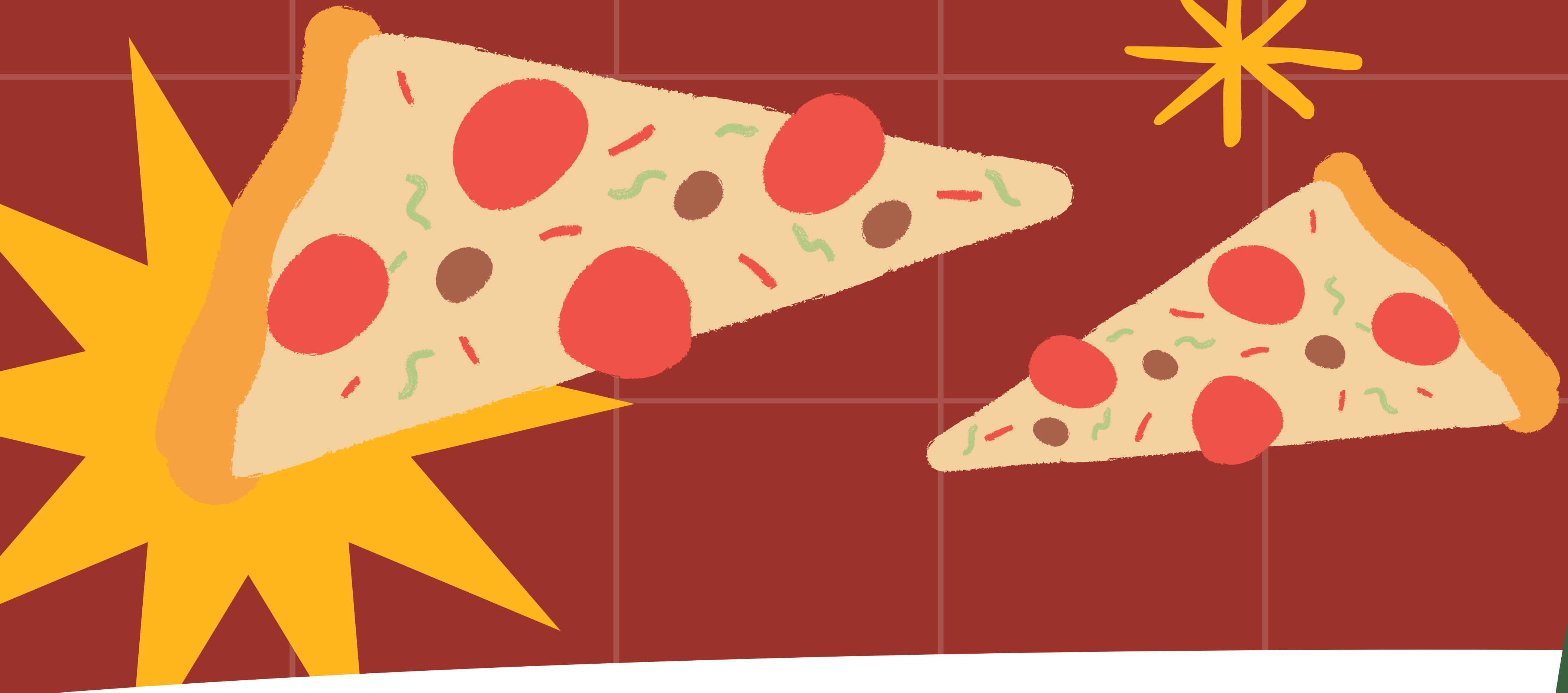
PIZZA SALES



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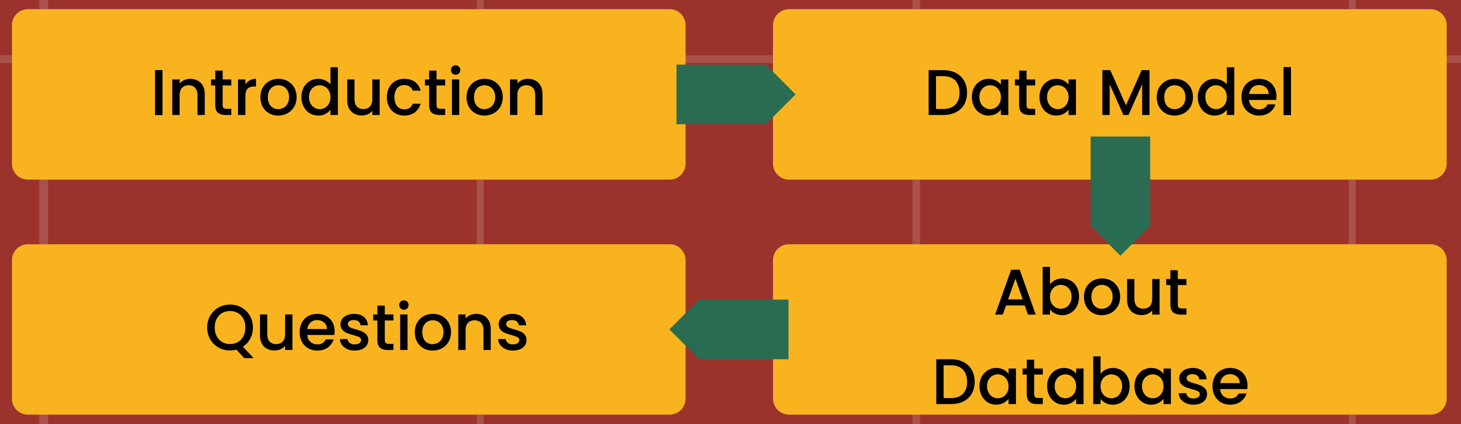

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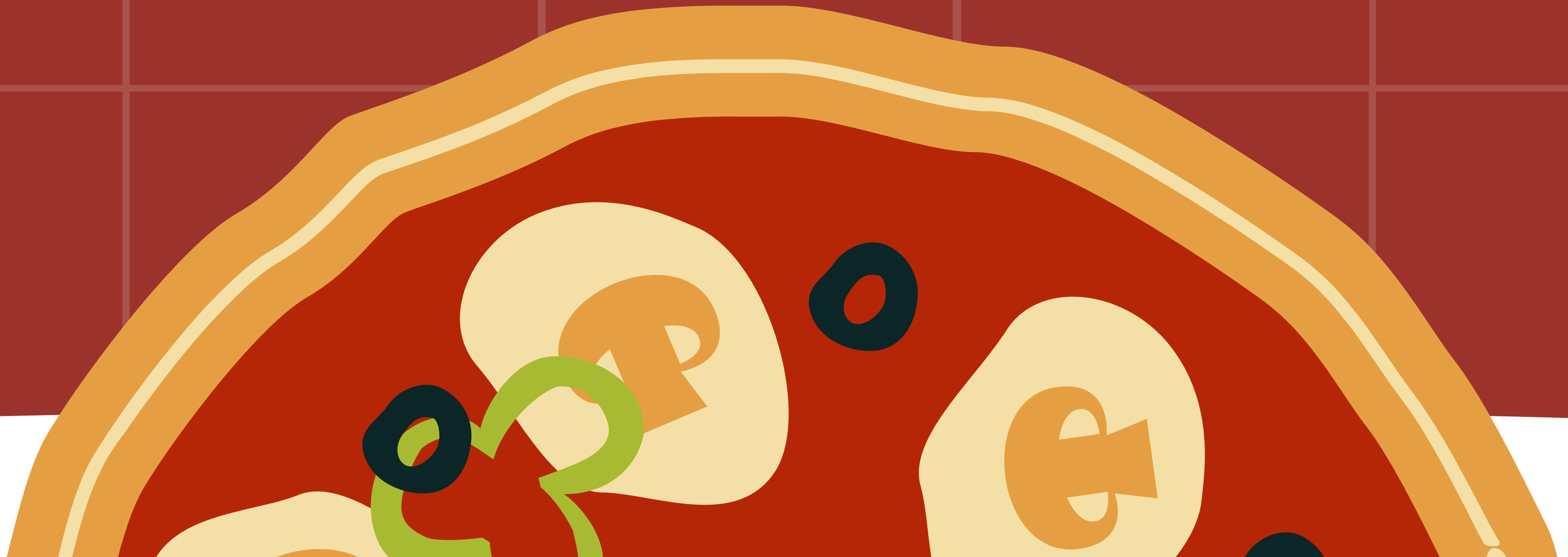
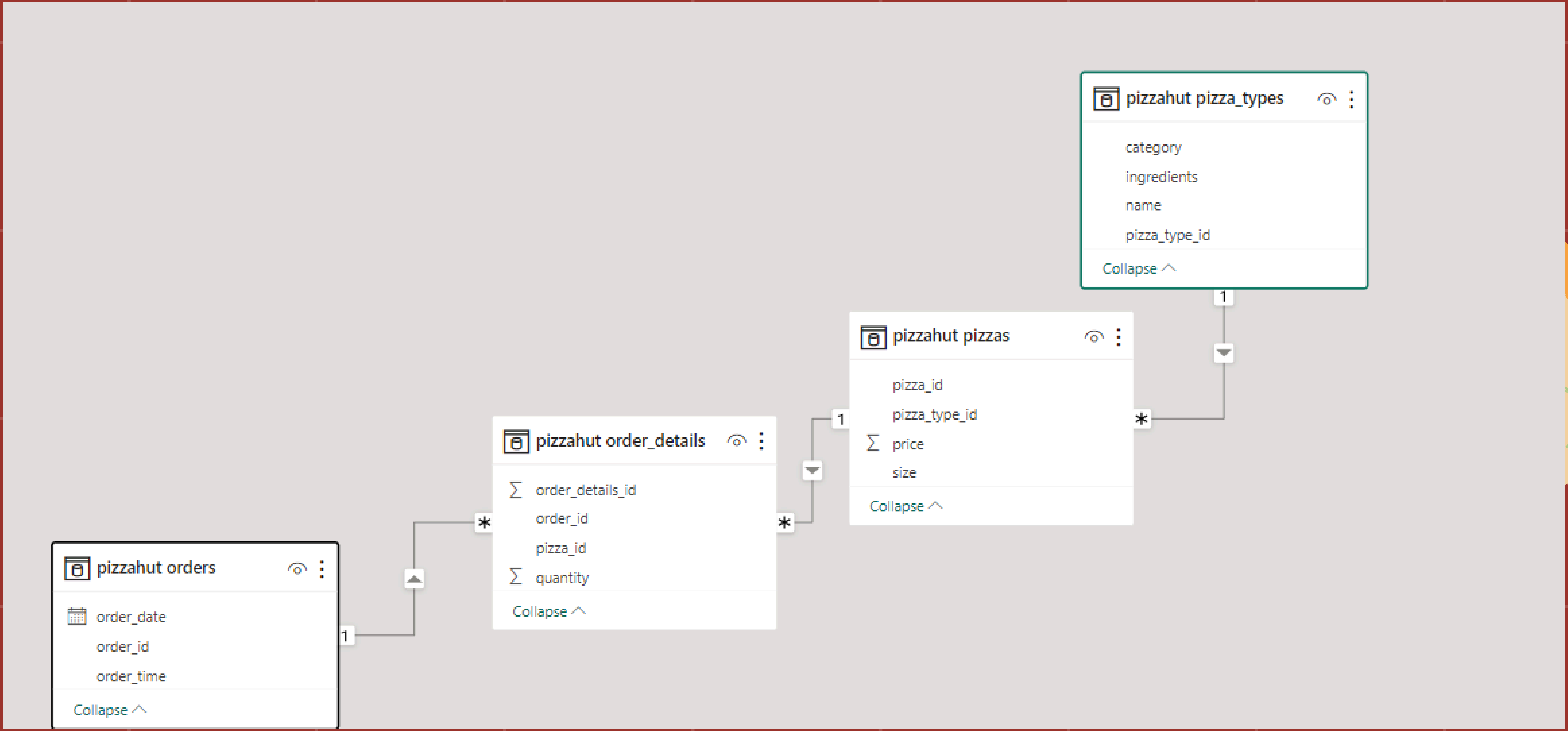
INTRODUCTION

Ghanashyam Vibhandik

In this project, I have leveraged SQL to analyze and gain insights into pizza sales data. By utilizing relevant queries, I explored key metrics and trends to uncover valuable business insights, helping to optimize sales strategies and performance.

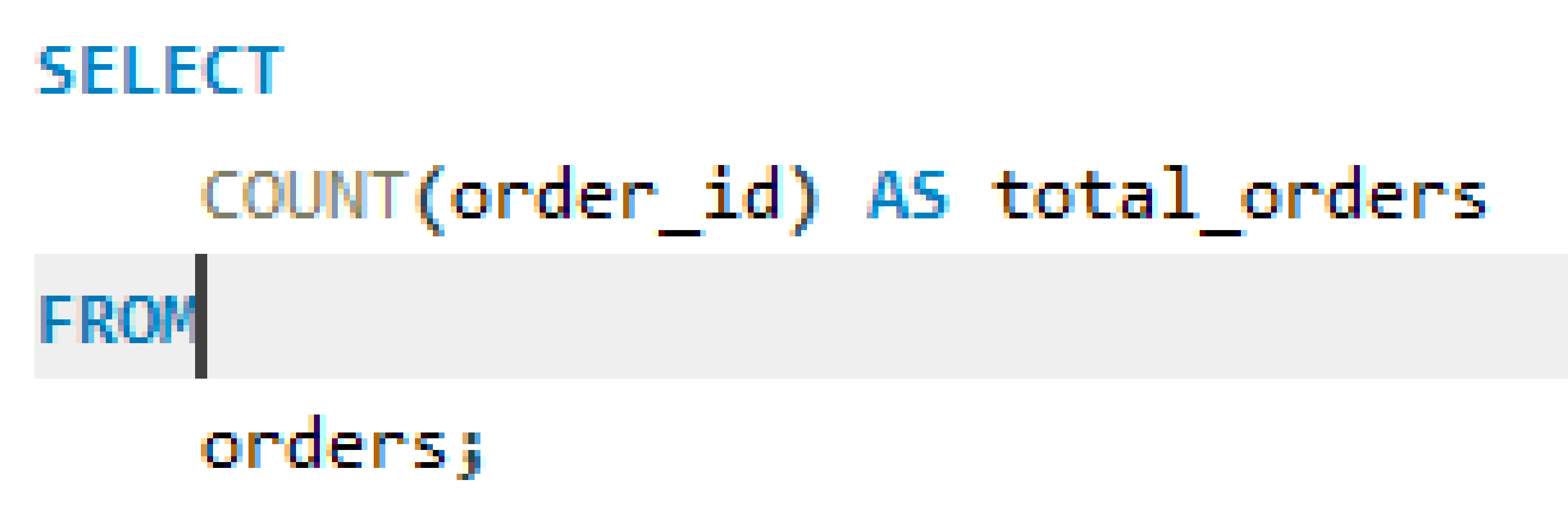


DATA MODEL

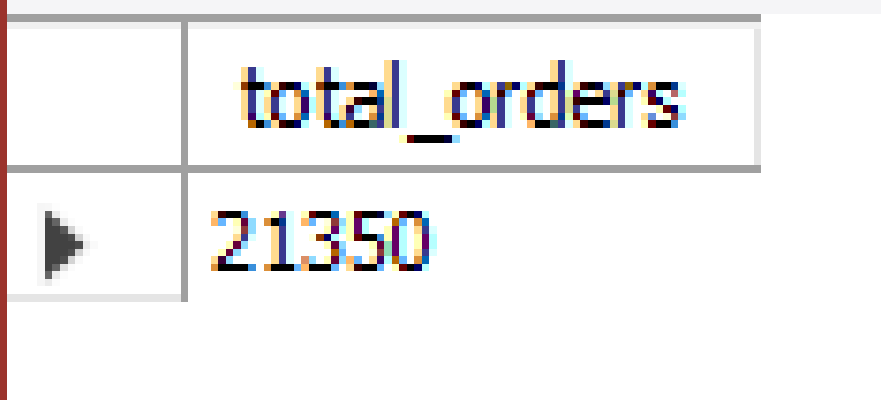


pizzahut pizza_types
category
ingredients
name
pizza_type_id
Collapse
1
pizzahut pizzas
pizza_id
pizza_type_id
price
size
Collapse
*
1
pizzahut order_details
order_details_id
order_id
pizza_id
quantity
Collapse
*
*
pizzahut orders
order_date
order_id
order_time
Collapse
1

RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

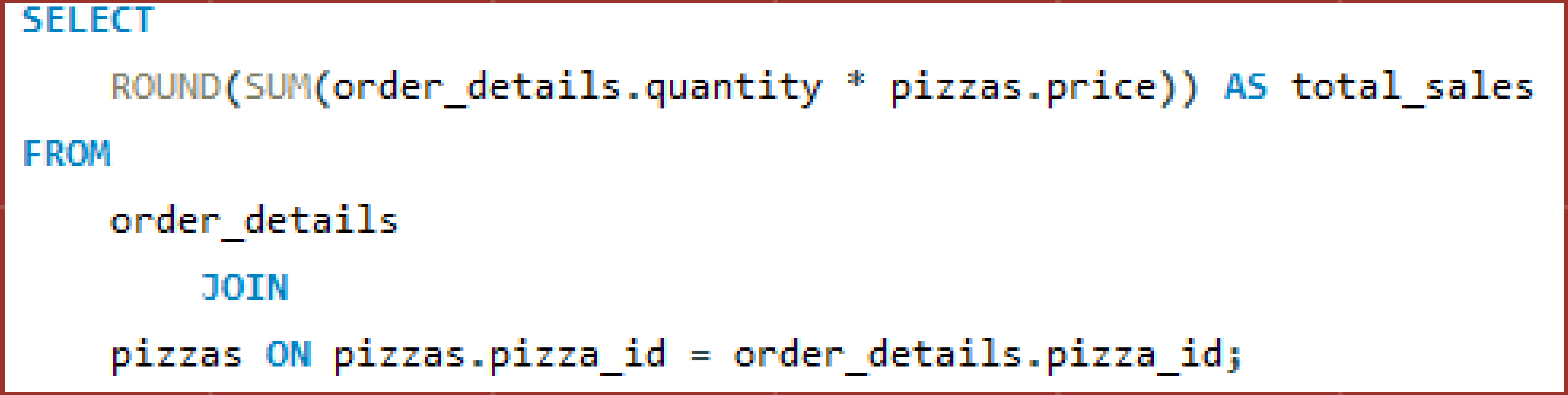


```sql
SELECT
    COUNT(order_id) AS total_orders
FROM
    orders;
```

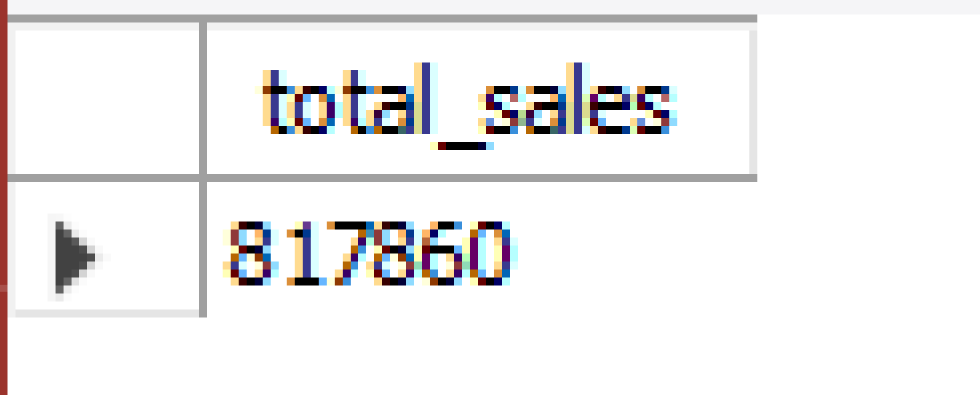


```
total_orders
21350
```

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

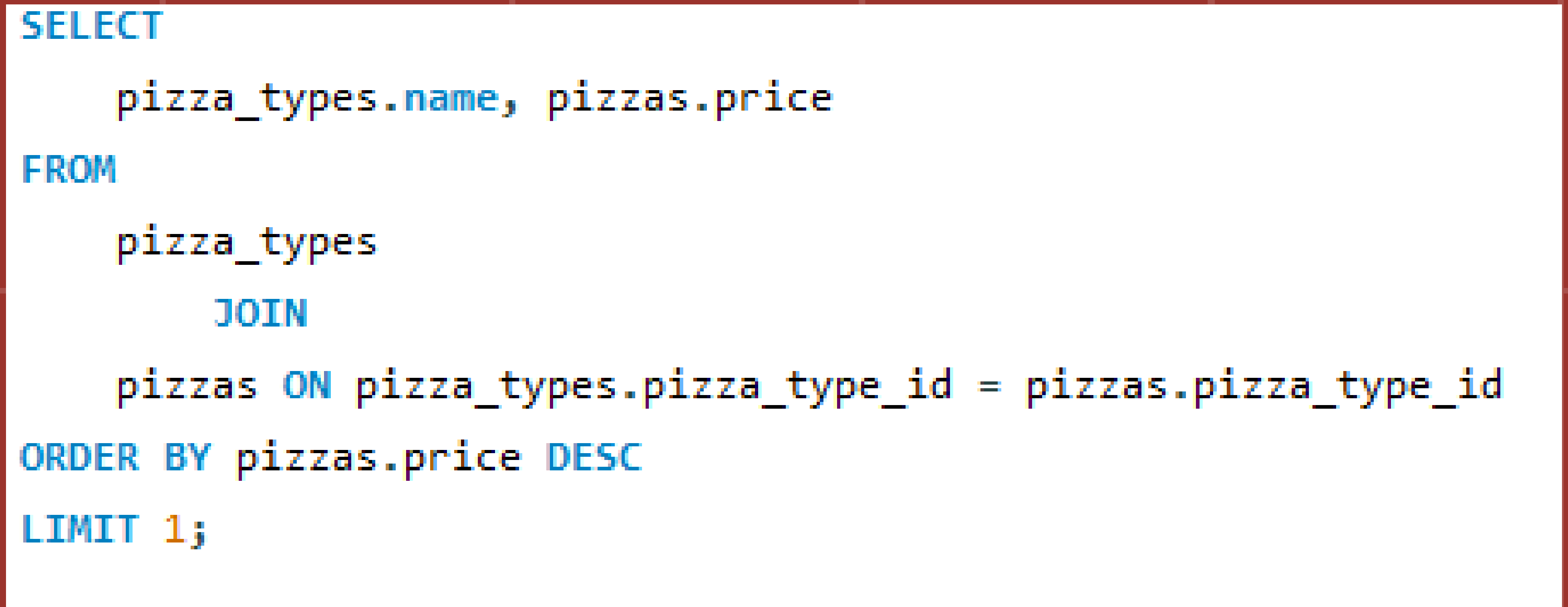


```
SELECT
    ROUND(SUM(order_details.quantity * pizzas.price)) AS total_sales
FROM
    order_details
        JOIN
    pizzas ON pizzas.pizza_id = order_details.pizza_id;
```

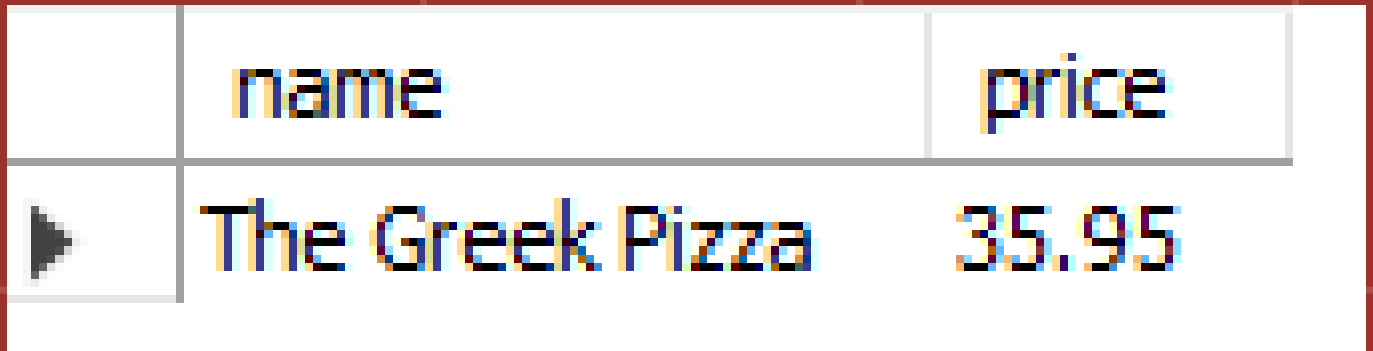


total_sales
817860

IDENTIFY THE HIGHEST-PRICED PIZZA.

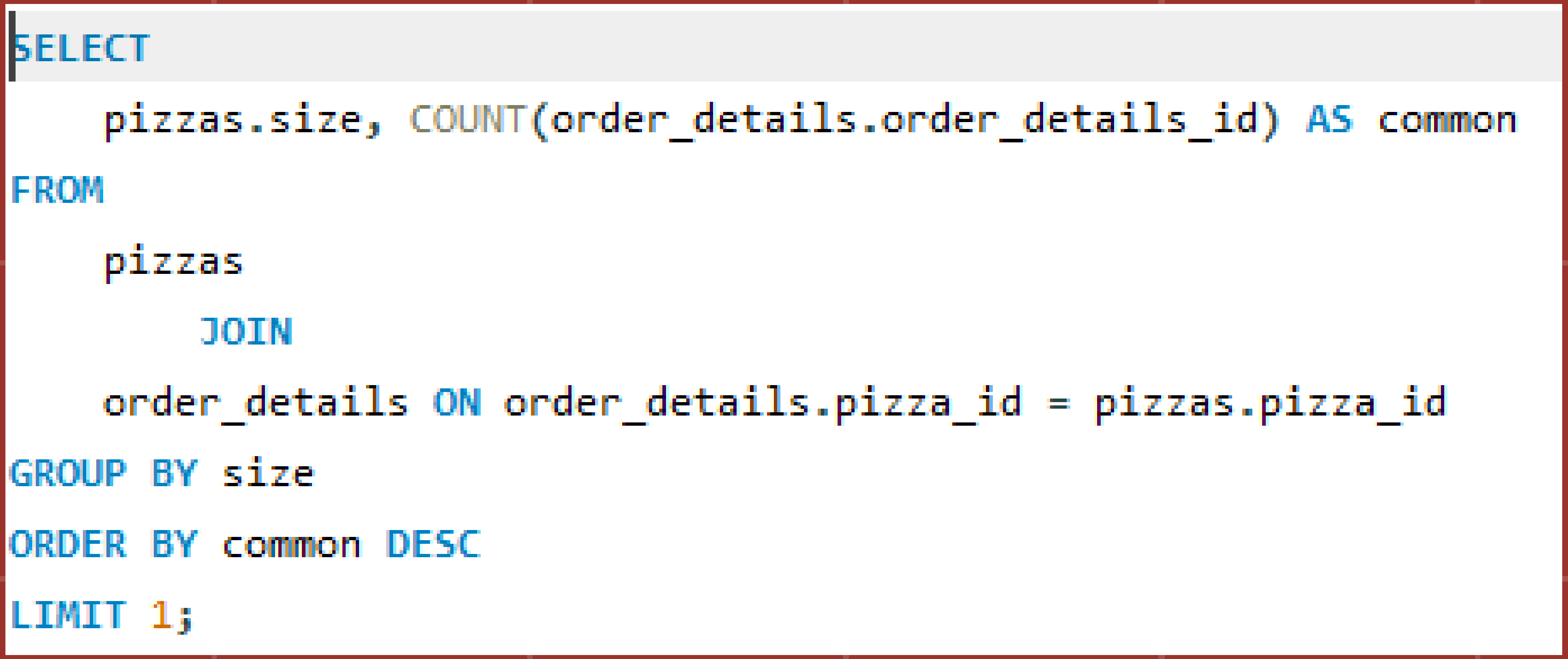


```sql
SELECT
    pizza_types.name, pizzas.price
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY pizzas.price DESC
LIMIT 1;
```

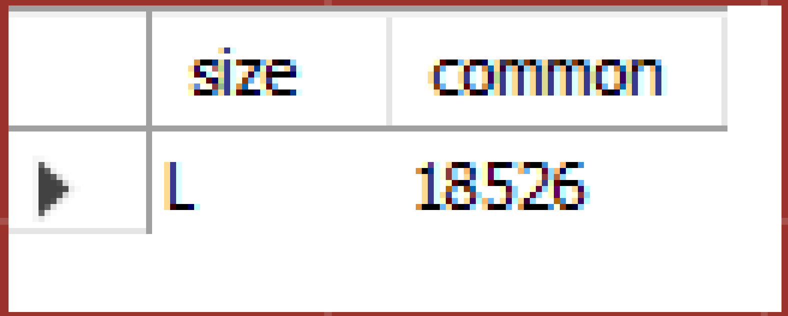


	name	price
▶	The Greek Pizza	35.95

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

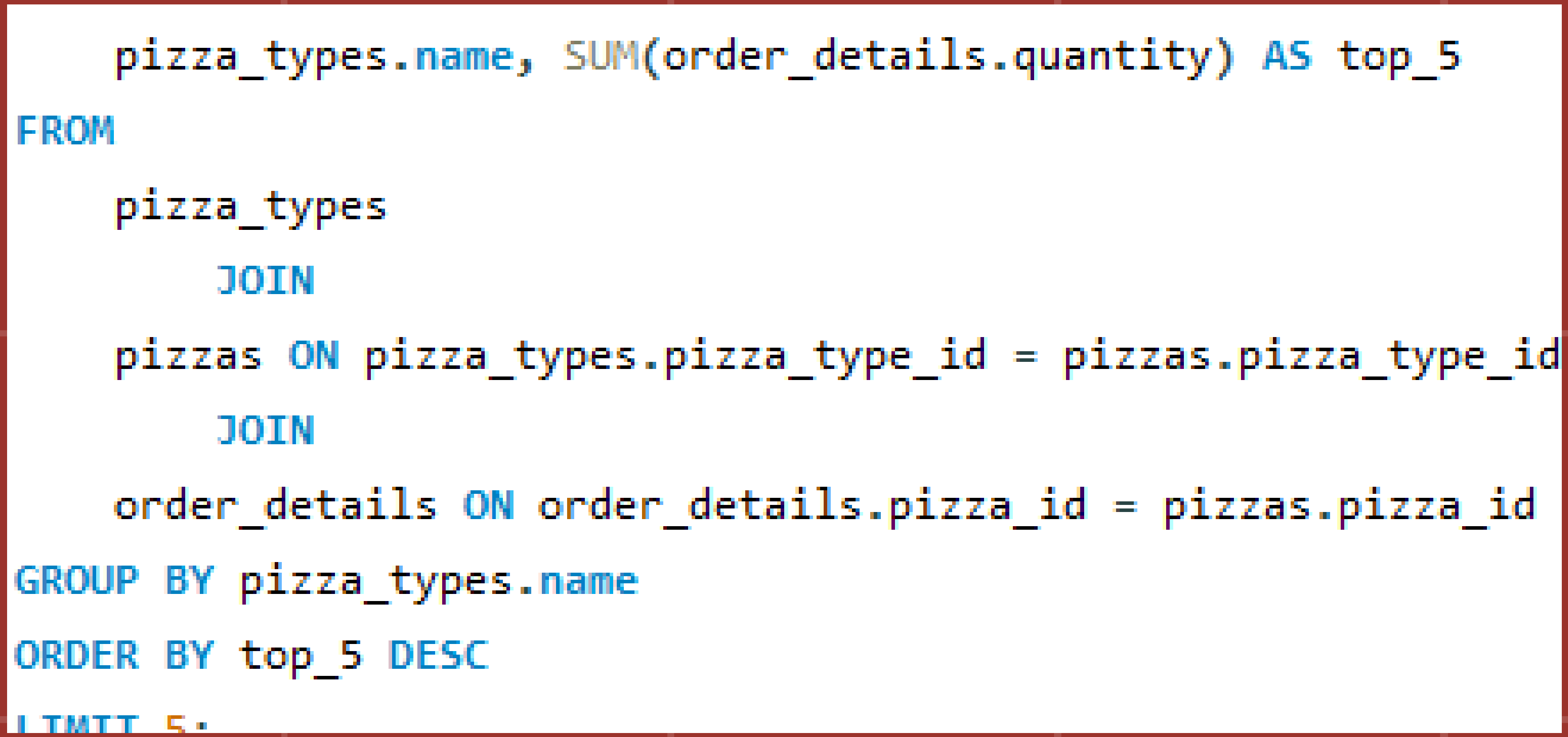


```
SELECT
    pizzas.size, COUNT(order_details.order_details_id) AS common
FROM
    pizzas
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY size
ORDER BY common DESC
LIMIT 1;
```

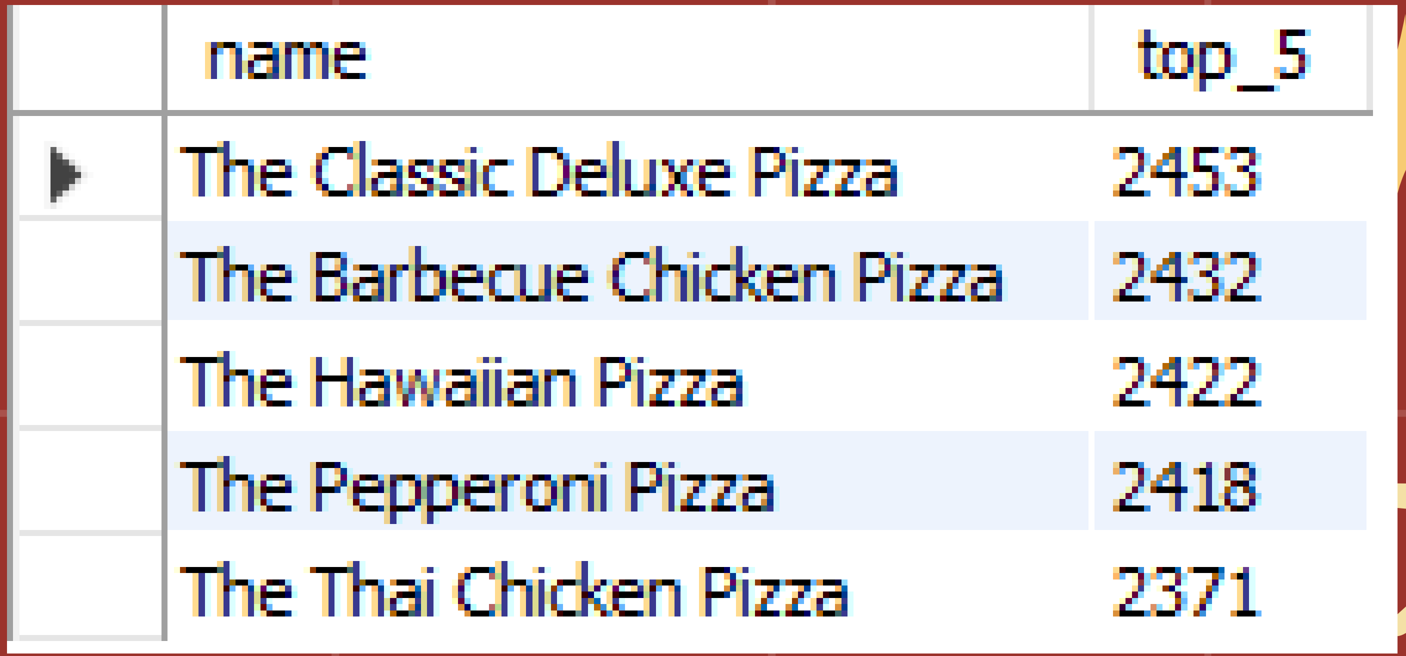


	size	common
▶	L	18526

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

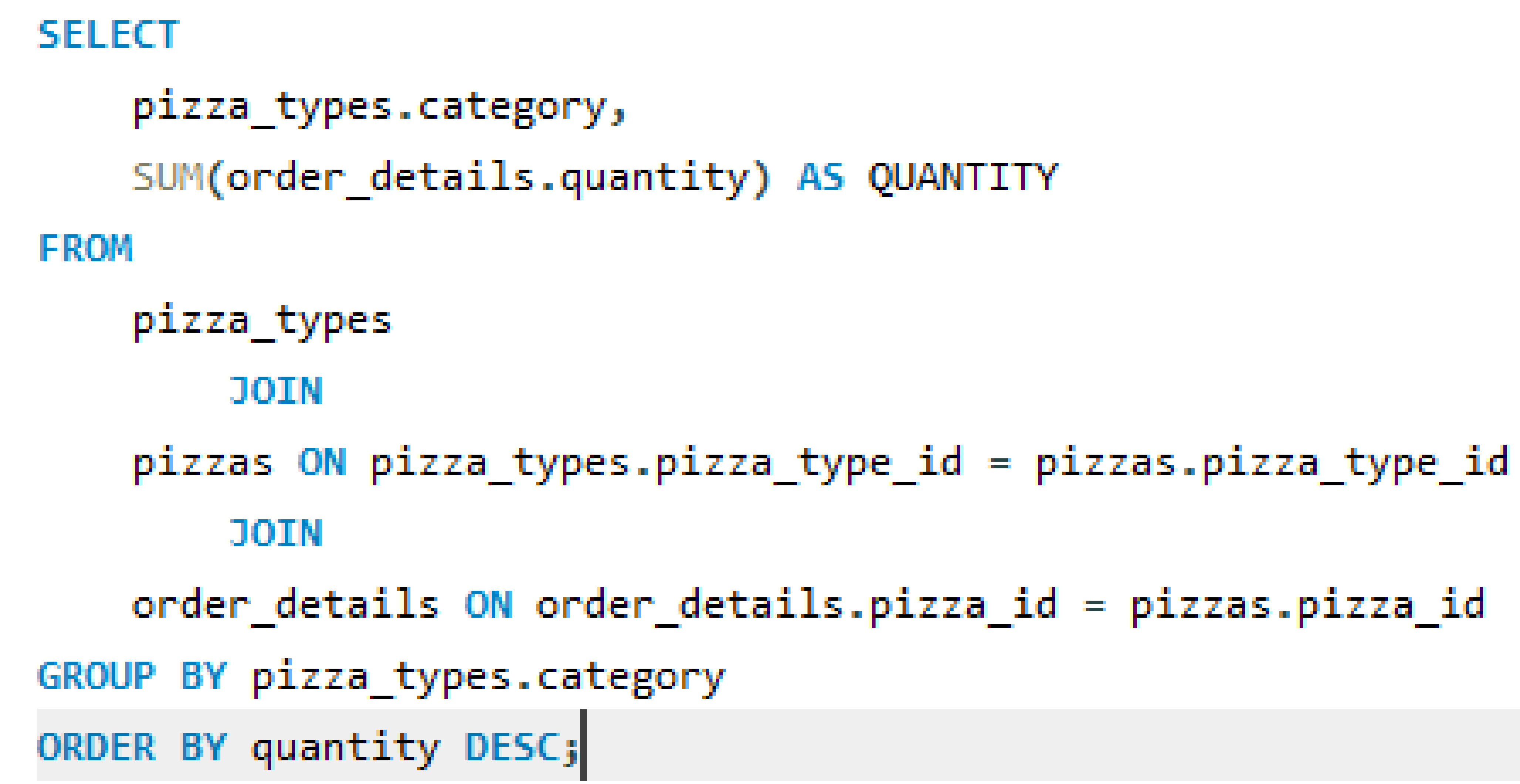


```
    pizza_types.name, SUM(order_details.quantity) AS top_5
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY top_5 DESC
LIMIT 5;
```

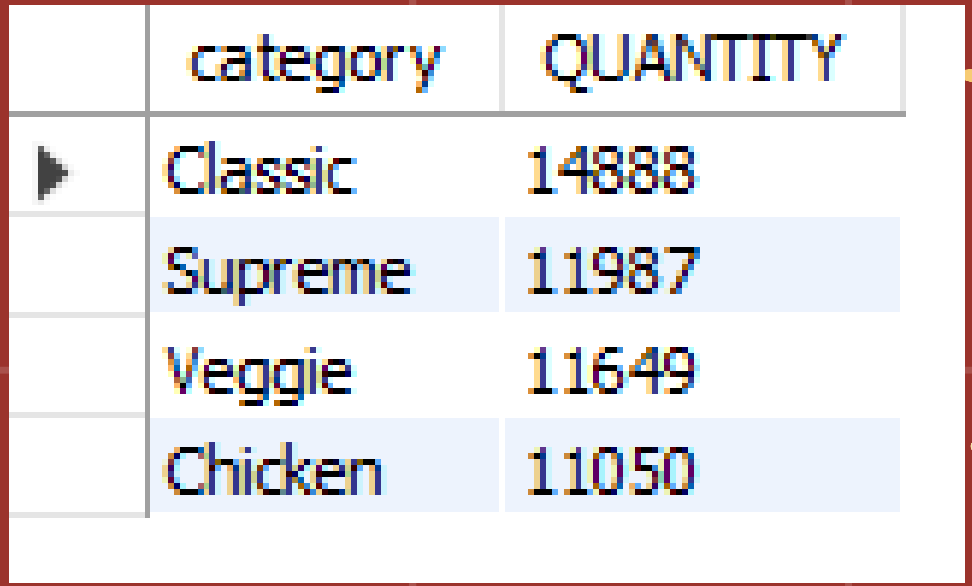


name	top_5
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED.

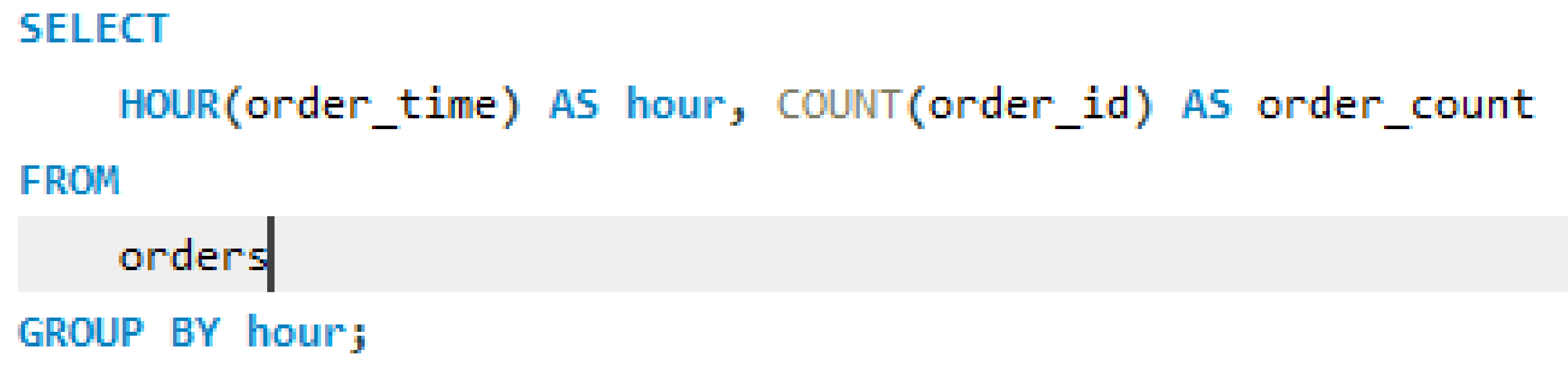


```
SELECT
    pizza_types.category,
    SUM(order_details.quantity) AS QUANTITY
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY quantity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

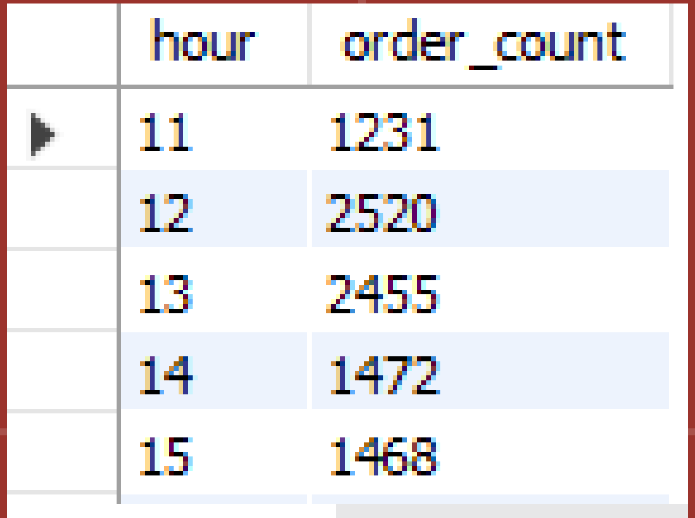


	category	QUANTITY
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

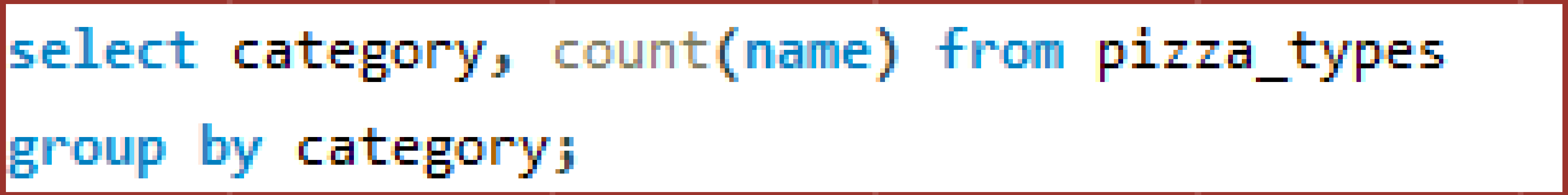


```
SELECT
    HOUR(order_time) AS hour, COUNT(order_id) AS order_count
FROM
    orders
GROUP BY hour;
```

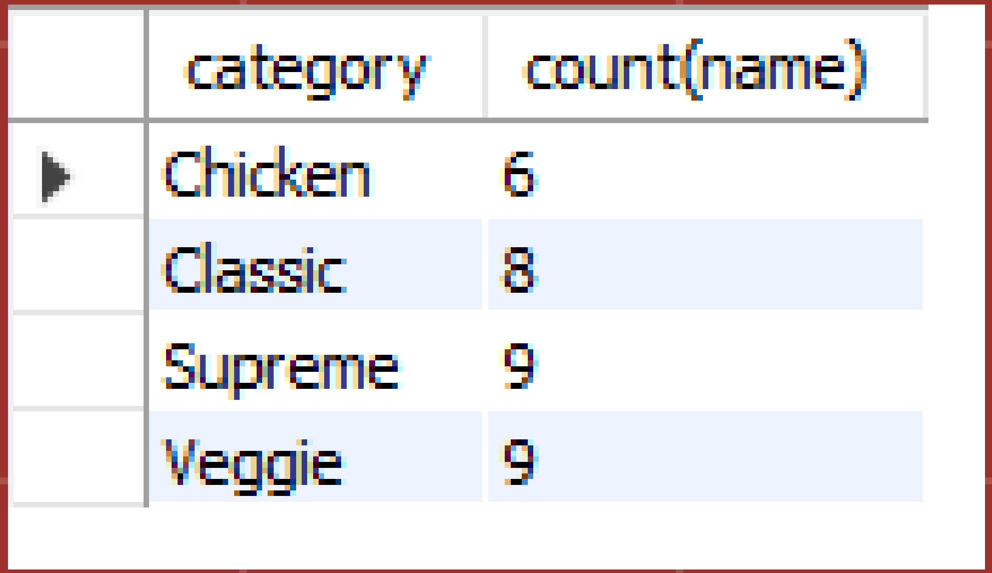


hour	order_count
11	1231
12	2520
13	2455
14	1472
15	1468

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

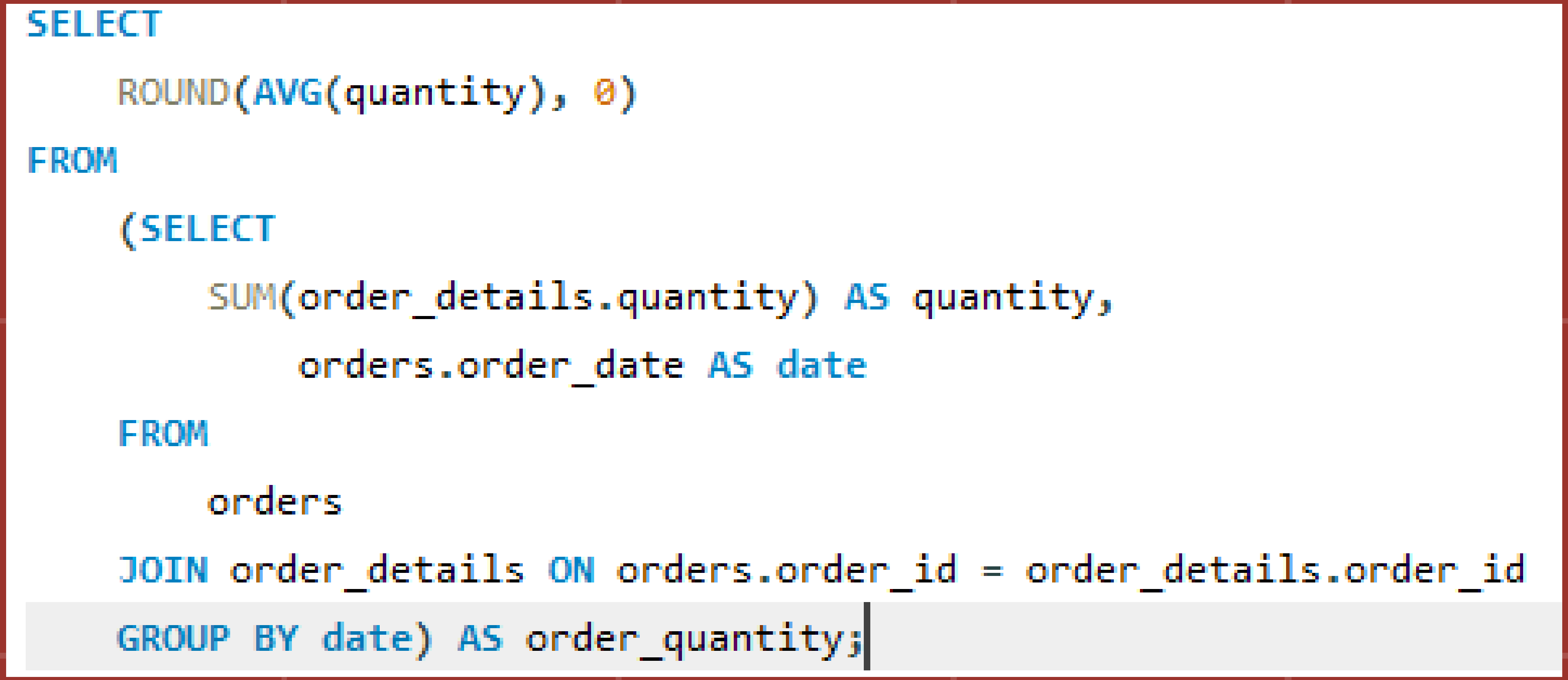


```
select category, count(name) from pizza_types
group by category;
```

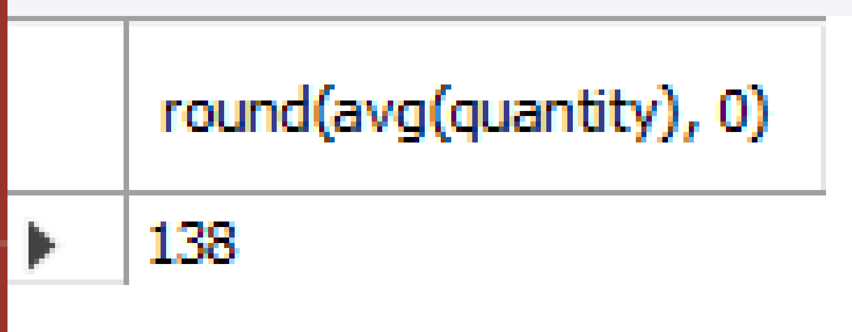


category	count(name)
Chicken	6
Classic	8
Supreme	9
Veggie	9

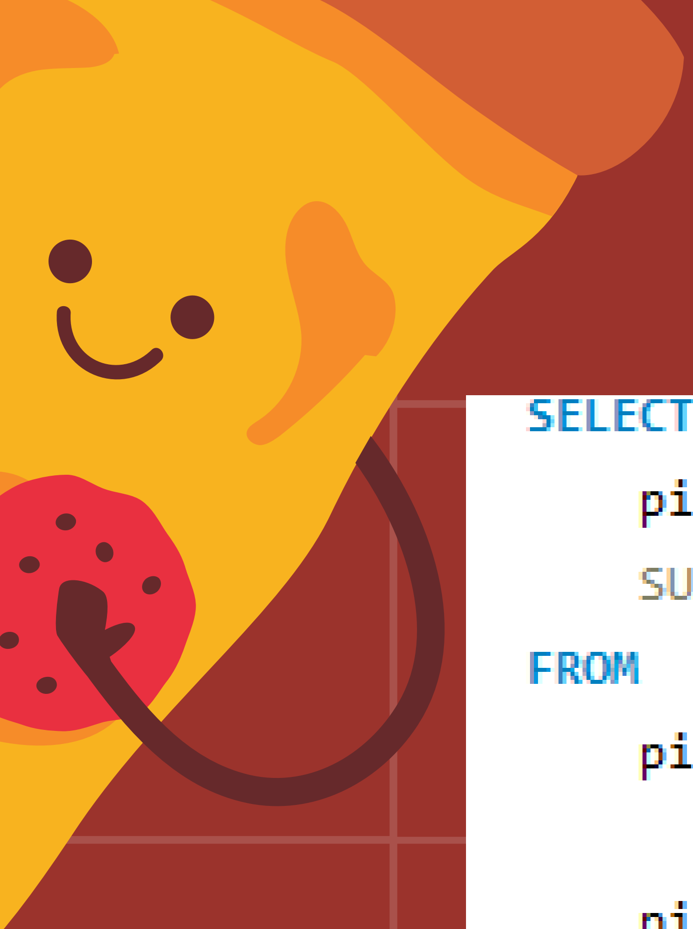
GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY.



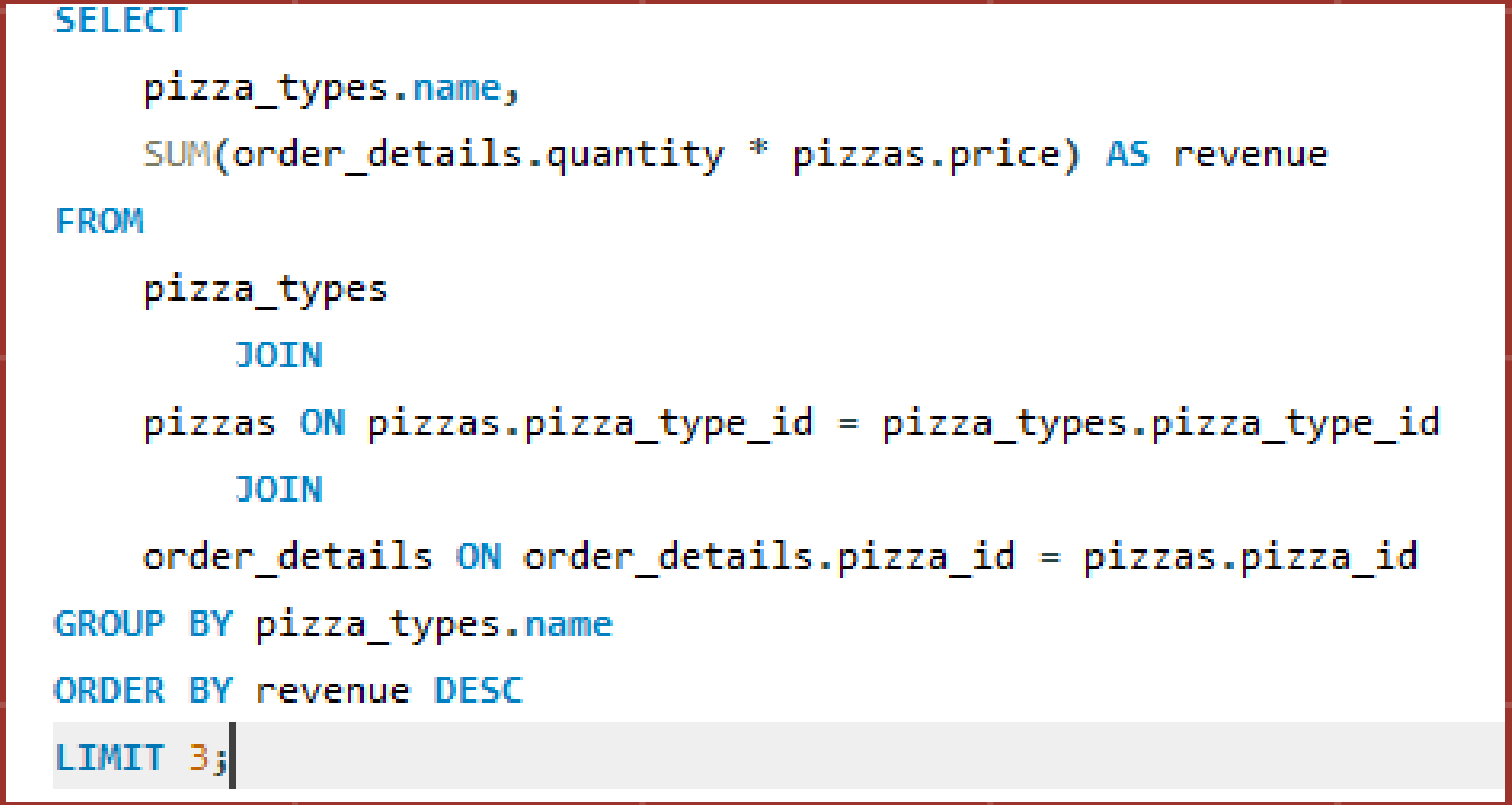
```sql
SELECT
    ROUND(AVG(quantity), 0)
FROM
    (SELECT
        SUM(order_details.quantity) AS quantity,
            orders.order_date AS date
    FROM
        orders
    JOIN order_details ON orders.order_id = order_details.order_id
    GROUP BY date) AS order_quantity;
```



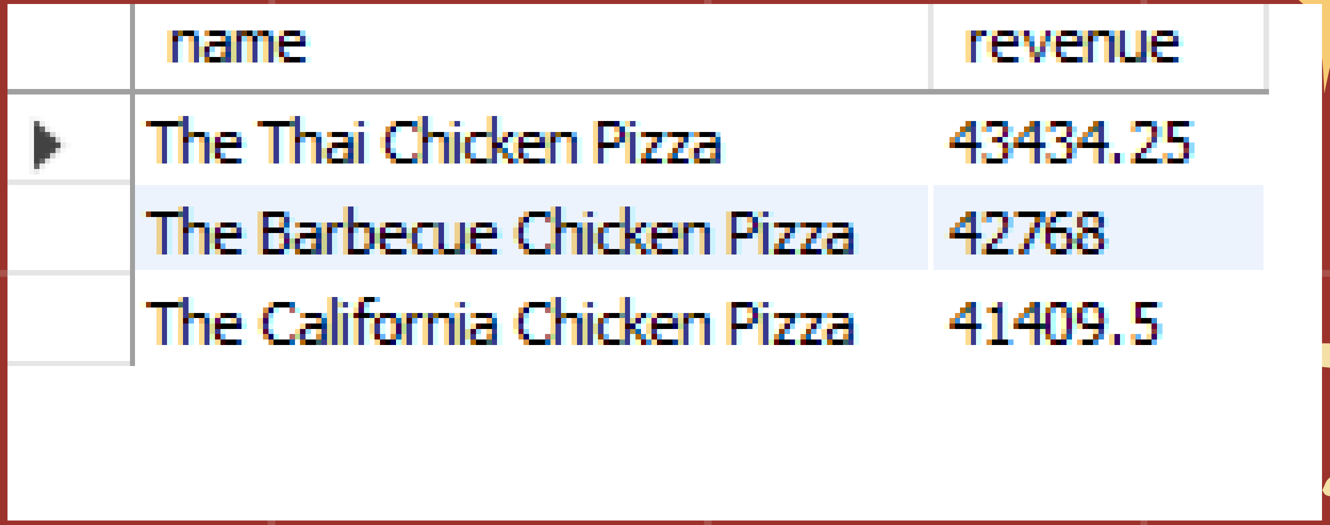
round(avg(quantity), 0)
138



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

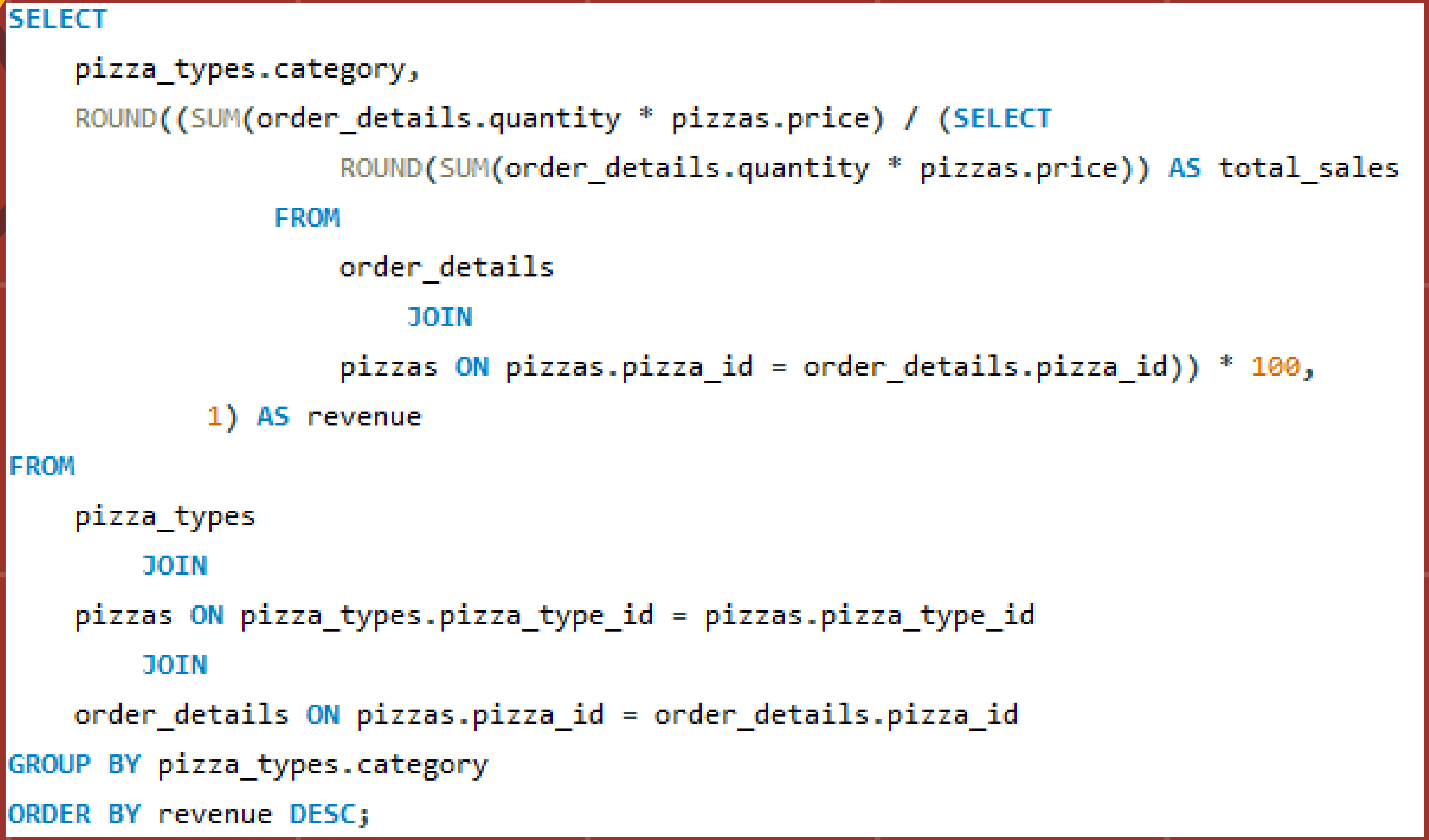


```
SELECT
    pizza_types.name,
    SUM(order_details.quantity * pizzas.price) AS revenue
FROM
    pizza_types
        JOIN
    pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
        JOIN
    order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY revenue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

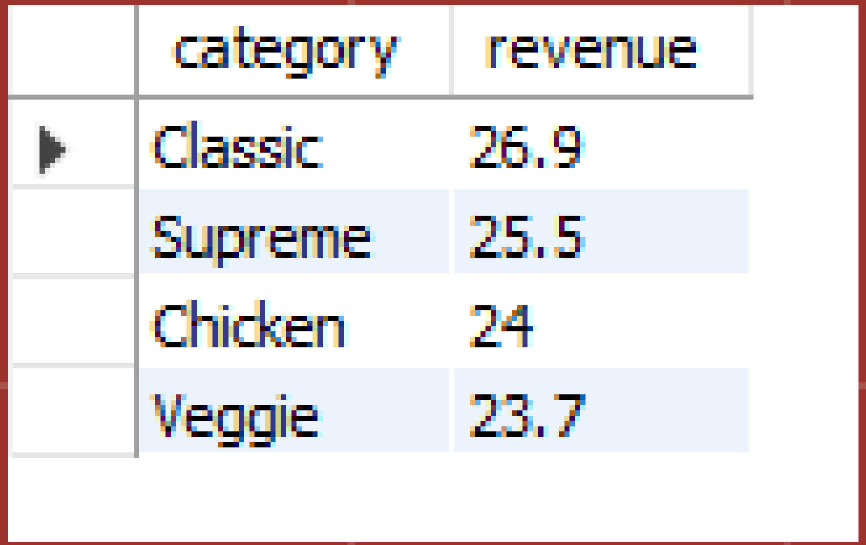


name	revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5

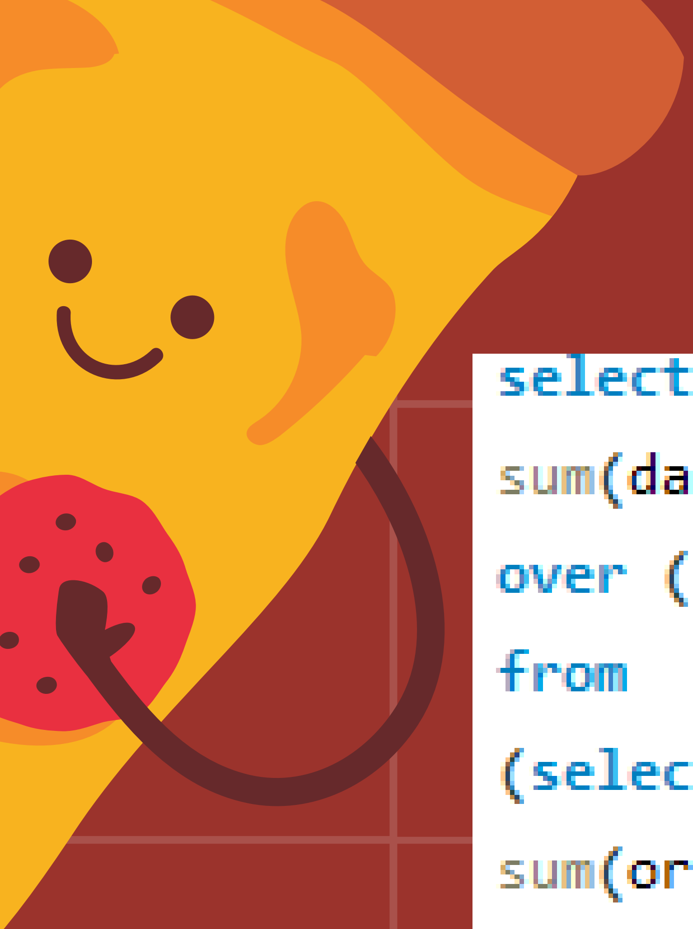
CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.



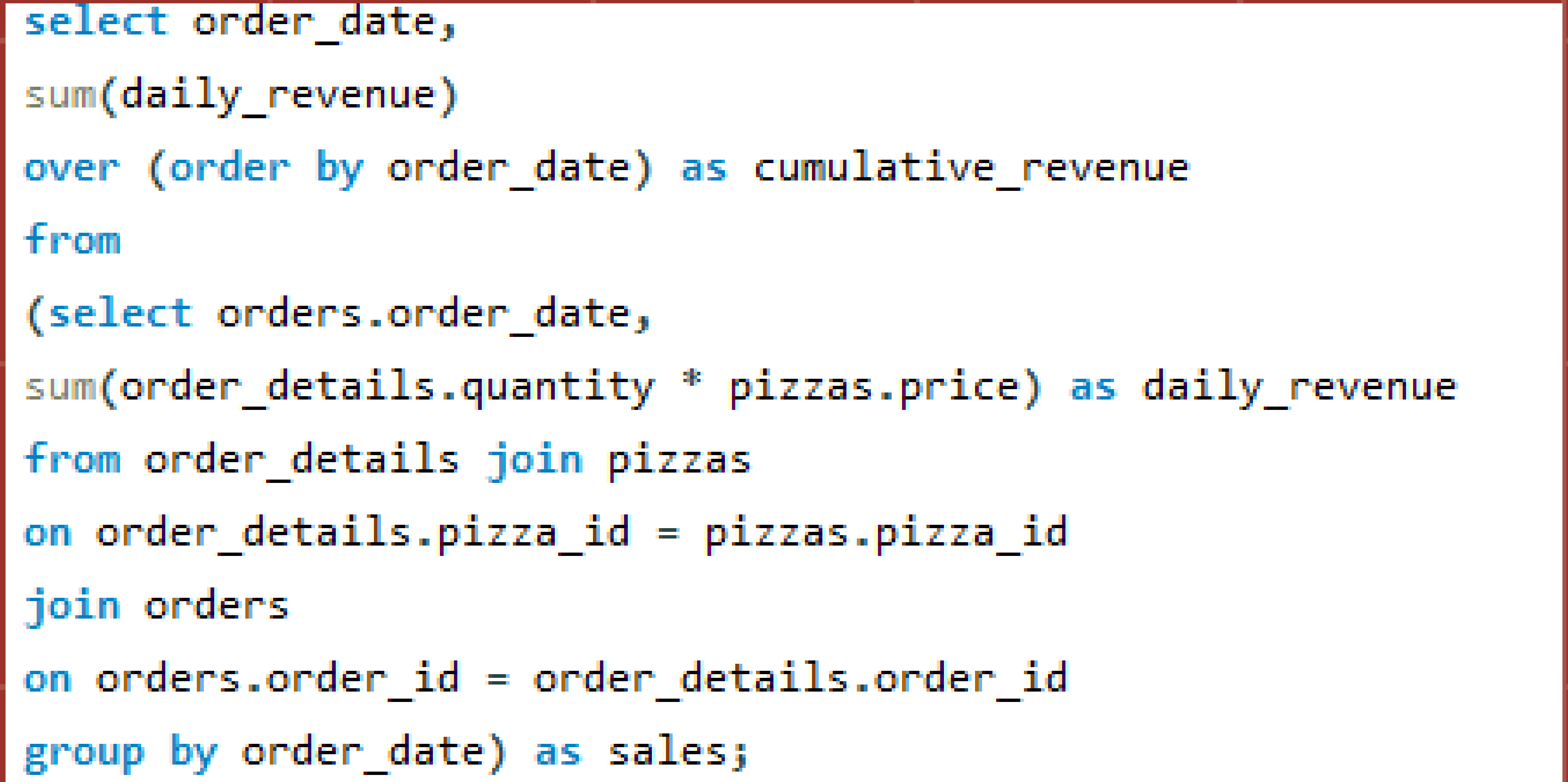
```
SELECT
    pizza_types.category,
    ROUND((SUM(order_details.quantity * pizzas.price) / (SELECT
                    ROUND(SUM(order_details.quantity * pizzas.price)) AS total_sales
                FROM
                    order_details
                        JOIN
                    pizzas ON pizzas.pizza_id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



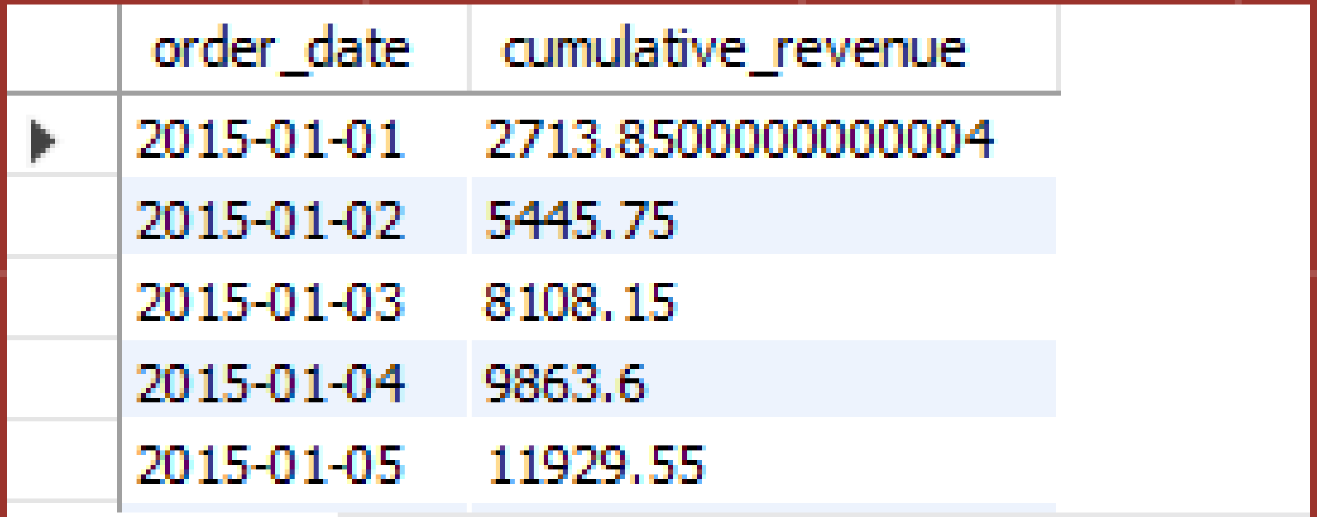
category	revenue
Classic	26.9
Supreme	25.5
Chicken	24
Veggie	23.7



ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.

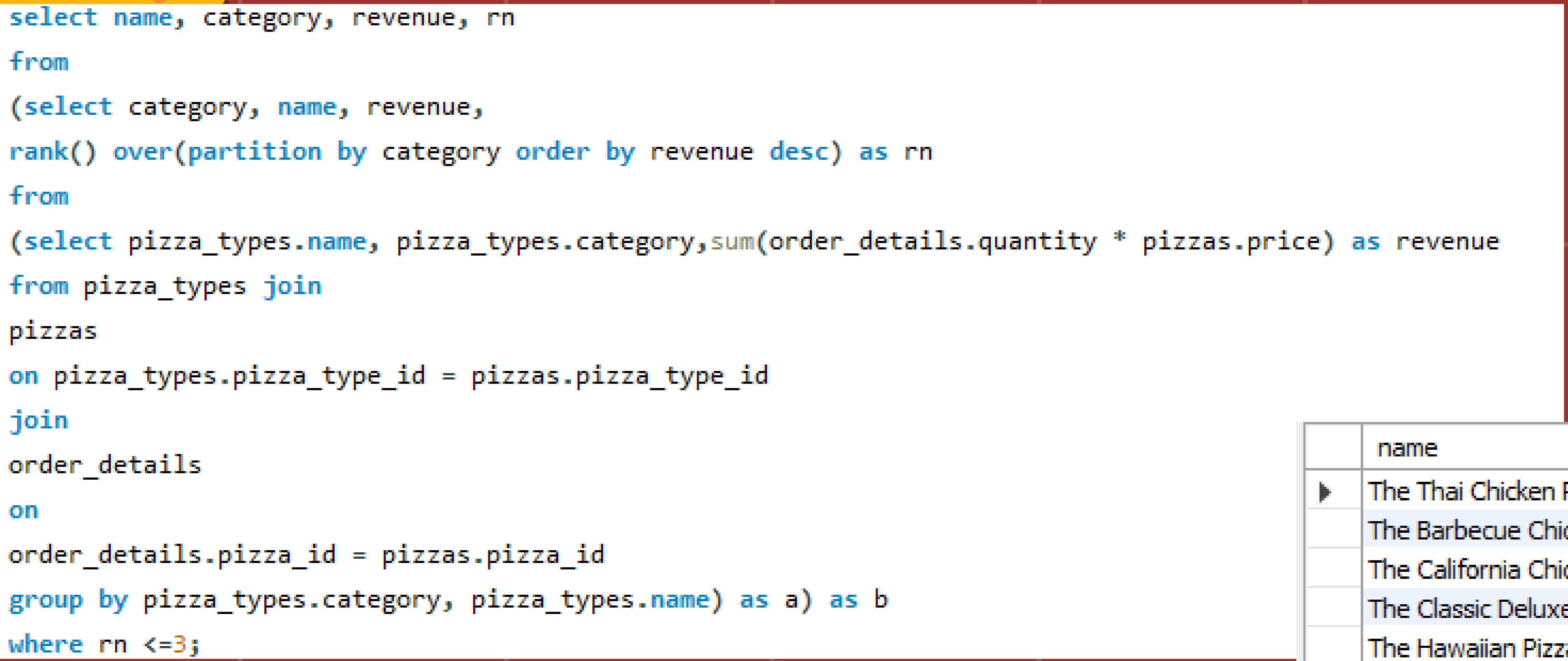


```
select order_date,
sum(daily_revenue)
over (order by order_date) as cumulative_revenue
from
(select orders.order_date,
sum(order_details.quantity * pizzas.price) as daily_revenue
from order_details join pizzas
on order_details.pizza_id = pizzas.pizza_id
join orders
on orders.order_id = order_details.order_id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

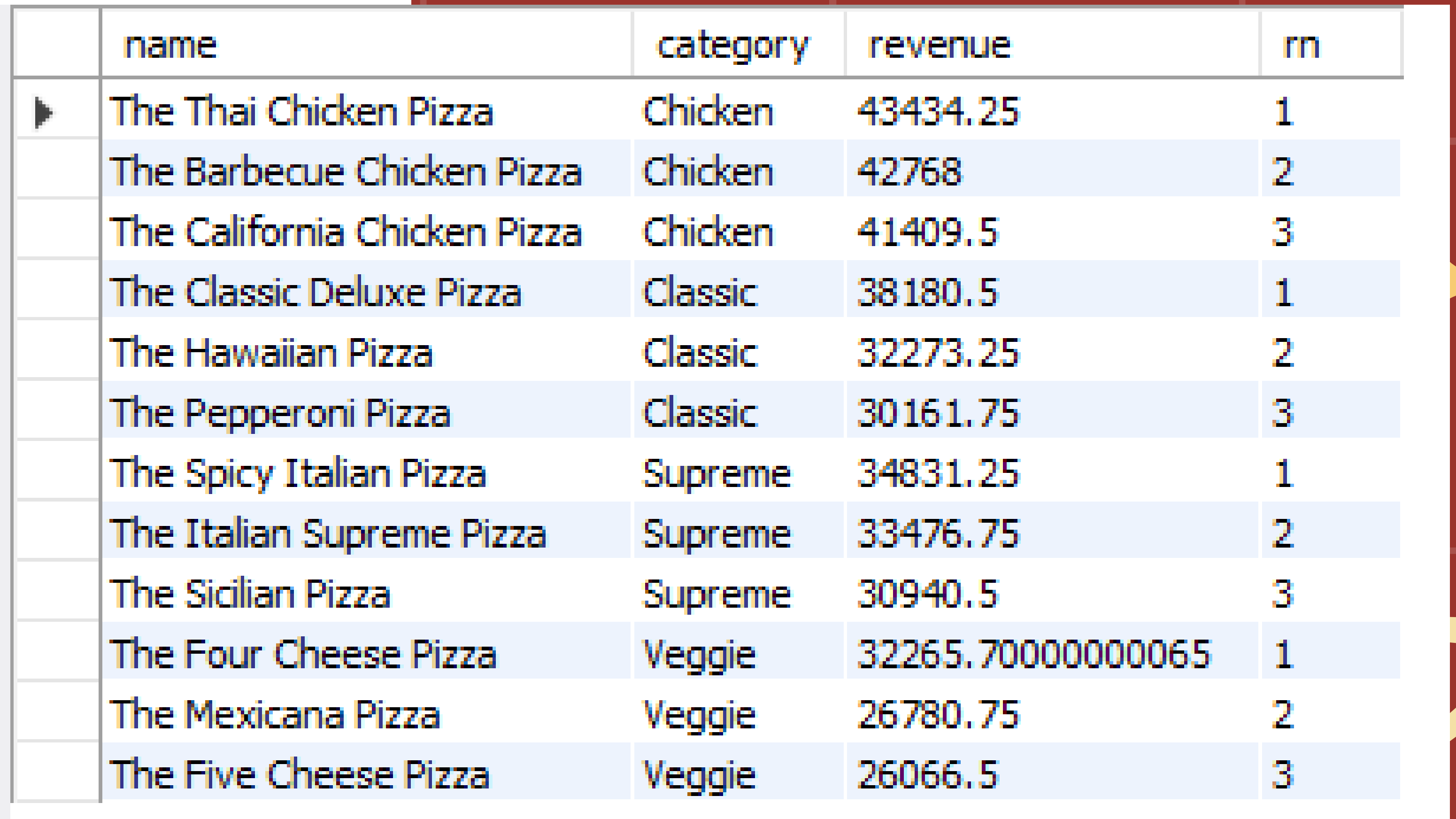


order_date	cumulative_revenue
2015-01-01	2713.8500000000004
2015-01-02	5445.75
2015-01-03	8108.15
2015-01-04	9863.6
2015-01-05	11929.55

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY.



```
select name, category, revenue, rn
from
(select category, name, revenue,
rank() over(partition by category order by revenue desc) as rn
from
(select pizza_types.name, pizza_types.category,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	category	revenue	rn
The Thai Chicken Pizza	Chicken	43434.25	1
The Barbecue Chicken Pizza	Chicken	42768	2
The California Chicken Pizza	Chicken	41409.5	3
The Classic Deluxe Pizza	Classic	38180.5	1
The Hawaiian Pizza	Classic	32273.25	2
The Pepperoni Pizza	Classic	30161.75	3
The Spicy Italian Pizza	Supreme	34831.25	1
The Italian Supreme Pizza	Supreme	33476.75	2
The Sicilian Pizza	Supreme	30940.5	3
The Four Cheese Pizza	Veggie	32265.70000000065	1
The Mexicana Pizza	Veggie	26780.75	2
The Five Cheese Pizza	Veggie	26066.5	3