SQL PROJECT ON PIZZA SALES

INTRODUCTION

Hello!
My name is Deepak kumar.

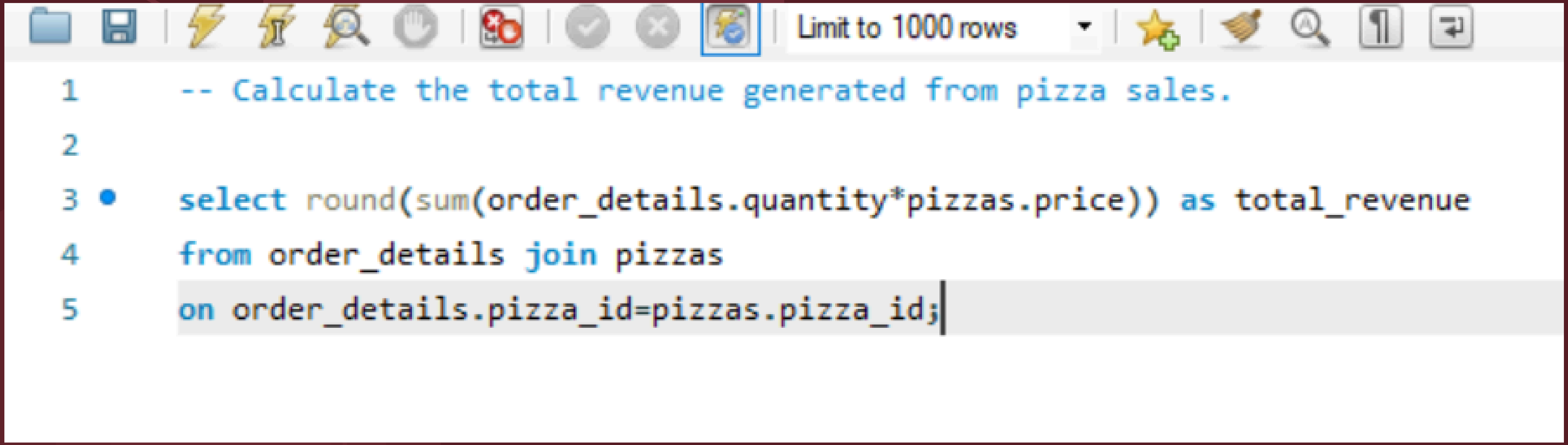
I just completed a project on pizza sales using SQL.where i utilise the sql queries that were related to pizza sales.

SQL databases are made up of tables that store data in a tabular format, with rows and columns representing different data attributes

SQL databases allow users to make changes in real-time, such as adding new tables and rows, and renaming relations.

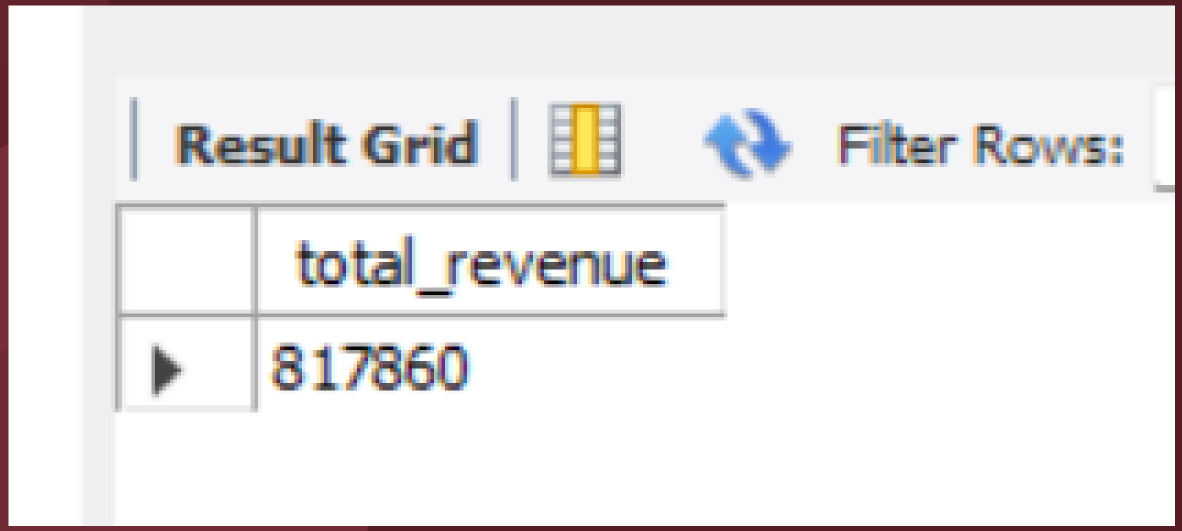
Examples of relational database management systems (RDBMS) include MySQL, Oracle, and Sybase.

Calculate the total revenue generated from pizza sales.



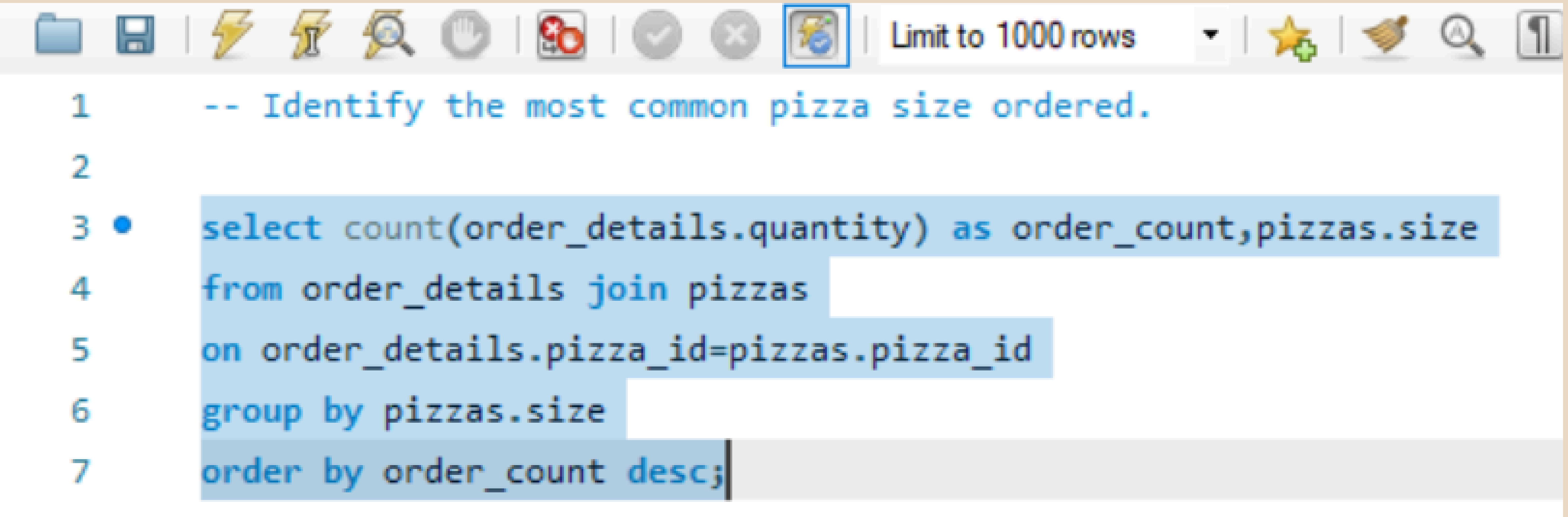
```
-- Calculate the total revenue generated from pizza sales.

select round(sum(order_details.quantity*pizzas.price)) as total_revenue
from order_details join pizzas
on order_details.pizza_id=pizzas.pizza_id;
```



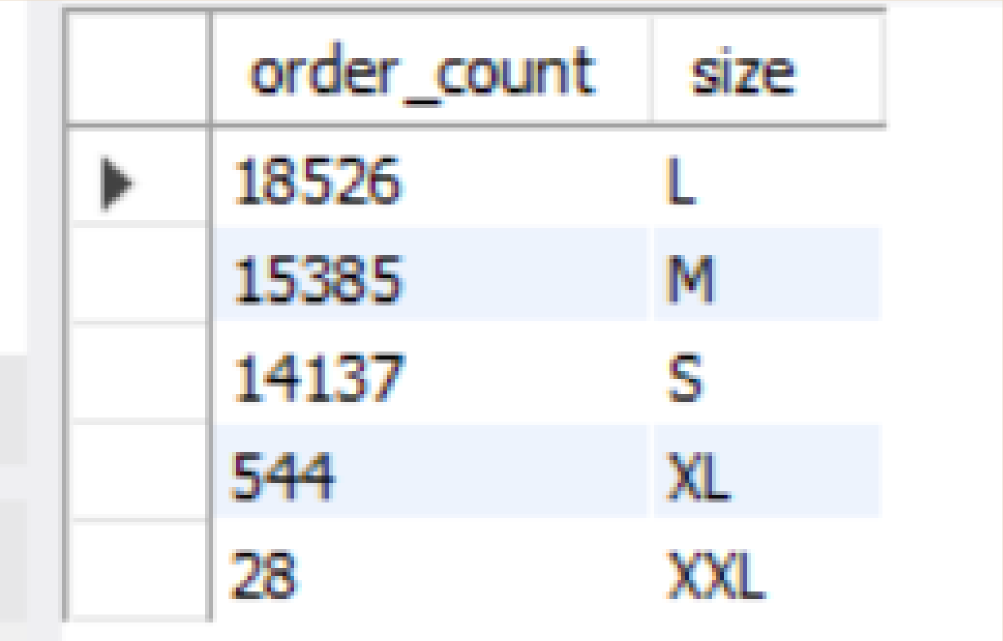
```
total_revenue
817860
```

Identify the most common pizza size ordered.



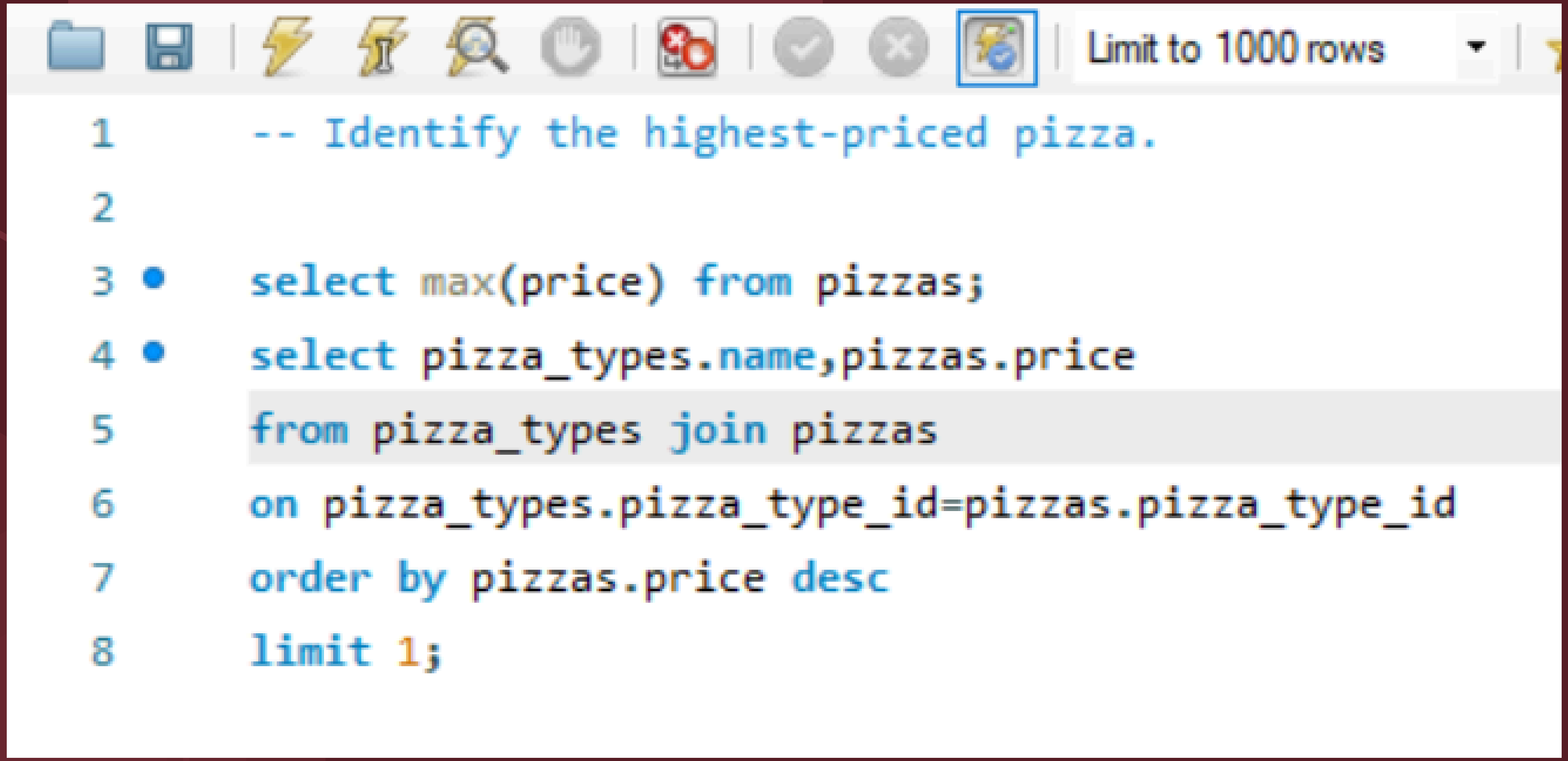
```sql
-- Identify the most common pizza size ordered.

select count(order_details.quantity) as order_count,pizzas.size
from order_details join pizzas
on order_details.pizza_id=pizzas.pizza_id
group by pizzas.size
order by order_count desc;
```



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

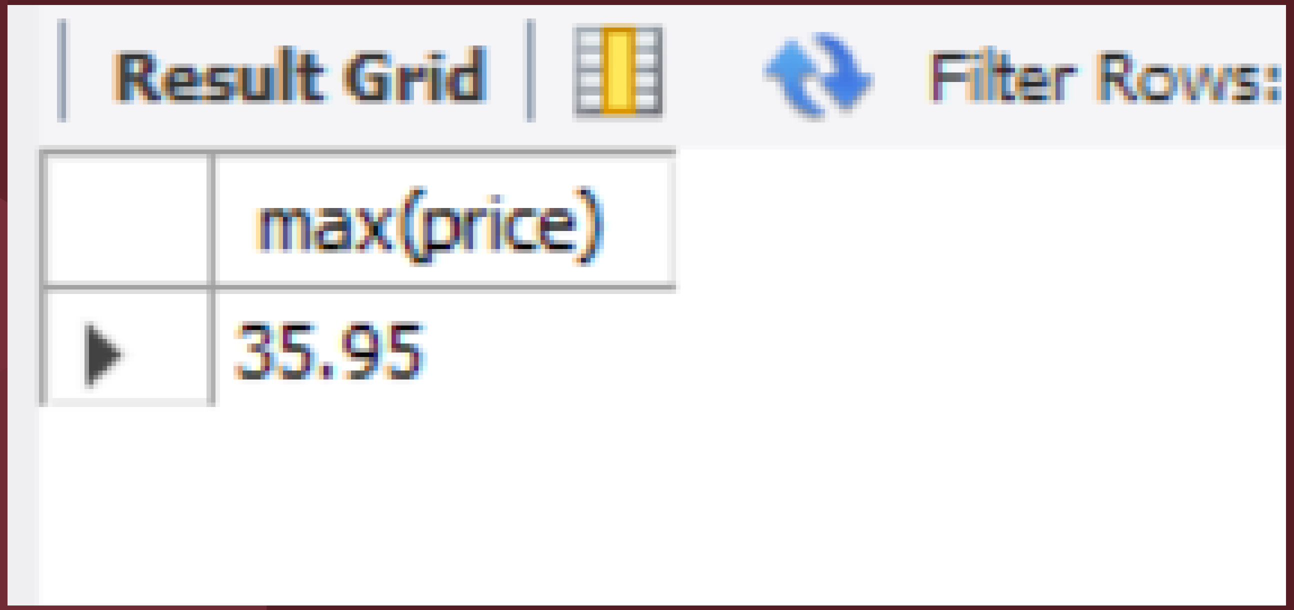
Identify the highest-priced pizza.



Limit to 1000 rows

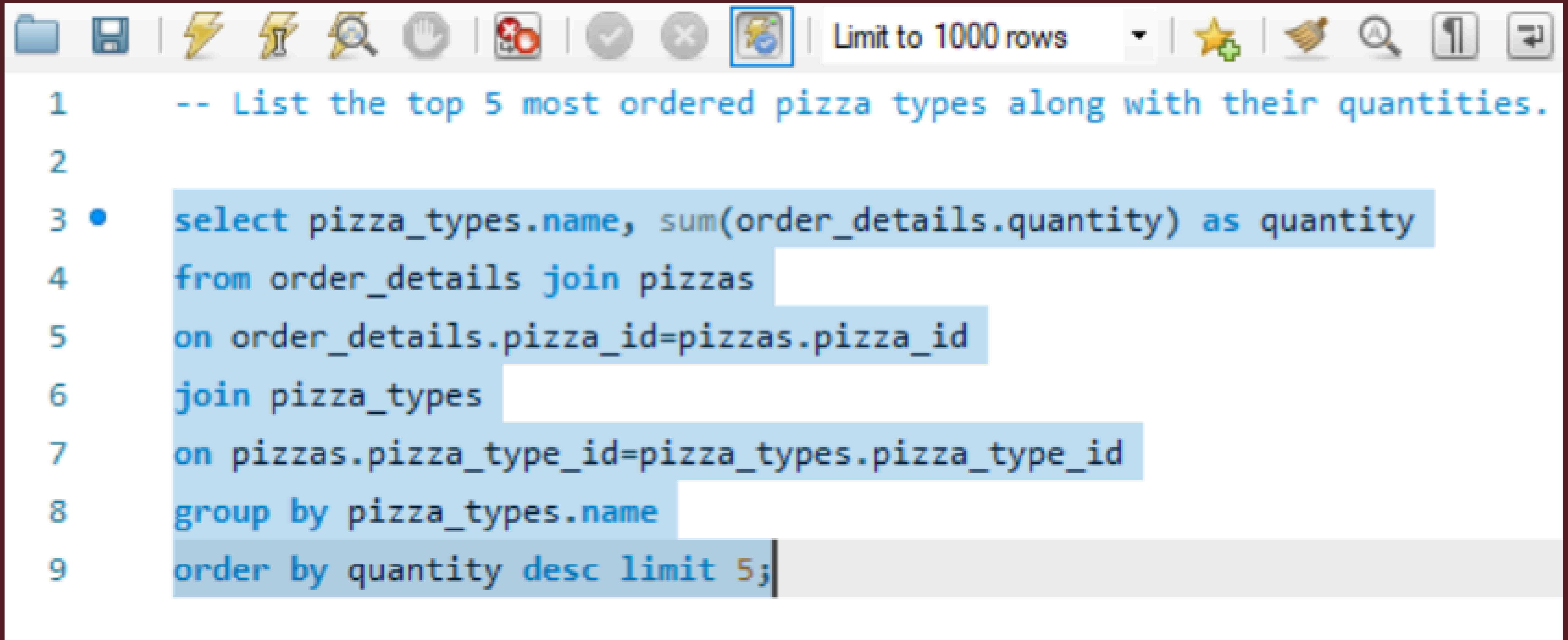
```
-- Identify the highest-priced pizza.

select max(price) from pizzas;
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;
```



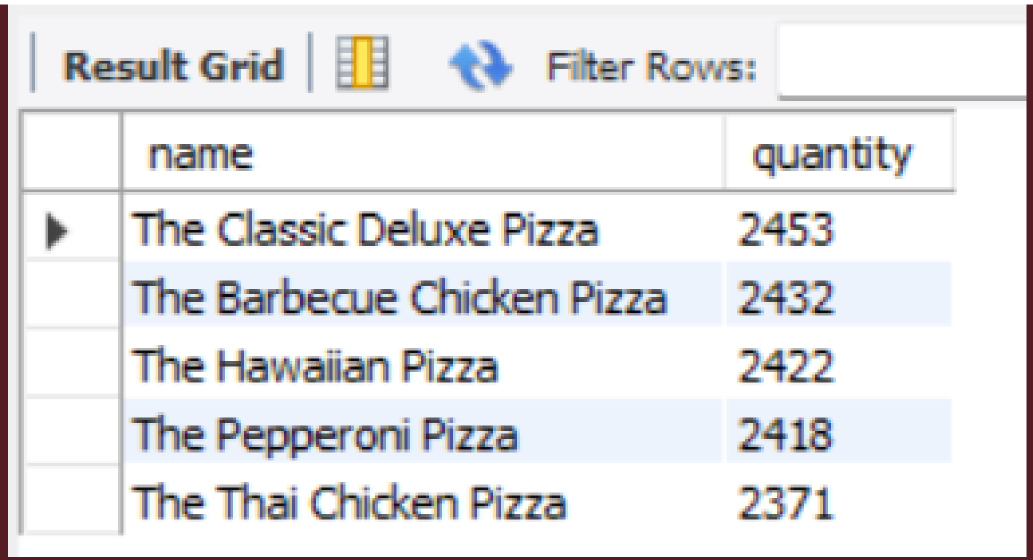
```
max(price)
35.95
```

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



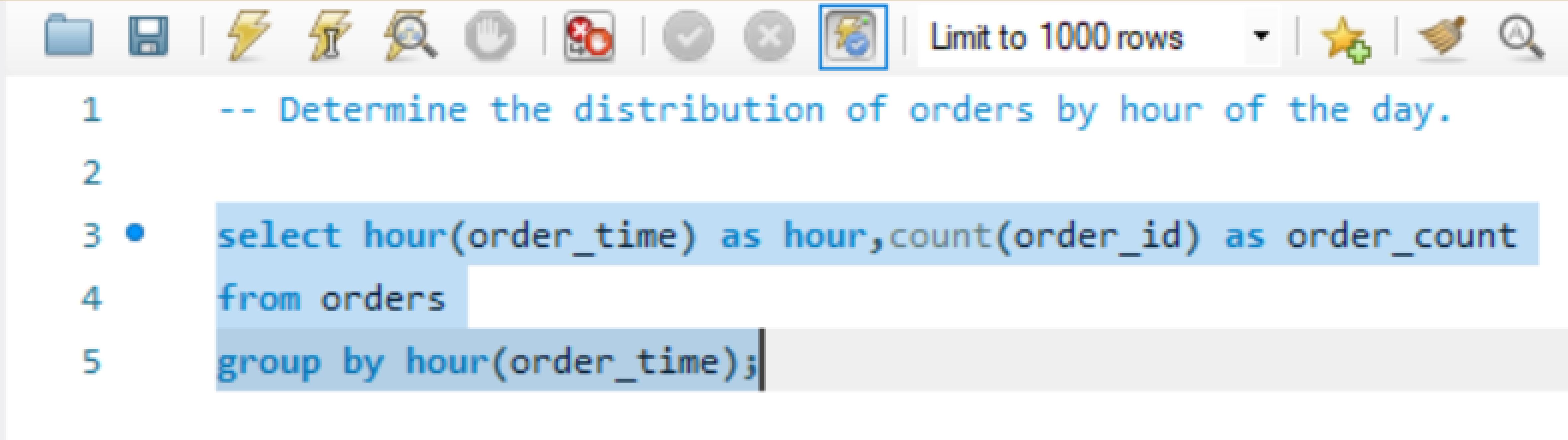
```sql
-- List the top 5 most ordered pizza types along with their quantities.

select pizza_types.name, sum(order_details.quantity) as quantity
from order_details join pizzas
on order_details.pizza_id=pizzas.pizza_id
join pizza_types
on pizzas.pizza_type_id=pizza_types.pizza_type_id
group by pizza_types.name
order by quantity desc limit 5;
```



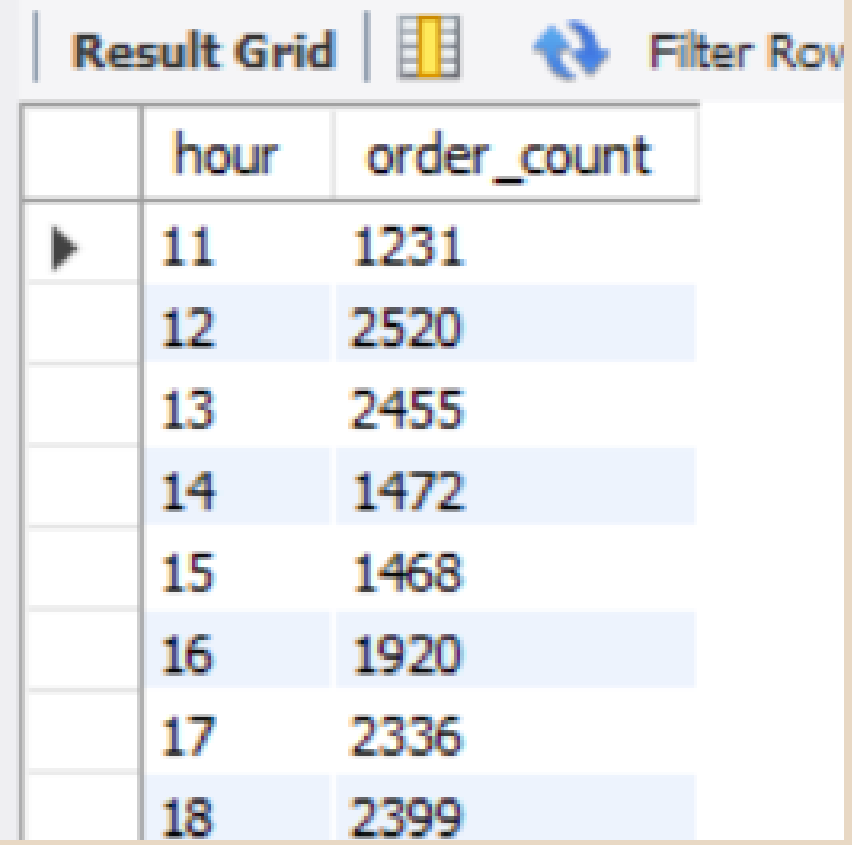
name	quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

Determine the distribution of orders by hour of the day.



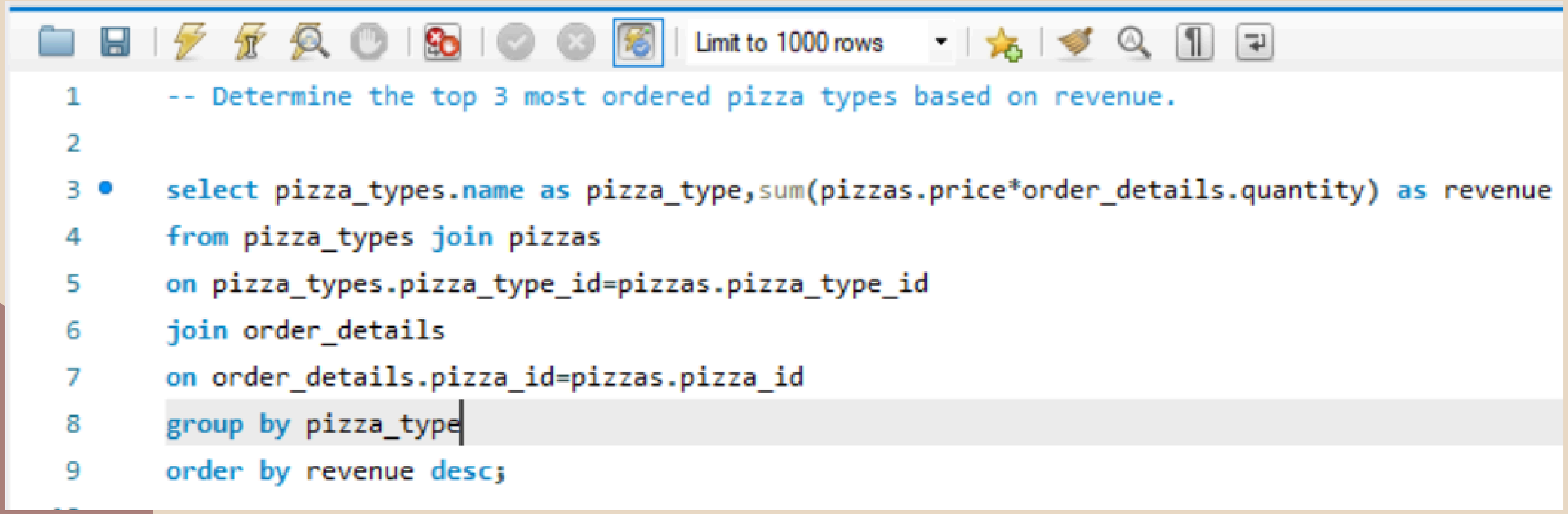
```
-- Determine the distribution of orders by hour of the day.

select hour(order_time) as hour,count(order_id) as order_count
from orders
group by hour(order_time);
```



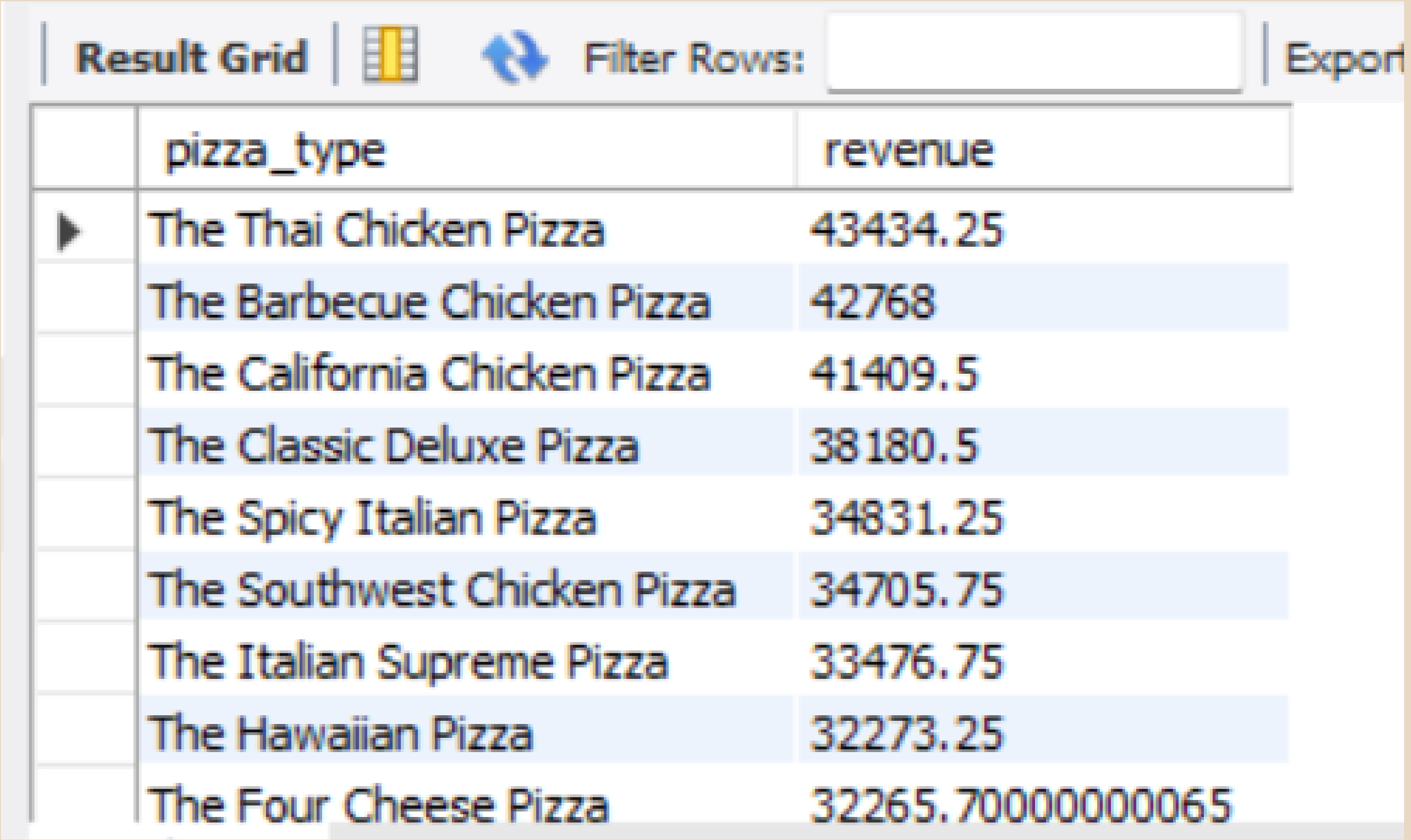
hour	order_count
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399

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



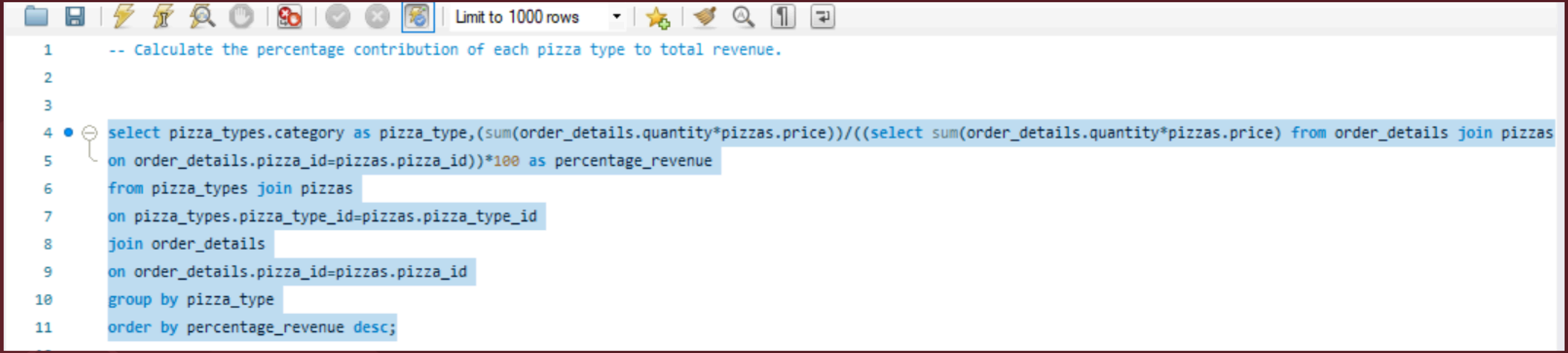
```sql
-- Determine the top 3 most ordered pizza types based on revenue.

select pizza_types.name as pizza_type,sum(pizzas.price*order_details.quantity) 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_type
order by revenue desc;
```



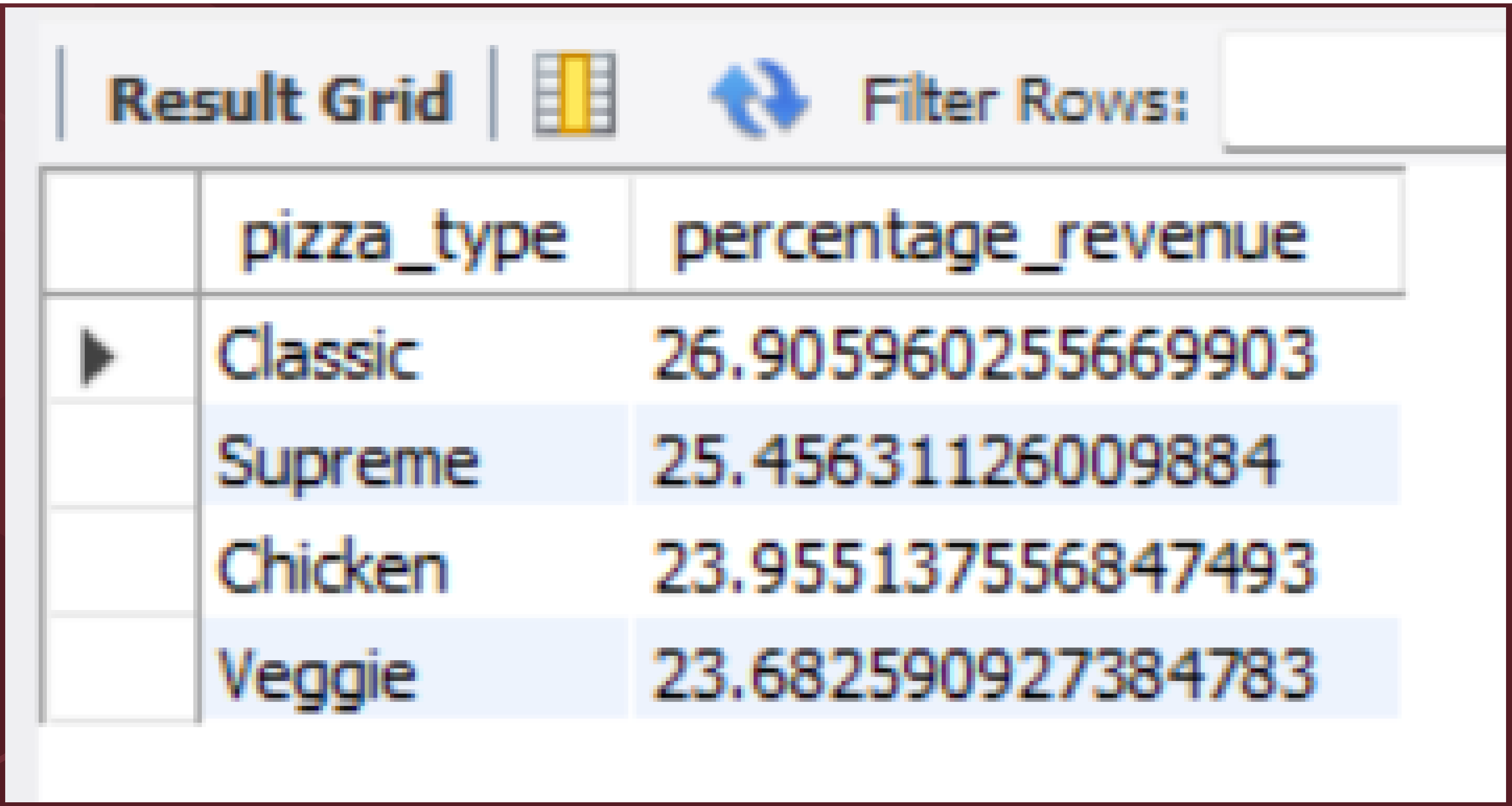
pizza_type	revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5
The Classic Deluxe Pizza	38180.5
The Spicy Italian Pizza	34831.25
The Southwest Chicken Pizza	34705.75
The Italian Supreme Pizza	33476.75
The Hawaiian Pizza	32273.25
The Four Cheese Pizza	32265.70000000065

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



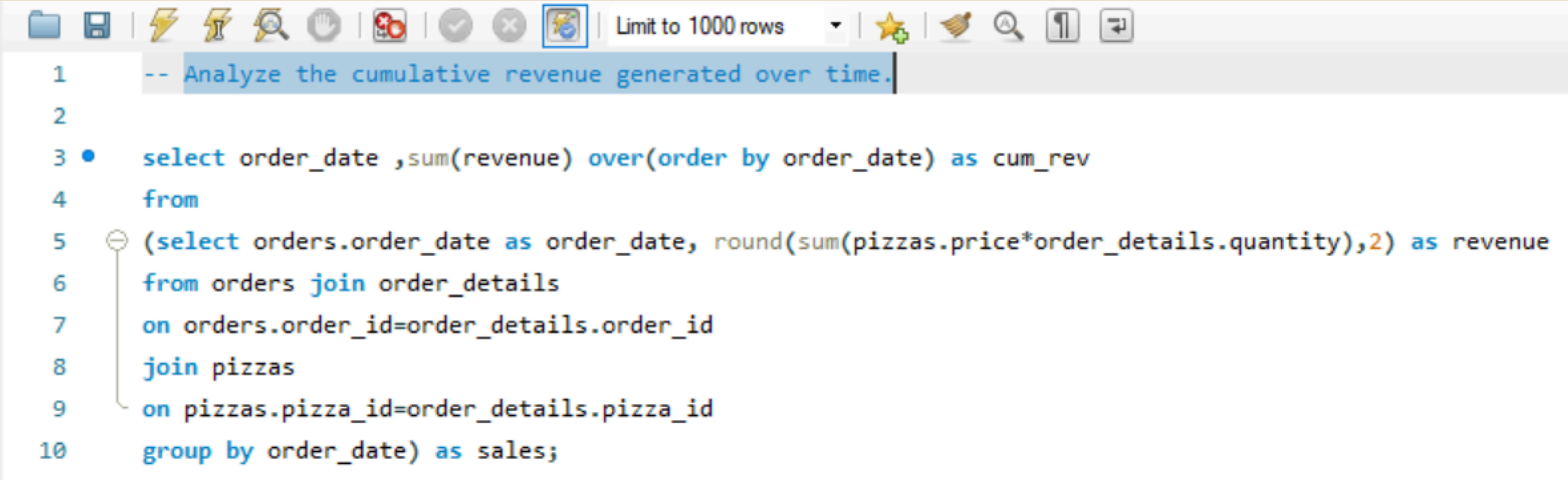
```sql
-- Calculate the percentage contribution of each pizza type to total revenue.


select pizza_types.category as pizza_type,(sum(order_details.quantity*pizzas.price))/((select sum(order_details.quantity*pizzas.price) from order_details join pizzas
on order_details.pizza_id=pizzas.pizza_id))*100 as percentage_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_type
order by percentage_revenue desc;
```



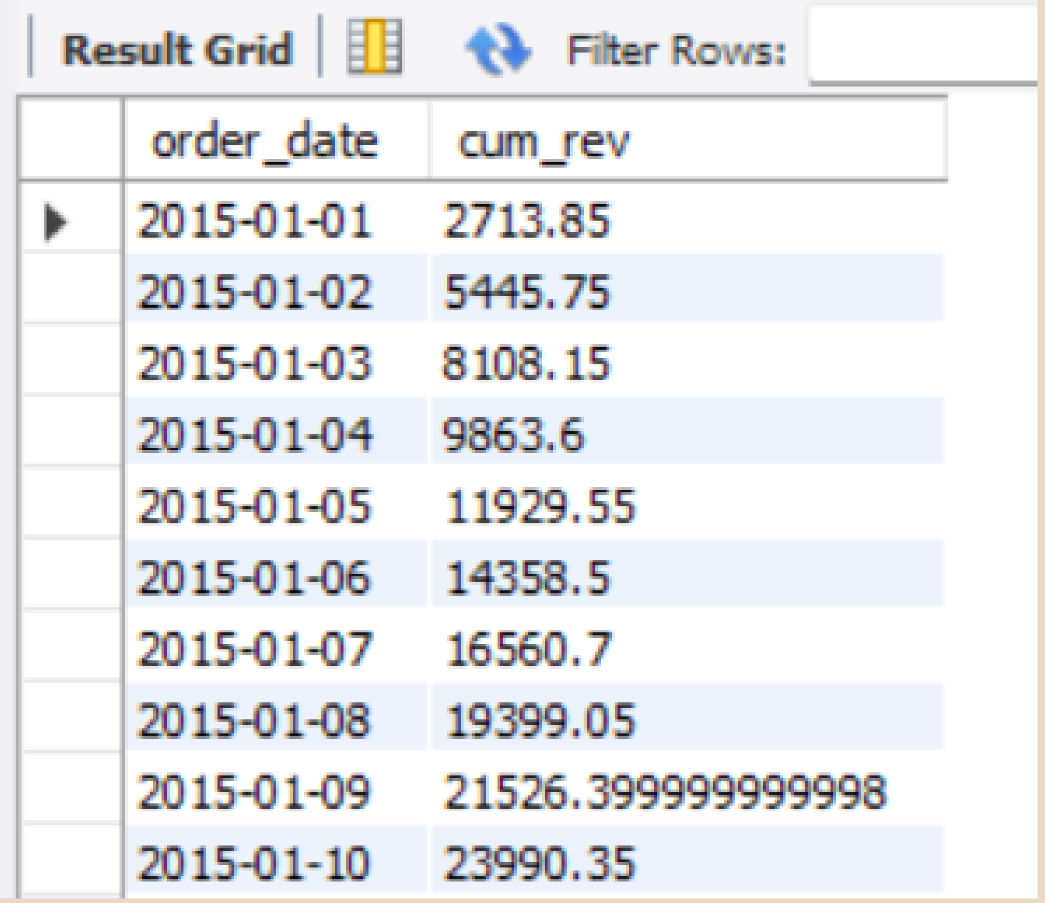
pizza_type	percentage_revenue
Classic	26.90596025569903
Supreme	25.45631126009884
Chicken	23.955137556847493
Veggie	23.682590927384783

Analyze the cumulative revenue generated over time.



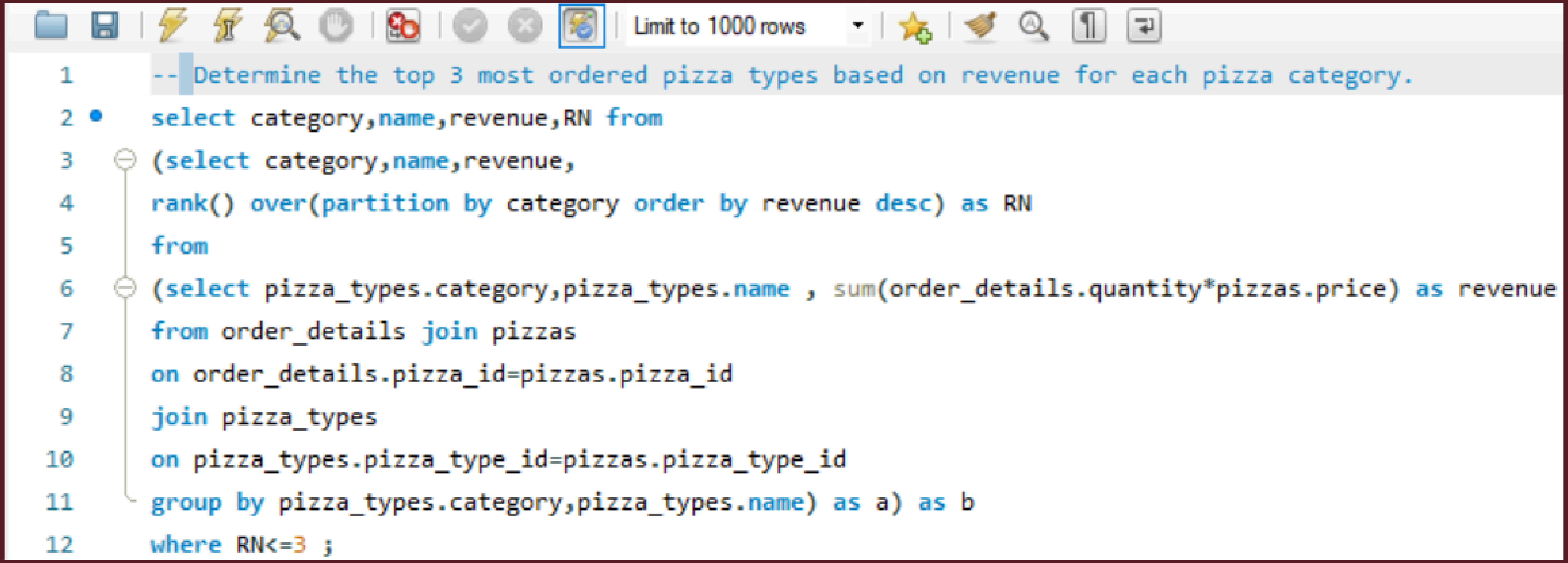
```sql
-- Analyze the cumulative revenue generated over time.

select order_date ,sum(revenue) over(order by order_date) as cum_rev
from
(select orders.order_date as order_date, round(sum(pizzas.price*order_details.quantity),2) as revenue
from orders join order_details
on orders.order_id=order_details.order_id
join pizzas
on pizzas.pizza_id=order_details.pizza_id
group by order_date) as sales;
```

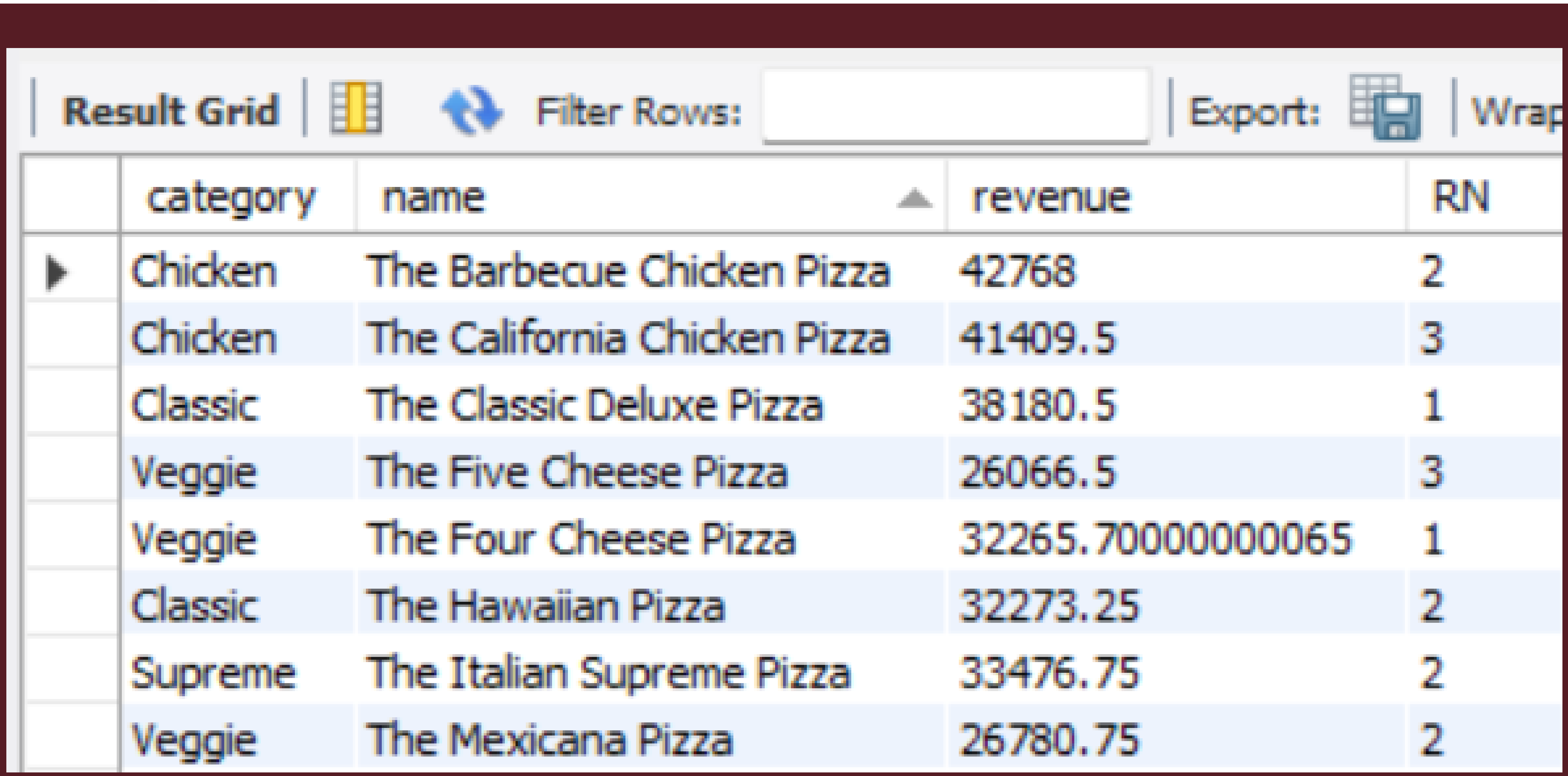


order_date	cum_rev
2015-01-01	2713.85
2015-01-02	5445.75
2015-01-03	8108.15
2015-01-04	9863.6
2015-01-05	11929.55
2015-01-06	14358.5
2015-01-07	16560.7
2015-01-08	19399.05
2015-01-09	21526.399999999998
2015-01-10	23990.35

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



```sql
-- Determine the top 3 most ordered pizza types based on revenue for each pizza category.
select category,name,revenue,RN 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(order_details.quantity*pizzas.price) as revenue
from order_details join pizzas
on order_details.pizza_id=pizzas.pizza_id
join pizza_types
on pizza_types.pizza_type_id=pizzas.pizza_type_id
group by pizza_types.category,pizza_types.name) as a) as b
where RN<=3 ;
```



category	name	revenue	RN
Chicken	The Barbecue Chicken Pizza	42768	2
Chicken	The California Chicken Pizza	41409.5	3
Classic	The Classic Deluxe Pizza	38180.5	1
Veggie	The Five Cheese Pizza	26066.5	3
Veggie	The Four Cheese Pizza	32265.70000000065	1
Classic	The Hawaiian Pizza	32273.25	2
Supreme	The Italian Supreme Pizza	33476.75	2
Veggie	The Mexicana Pizza	26780.75	2

conclusion

In this project, i explored the use of SQL queries to manage and analyze data within a relational database.
The primary objectives were to:

Design and implement a database schema that accurately represents the data requirements.

Develop and execute SQL queries to perform various data operations, including data retrieval, insertion, updating, and deletion.

Analyze the results of these queries to derive meaningful insights.

THANK YOU