Pizza Sales Insights - SQL

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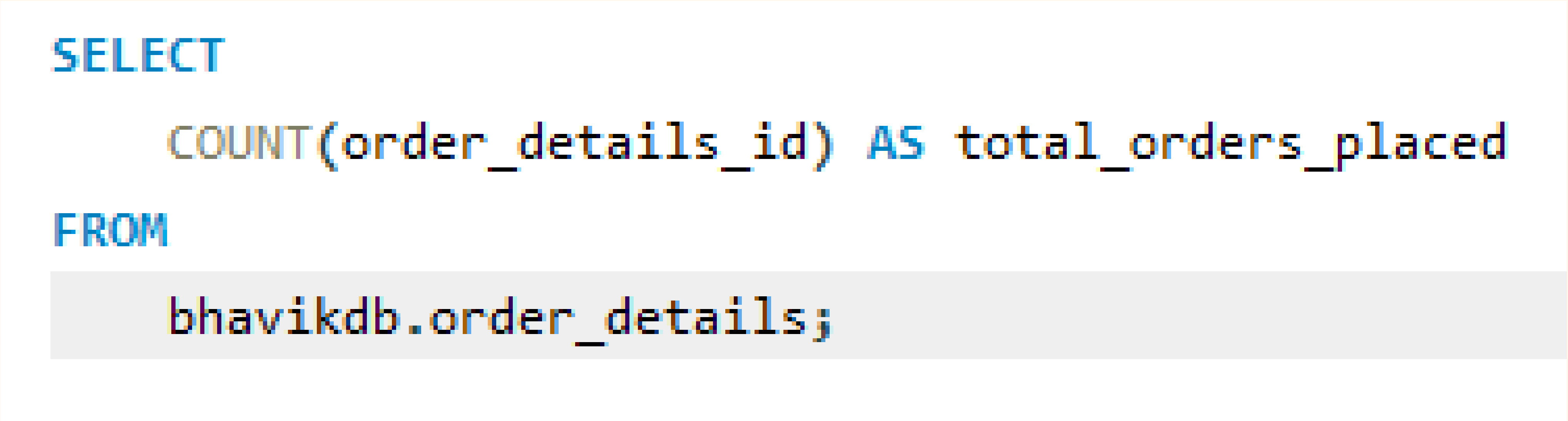
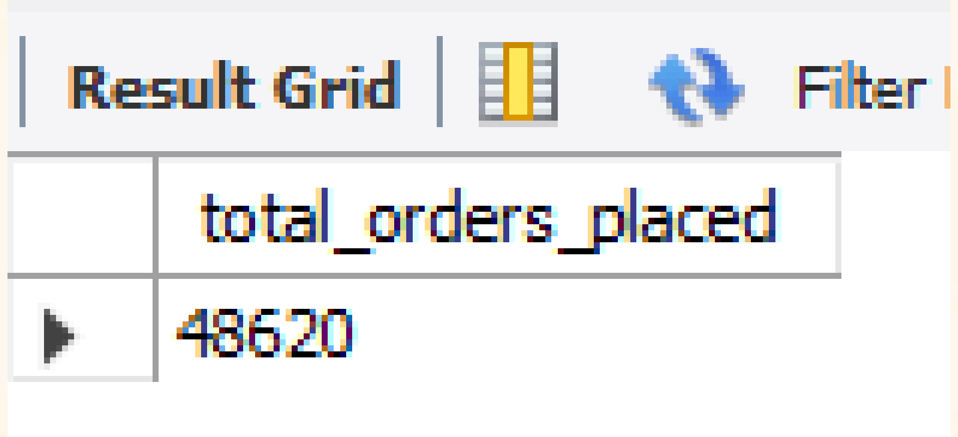
What data do we have?

We have data of a pizza company which consists of data like pizza types, pizza names, price, size, quantity, ingredients used, order date, order time, etc.

Retrieve the total number of orders placed.

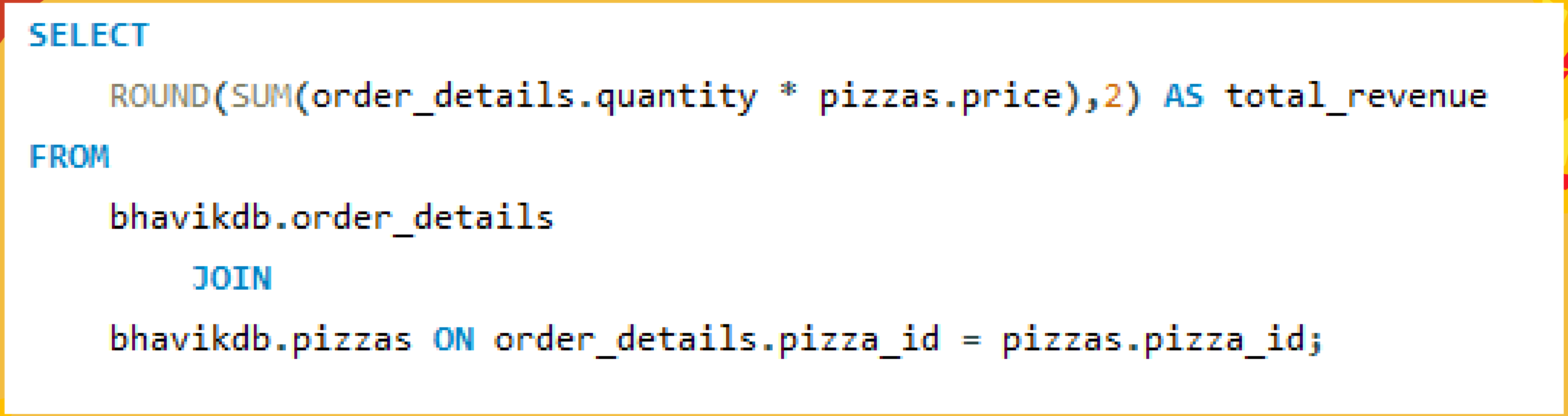


```
SELECT
    COUNT(order_details_id) AS total_orders_placed
FROM
    bhavikdb.order_details;
```

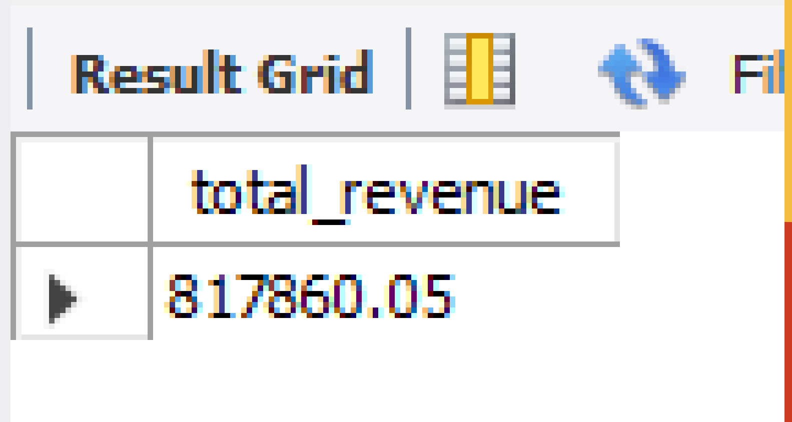


```
   total_orders_placed
▶  48620
```

Calculate the total revenue generated from pizza sales.

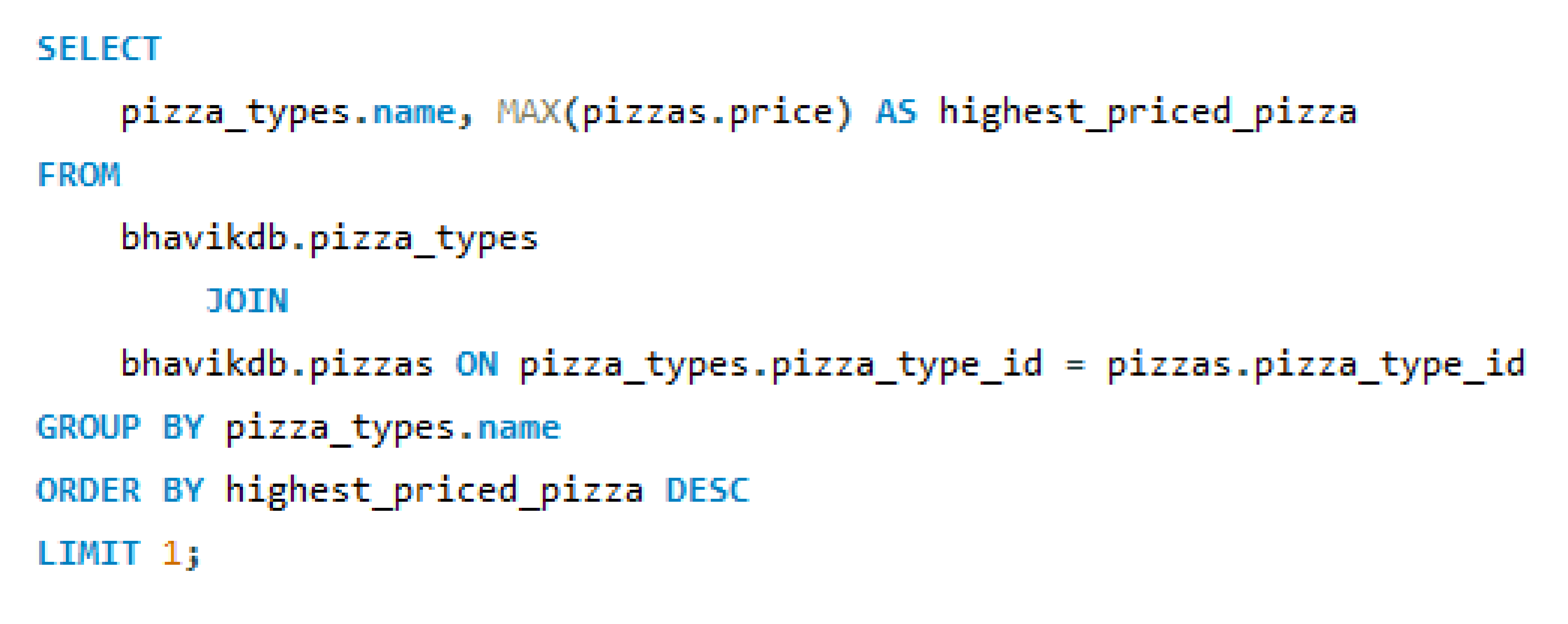


```
SELECT
    ROUND(SUM(order_details.quantity * pizzas.price),2) AS total_revenue
FROM
    bhavikdb.order_details
        JOIN
    bhavikdb.pizzas ON order_details.pizza_id = pizzas.pizza_id;
```

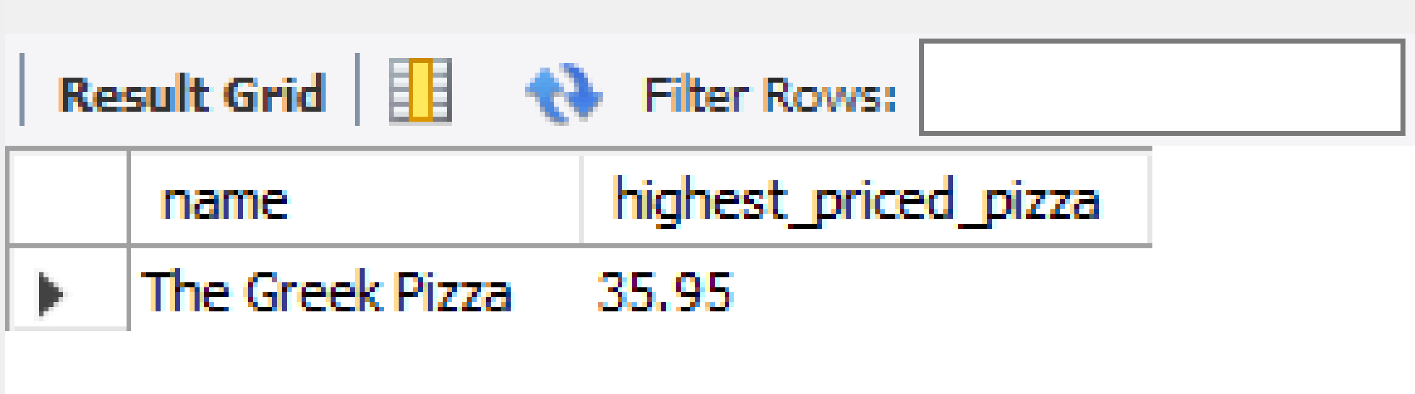


	total_revenue
▶	817860.05

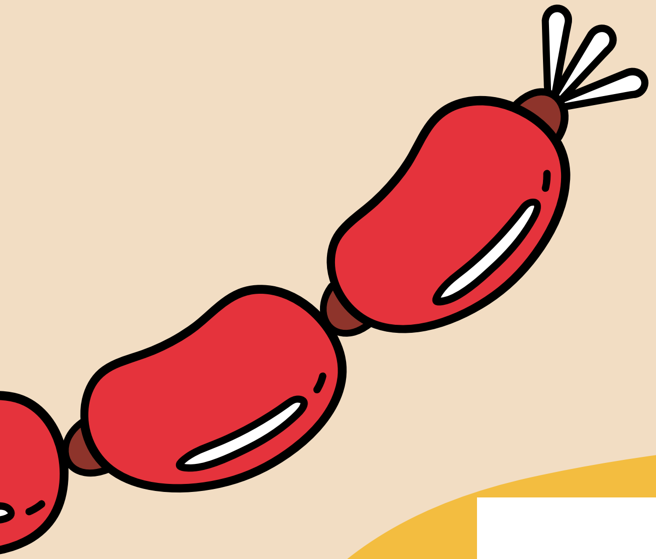
Identify the highest-priced pizza.



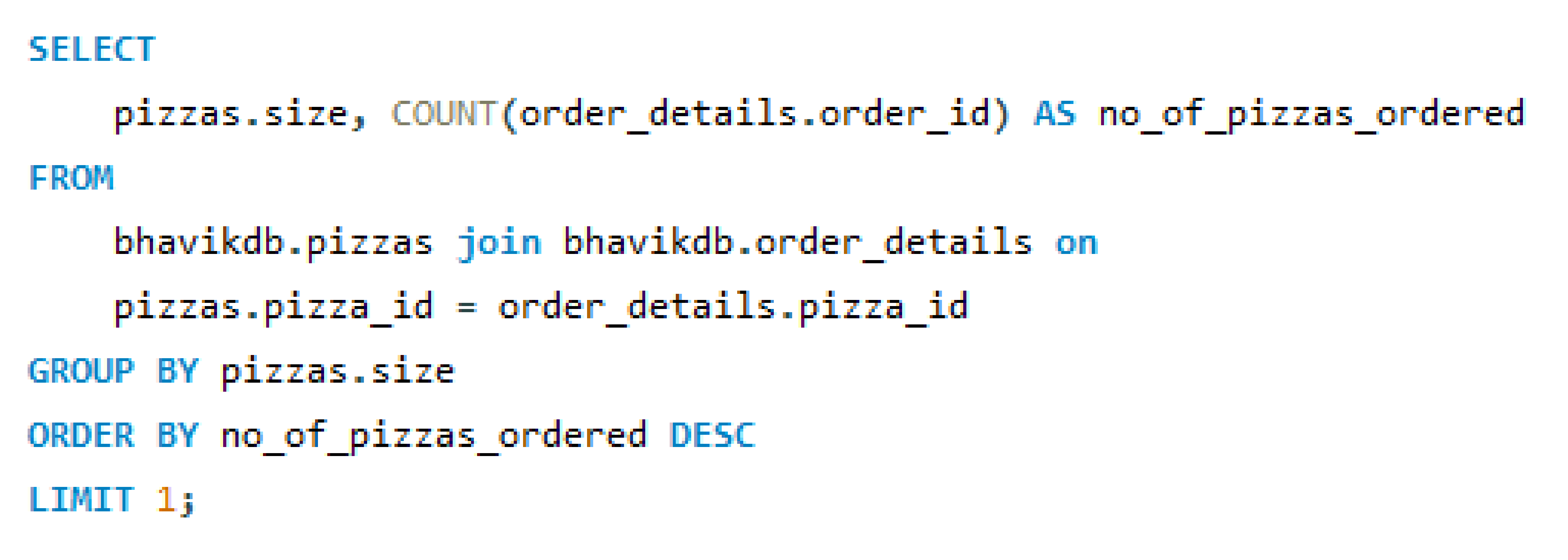
```
SELECT
    pizza_types.name, MAX(pizzas.price) AS highest_priced_pizza
FROM
    bhavikdb.pizza_types
        JOIN
    bhavikdb.pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
GROUP BY pizza_types.name
ORDER BY highest_priced_pizza DESC
LIMIT 1;
```



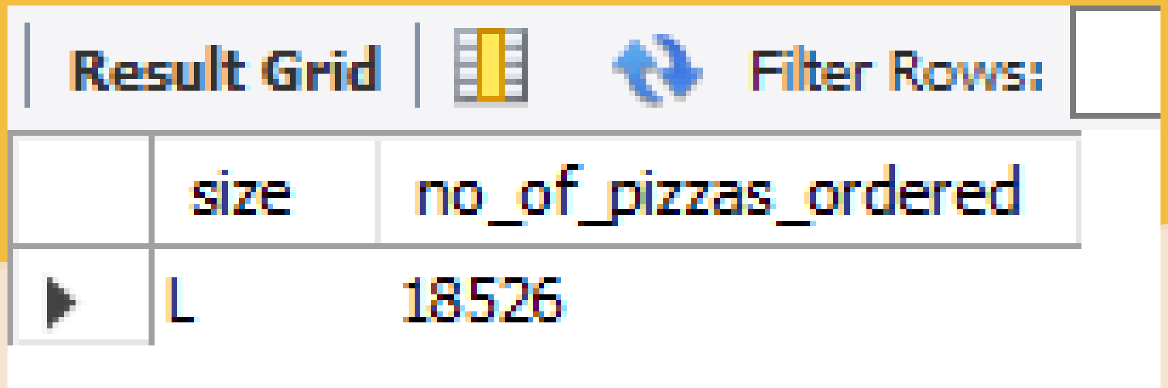
name	highest_priced_pizza
The Greek Pizza	35.95



Identify the most common pizza size ordered.

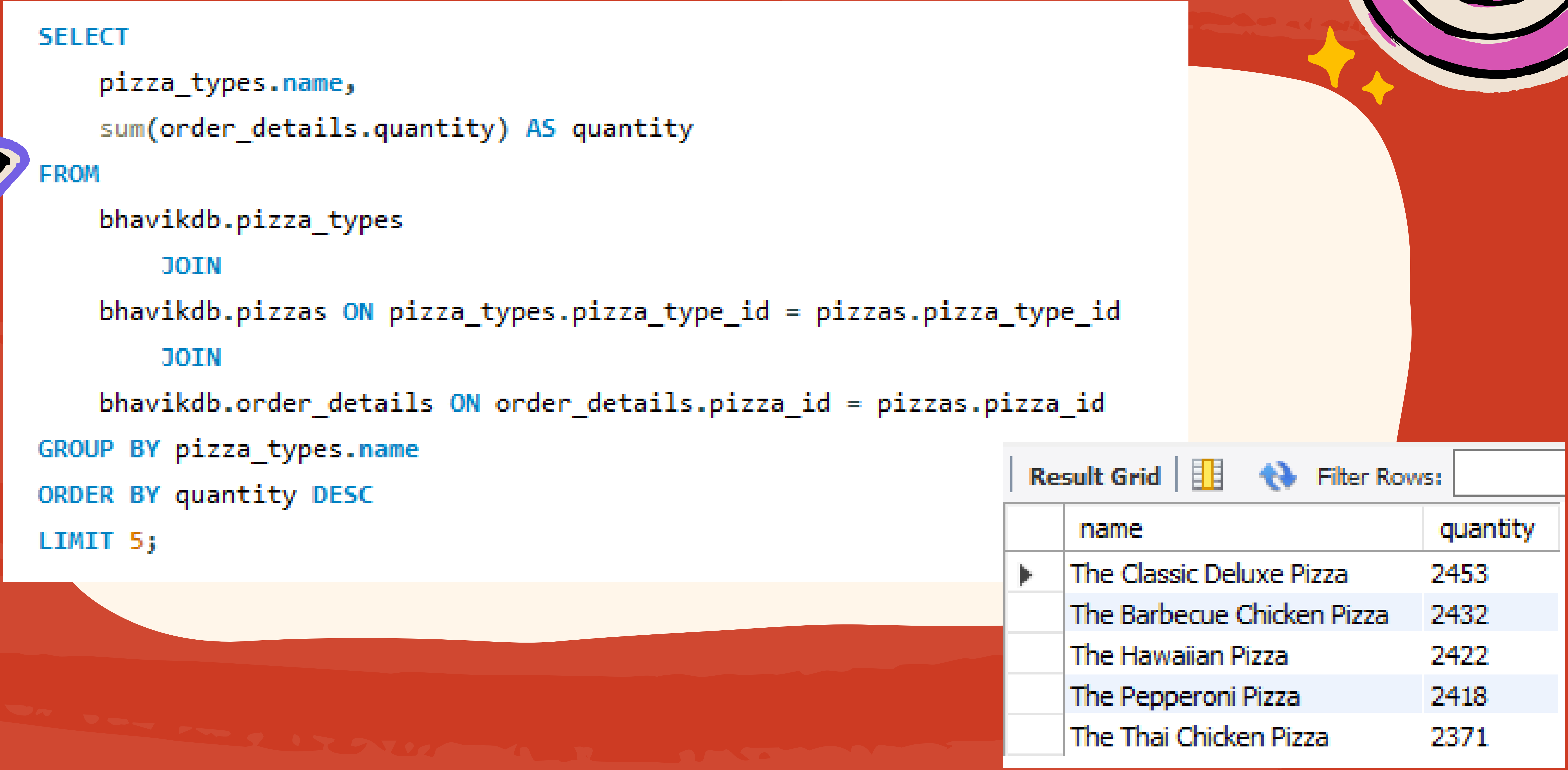


```sql
SELECT
    pizzas.size, COUNT(order_details.order_id) AS no_of_pizzas_ordered
FROM
    bhavikdb.pizzas join bhavikdb.order_details on
    pizzas.pizza_id = order_details.pizza_id
GROUP BY pizzas.size
ORDER BY no_of_pizzas_ordered DESC
LIMIT 1;
```



size	no_of_pizzas_ordered
L	18526

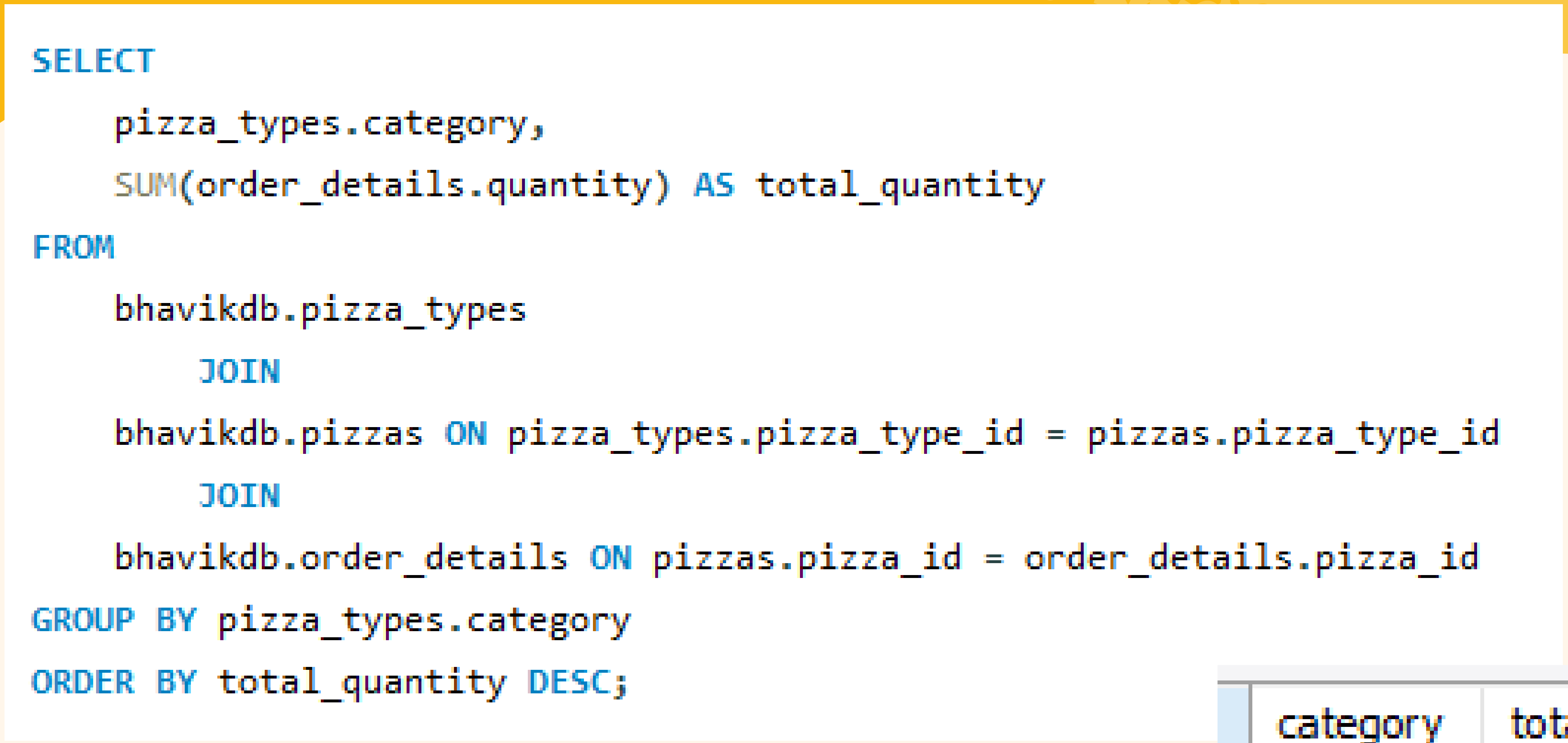
List the top 5 most ordered pizza types along with their quantities.



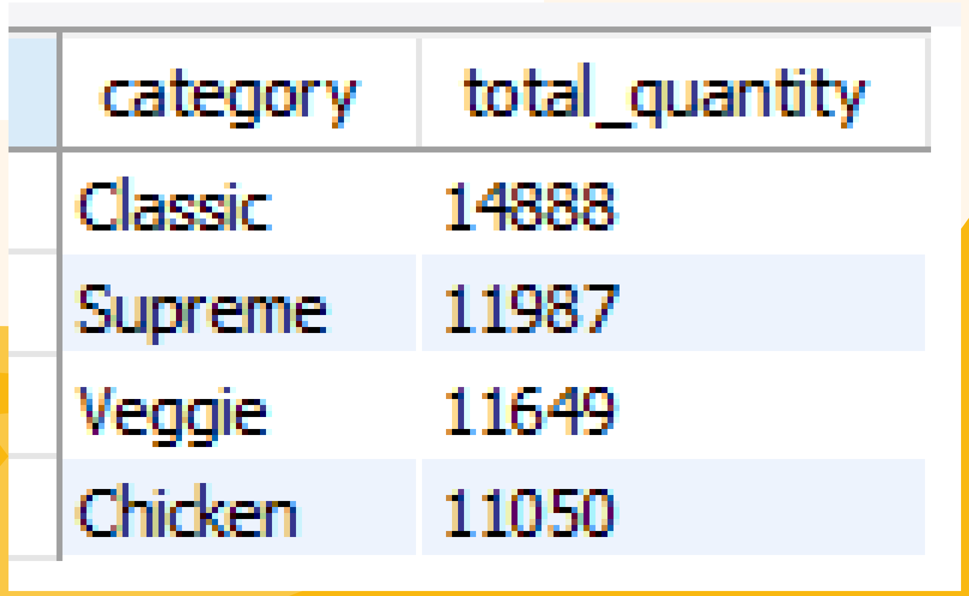
```
SELECT
    pizza_types.name,
    sum(order_details.quantity) AS quantity
FROM
    bhavikdb.pizza_types
        JOIN
    bhavikdb.pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    bhavikdb.order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
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

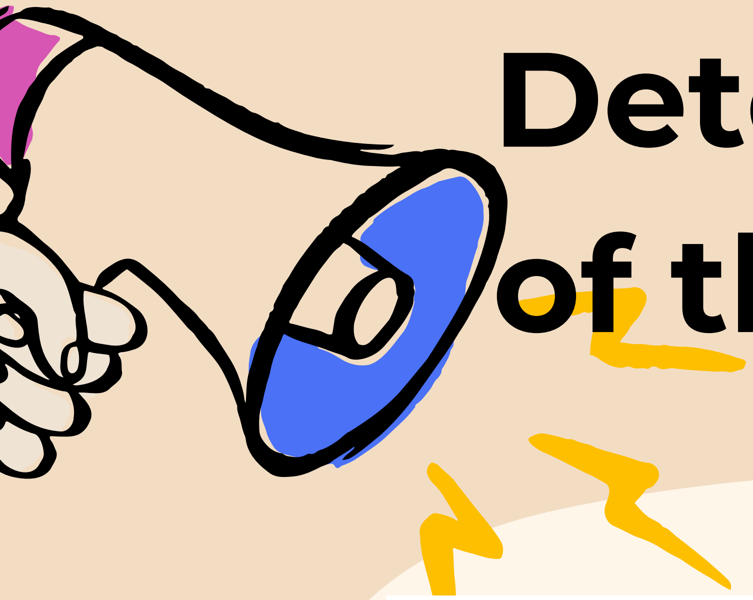
Find the total quantity of each pizza category ordered.



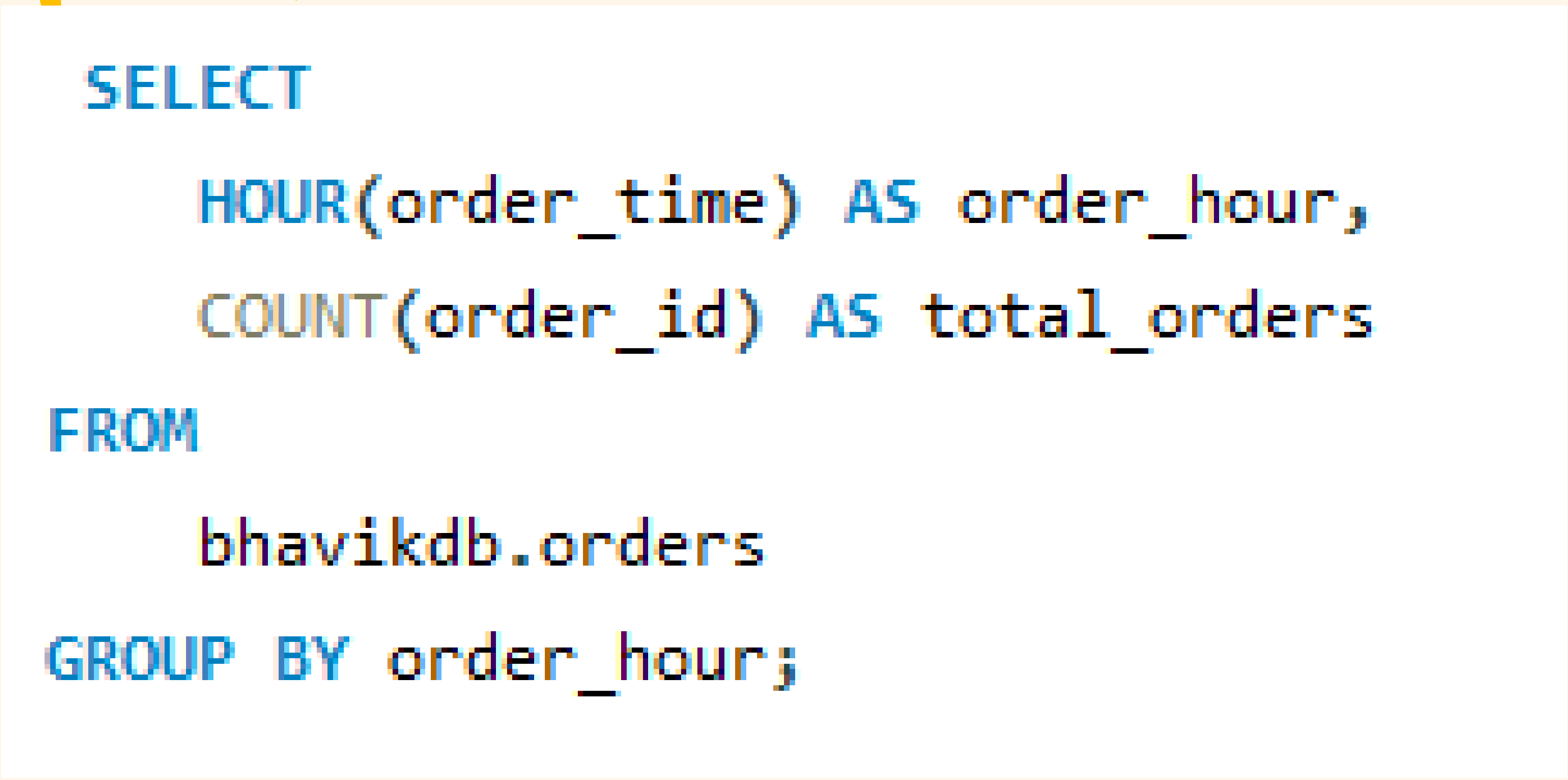
```
SELECT
    pizza_types.category,
    SUM(order_details.quantity) AS total_quantity
FROM
    bhavikdb.pizza_types
        JOIN
    bhavikdb.pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    bhavikdb.order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizza_types.category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



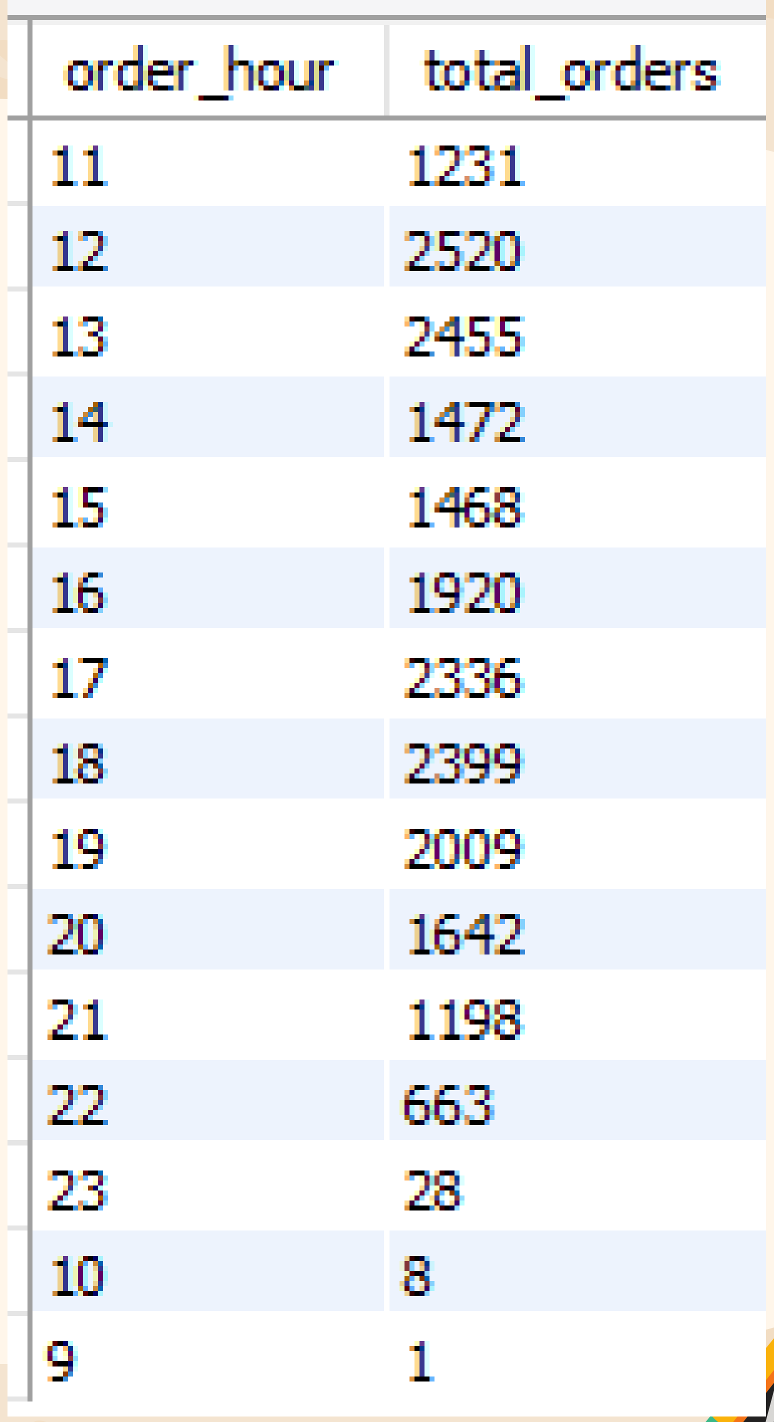
category	total_quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050



Determine the distribution of orders by hour of the day.

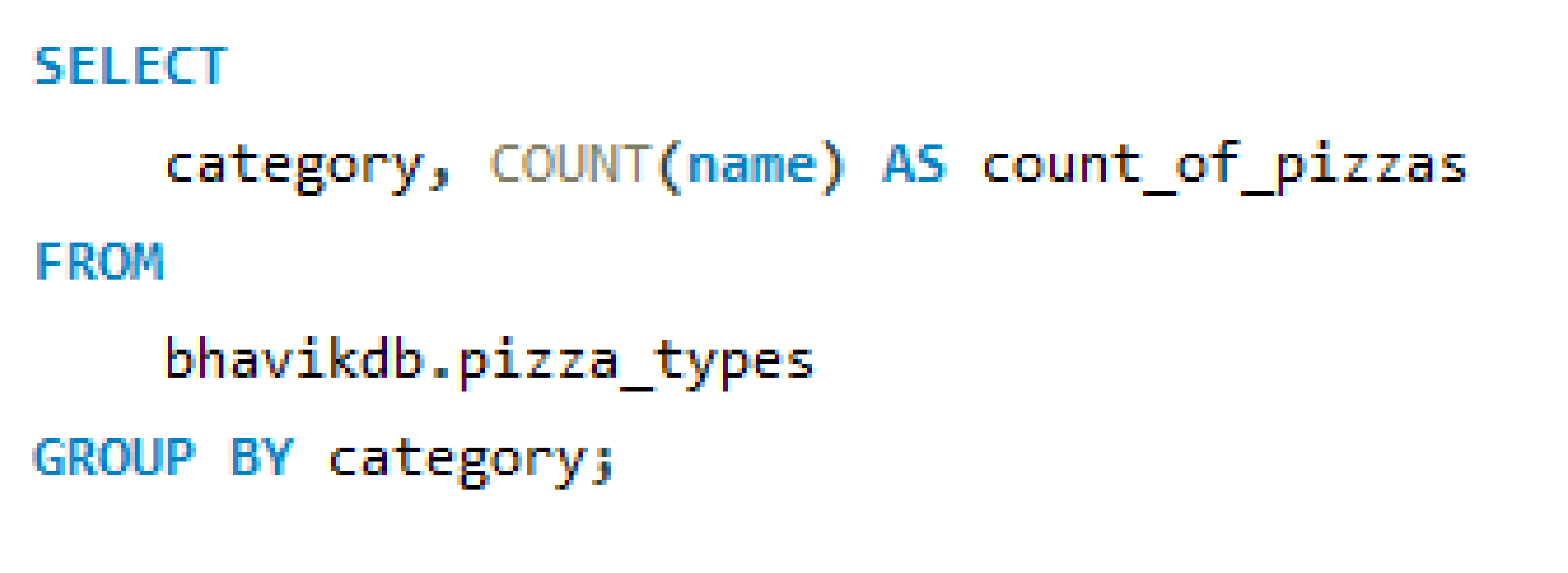


```
 SELECT
    HOUR(order_time) AS order_hour,
    COUNT(order_id) AS total_orders
FROM
    bhavikdb.orders
GROUP BY order_hour;
```

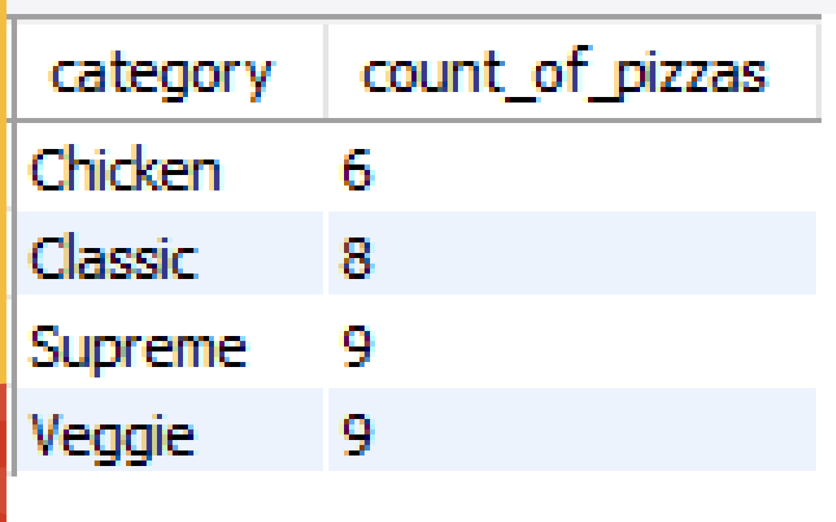


order_hour	total_orders
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399
19	2009
20	1642
21	1198
22	663
23	28
10	8
9	1

Find the category-wise distribution of pizzas.

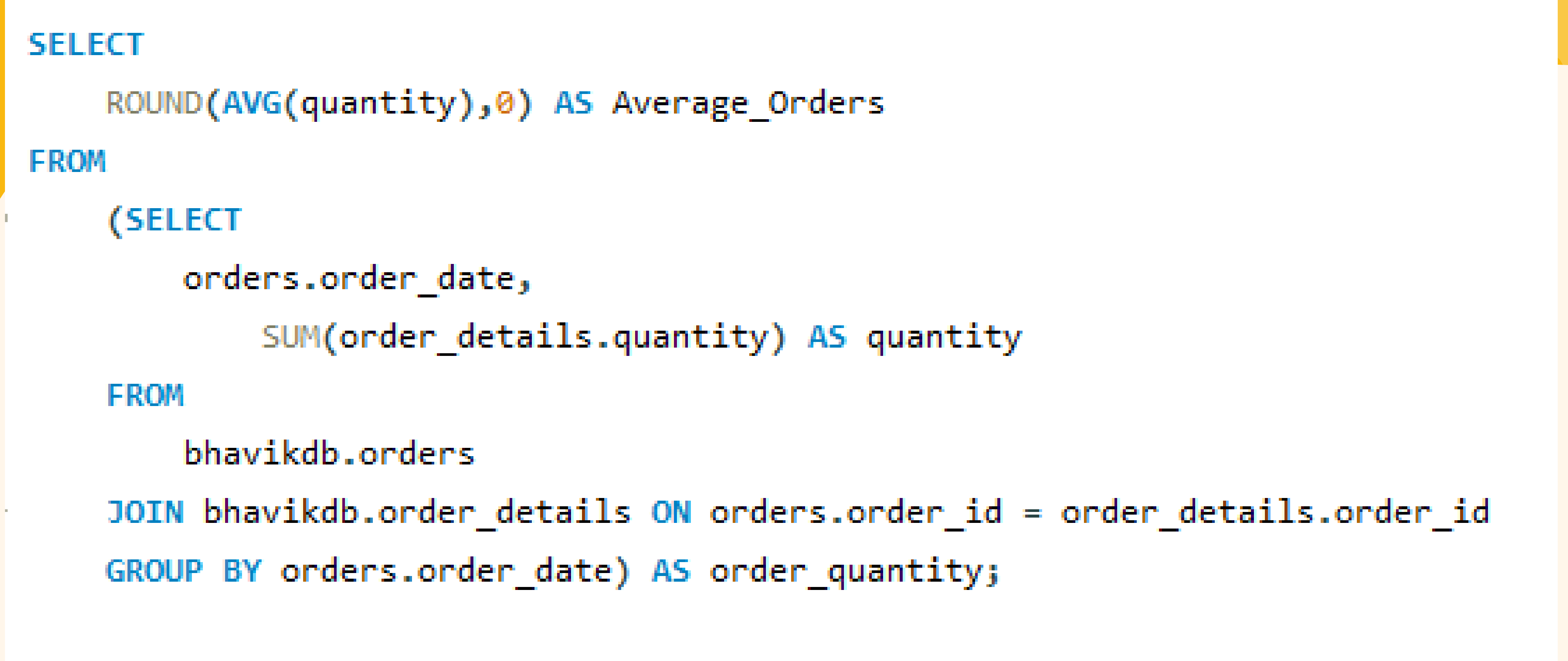


```sql
SELECT
    category, COUNT(name) AS count_of_pizzas
FROM
    bhavikdb.pizza_types
GROUP BY category;
```

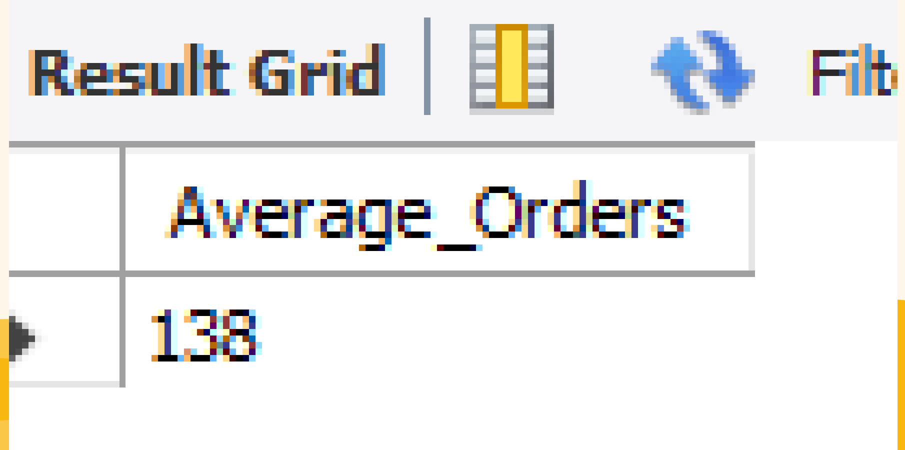


category	count_of_pizzas
Chicken	6
Classic	8
Supreme	9
Veggie	9

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

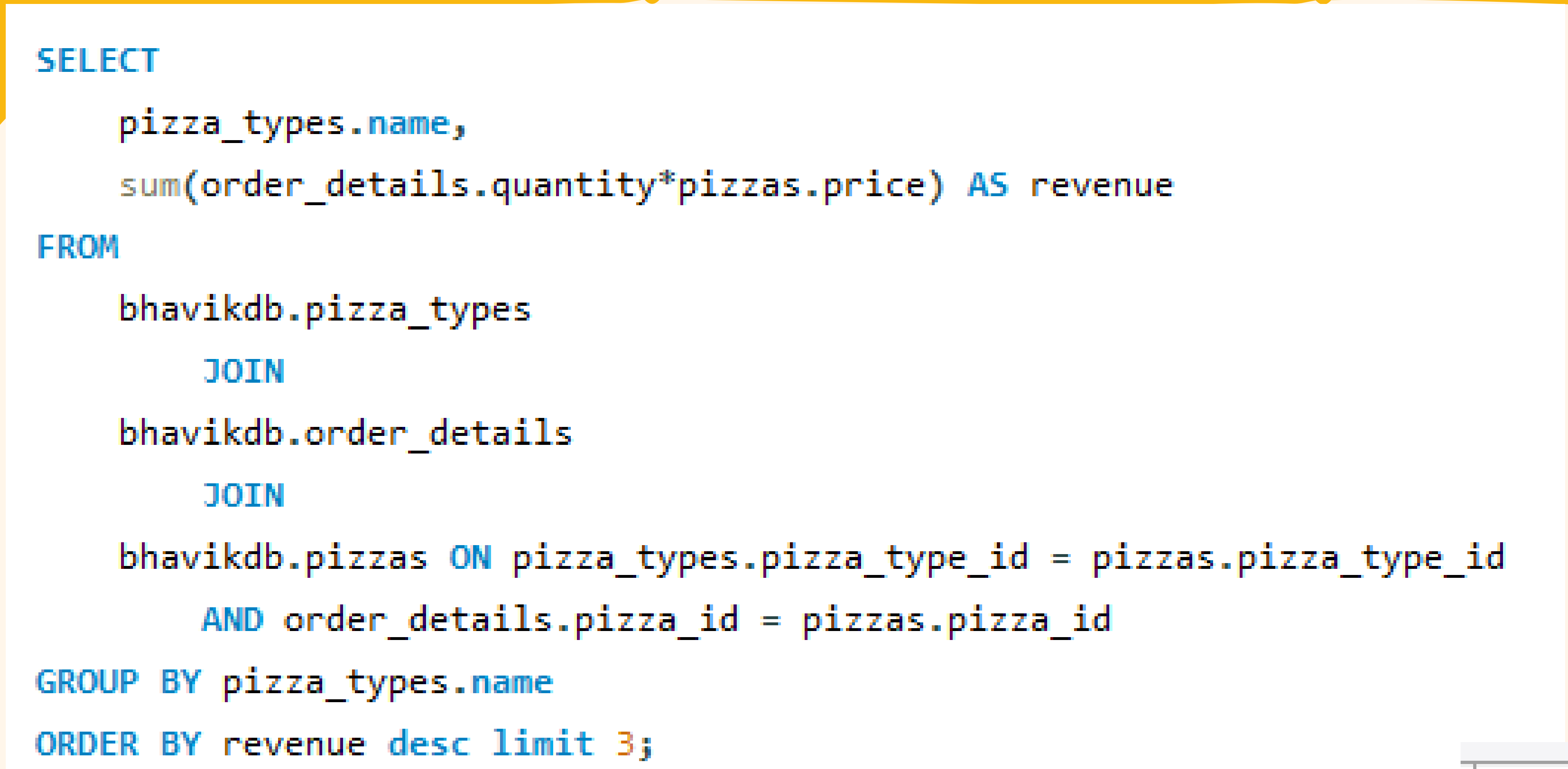


```
SELECT
    ROUND(AVG(quantity),0) AS Average_Orders
FROM
    (SELECT
        orders.order_date,
            SUM(order_details.quantity) AS quantity
    FROM
        bhavikdb.orders
    JOIN bhavikdb.order_details ON orders.order_id = order_details.order_id
    GROUP BY orders.order_date) AS order_quantity;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

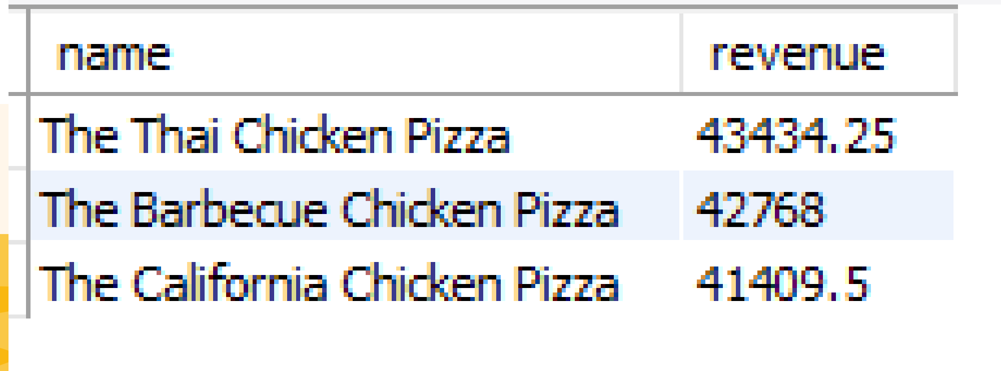


Average_Orders
138

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

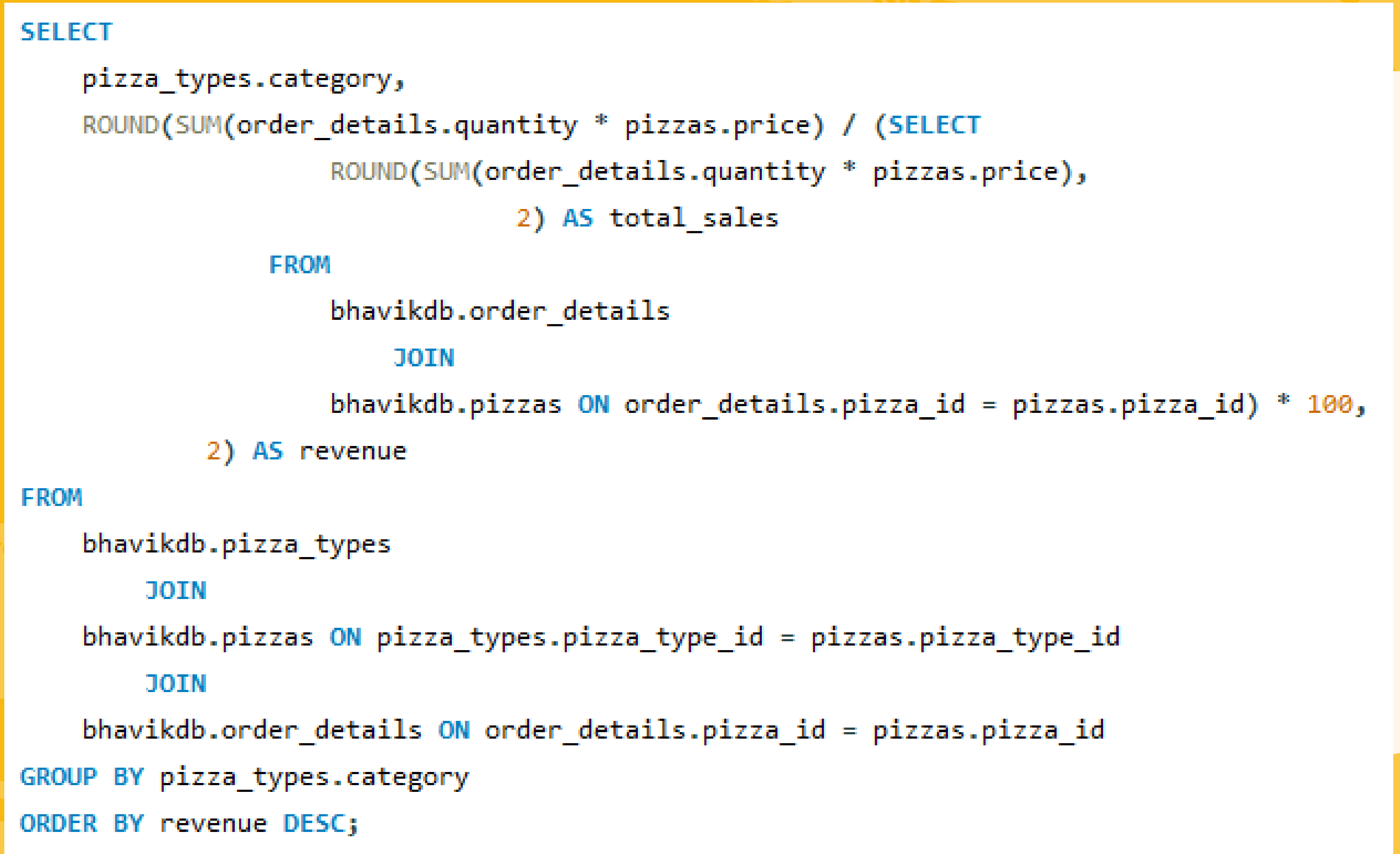


```
SELECT
    pizza_types.name,
    sum(order_details.quantity*pizzas.price) AS revenue
FROM
    bhavikdb.pizza_types
        JOIN
    bhavikdb.order_details
        JOIN
    bhavikdb.pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        AND order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY revenue desc limit 3;
```

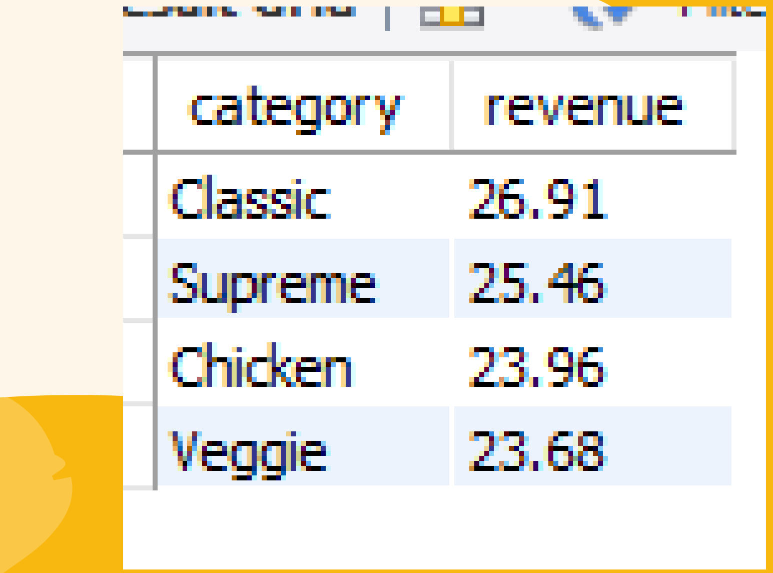


name	revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5

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

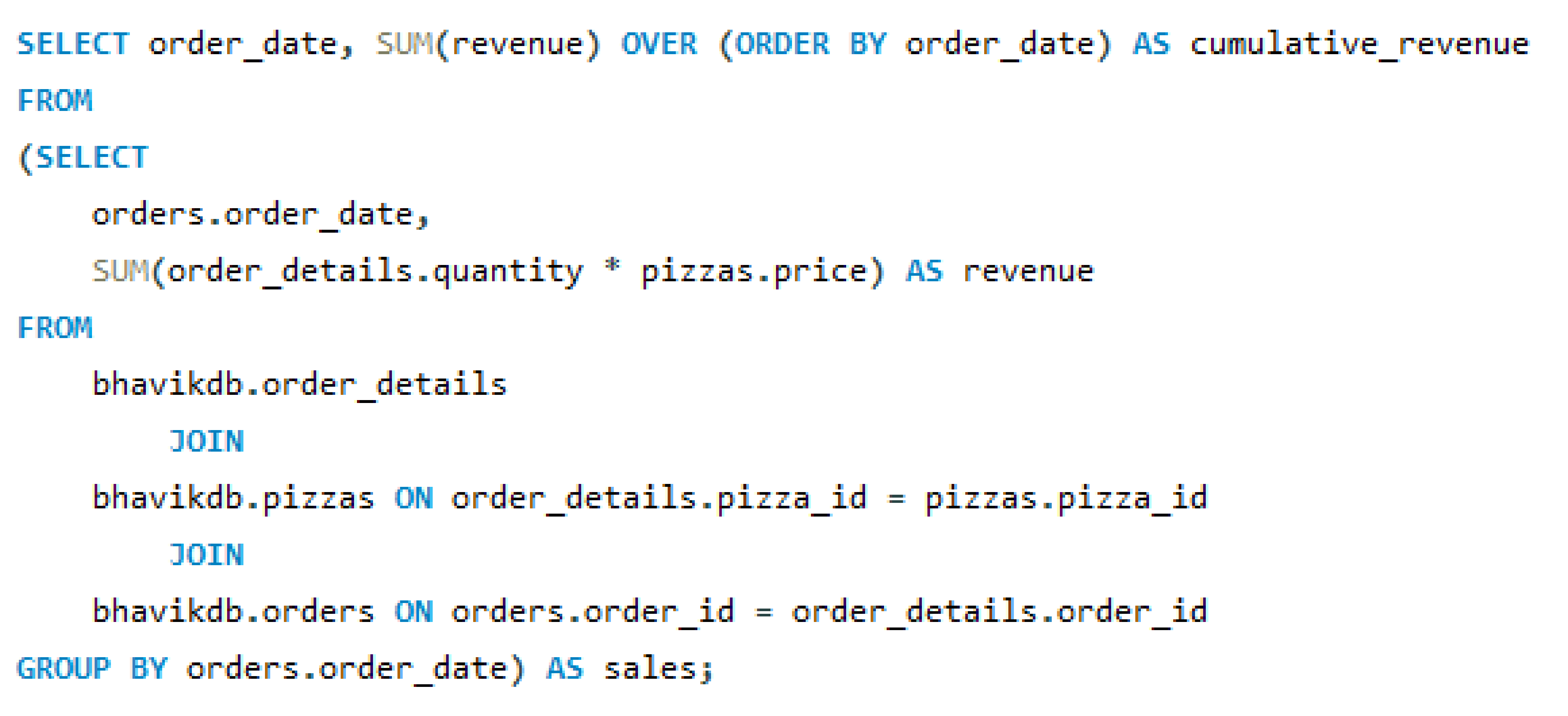


```
SELECT
    pizza_types.category,
    ROUND(SUM(order_details.quantity * pizzas.price) / (SELECT
                    ROUND(SUM(order_details.quantity * pizzas.price),
                                2) AS total_sales
                FROM
                    bhavikdb.order_details
                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

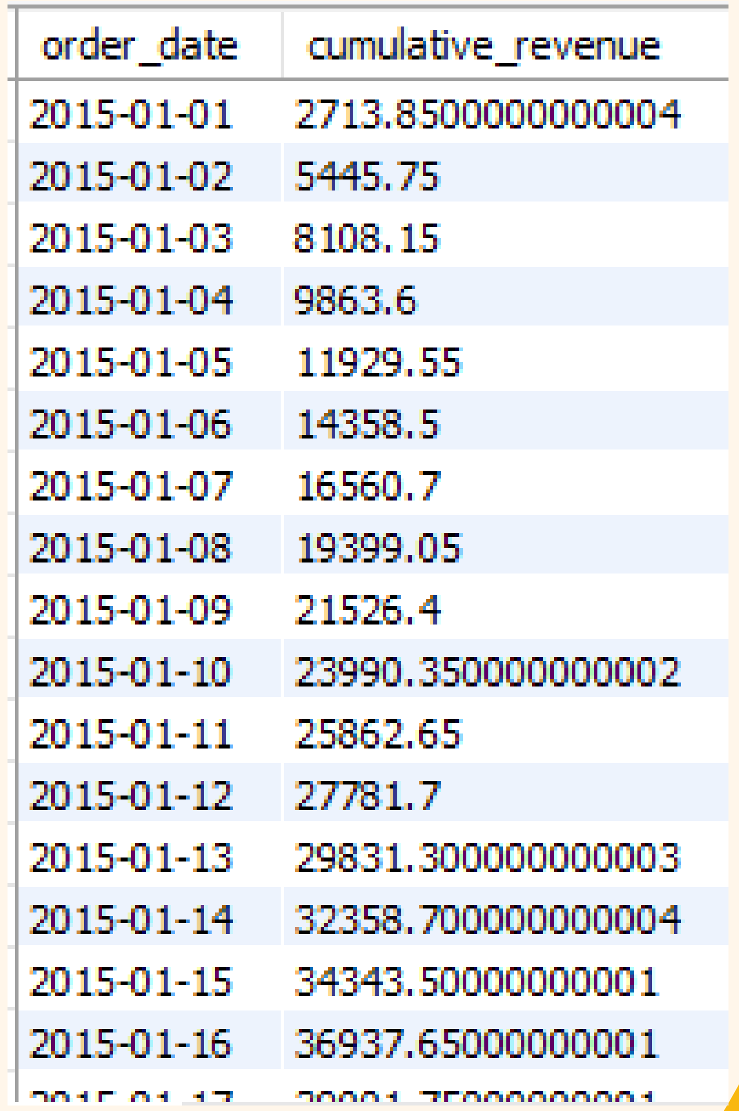


category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

Analyze the cumulative revenue generated over time.

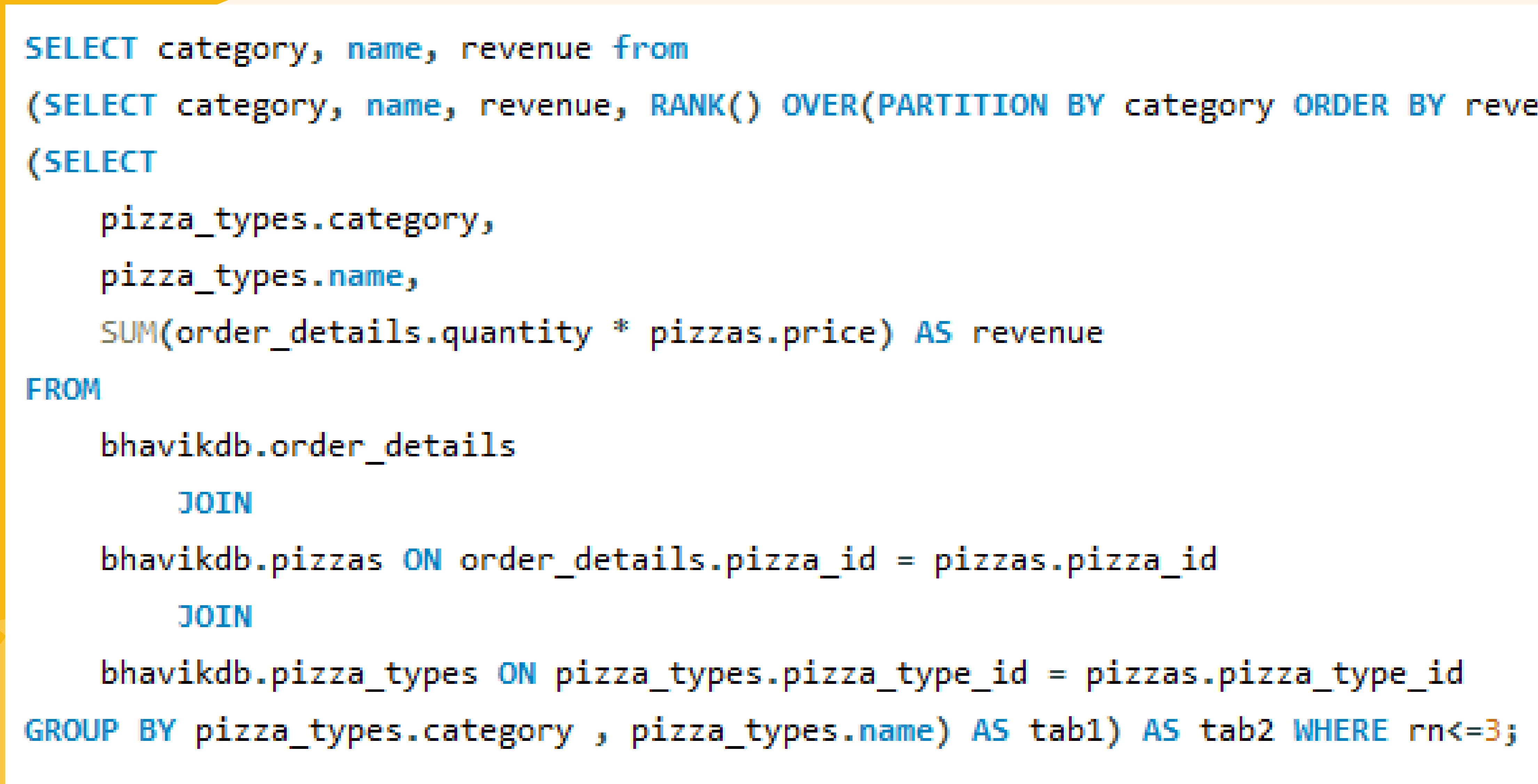


```sql
SELECT order_date, SUM(revenue) OVER (ORDER BY order_date) AS cumulative_revenue
FROM
(SELECT
    orders.order_date,
    SUM(order_details.quantity * pizzas.price) AS revenue
FROM
    bhavikdb.order_details
        JOIN
    bhavikdb.pizzas ON order_details.pizza_id = pizzas.pizza_id
        JOIN
    bhavikdb.orders ON orders.order_id = order_details.order_id
GROUP BY orders.order_date) AS sales;
```

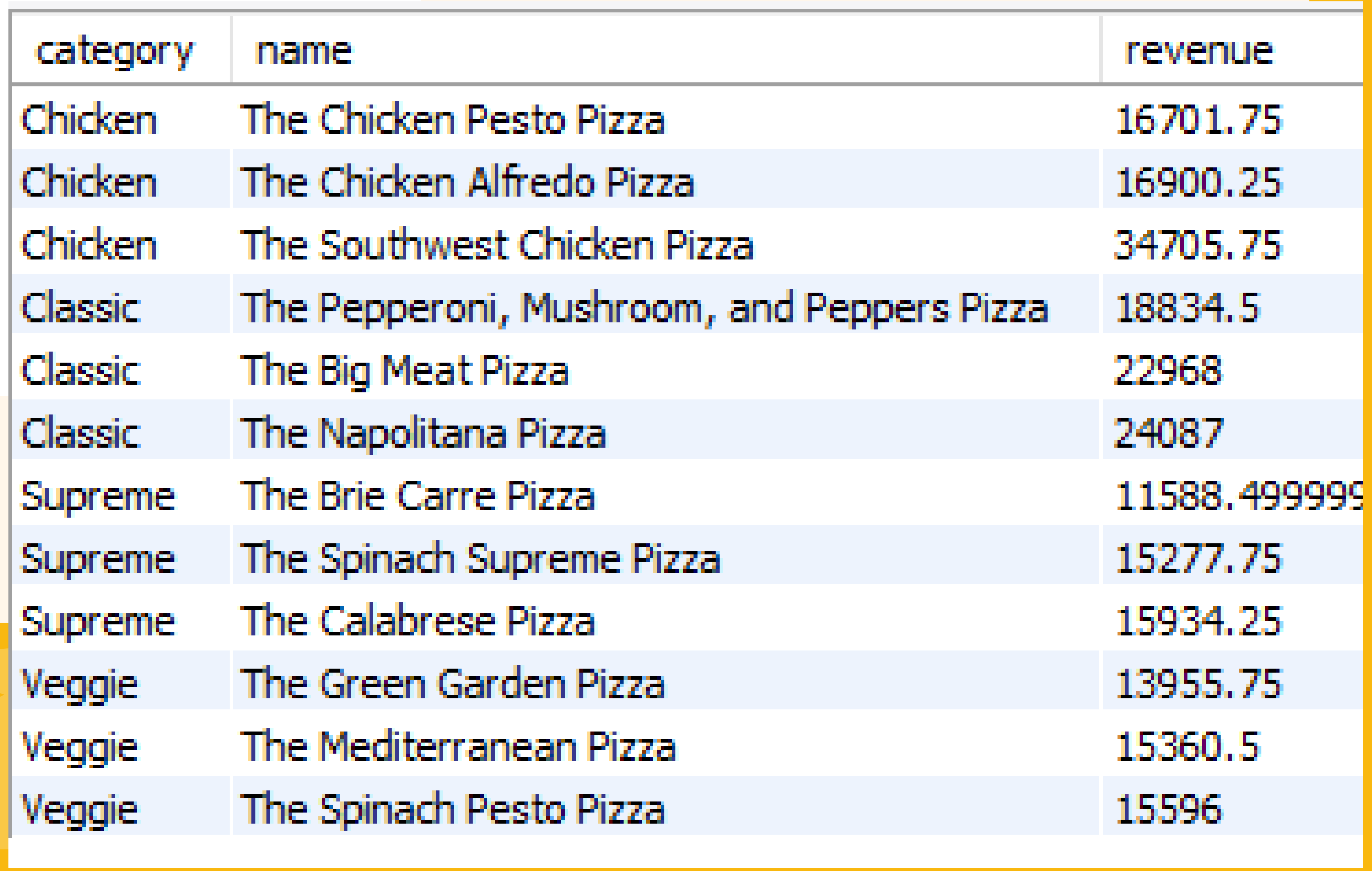


order_date	cumulative_revenue
2015-01-01	2713.8500000000004
2015-01-02	5445.75
2015-01-03	8108.15
2015-01-04	9863.6
2015-01-05	11929.55
2015-01-06	14358.5
2015-01-07	16560.7
2015-01-08	19399.05
2015-01-09	21526.4
2015-01-10	23990.350000000002
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.300000000003
2015-01-14	32358.700000000004
2015-01-15	34343.50000000001
2015-01-16	36937.65000000001
2015-01-17	39001.75000000001

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



```
SELECT category, name, revenue from
(SELECT category, name, revenue, RANK() OVER(PARTITION BY category ORDER BY revenue) AS rn FROM
(SELECT
    pizza_types.category,
    pizza_types.name,
    SUM(order_details.quantity * pizzas.price) AS revenue
FROM
    bhavikdb.order_details
        JOIN
    bhavikdb.pizzas ON order_details.pizza_id = pizzas.pizza_id
        JOIN
    bhavikdb.pizza_types ON pizza_types.pizza_type_id = pizzas.pizza_type_id
GROUP BY pizza_types.category , pizza_types.name) AS tab1) AS tab2 WHERE rn<=3;
```



category	name	revenue
Chicken	The Chicken Pesto Pizza	16701.75
Chicken	The Chicken Alfredo Pizza	16900.25
Chicken	The Southwest Chicken Pizza	34705.75
Classic	The Pepperoni, Mushroom, and Peppers Pizza	18834.5
Classic	The Big Meat Pizza	22968
Classic	The Napolitana Pizza	24087
Supreme	The Brie Carre Pizza	11588.499999
Supreme	The Spinach Supreme Pizza	15277.75
Supreme	The Calabrese Pizza	15934.25
Veggie	The Green Garden Pizza	13955.75
Veggie	The Mediterranean Pizza	15360.5
Veggie	The Spinach Pesto Pizza	15596

Thank You!

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