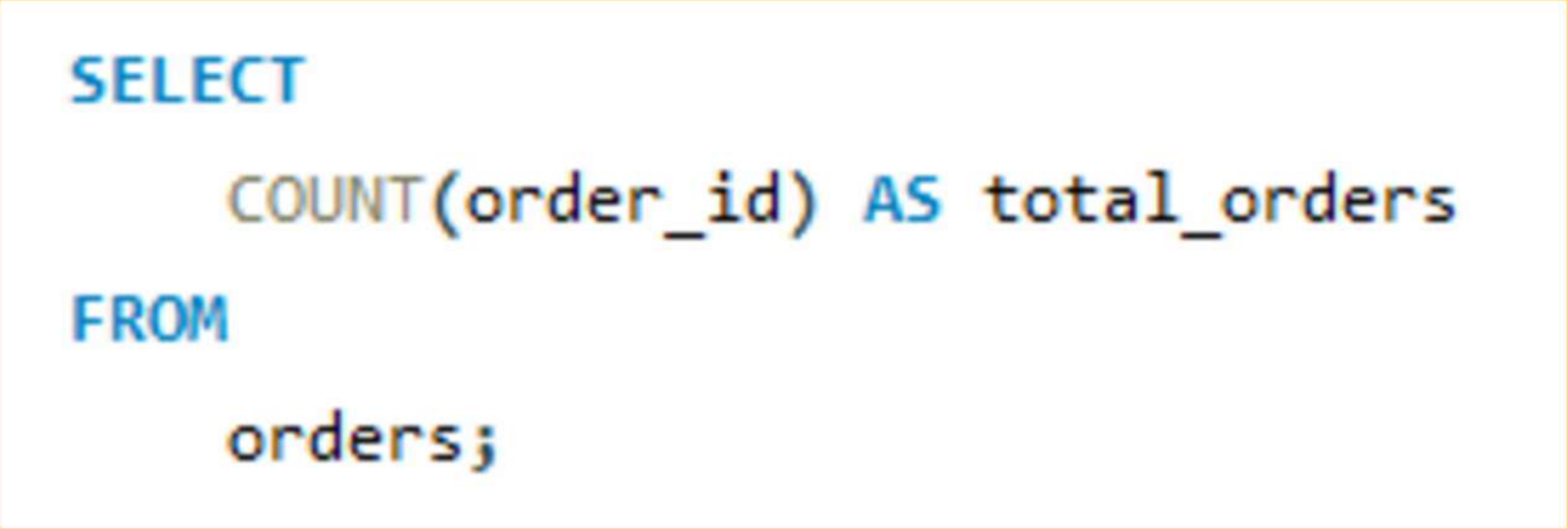
Calculate the percentage contribution of each pizza type to total revenue.

Problem 10

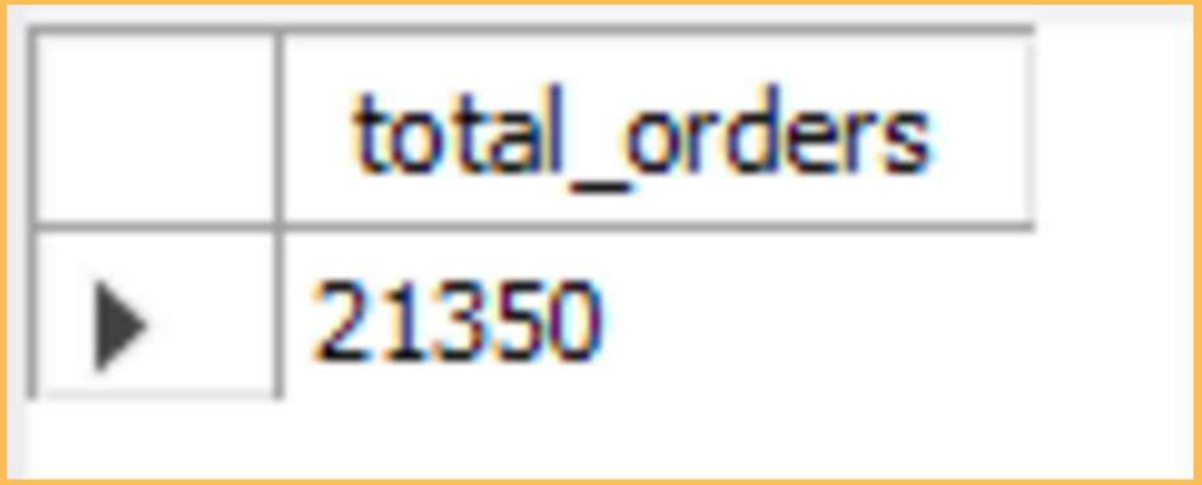
Join the necessary tables to find the total quantity of each pizza category ordered.

Solutions

Solution 1



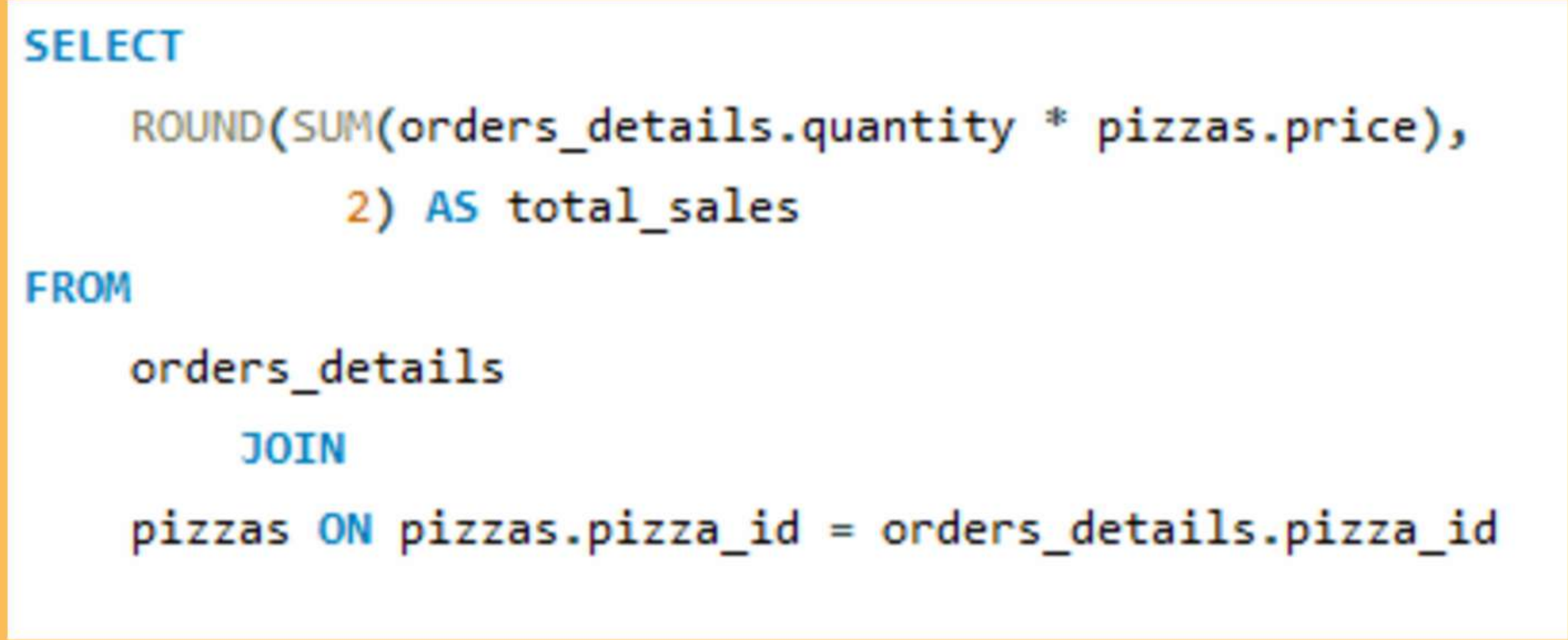
```
SELECT
    COUNT(order_id) AS total_orders
FROM
    orders;
```



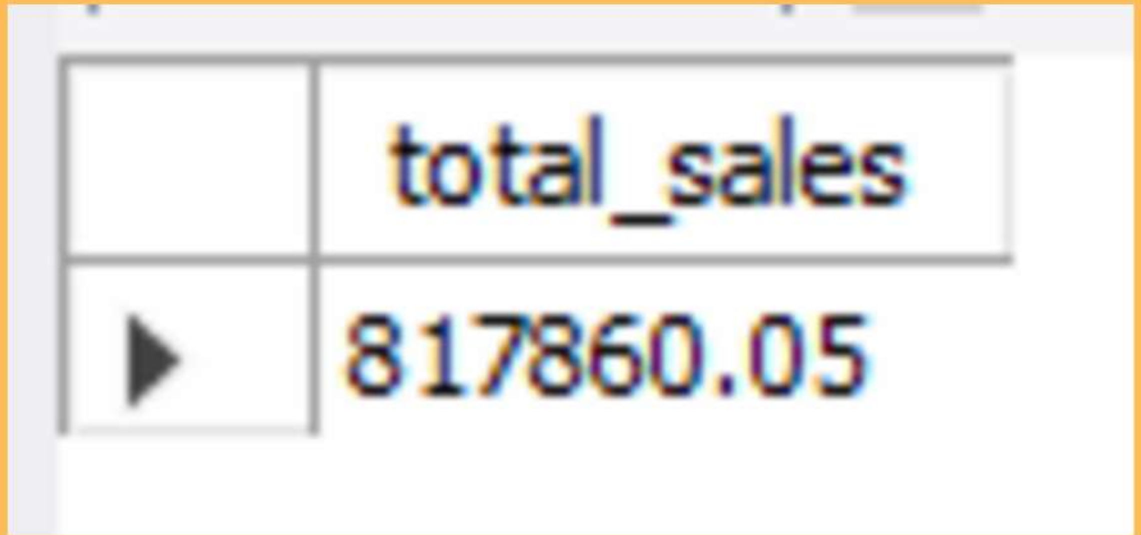
total_orders
21350

Solutions

Solution 2



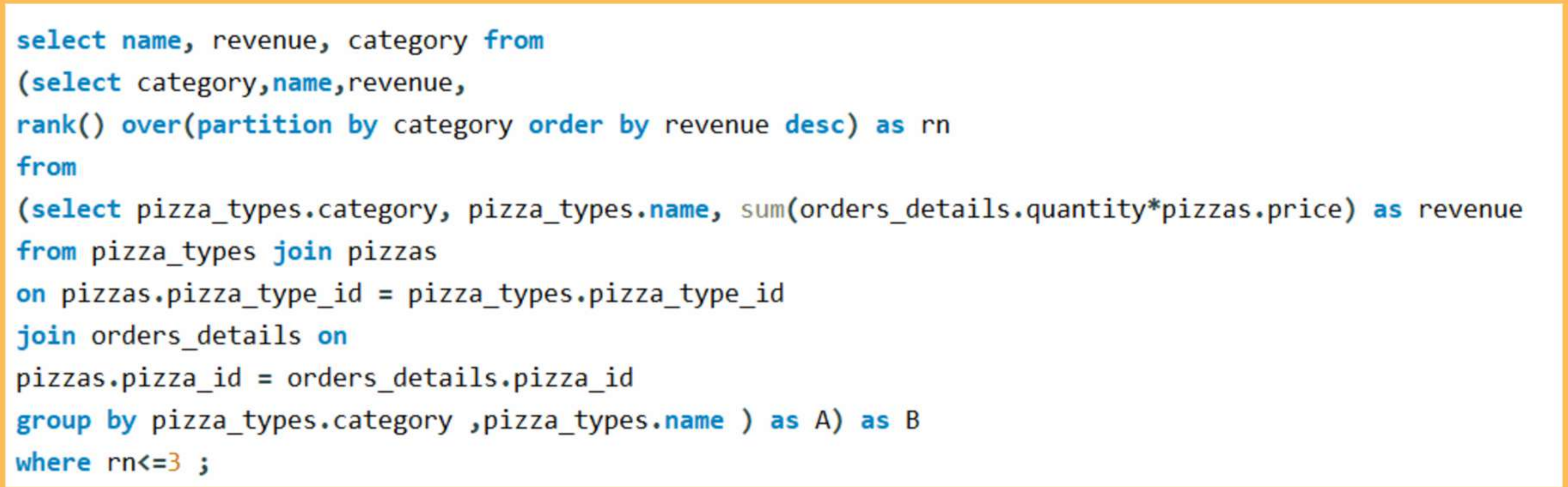
```
SELECT
    ROUND(SUM(orders_details.quantity * pizzas.price),
            2) AS total_sales
FROM
    orders_details
        JOIN
    pizzas ON pizzas.pizza_id = orders_details.pizza_id
```



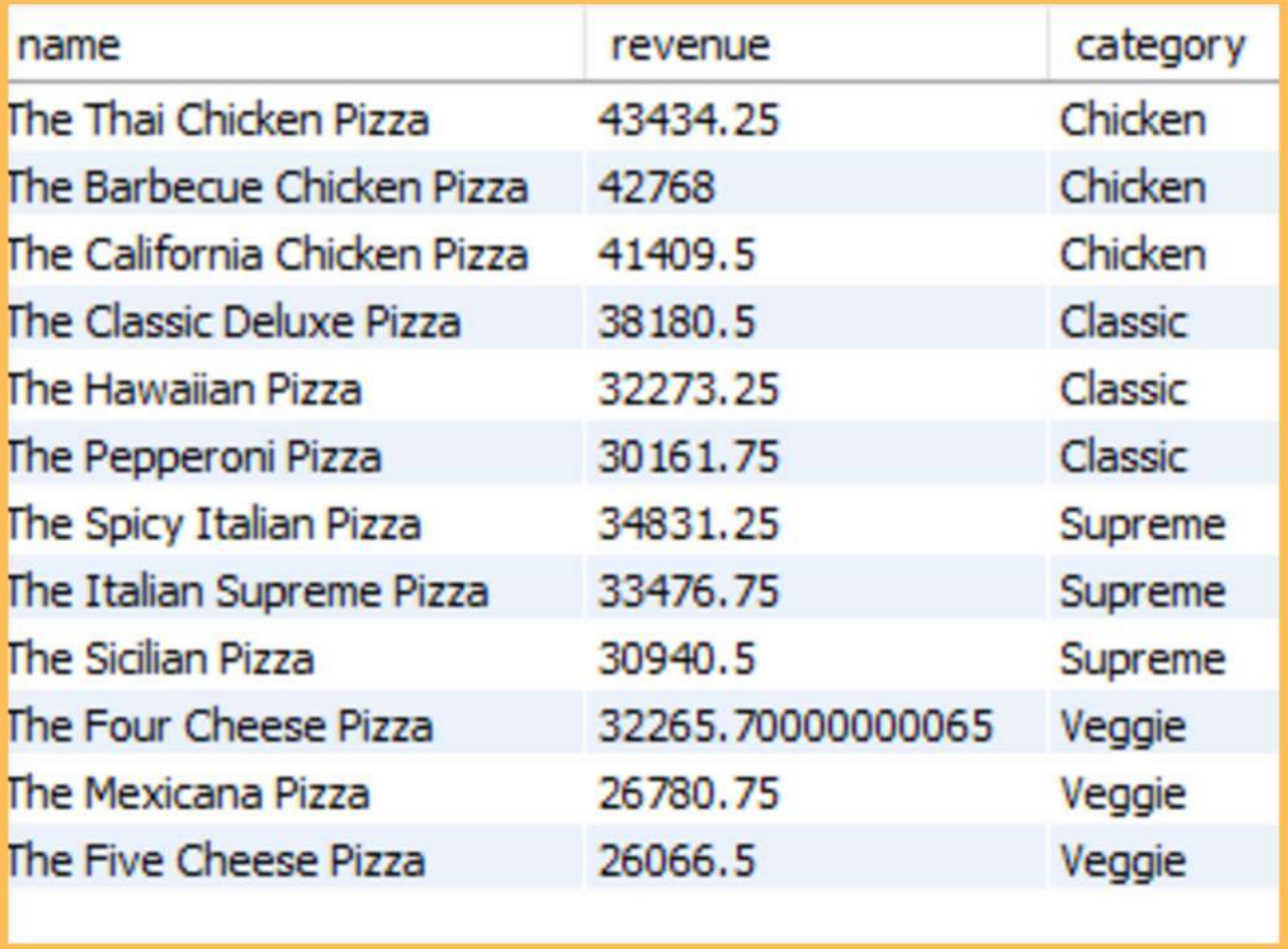
	total_sales
▶	817860.05

Solutions

Solution 3



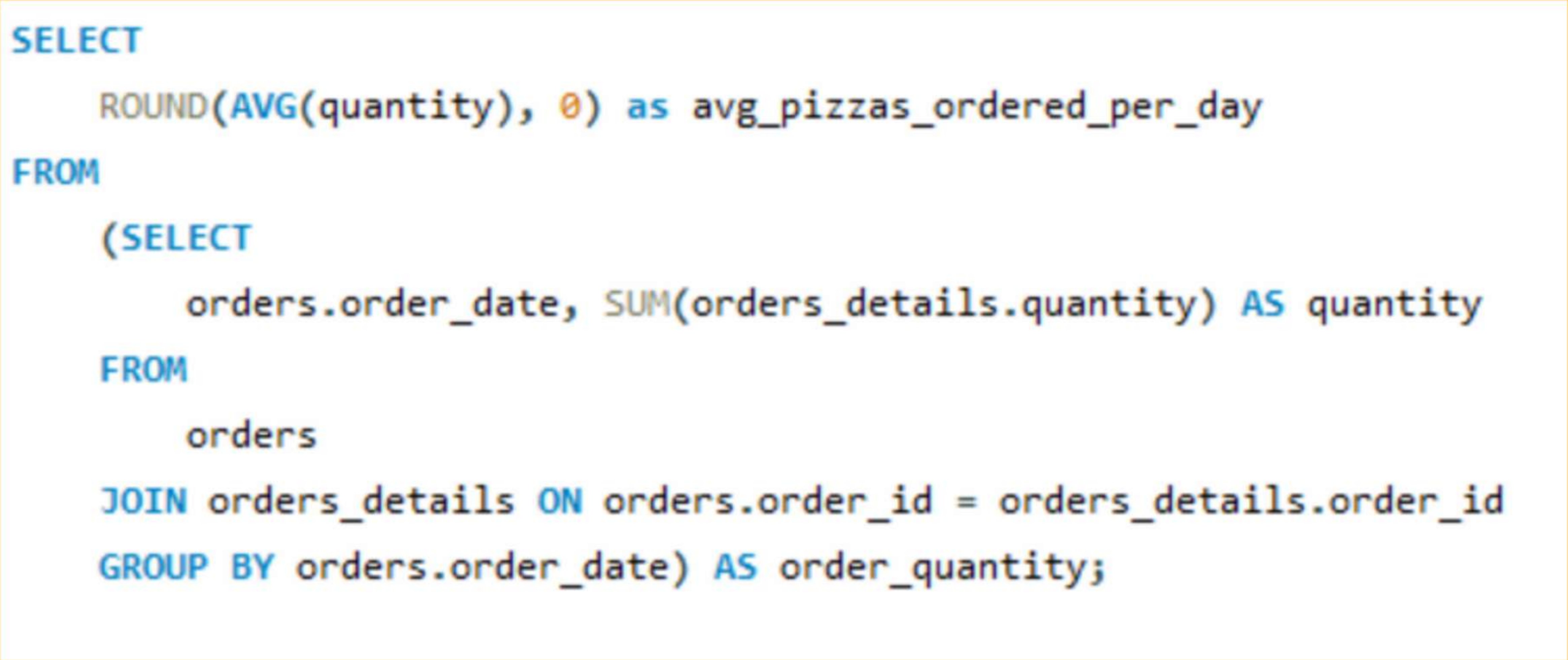
```
select name, revenue, category from
(select category,name,revenue,
rank() over(partition by category order by revenue desc) as rn
from
(select pizza_types.category, pizza_types.name, sum(orders_details.quantity*pizzas.price) as revenue
from pizza_types join pizzas
on pizzas.pizza_type_id = pizza_types.pizza_type_id
join orders_details on
pizzas.pizza_id = orders_details.pizza_id
group by pizza_types.category ,pizza_types.name ) as A) as B
where rn<=3 ;
```



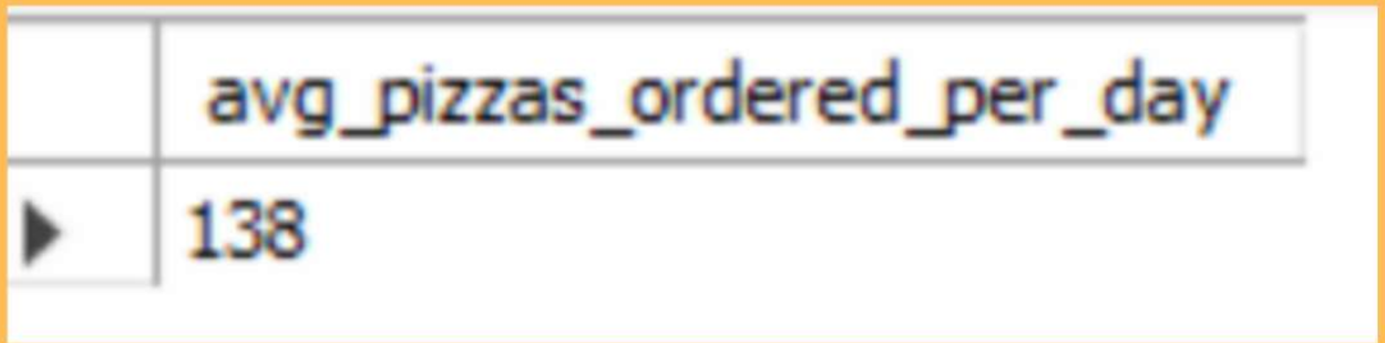
name	revenue	category
The Thai Chicken Pizza	43434.25	Chicken
The Barbecue Chicken Pizza	42768	Chicken
The California Chicken Pizza	41409.5	Chicken
The Classic Deluxe Pizza	38180.5	Classic
The Hawaiian Pizza	32273.25	Classic
The Pepperoni Pizza	30161.75	Classic
The Spicy Italian Pizza	34831.25	Supreme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

Solutions

Solution 4



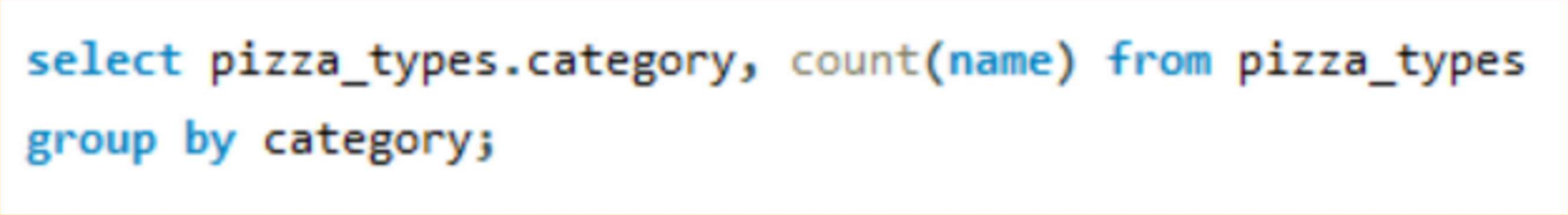
```
SELECT
    ROUND(AVG(quantity), 0) as avg_pizzas_ordered_per_day
FROM
    (SELECT
        orders.order_date, SUM(orders_details.quantity) AS quantity
    FROM
        orders
    JOIN orders_details ON orders.order_id = orders_details.order_id
    GROUP BY orders.order_date) AS order_quantity;
```



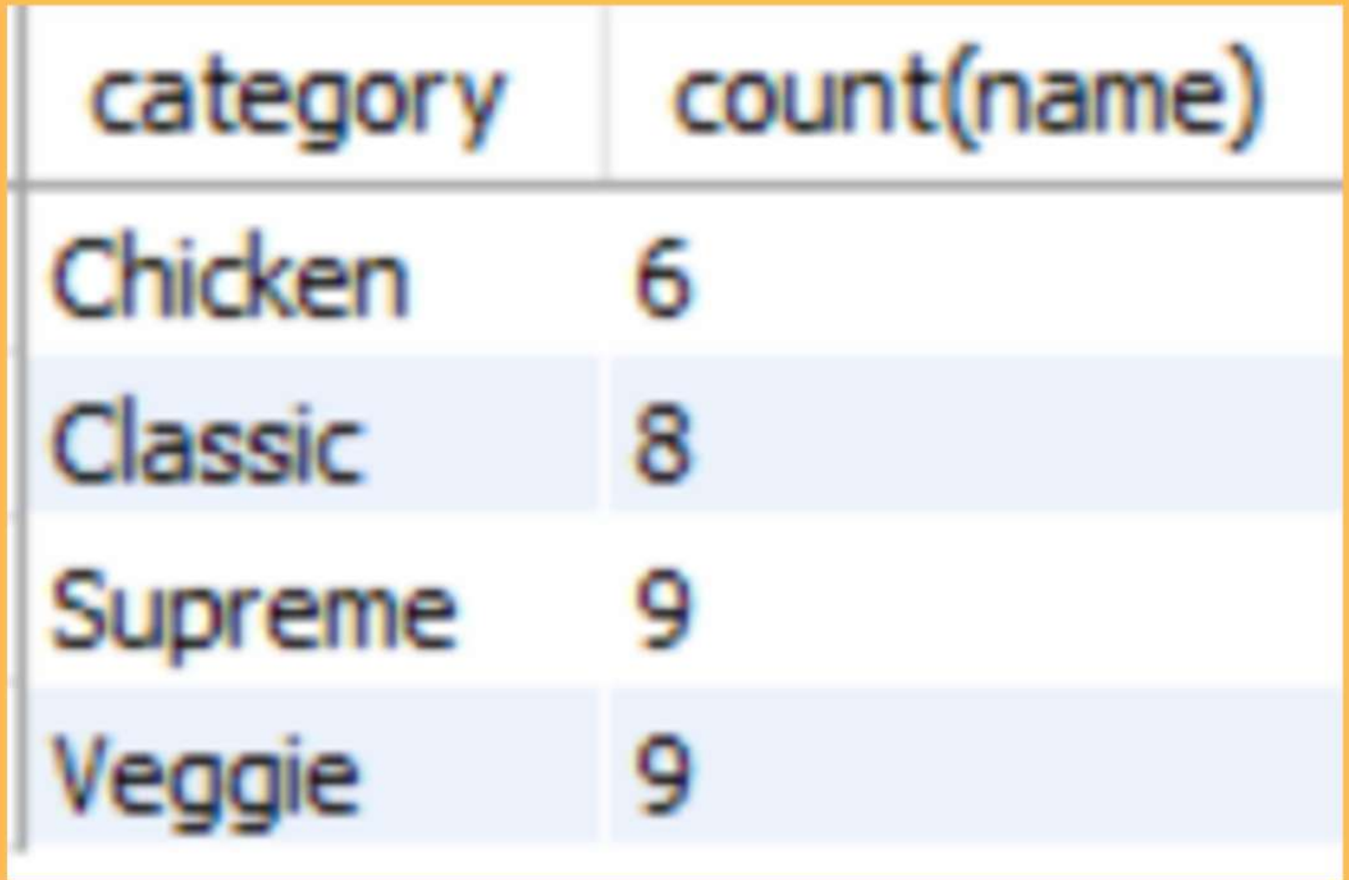
avg_pizzas_ordered_per_day
138

Solutions

Solution 5



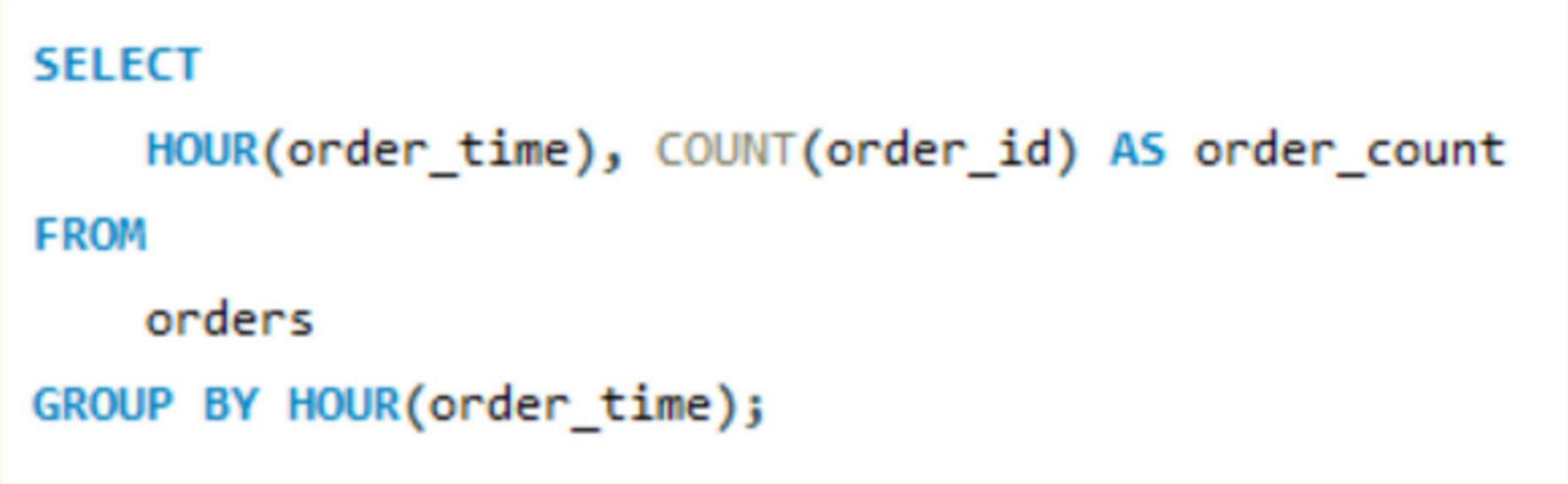
```
select pizza_types.category, count(name) from pizza_types
group by category;
```



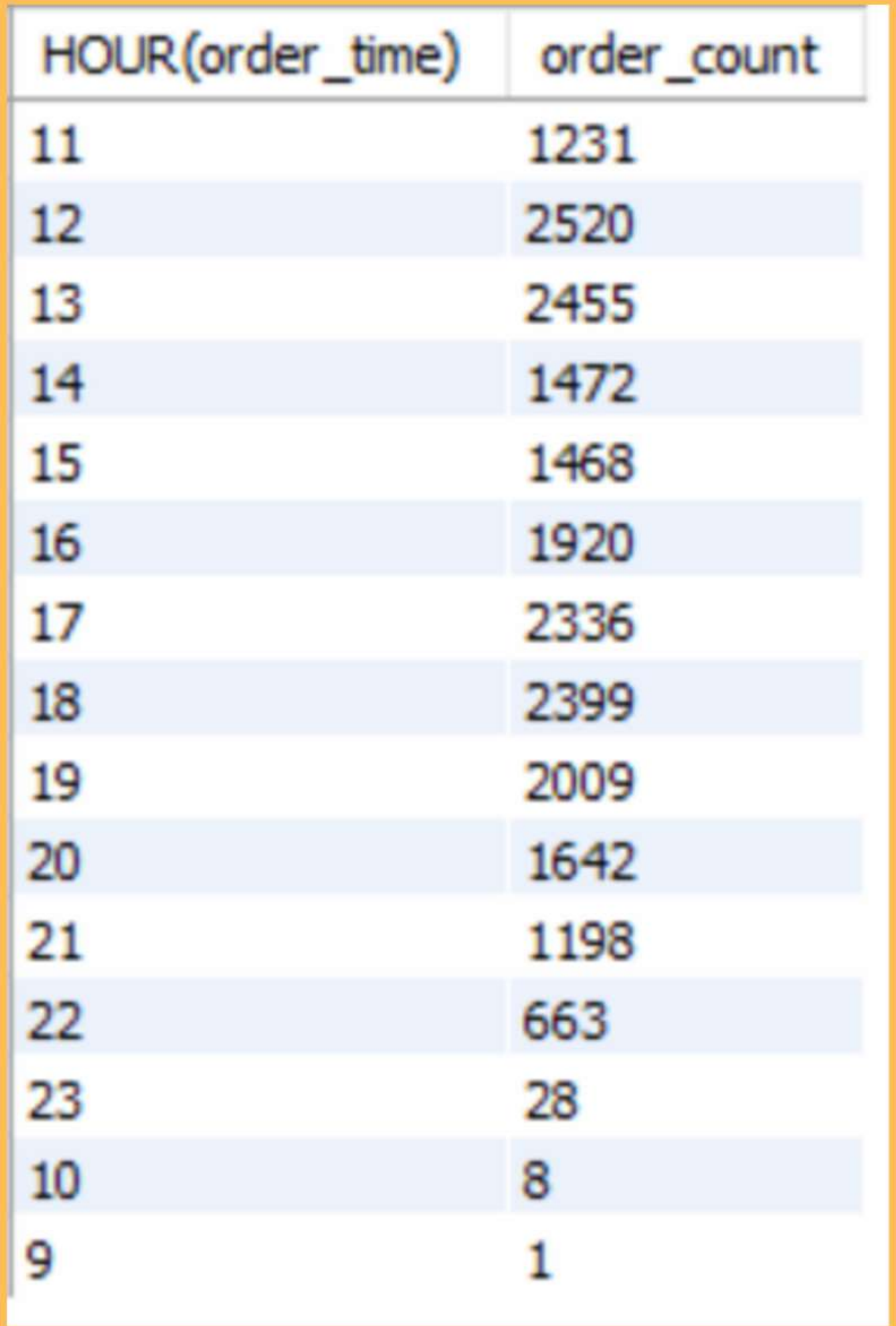
category	count(name)
Chicken	6
Classic	8
Supreme	9
Veggie	9

Solutions

Solution 6



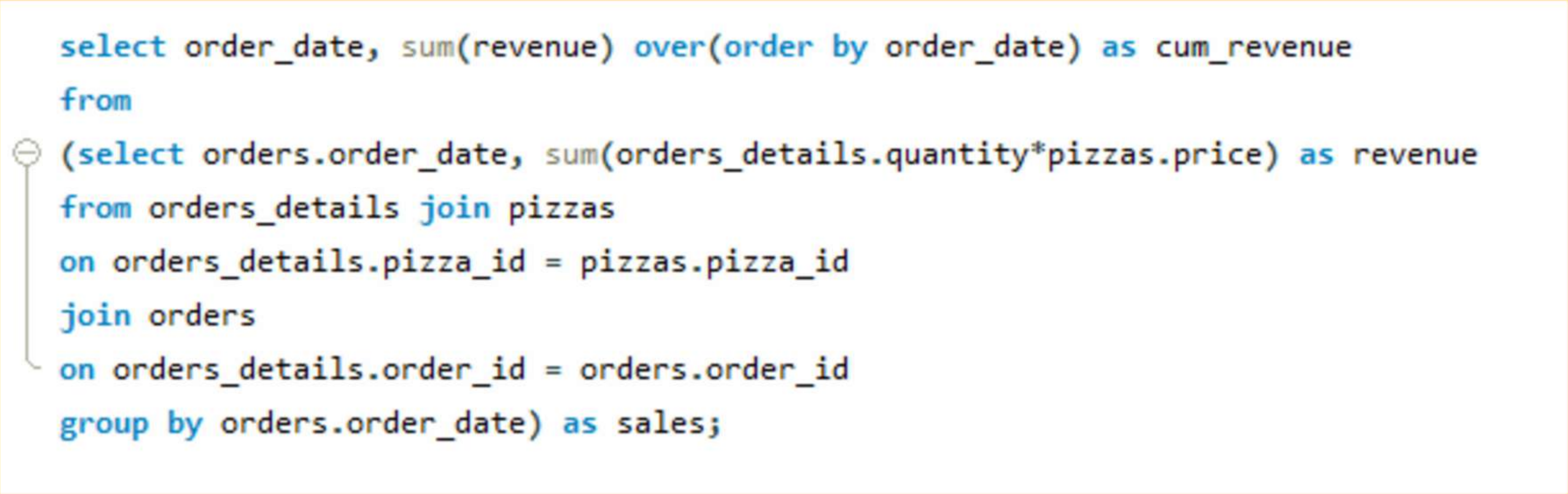
```
SELECT
    HOUR(order_time), COUNT(order_id) AS order_count
FROM
    orders
GROUP BY HOUR(order_time);
```



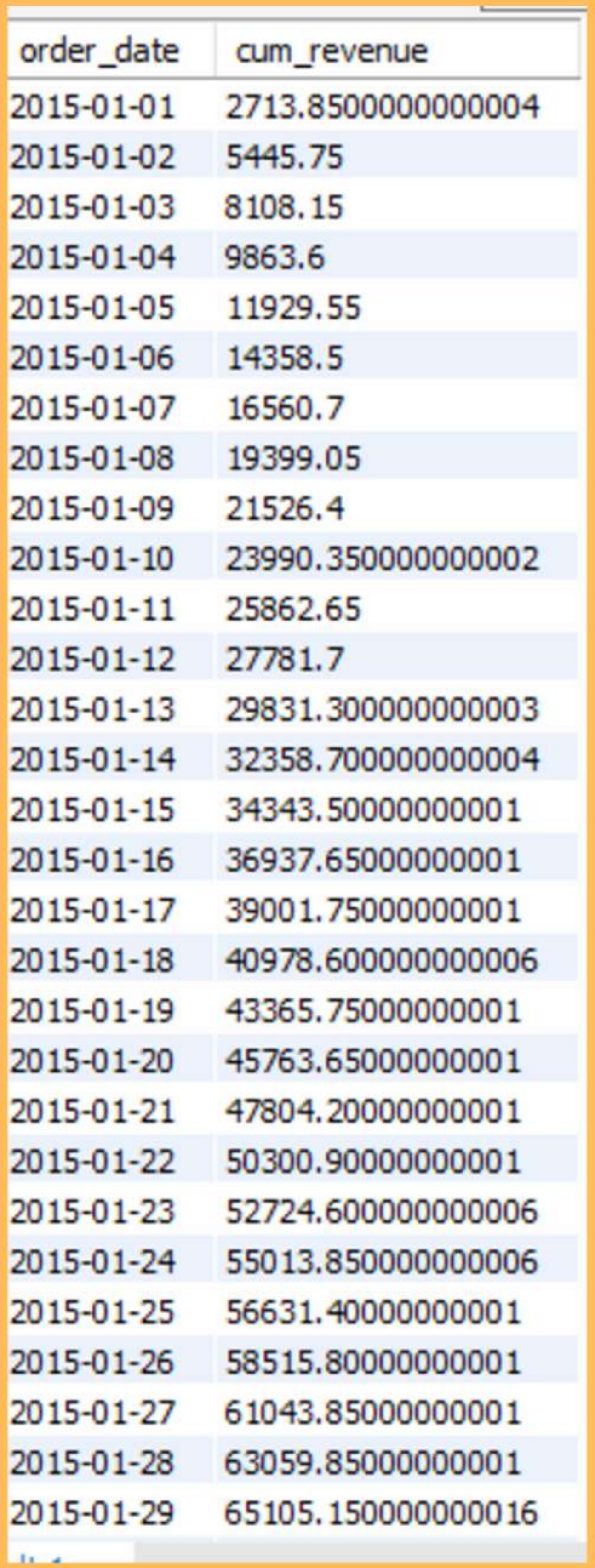
HOUR(order_time)	order_count
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399
19	2009
20	1642
21	1198
22	663
23	28
10	8
9	1

Solutions

Solution 7



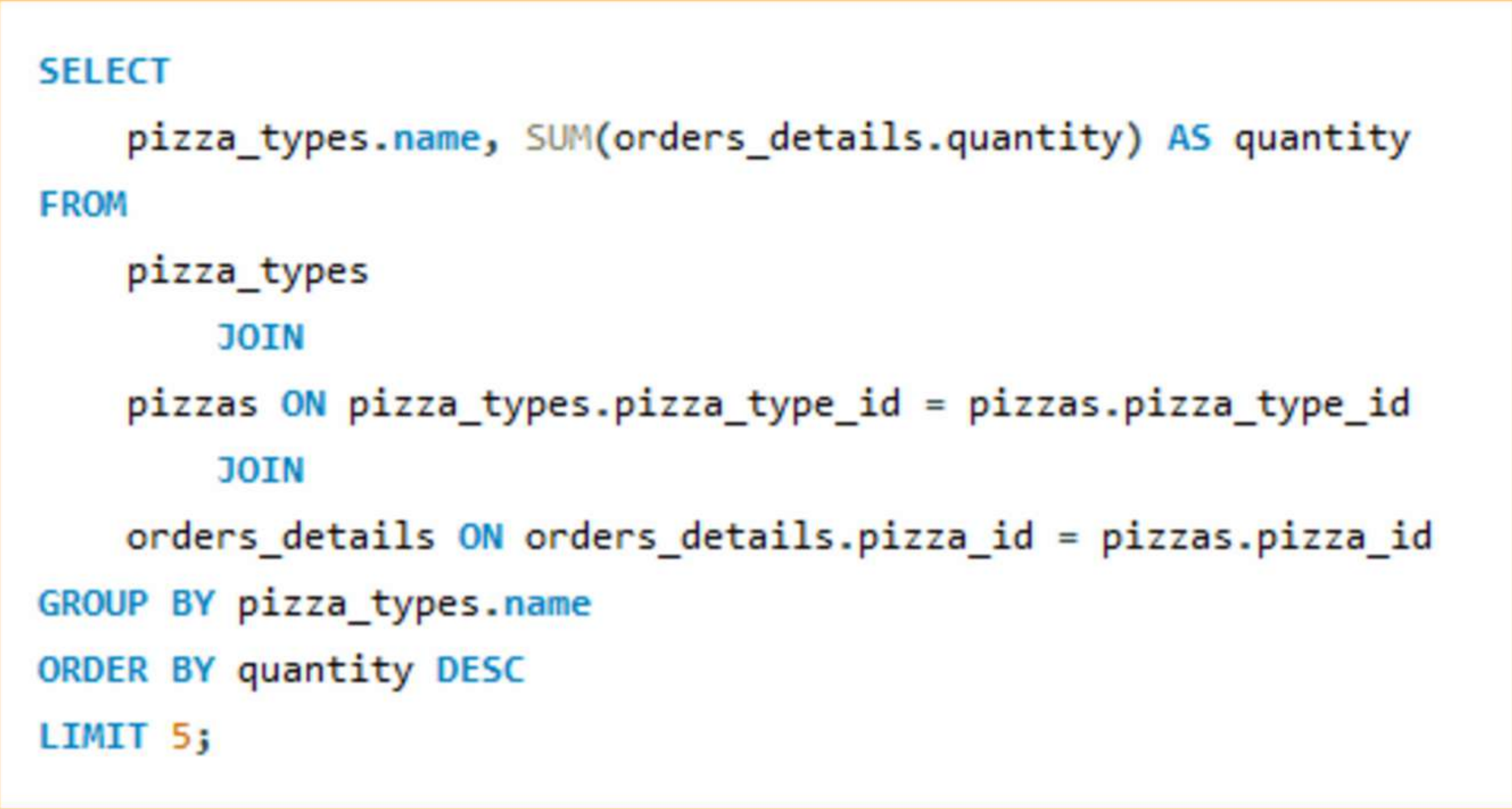
```
select order_date, sum(revenue) over(order by order_date) as cum_revenue
from
(select orders.order_date, sum(orders_details.quantity*pizzas.price) as revenue
from orders_details join pizzas
on orders_details.pizza_id = pizzas.pizza_id
join orders
on orders_details.order_id = orders.order_id
group by orders.order_date) as sales;
```



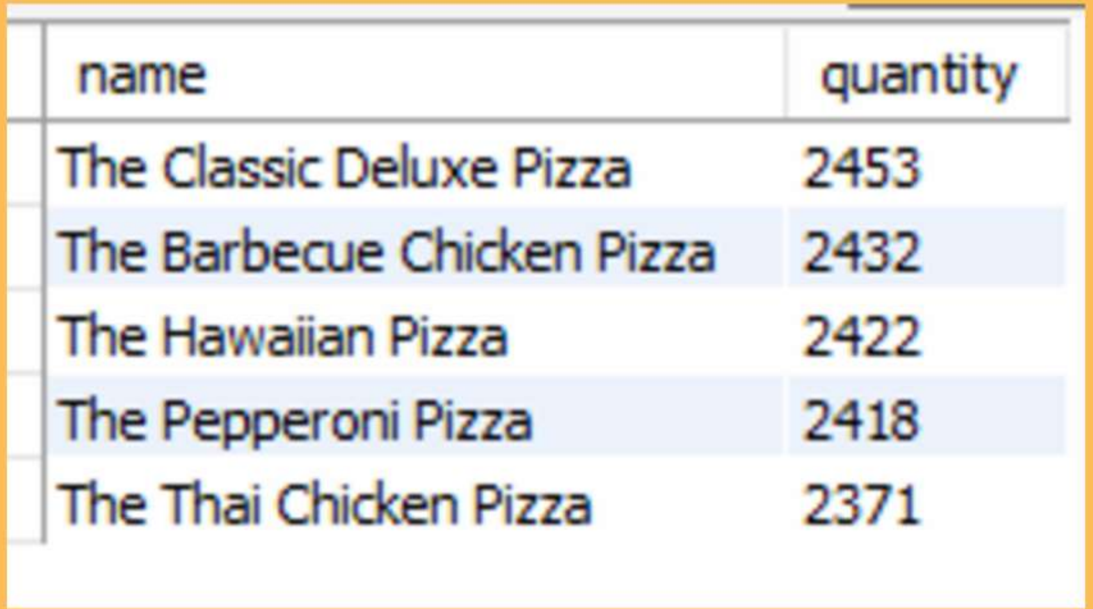
order_date	cum_revenue
2015-01-01	2713.8500000000004
2015-01-02	5445.75
2015-01-03	8108.15
2015-01-04	9863.6
2015-01-05	11929.55
2015-01-06	14358.5
2015-01-07	16560.7
2015-01-08	19399.05
2015-01-09	21526.4
2015-01-10	23990.350000000002
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.300000000003
2015-01-14	32358.700000000004
2015-01-15	34343.50000000001
2015-01-16	36937.65000000001
2015-01-17	39001.75000000001
2015-01-18	40978.600000000006
2015-01-19	43365.75000000001
2015-01-20	45763.65000000001
2015-01-21	47804.20000000001
2015-01-22	50300.90000000001
2015-01-23	52724.600000000006
2015-01-24	55013.850000000006
2015-01-25	56631.40000000001
2015-01-26	58515.80000000001
2015-01-27	61043.85000000001
2015-01-28	63059.85000000001
2015-01-29	65105.150000000016

Solutions

Solution 8



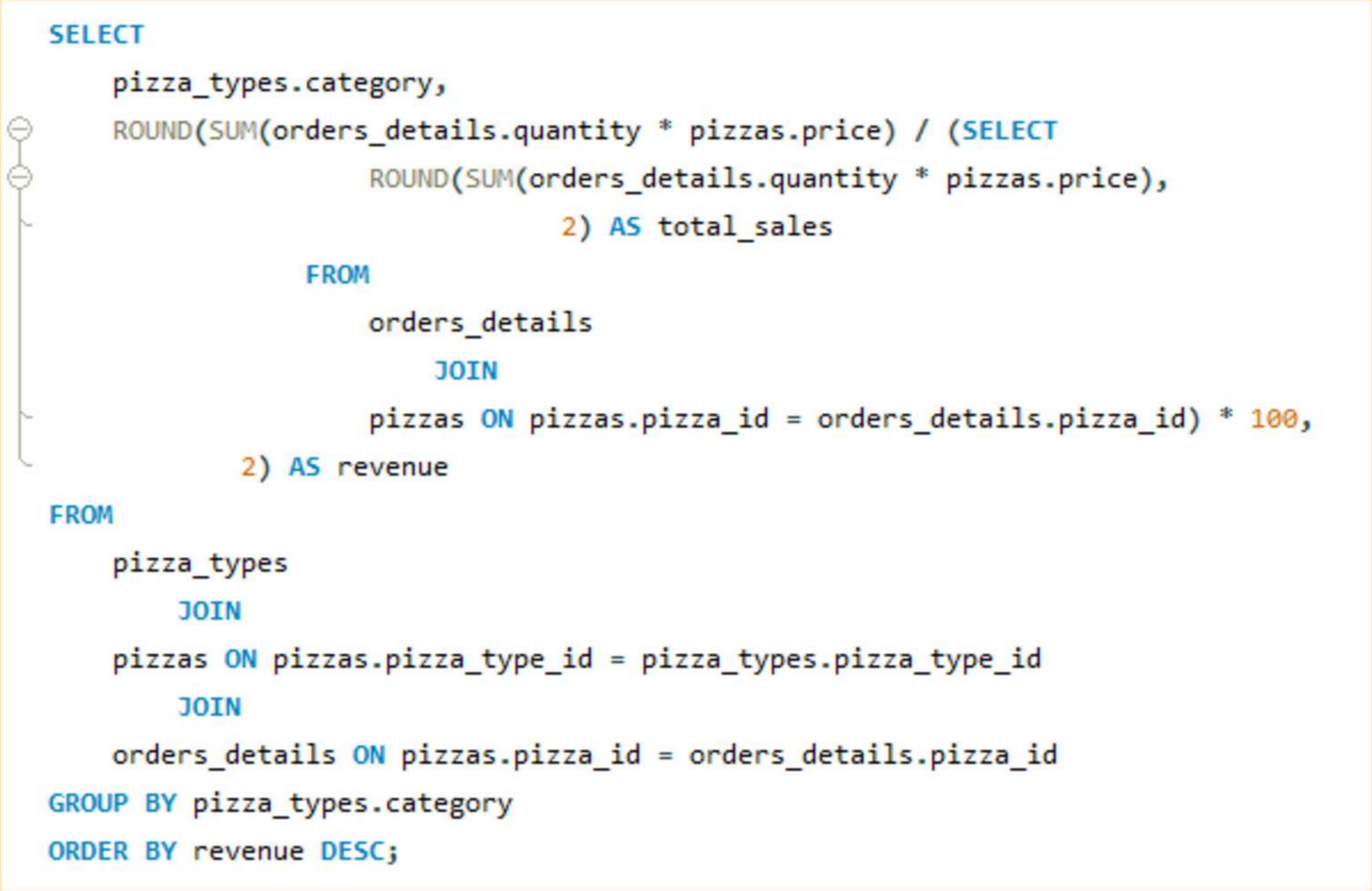
```
SELECT
    pizza_types.name, SUM(orders_details.quantity) AS quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT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



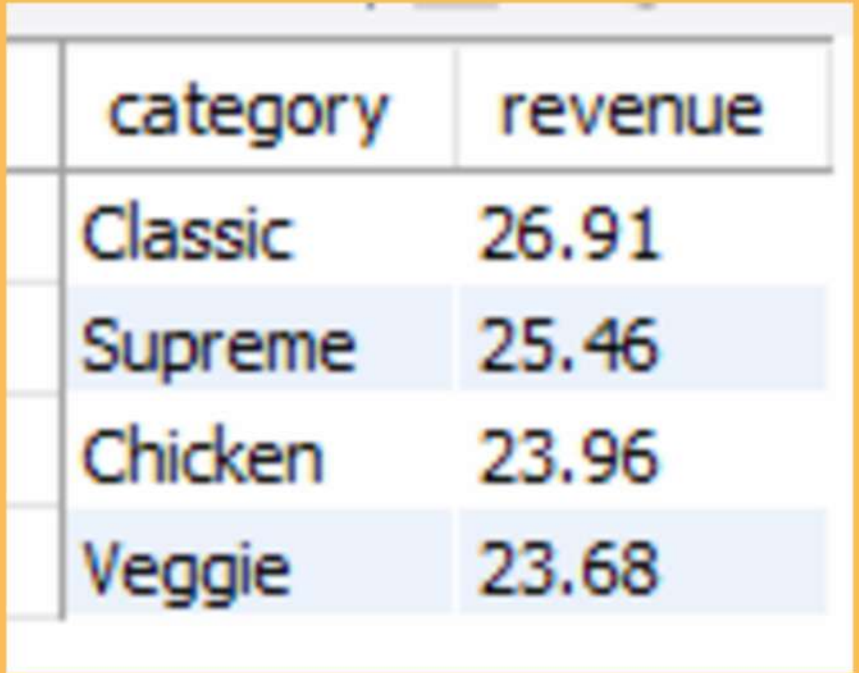
name	quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

Solutions

Solution 9



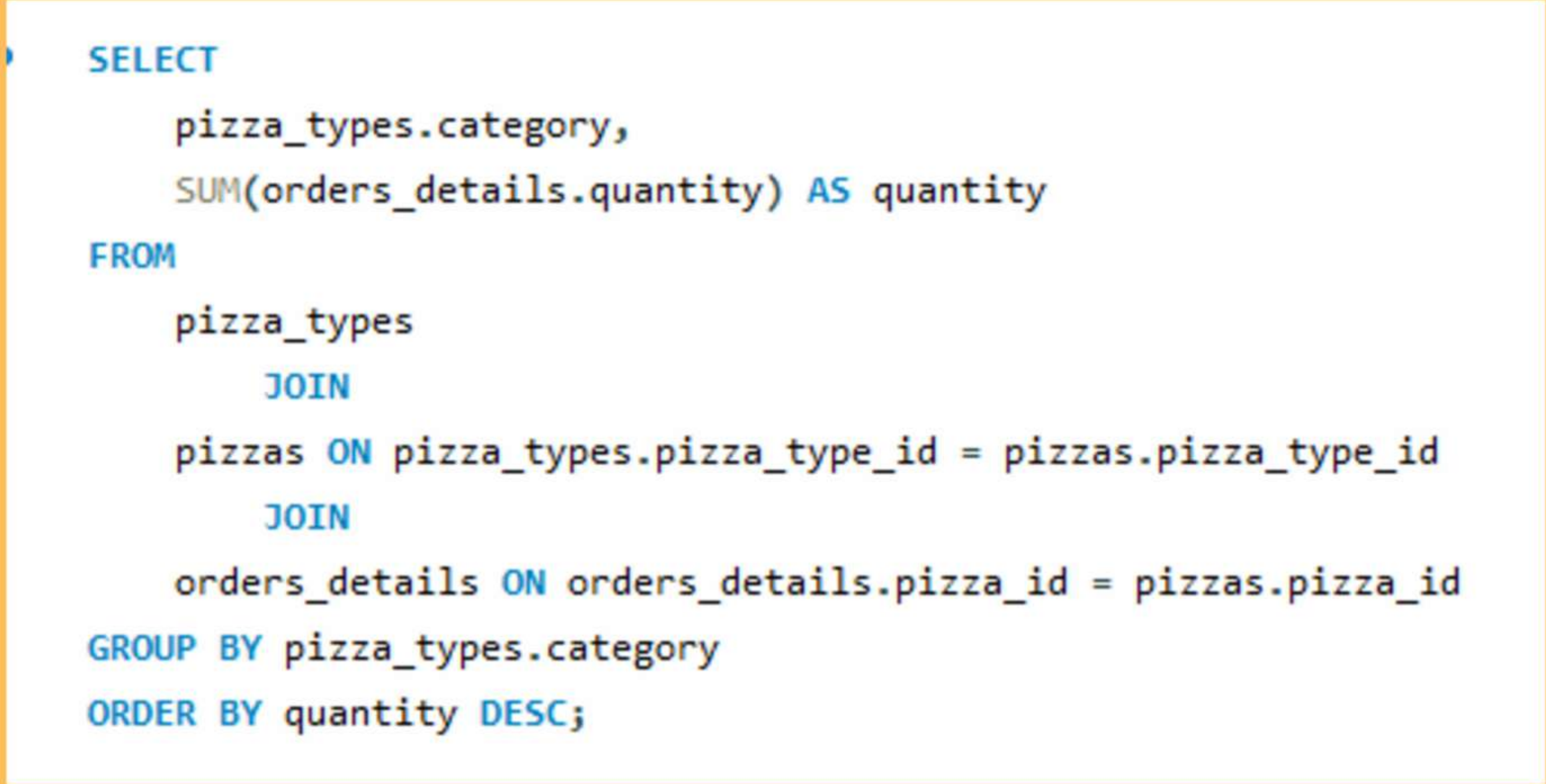
```sql
SELECT
    pizza_types.category,
    ROUND(SUM(orders_details.quantity * pizzas.price) / (SELECT
                    ROUND(SUM(orders_details.quantity * pizzas.price),
                                2) AS total_sales
                FROM
                    orders_details
                        JOIN
                    pizzas ON pizzas.pizza_id = orders_details.pizza_id) * 100,
            2) AS revenue
FROM
    pizza_types
        JOIN
    pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
        JOIN
    orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY pizza_types.category
ORDER BY revenue DESC;
```



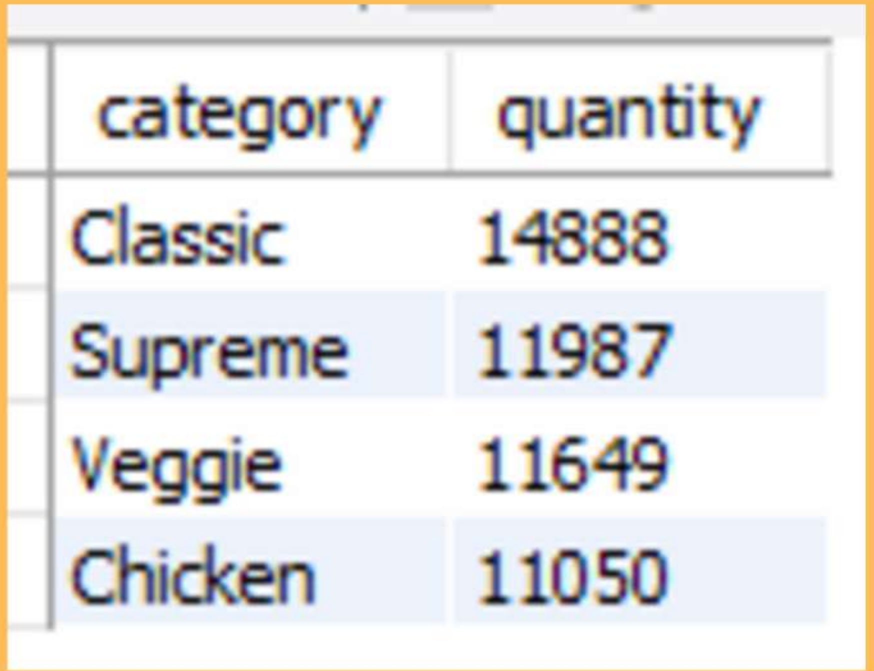
category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

Solutions

Solution 10



```
SELECT
    pizza_types.category,
    SUM(orders_details.quantity) AS quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY quantity DESC;
```



category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

THANKYOU