PIZZA BOXCAR

Introduction

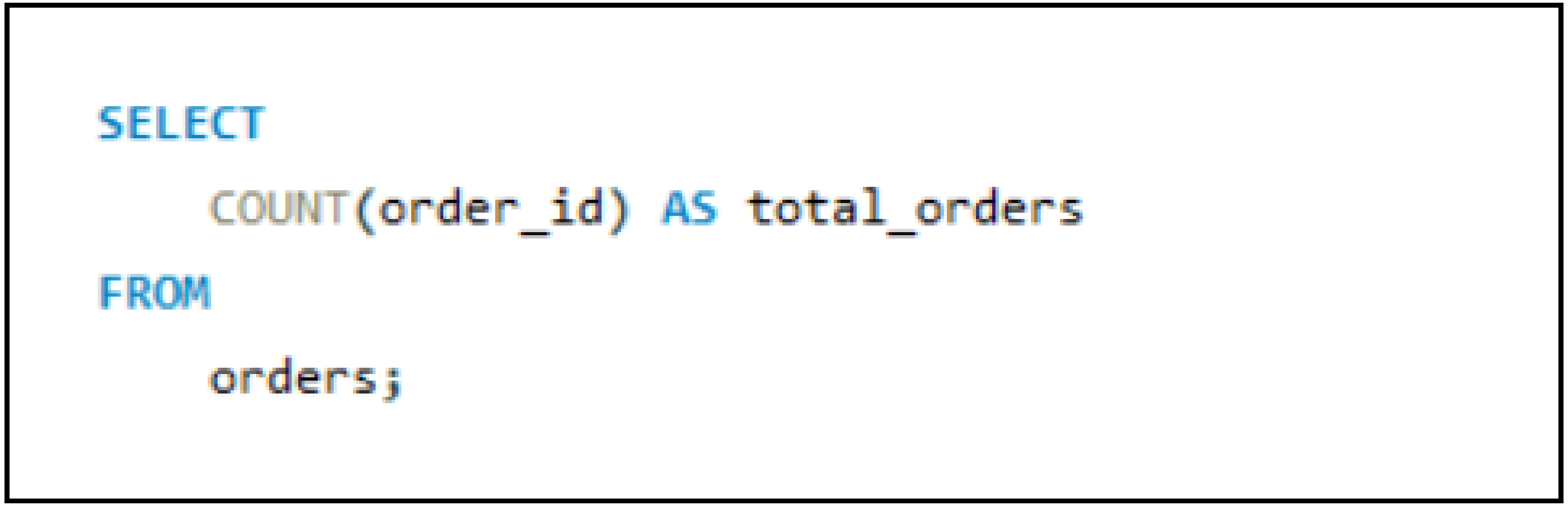
Hello, I am Monika Nayak.

In this project i have utilized SQL queries to solve questions that are related to pizza sales.

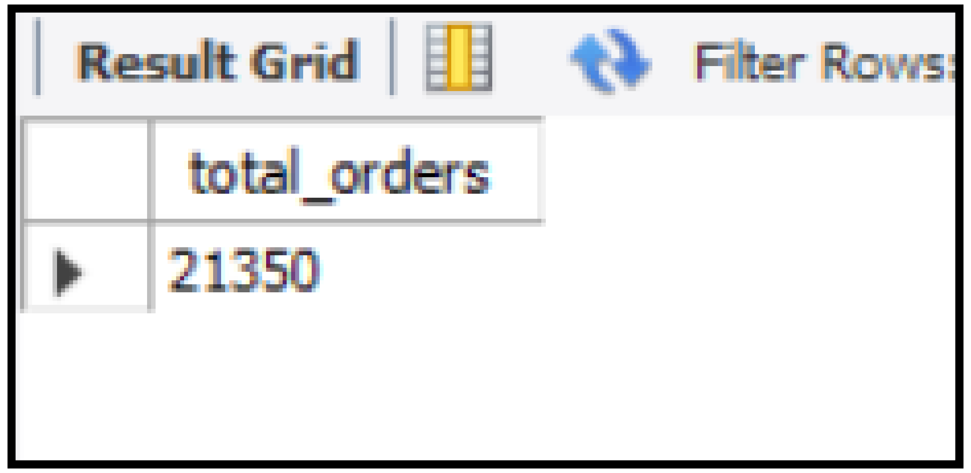
Questions

- Retrive the total number of orders placed.
- calculate the total revenue generated from pizza sales.
- Identify the height-priced pizza.
- Identify the most common pizza size ordered.
- Join relevent tables to find the category wise distribution of pizza..
- List the top most ordered pizza type along their quantity
- Join the necessary tables to find the total quantity of each pizza category ordered.
- Determine the distribution of orders by hour of the day
- Group the orders by date and calculate the average number of pizzas order per day
- Determine the top 3 most ordered pizza types based on revenue
- Calculate the percentage contribution of each pizza type total revenue
- Analyze the cumulative revenue generated over time.
- Determine the top 3 most ordered pizza types based on revenue for each pizza

Retrive the total number of orders placed.

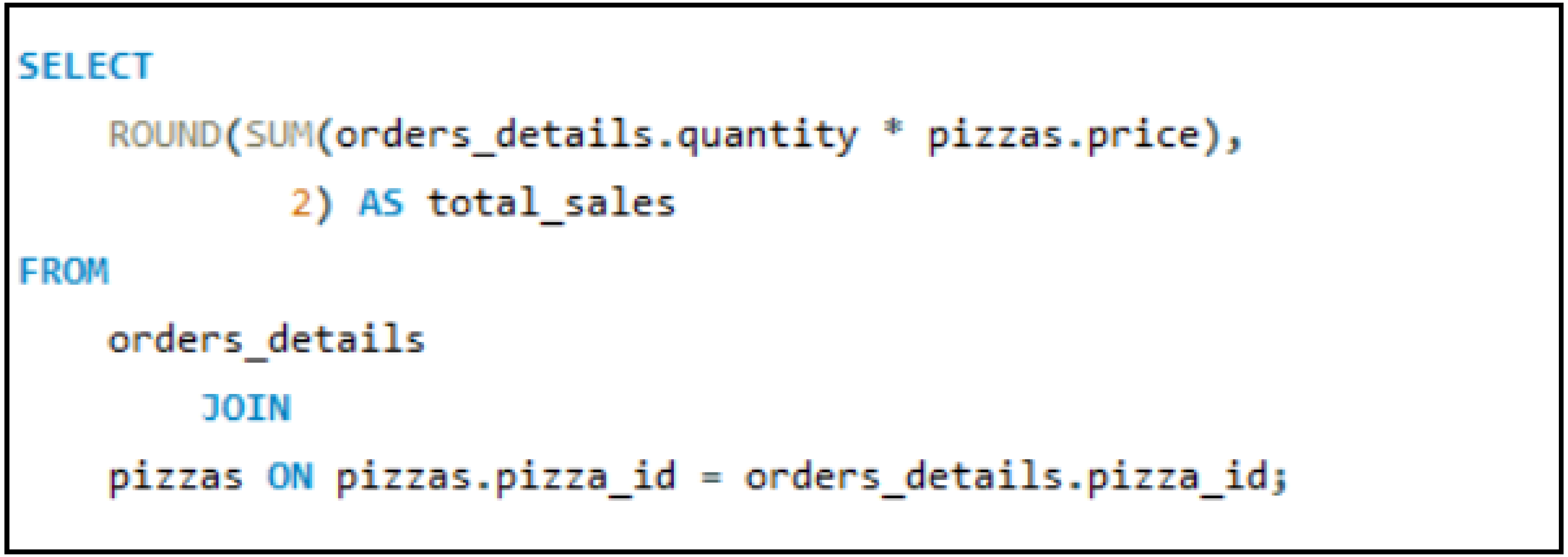


```
SELECT
    COUNT(order_id) AS total_orders
FROM
    orders;
```

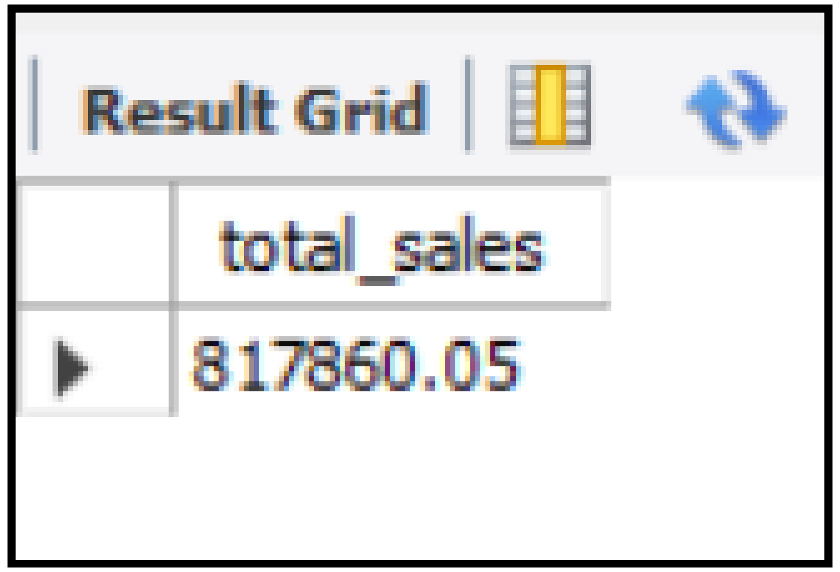


```
total_orders
21350
```

calculate the total revenue generated from pizza sales.

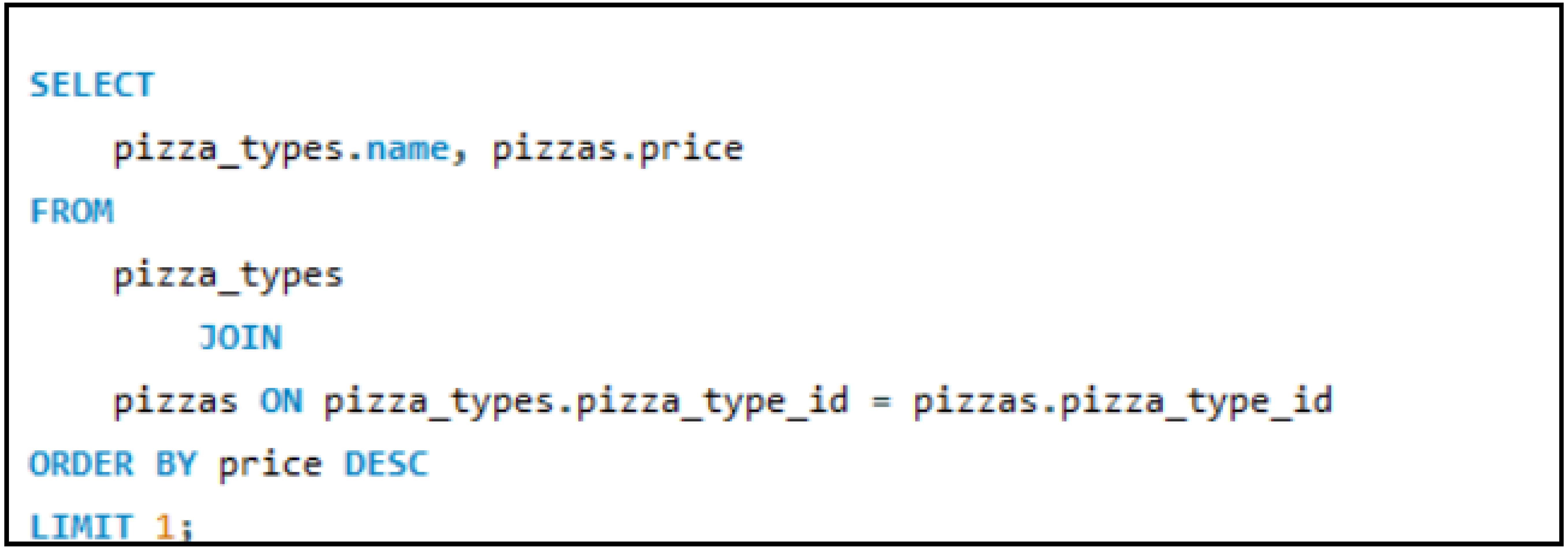


```
SELECT
    ROUND(SUM(orders_details.quantity * pizzas.price),
            2) AS total_sales
FROM
    orders_details
        JOIN
    pizzas ON pizzas.pizza_id = orders_details.pizza_id;
```

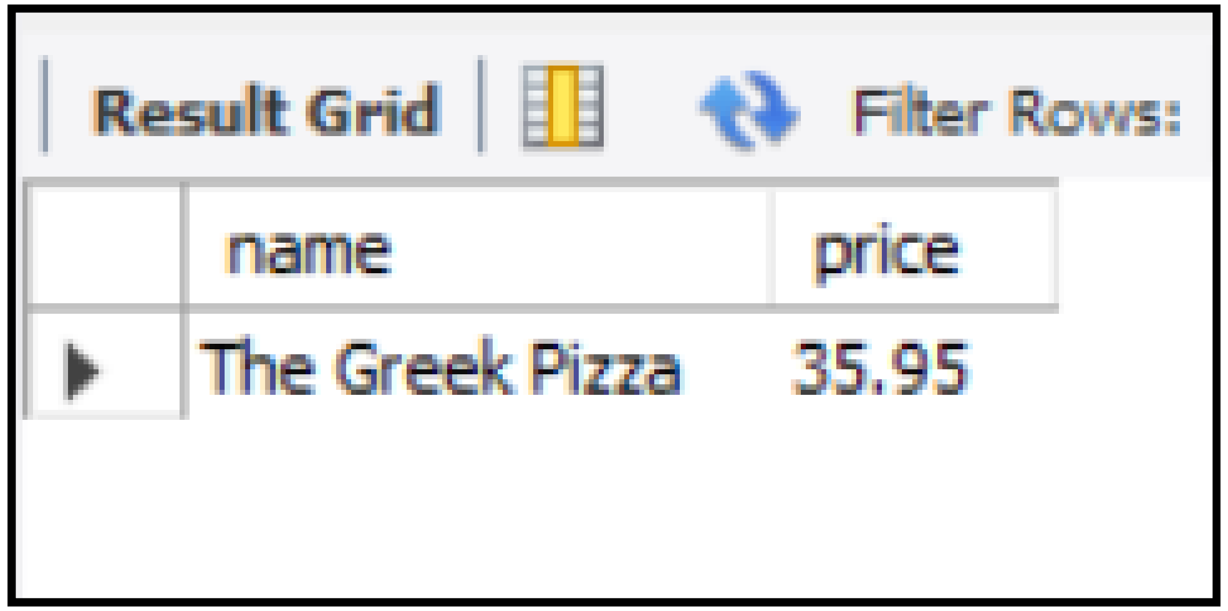


```
  total_sales
▶ 817860.05
```

Identify the height-priced pizza.

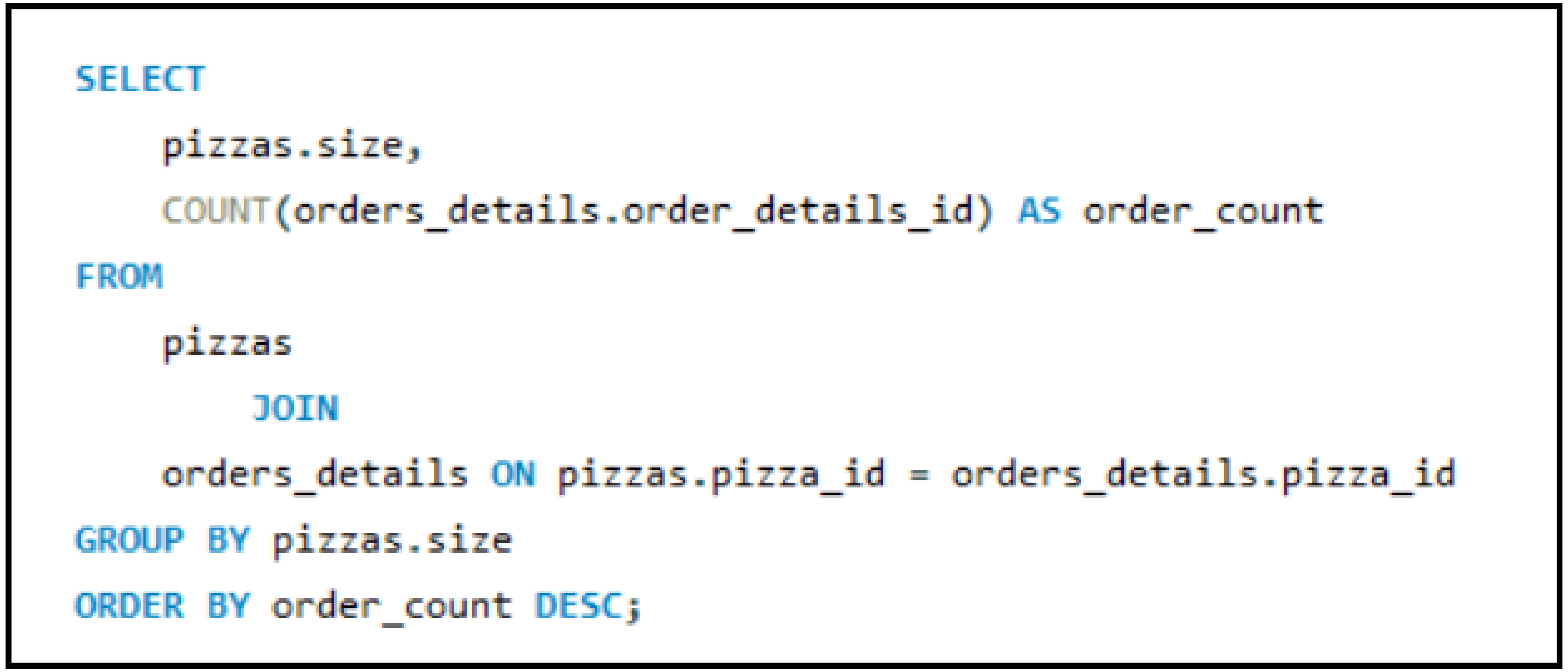


```
SELECT
    pizza_types.name, pizzas.price
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY price DESC
LIMIT 1;
```

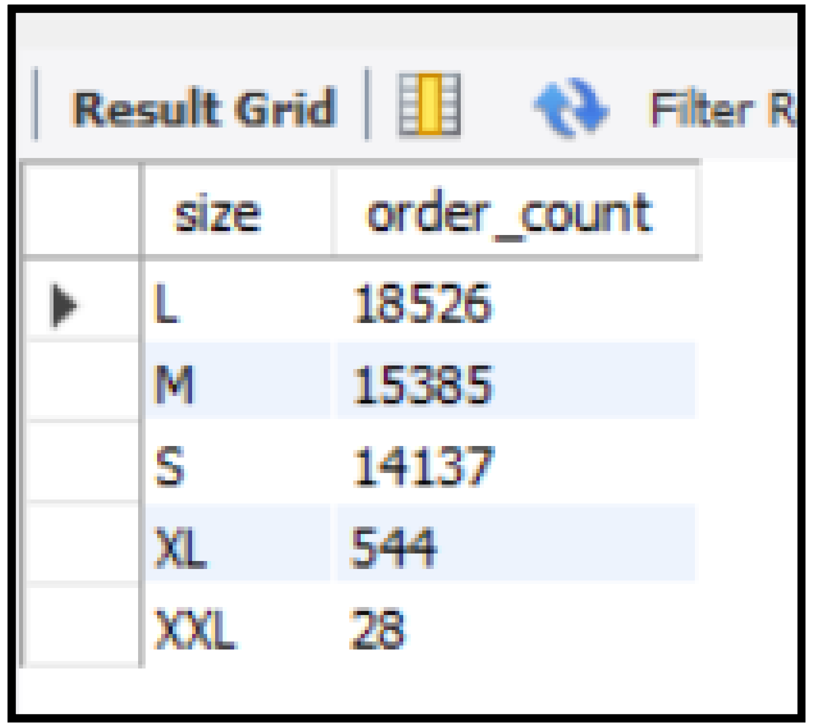


	name	price
▶	The Greek Pizza	35.95

Identify the most common pizza size ordered.

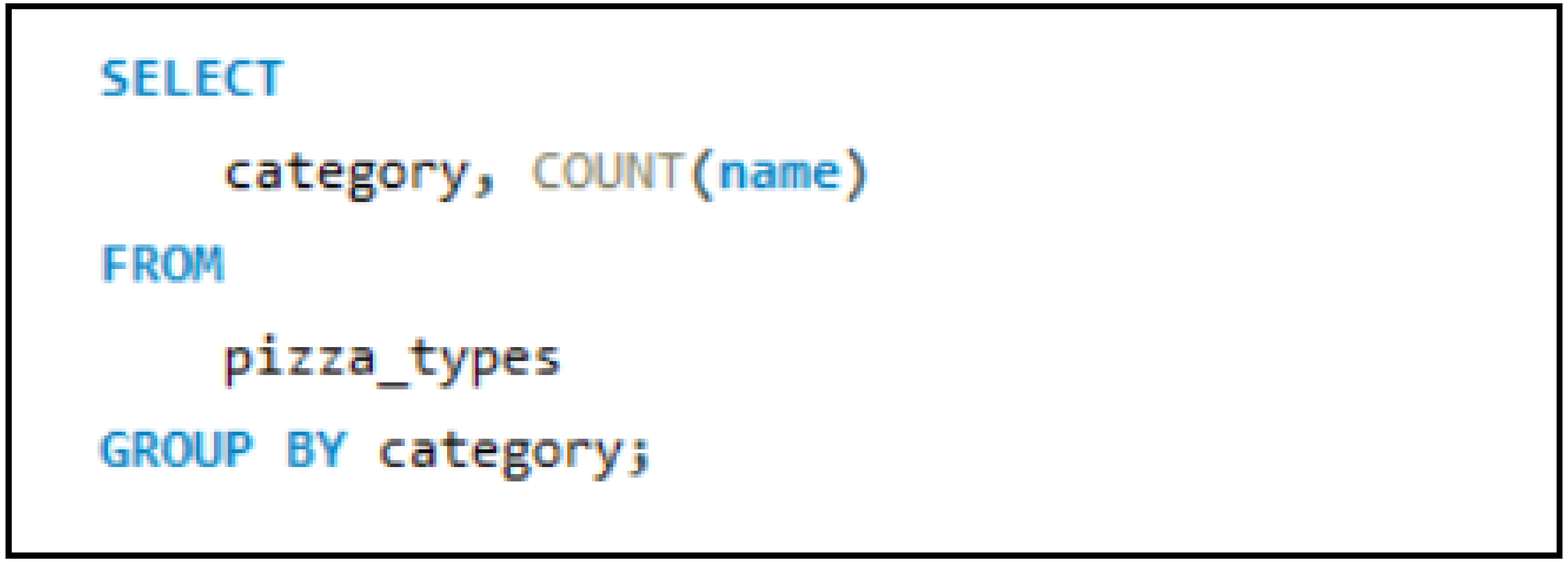


```
SELECT
    pizzas.size,
    COUNT(orders_details.order_details_id) AS order_count
FROM
    pizzas
        JOIN
    orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY pizzas.size
ORDER BY order_count DESC;
```

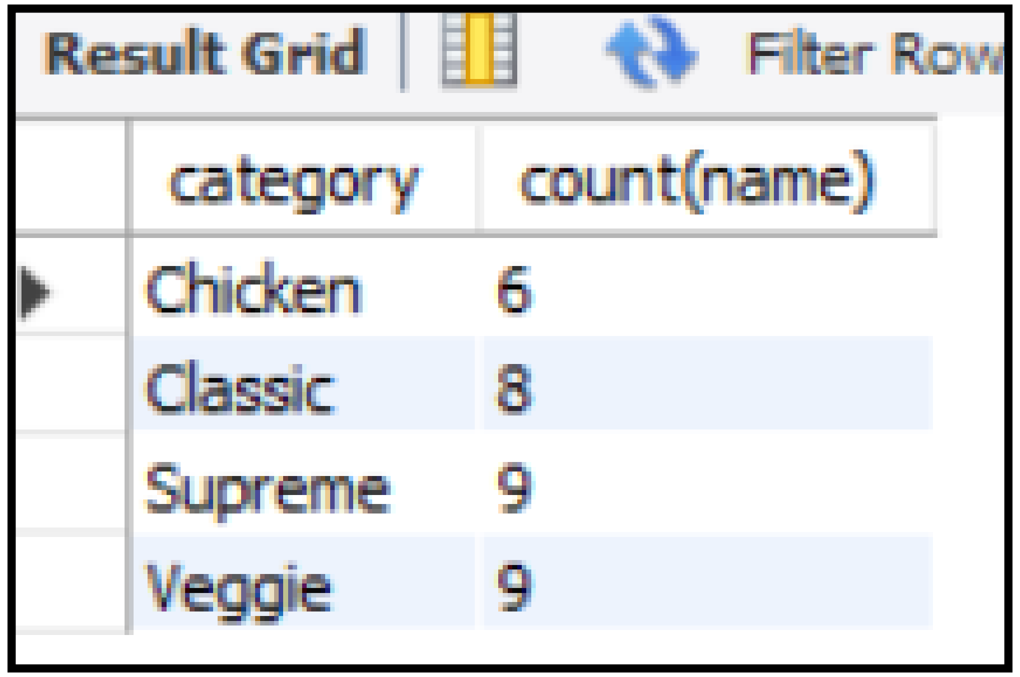


size	order_count
L	18526
M	15385
S	14137
XL	544
XXL	28

Join relevent tables to find the category wise distribution of pizza.

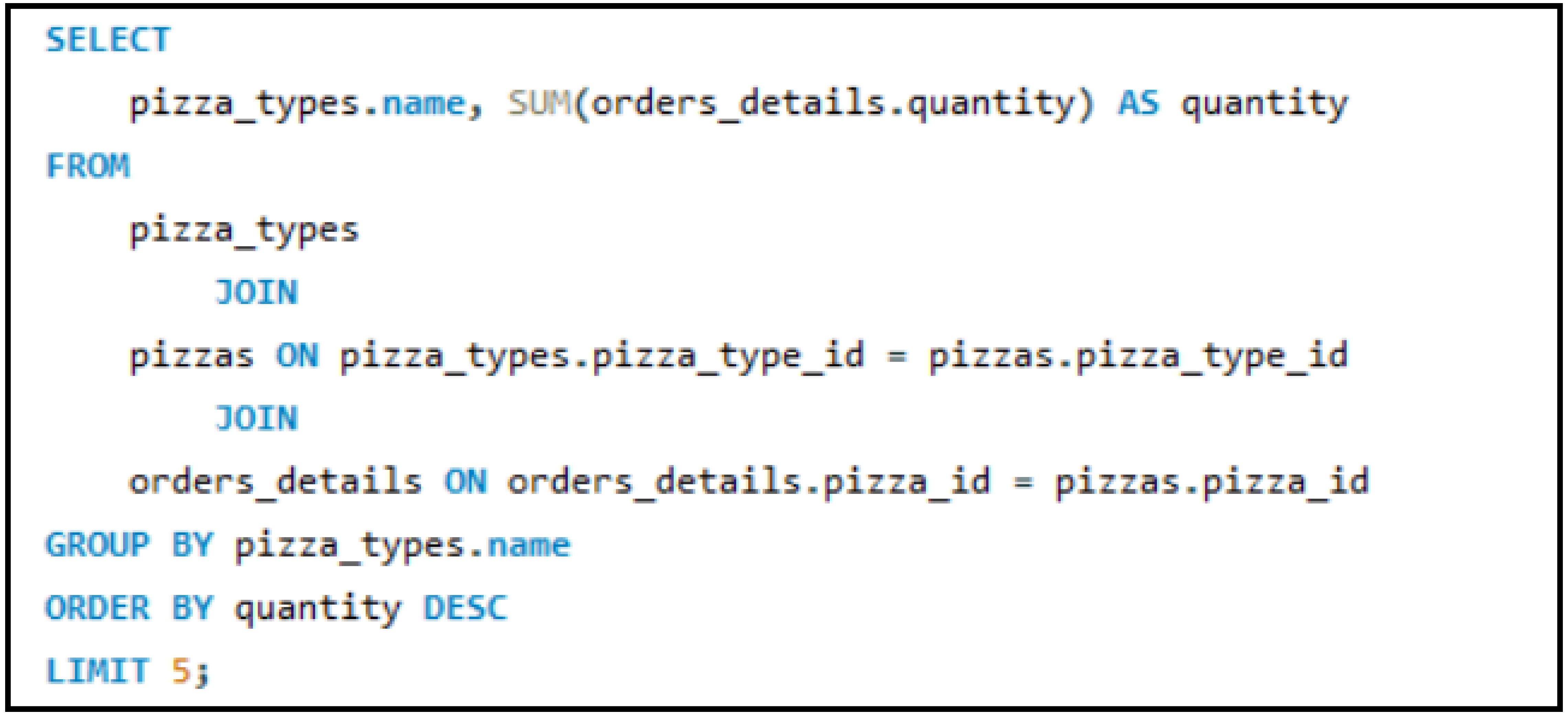


```
SELECT
    category, COUNT(name)
FROM
    pizza_types
GROUP BY category;
```

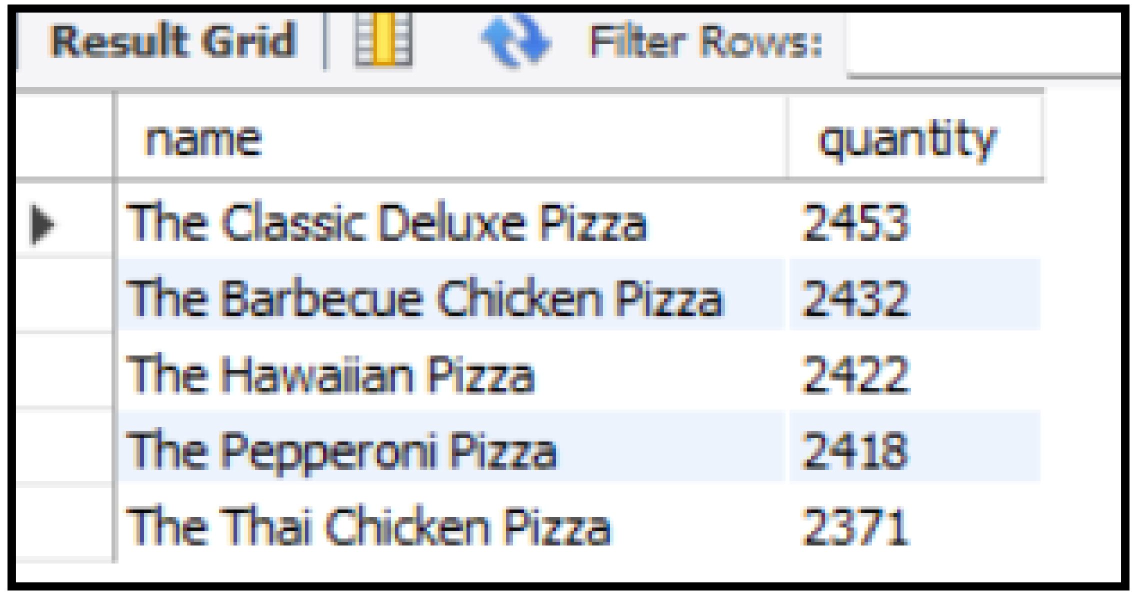


category	count(name)
Chicken	6
Classic	8
Supreme	9
Veggie	9

List the top most ordered pizza type along their quantity

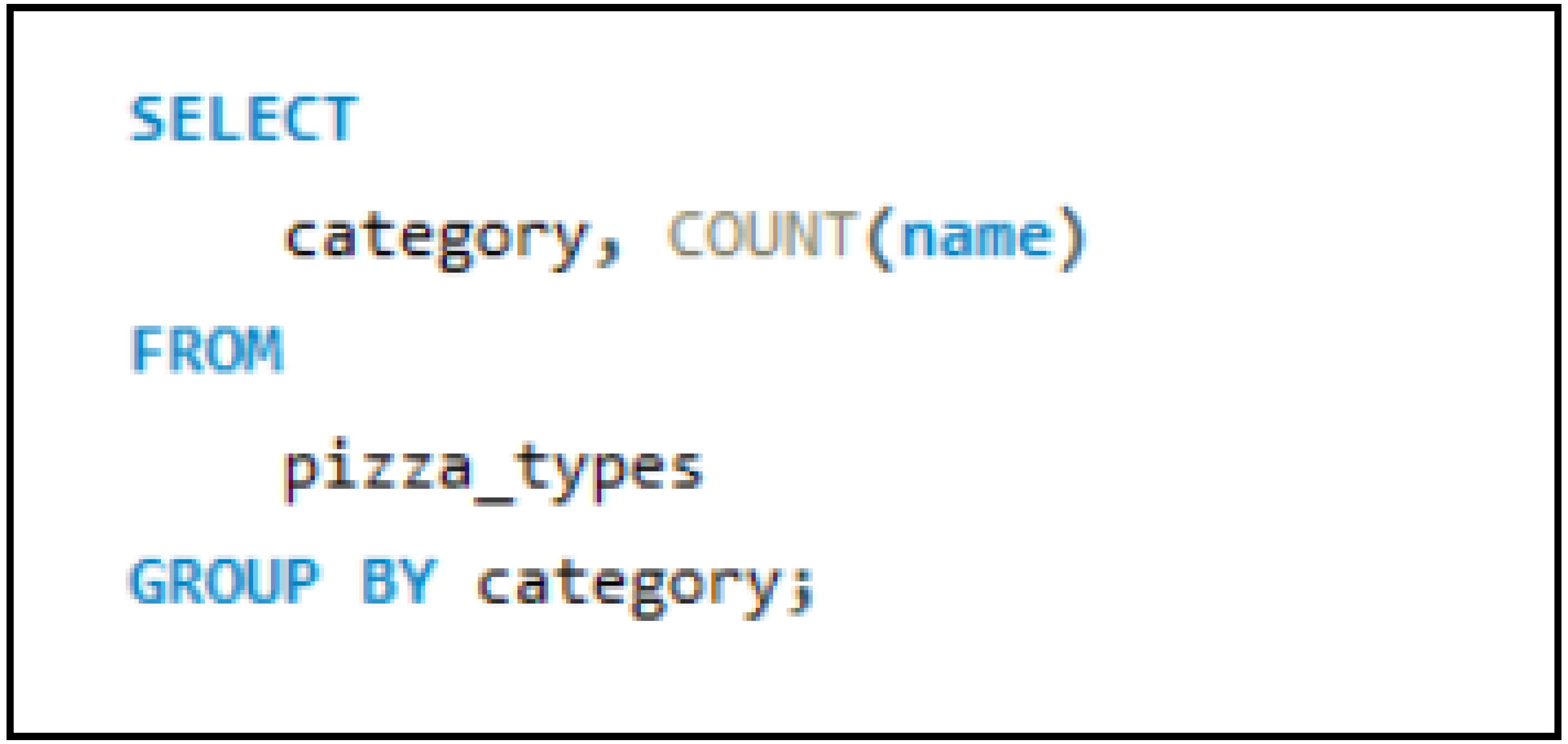


```
SELECT
    pizza_types.name, SUM(orders_details.quantity) AS quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT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

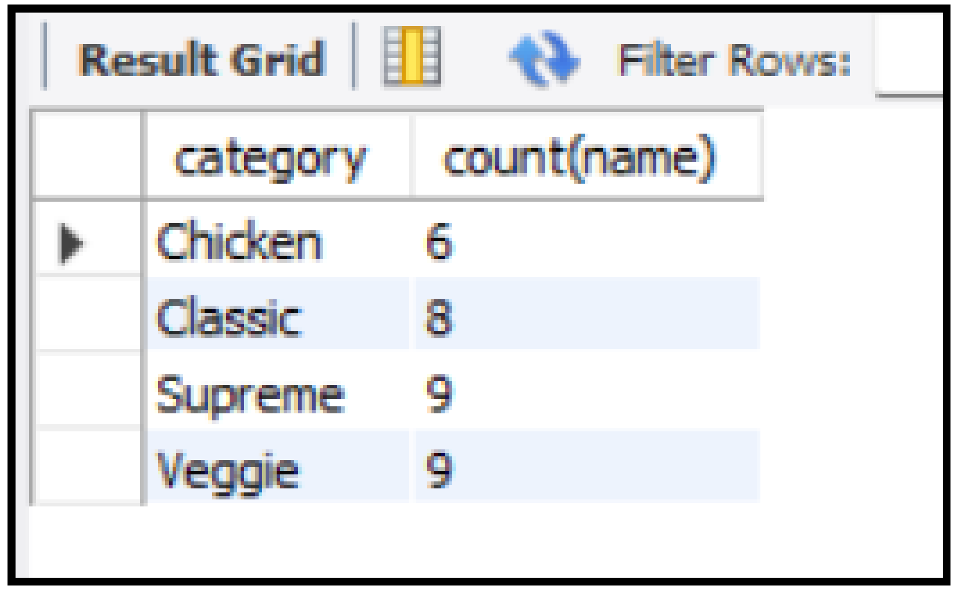


name	quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

Join relevent tables to find the category wise distribution of pizza.

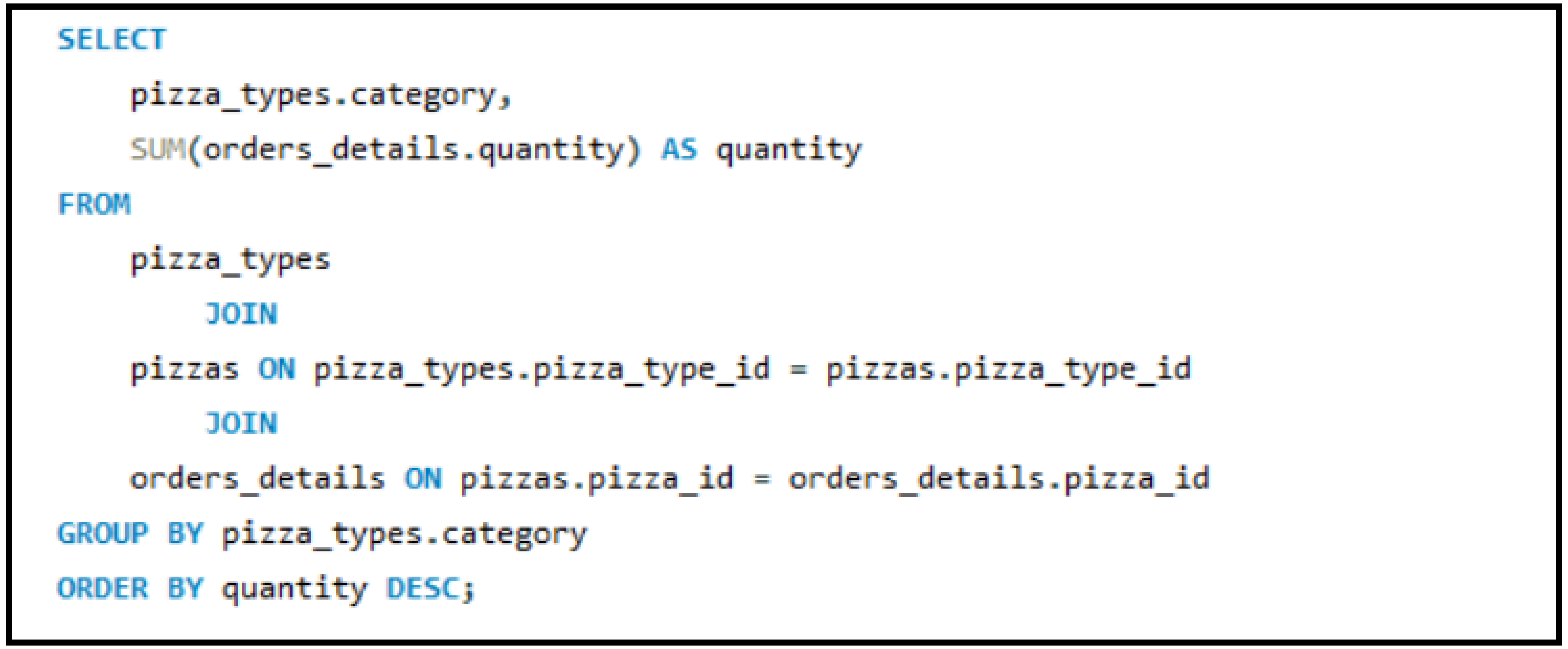


```
SELECT
    category, COUNT(name)
FROM
    pizza_types
GROUP BY category;
```

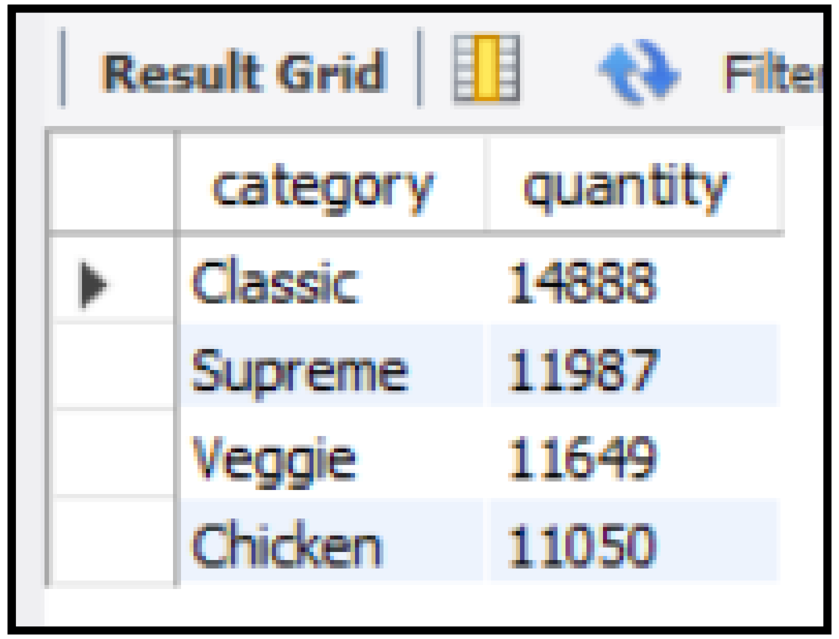


category	count(name)
Chicken	6
Classic	8
Supreme	9
Veggie	9

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

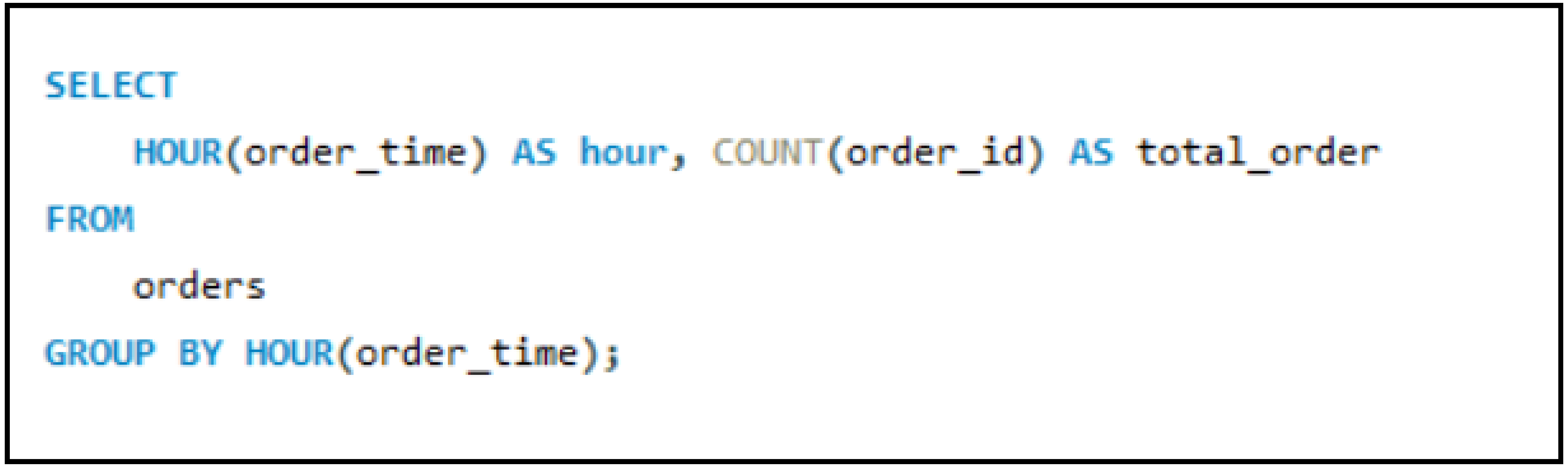


```
SELECT
    pizza_types.category,
    SUM(orders_details.quantity) AS quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY pizza_types.category
ORDER BY quantity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

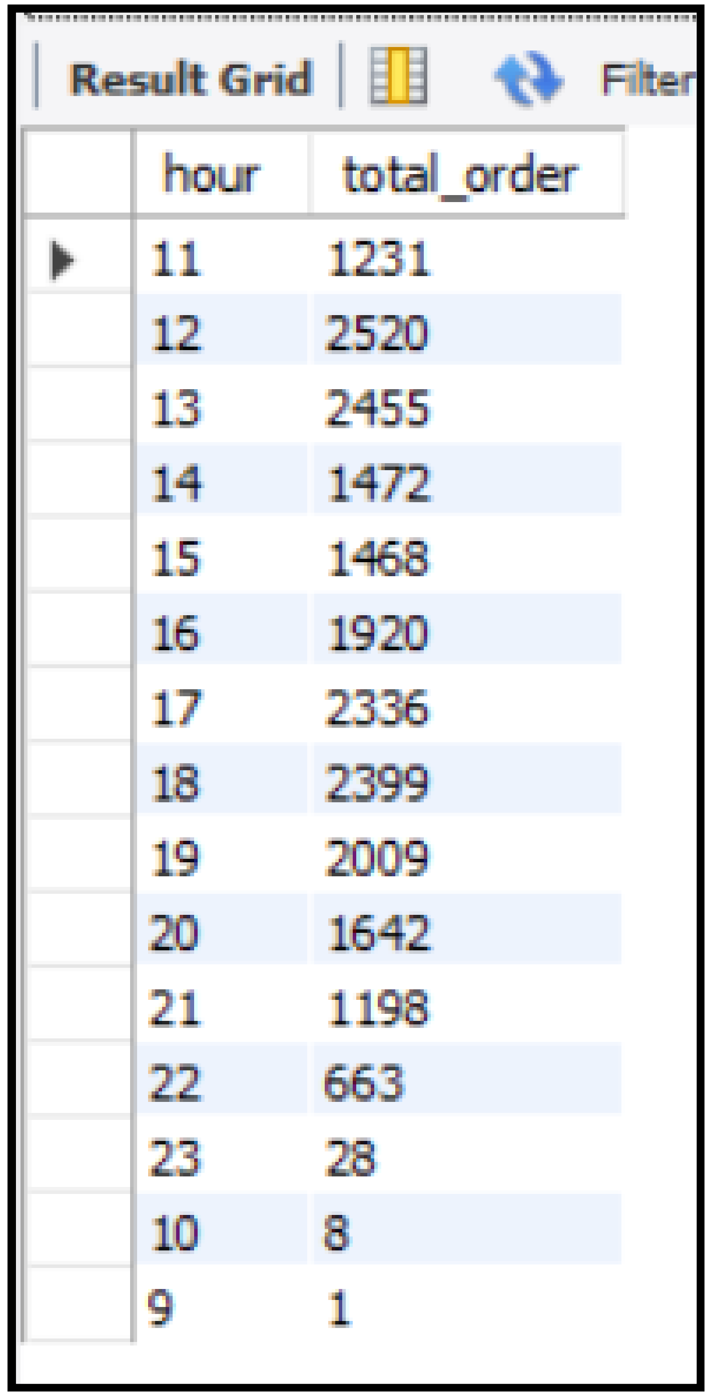


category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

Determine the distribution of orders by hour of the day

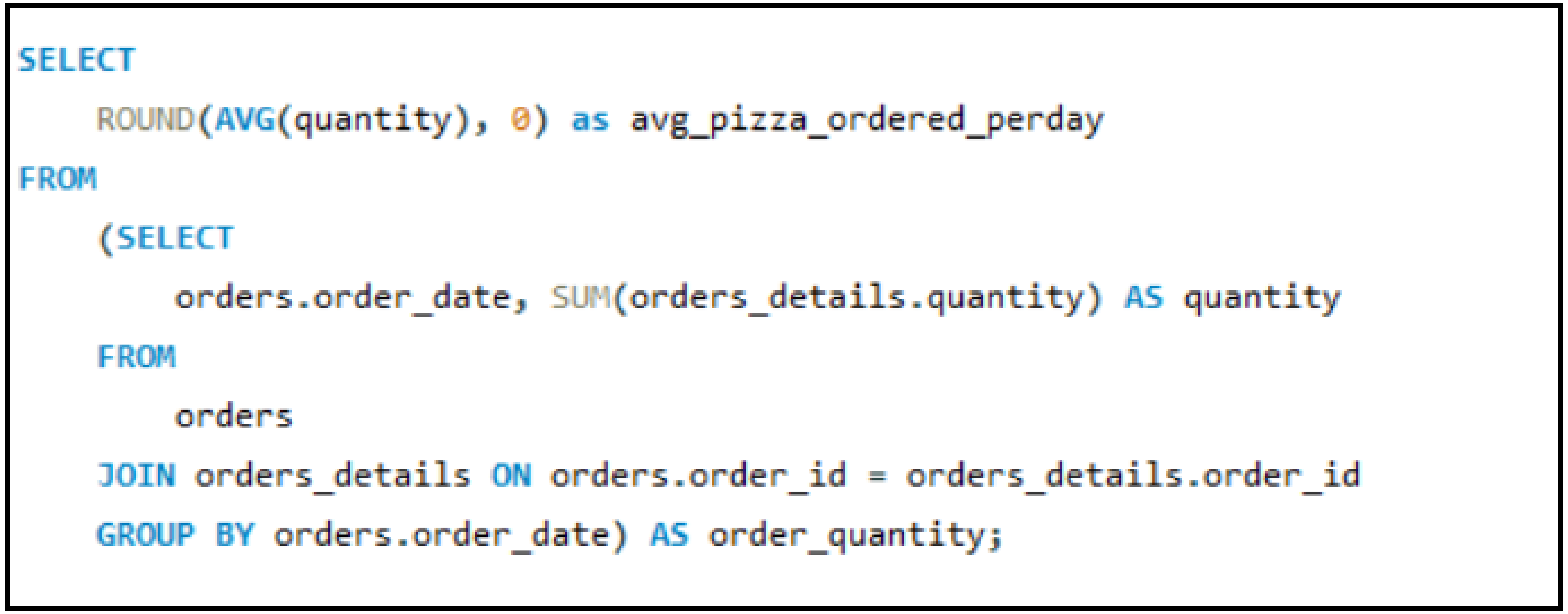


```
SELECT
    HOUR(order_time) AS hour, COUNT(order_id) AS total_order
FROM
    orders
GROUP BY HOUR(order_time);
```

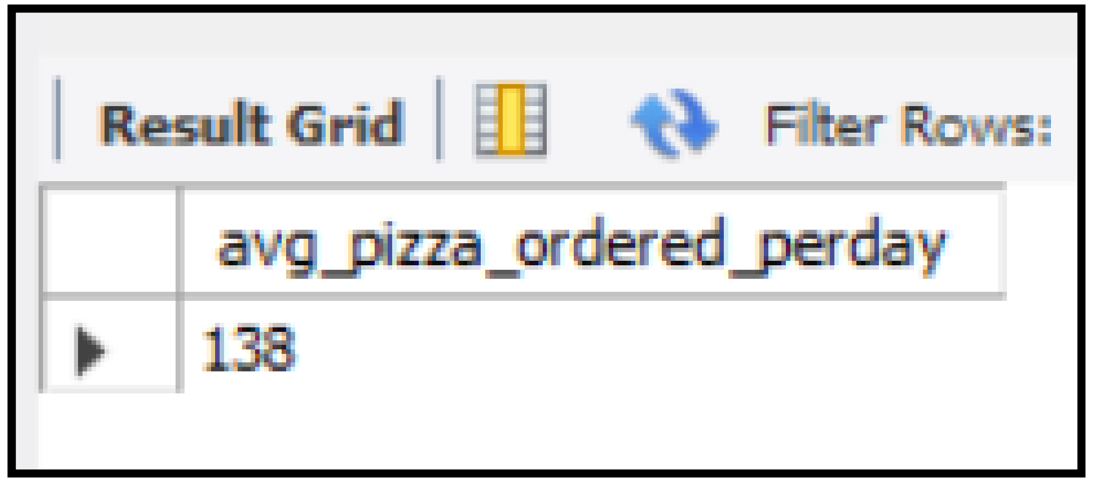


hour	total_order
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399
19	2009
20	1642
21	1198
22	663
23	28
10	8
9	1

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

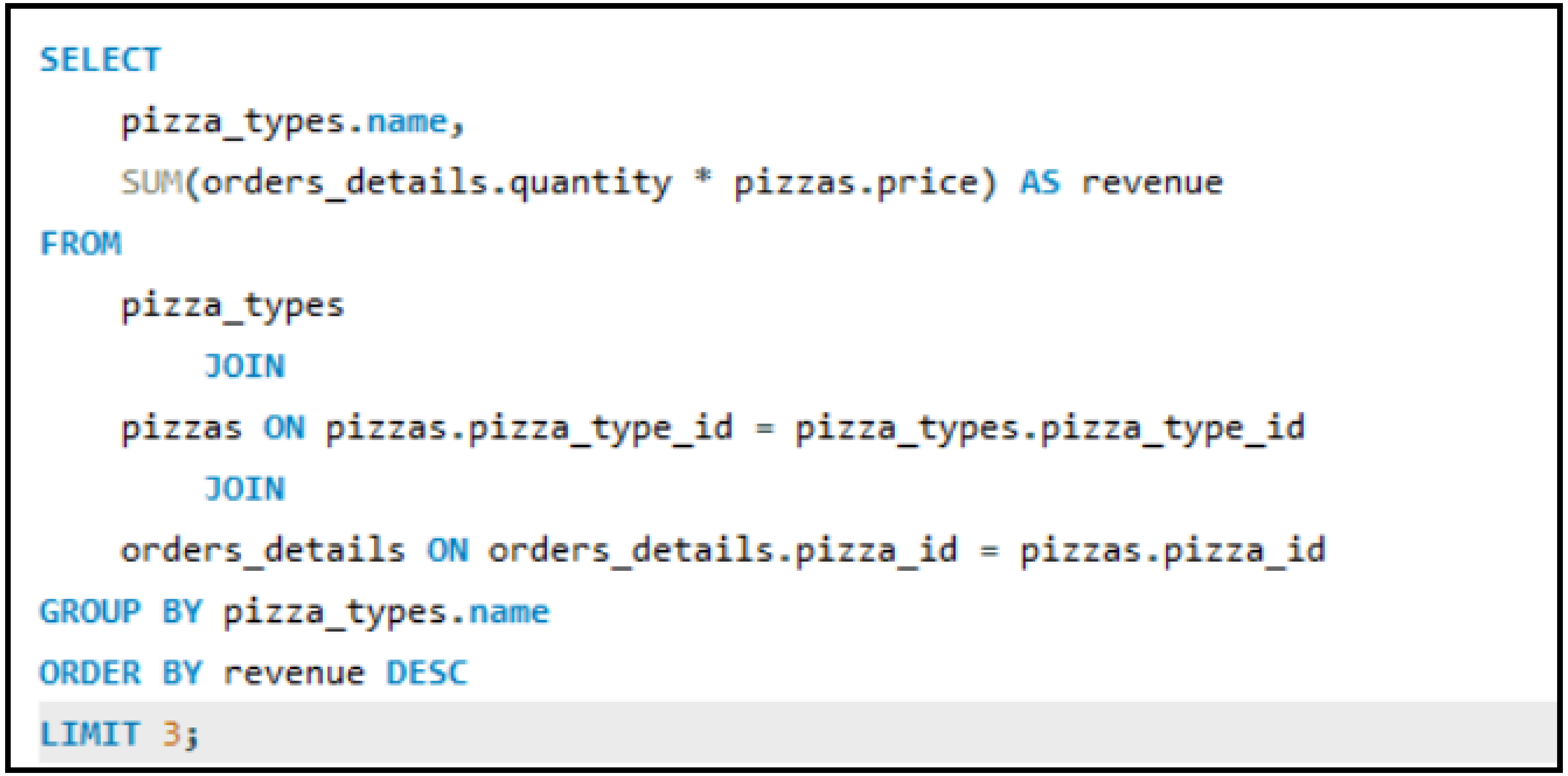


```sql
SELECT
    ROUND(AVG(quantity), 0) as avg_pizza_ordered_perday
FROM
    (SELECT
        orders.order_date, SUM(orders_details.quantity) AS quantity
    FROM
        orders
    JOIN orders_details ON orders.order_id = orders_details.order_id
    GROUP BY orders.order_date) AS order_quantity;
```

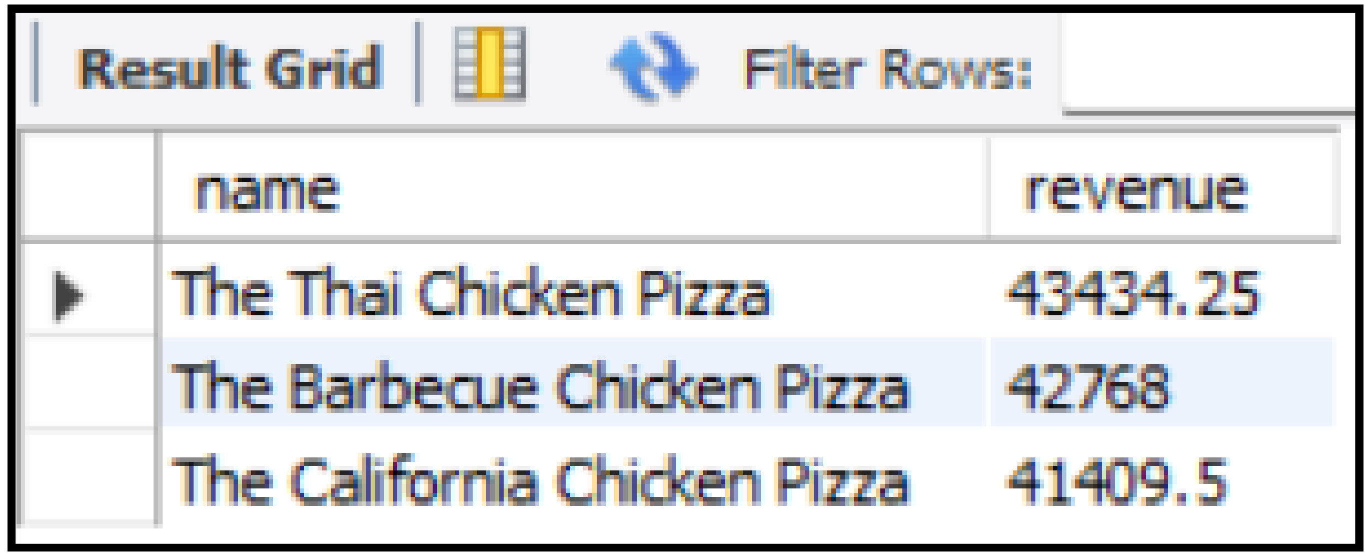


avg_pizza_ordered_perday
138

Determine the top 3 most ordered pizza types based on revenue

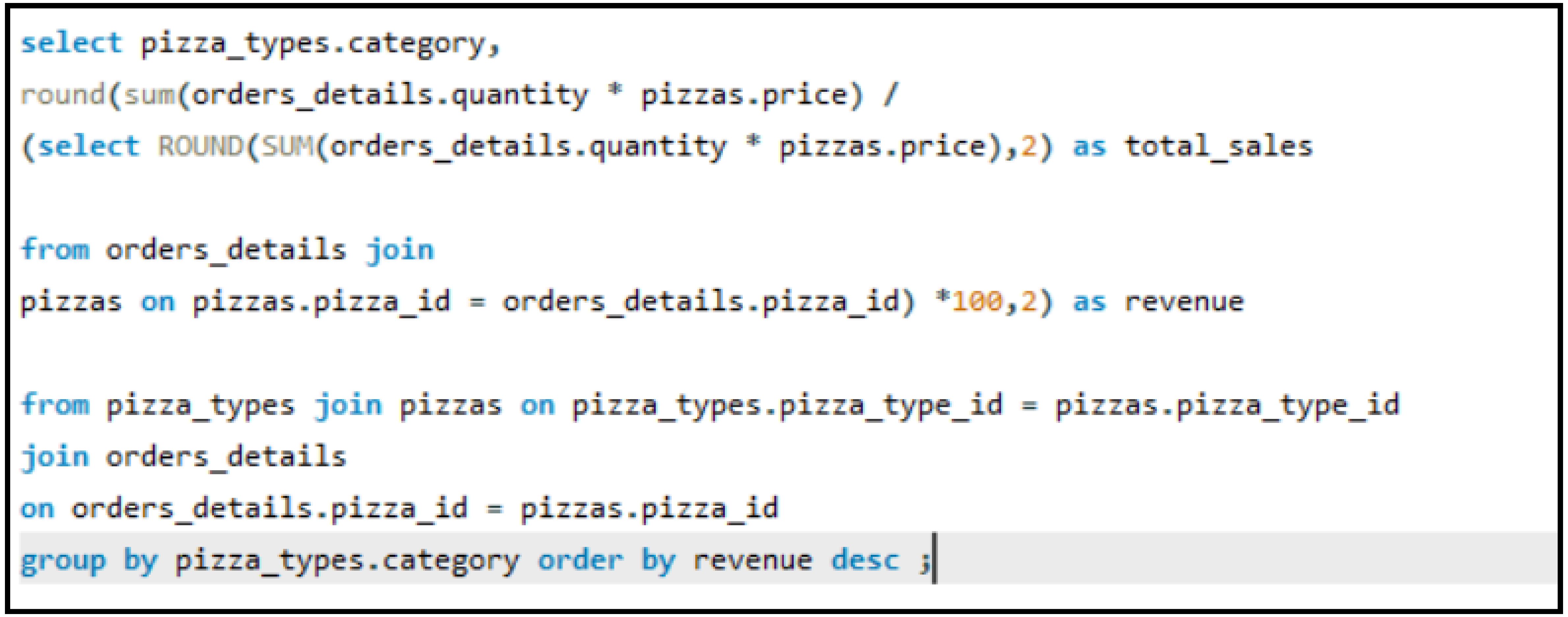


```
SELECT
    pizza_types.name,
    SUM(orders_details.quantity * pizzas.price) AS revenue
FROM
    pizza_types
        JOIN
    pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
        JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY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

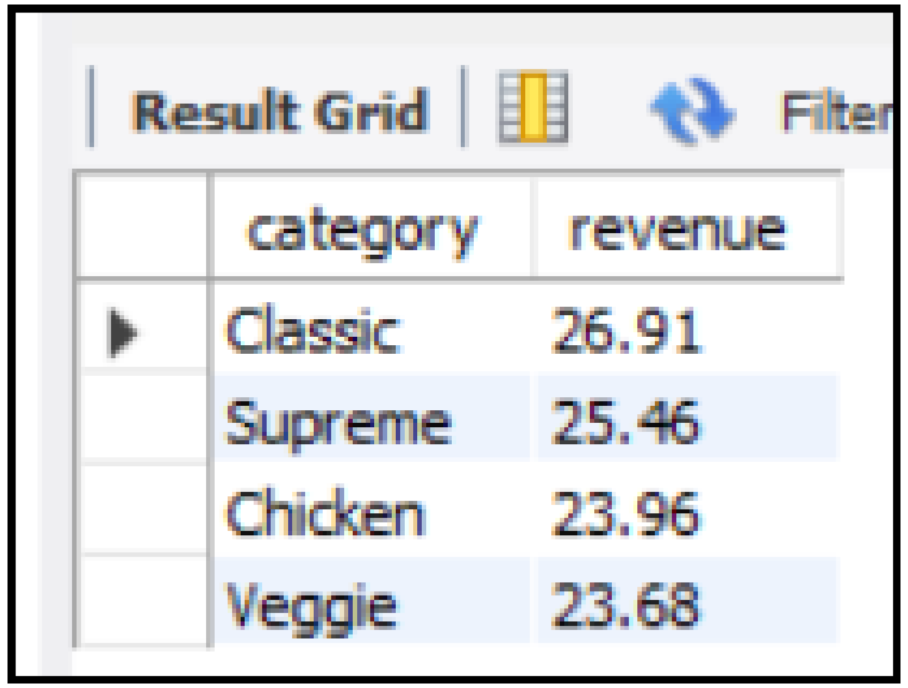


name	revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5

Calculate the percentage contribution of each pizza type total revenue

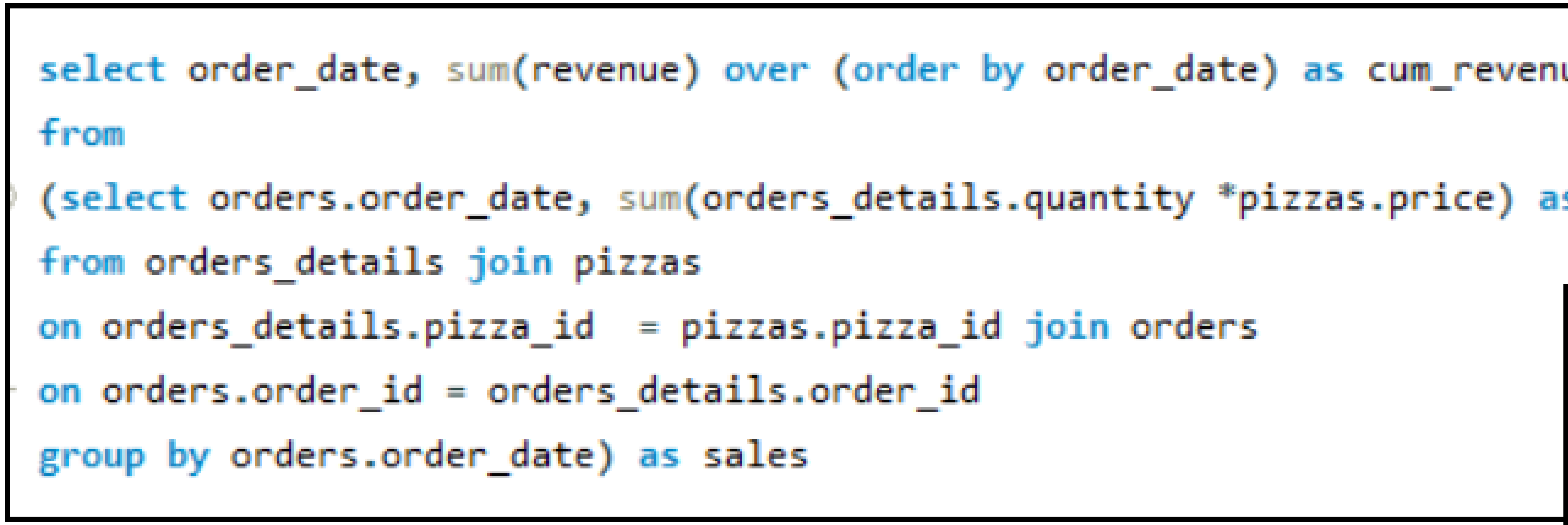


```
select pizza_types.category,
round(sum(orders_details.quantity * pizzas.price) /
(select ROUND(SUM(orders_details.quantity * pizzas.price),2) as total_sales

from orders_details join
pizzas on pizzas.pizza_id = orders_details.pizza_id) *100,2) as revenue

from pizza_types join pizzas on 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 revenue desc ;
```

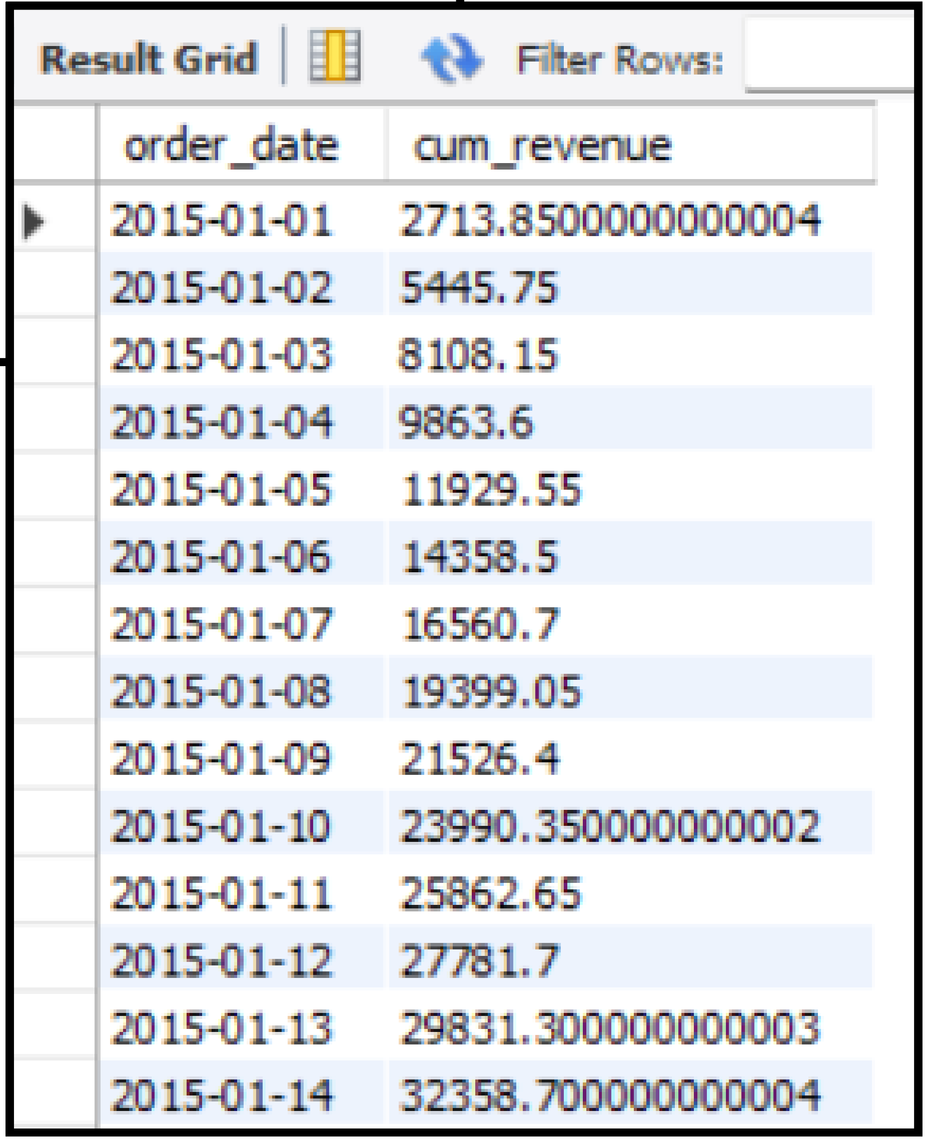


category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

Analyze the cumulative revenue generated over time.

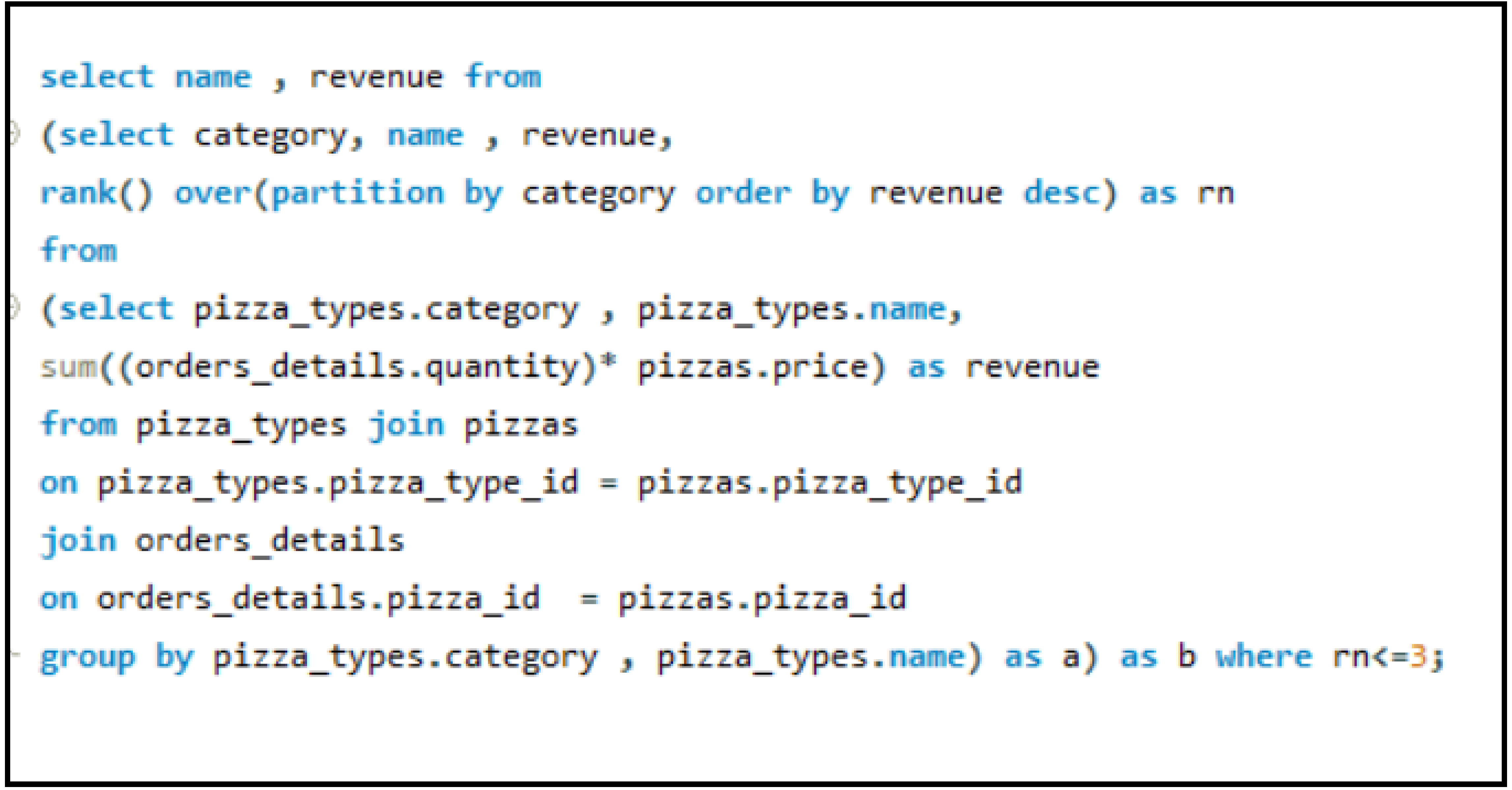


```
select order_date, sum(revenue) over (order by order_date) as cum_revenue
from
(select orders.order_date, sum(orders_details.quantity *pizzas.price) as revenue
from orders_details join pizzas
on orders_details.pizza_id  = pizzas.pizza_id join orders
on orders.order_id = orders_details.order_id
group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

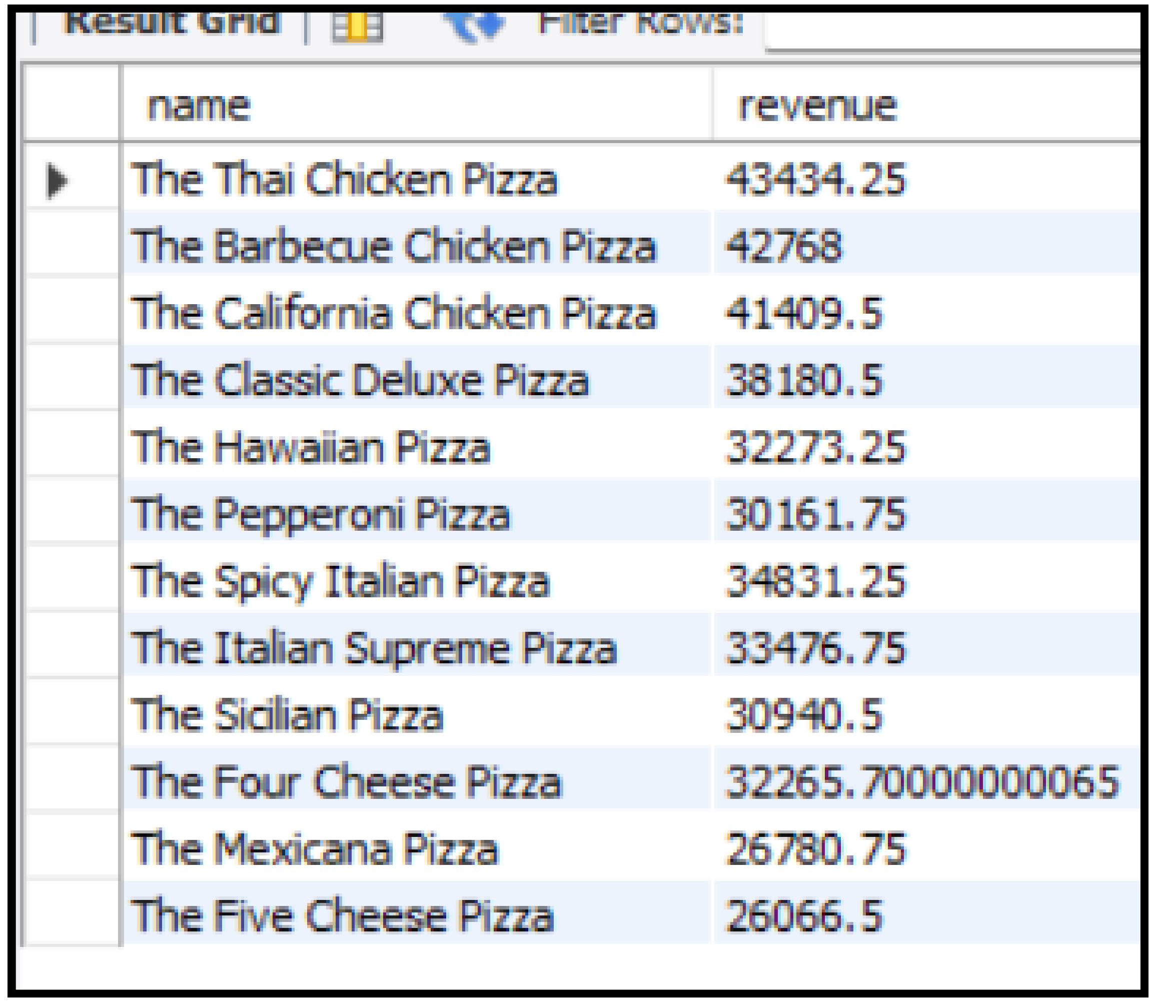


order_date	cum_revenue
2015-01-01	2713.8500000000004
2015-01-02	5445.75
2015-01-03	8108.15
2015-01-04	9863.6
2015-01-05	11929.55
2015-01-06	14358.5
2015-01-07	16560.7
2015-01-08	19399.05
2015-01-09	21526.4
2015-01-10	23990.350000000002
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.300000000003
2015-01-14	32358.700000000004

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



```sql
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((orders_details.quantity)* pizzas.price) as revenue
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 , 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