Pizza Hut

RESTAURANT SALES

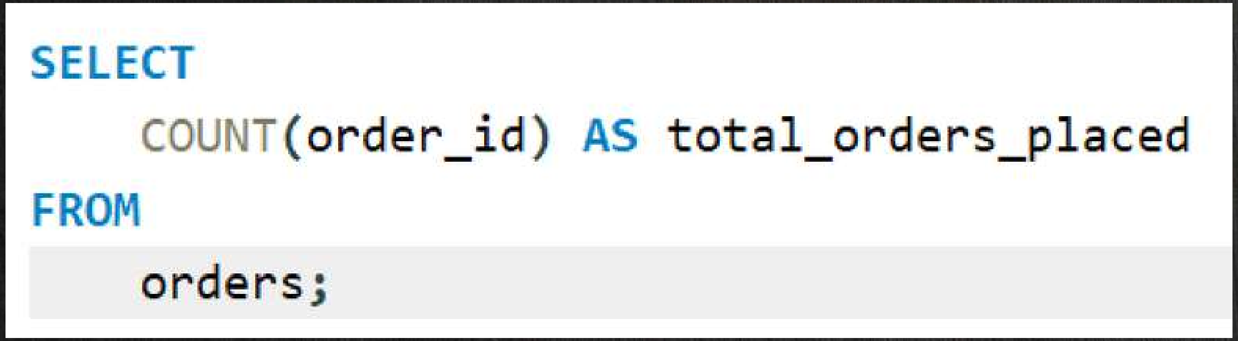
Pizza sales

SQL PROJECT

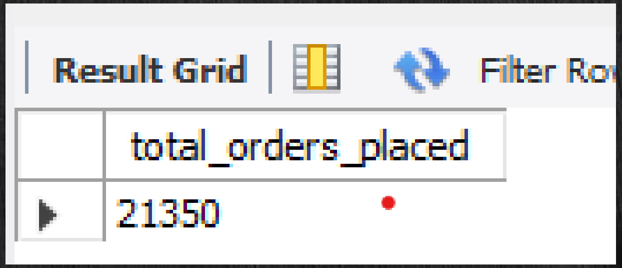
Presenting the Pizza Sales Analysis Report, which I've generated using SQL. Goal with this report is to gain insights into the sales performance across various types of pizzas, customer preferences, and trends over time. By analyzing the data, I was able to identify key patterns and opportunities for optimizing the sales strategy. Let's dive into the findings and see how they can help us drive better business decisions."

By Shaurya Katoch

Retrieve the total number of orders placed.

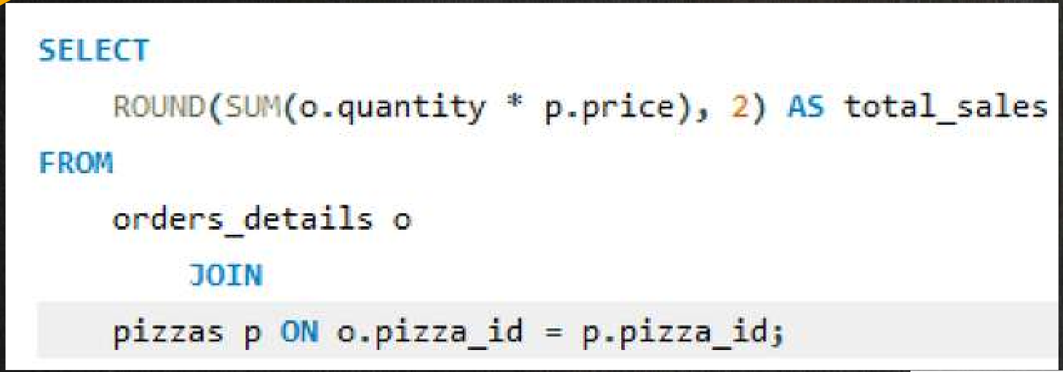


```sql
SELECT
    COUNT(order_id) AS total_orders_placed
FROM
    orders;
```

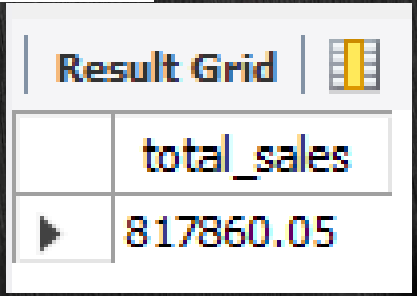


```
   total_orders_placed
▶  21350
```

Calculate the total revenue generated from pizza sales.

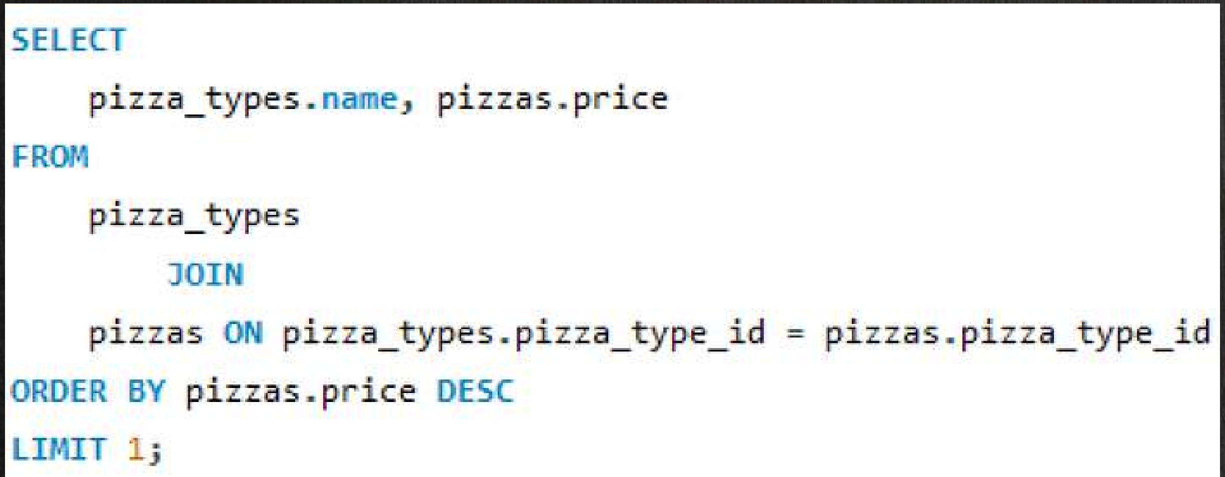


```
SELECT
    ROUND(SUM(o.quantity * p.price), 2) AS total_sales
FROM
    orders_details o
        JOIN
    pizzas p ON o.pizza_id = p.pizza_id;
```

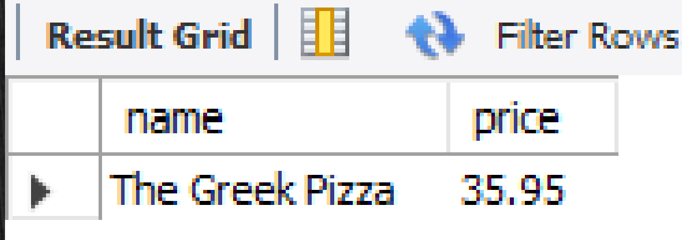


total_sales
817860.05

Identify the highest-priced pizza

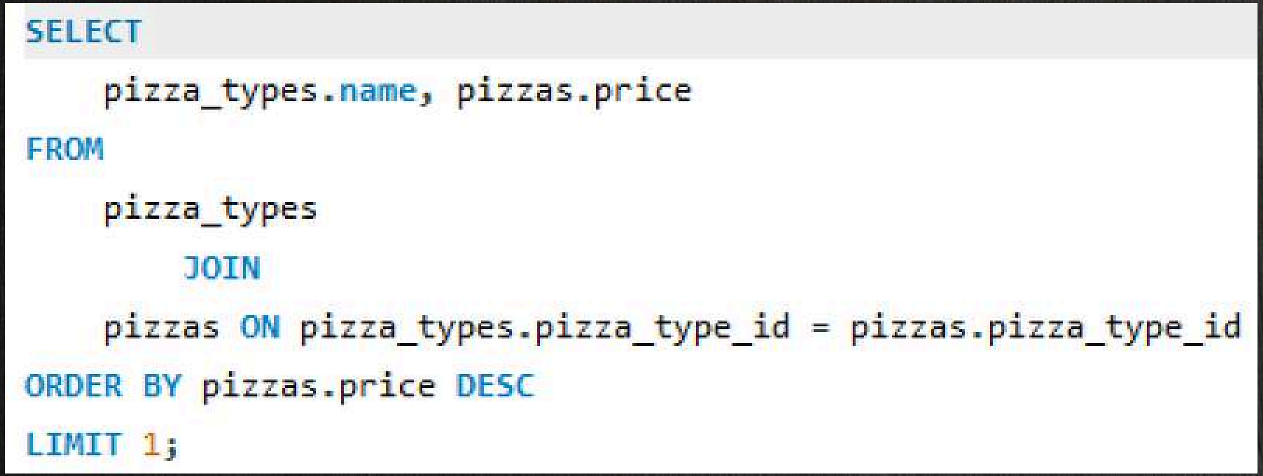


```
SELECT
    pizza_types.name, pizzas.price
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY pizzas.price DESC
LIMIT 1;
```

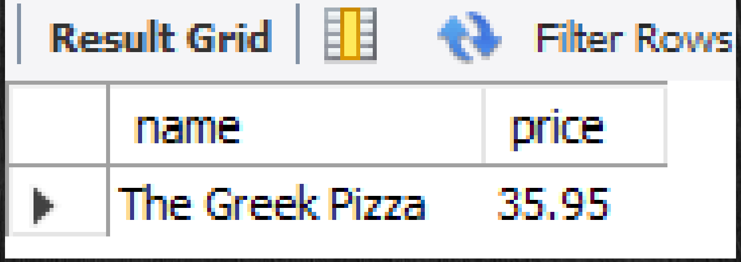


name	price
The Greek Pizza	35.95

Identify the highest-priced pizza

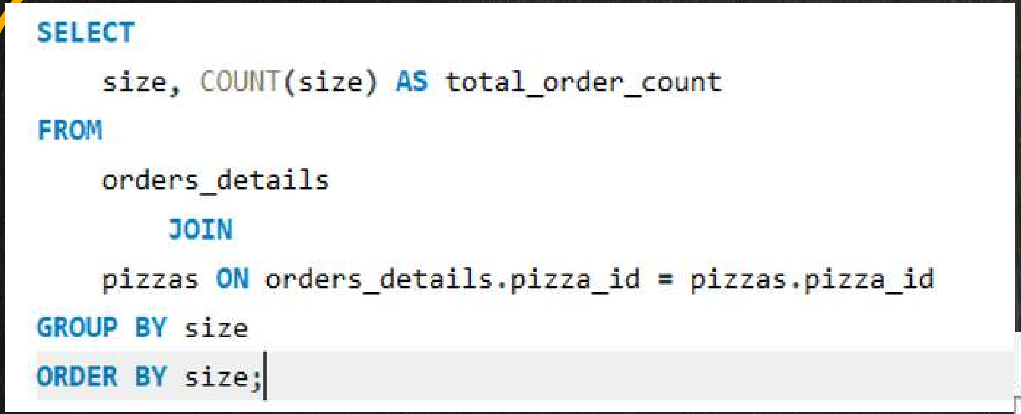


```
SELECT
    pizza_types.name, pizzas.price
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY pizzas.price DESC
LIMIT 1;
```

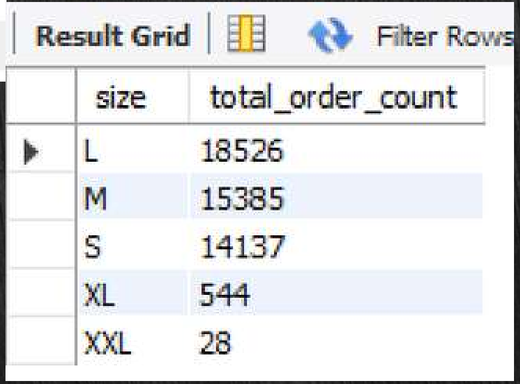


	name	price
▶	The Greek Pizza	35.95

Identify the most common pizza size ordered.

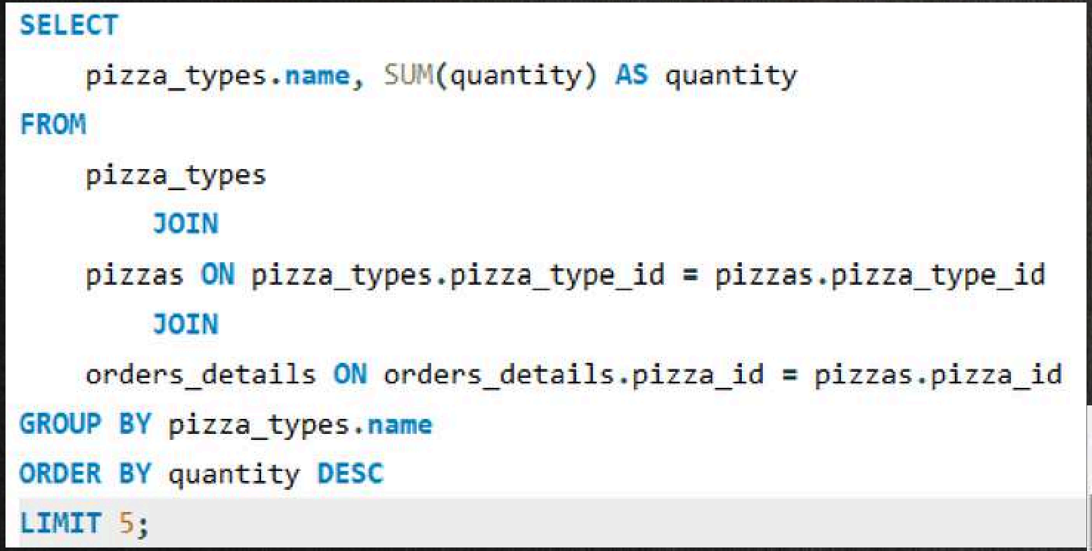


```sql
SELECT
    size, COUNT(size) AS total_order_count
FROM
    orders_details
        JOIN
    pizzas ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY size
ORDER BY size;
```

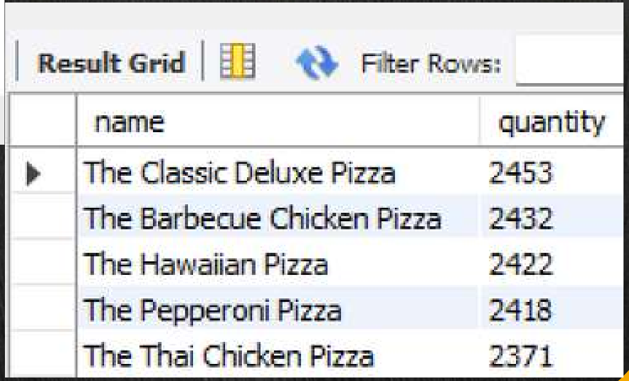


size	total_order_count
L	18526
M	15385
S	14137
XL	544
XXL	28

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

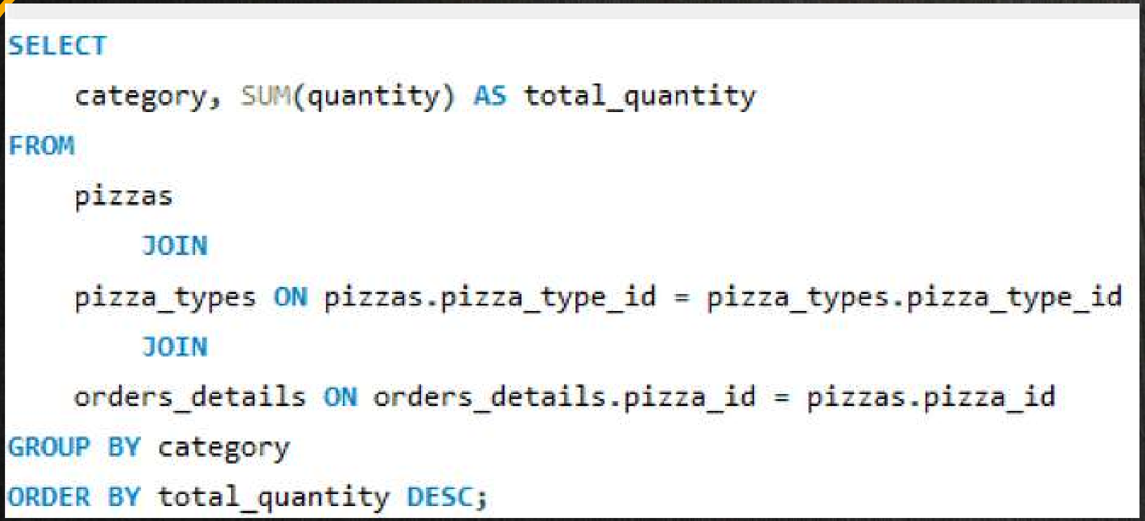


```sql
SELECT
    pizza_types.name, SUM(quantity) AS quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT 5;
```

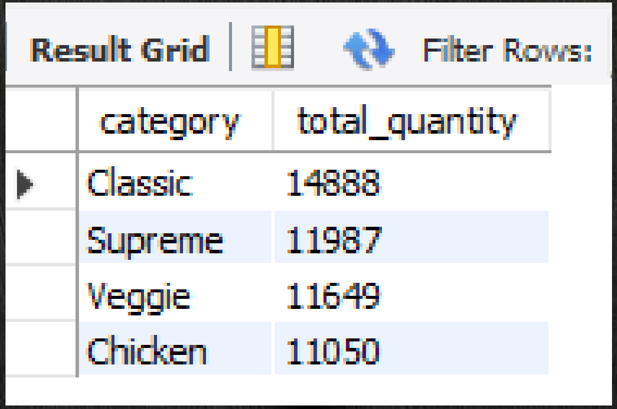


name	quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

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

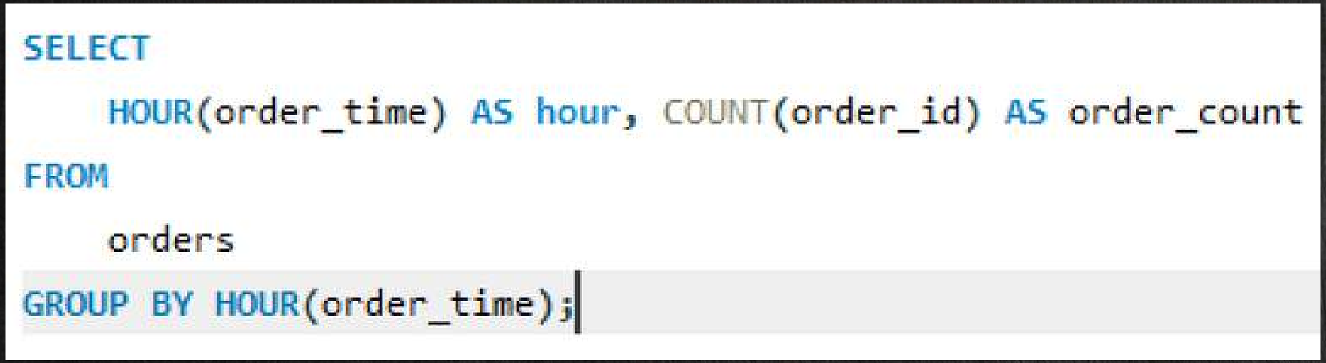


```
SELECT
    category, SUM(quantity) AS total_quantity
FROM
    pizzas
        JOIN
    pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
        JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY category
ORDER BY total_quantity DESC;
```

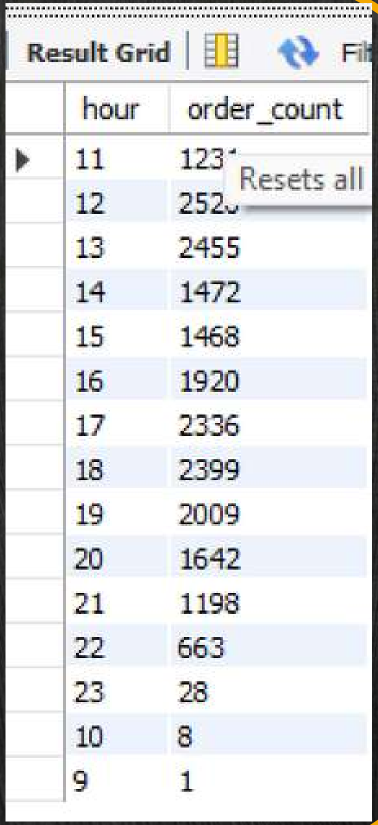


category	total_quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

Determine the distribution of orders by hour of the day.

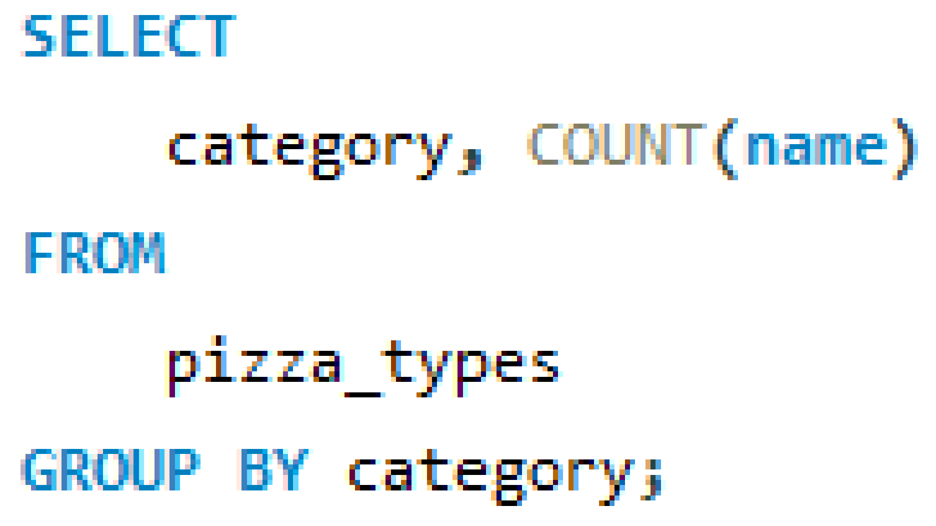


```
SELECT
    HOUR(order_time) AS hour, COUNT(order_id) AS order_count
FROM
    orders
GROUP BY HOUR(order_time);
```

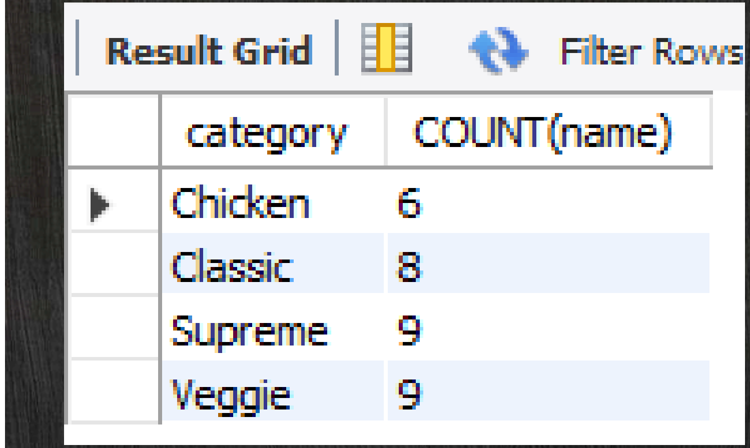


hour	order_count
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399
19	2009
20	1642
21	1198
22	663
23	28
10	8
9	1

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

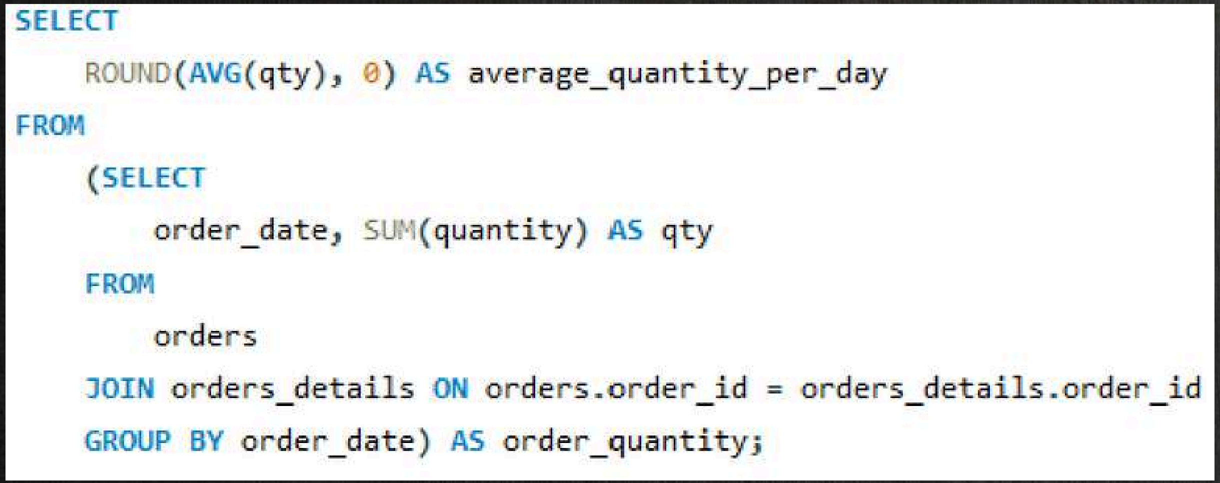


```
SELECT
    category, COUNT(name)
FROM
    pizza_types
GROUP BY category;
```

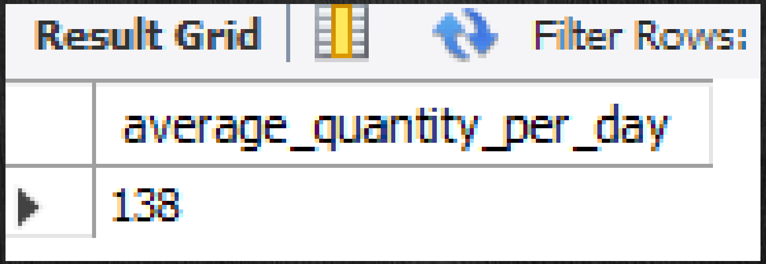


category	COUNT(name)
Chicken	6
Classic	8
Supreme	9
Veggie	9

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

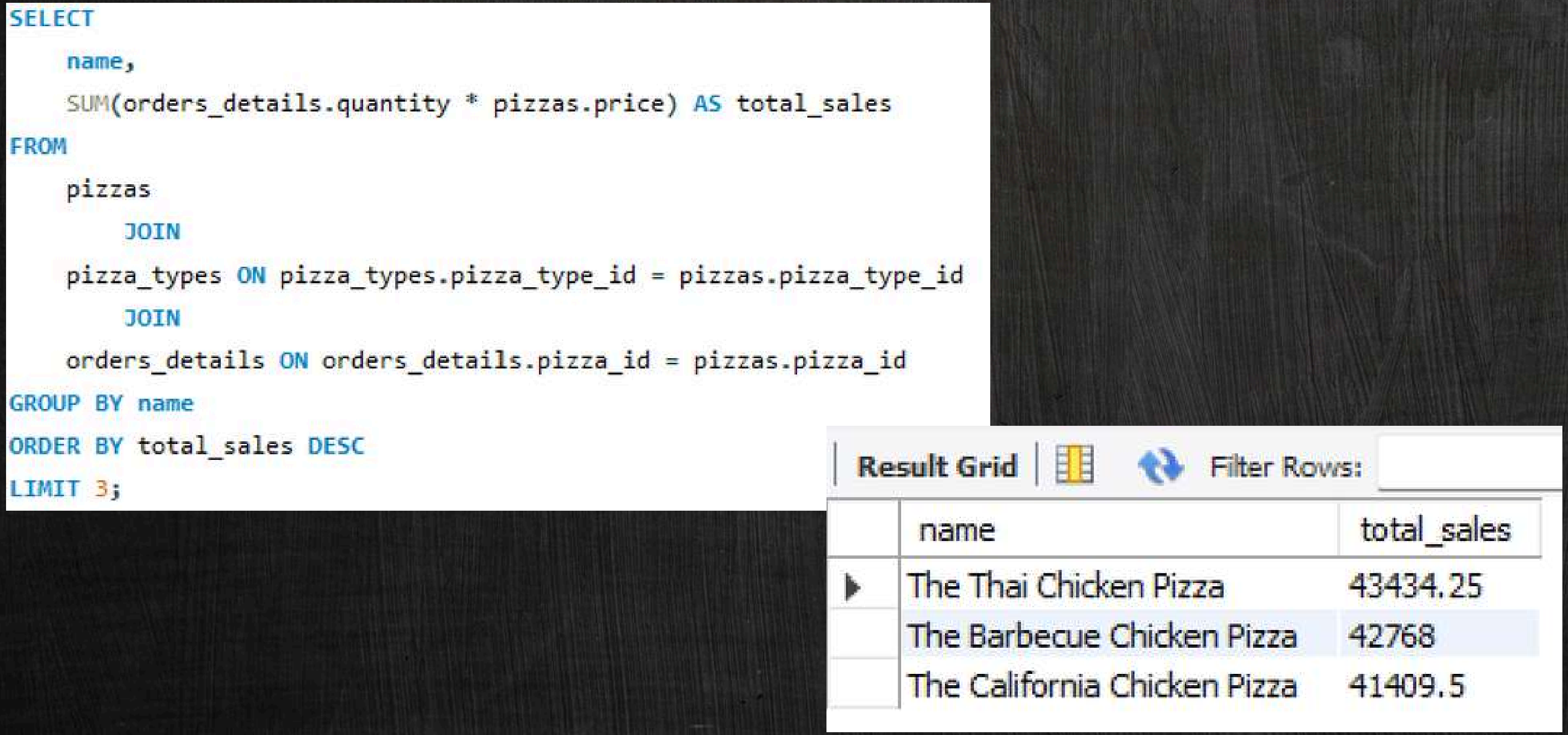


```
SELECT
    ROUND(AVG(qty), 0) AS average_quantity_per_day
FROM
    (SELECT
        order_date, SUM(quantity) AS qty
    FROM
        orders
    JOIN orders_details ON orders.order_id = orders_details.order_id
    GROUP BY order_date) AS order_quantity;
```



```
average_quantity_per_day
138
```

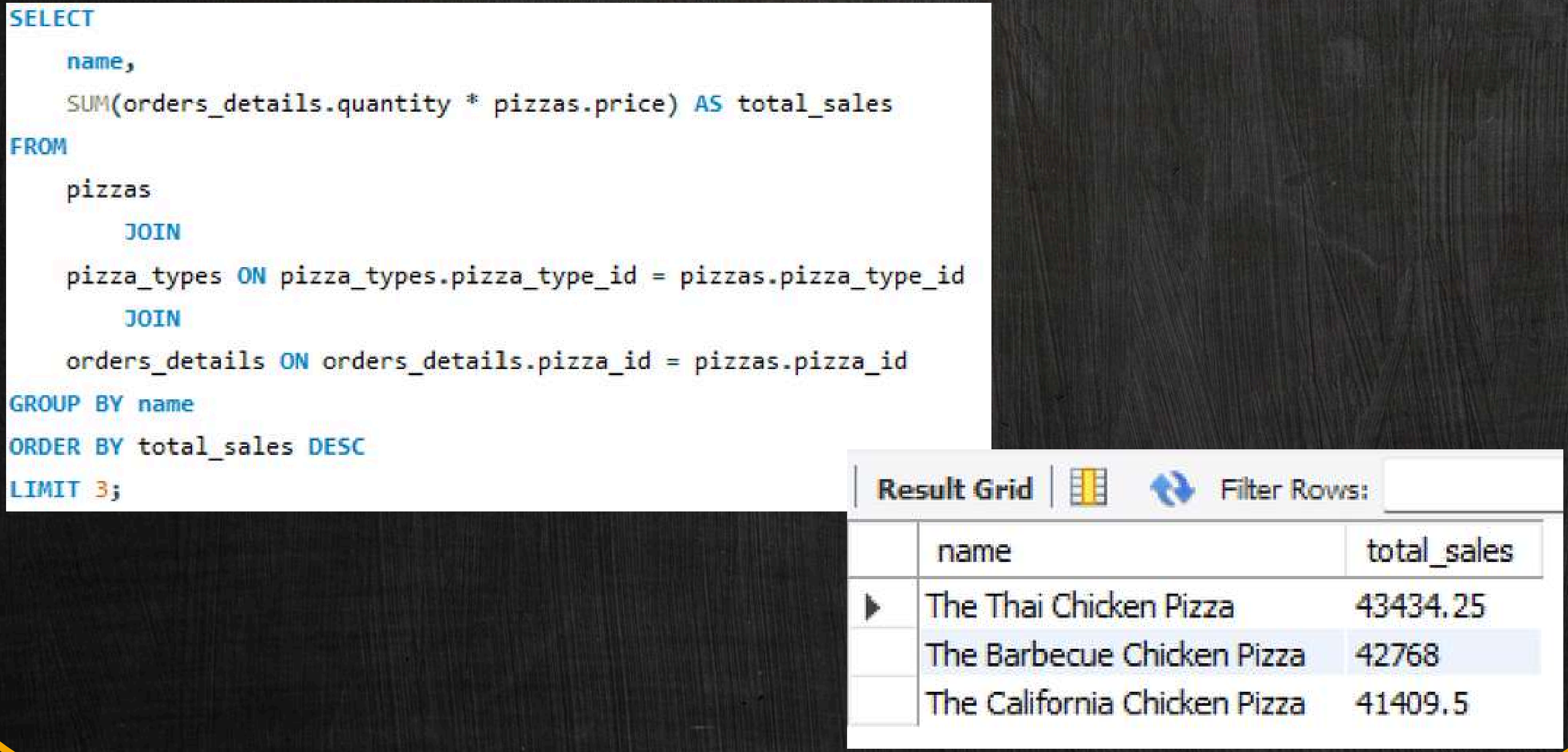
Determine the top 3 most ordered pizza types based on revenue.



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

```
name                            total_sales
The Thai Chicken Pizza          43434.25
The Barbecue Chicken Pizza      42768
The California Chicken Pizza    41409.5
```

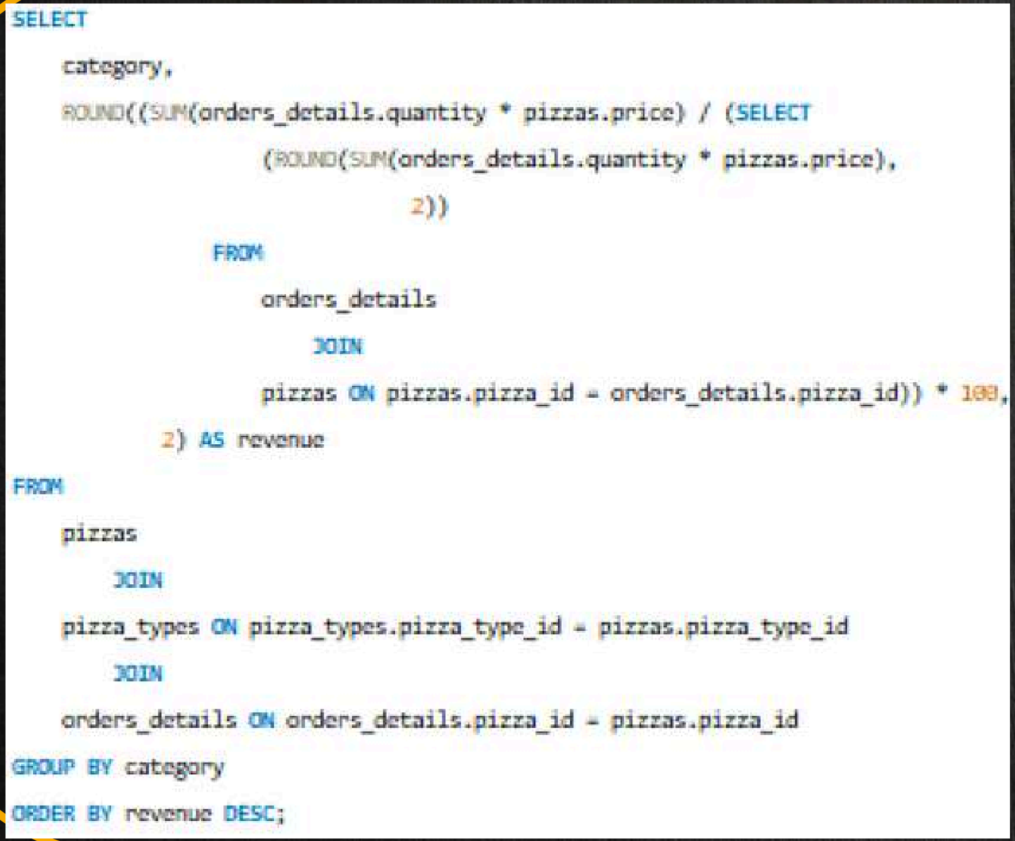
Determine the top 3 most ordered pizza types based on revenue.



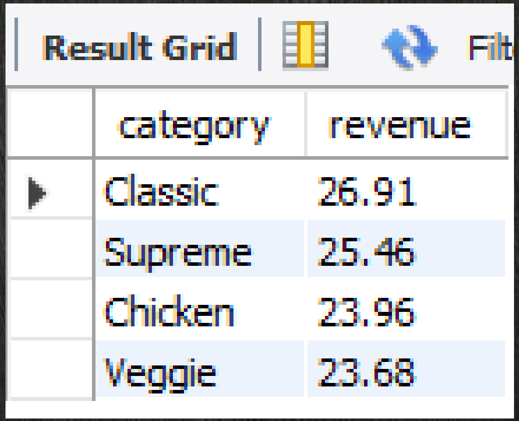
```
SELECT
    name,
    SUM(orders_details.quantity * pizzas.price) AS total_sales
FROM
    pizzas
        JOIN
    pizza_types ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY name
ORDER BY total_sales DESC
LIMIT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

name	total_sales
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.

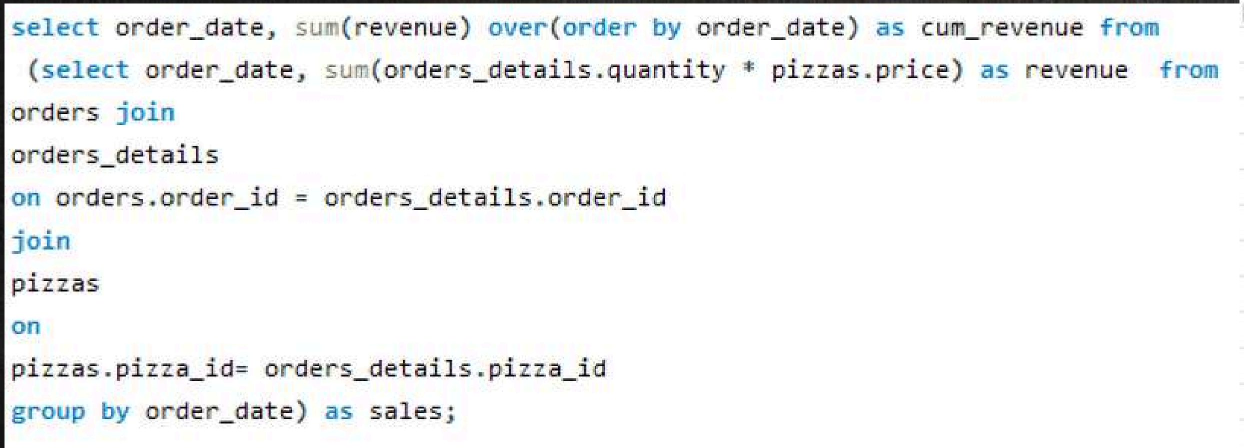


```
SELECT
    category,
    ROUND((SUM(orders_details.quantity * pizzas.price) / (SELECT
                (ROUND(SUM(orders_details.quantity * pizzas.price),
                            2))
            FROM
                orders_details
                    JOIN
                pizzas ON pizzas.pizza_id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

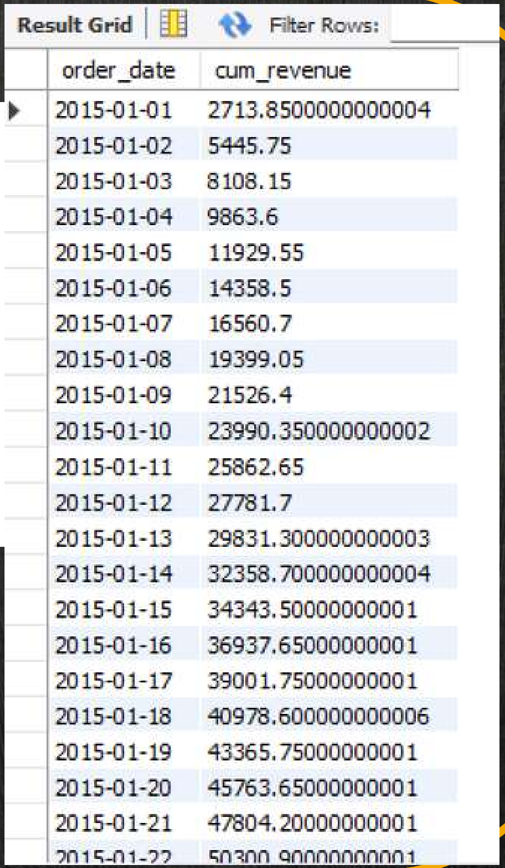


category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

Analyze the cumulative revenue generated over time.

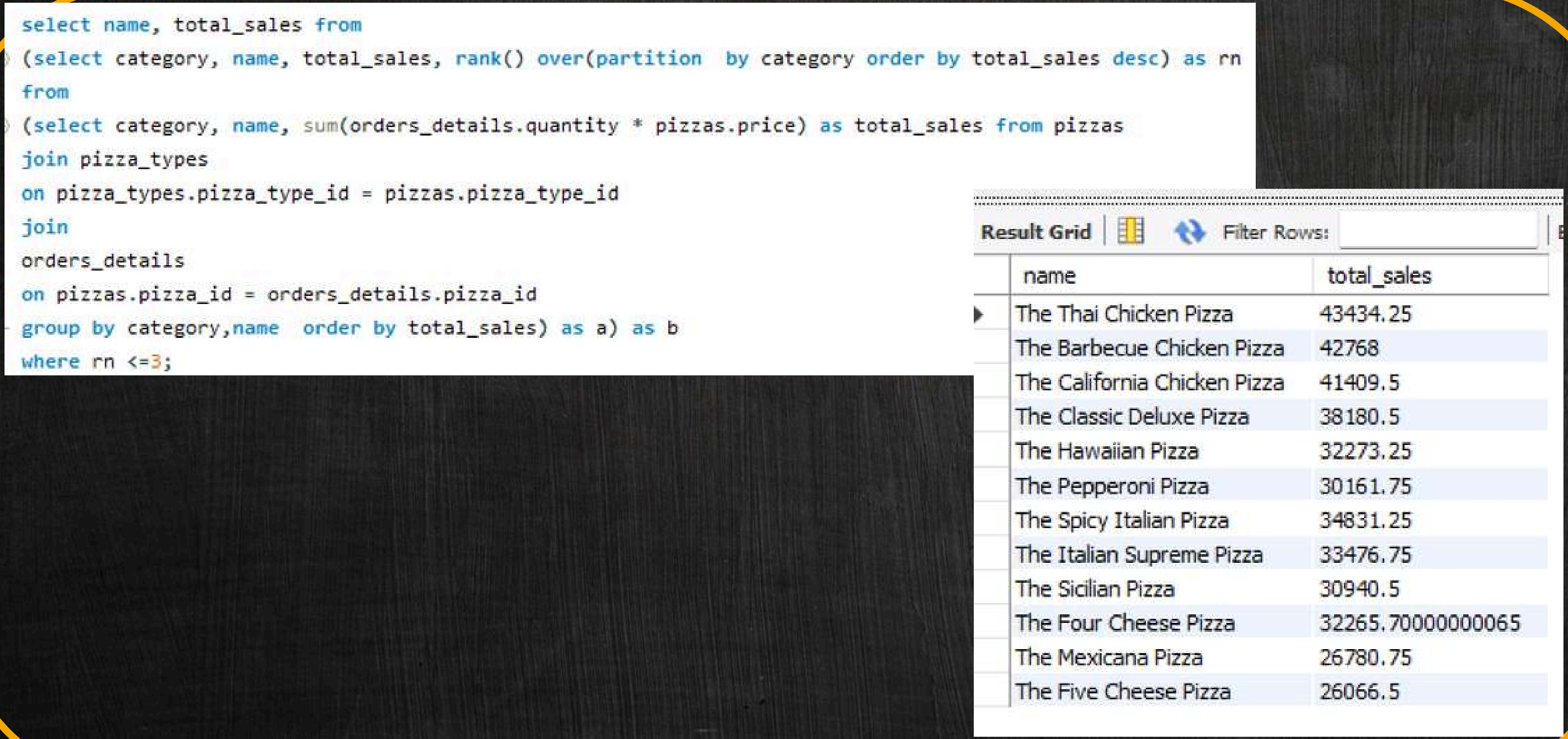


```
select order_date, sum(revenue) over(order by order_date) as cum_revenue from
 (select order_date, sum(orders_details.quantity * pizzas.price) as revenue  from
orders join
orders_details
on orders.order_id = orders_details.order_id
join
pizzas
on
pizzas.pizza_id= orders_details.pizza_id
group by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

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



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

name	total_sales
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