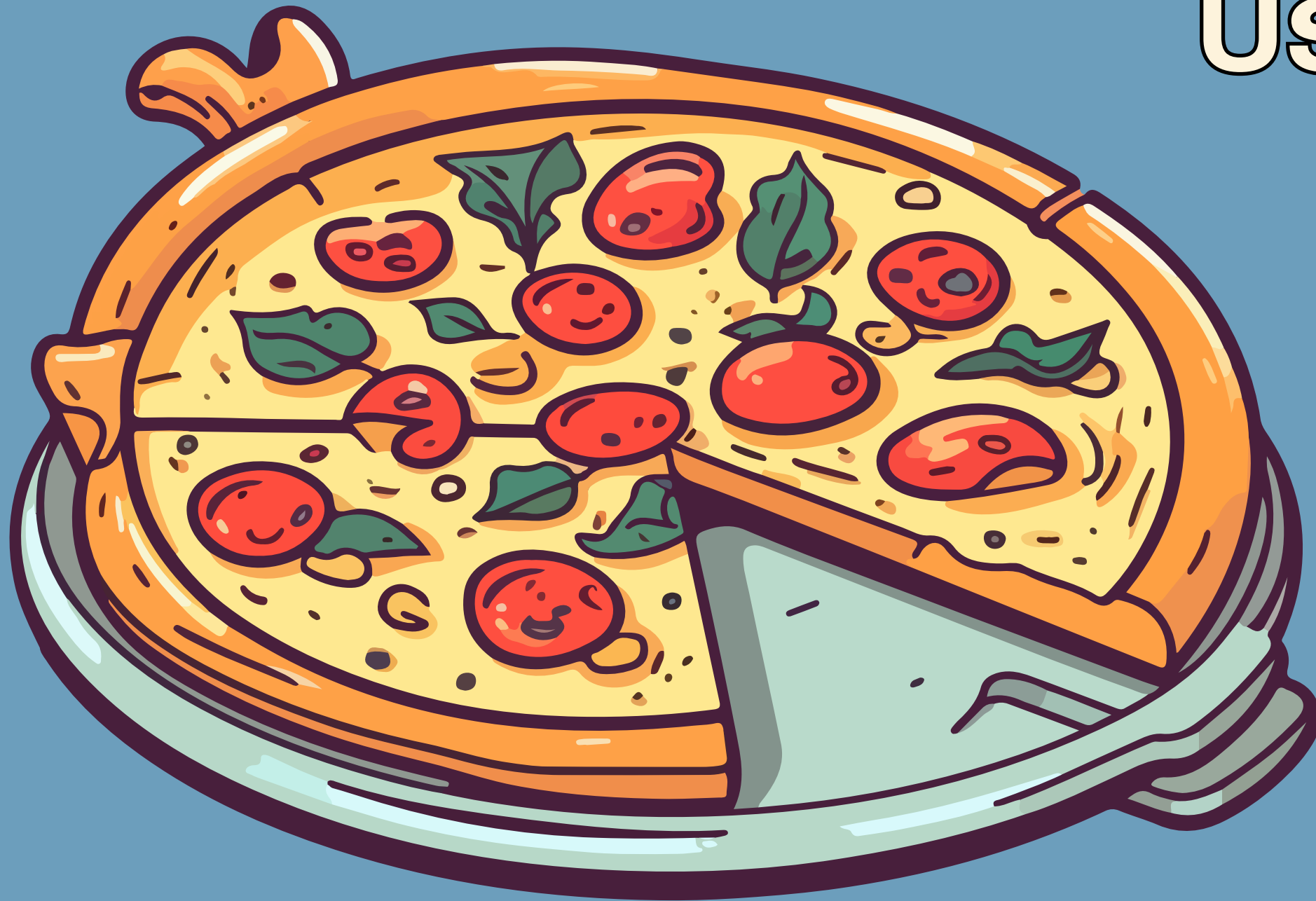


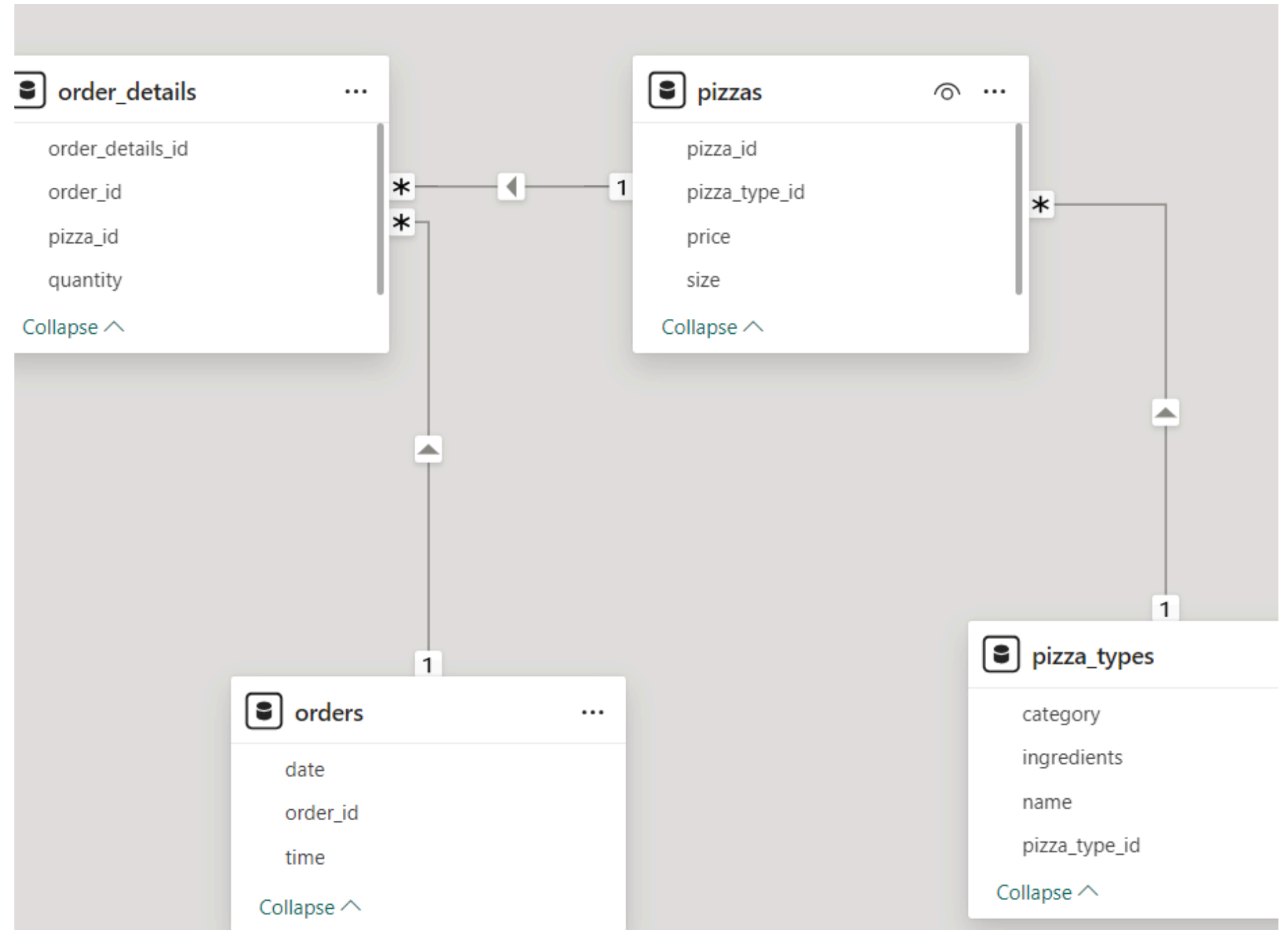
# PIZZA SALES ANALYSIS USING SQL



Welcome! I'm Kaynat, and in this presentation, I'll showcase how SQL queries were used to analyze pizza sales, uncovering insights into performance, customer preferences, and trends.

# 1

# Database Schema Overview Using PowerBI



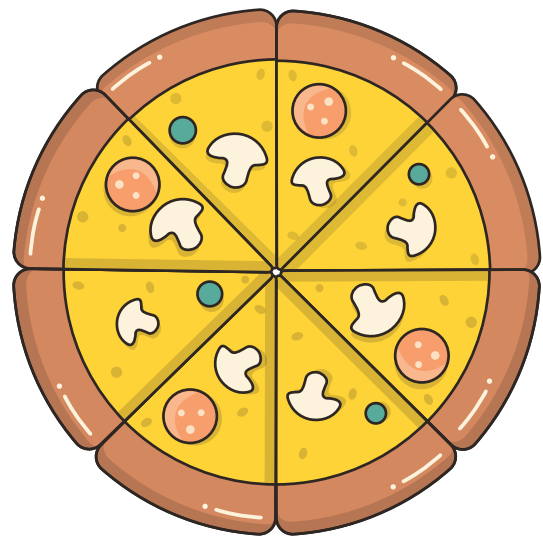
Retrieve the total number of orders placed.

SELECT

COUNT(order\_id) AS total\_orders

FROM

orders;



Result Grid | 

total\_orders



21350

# Calculate the total revenue generated from pizza sales.

SELECT

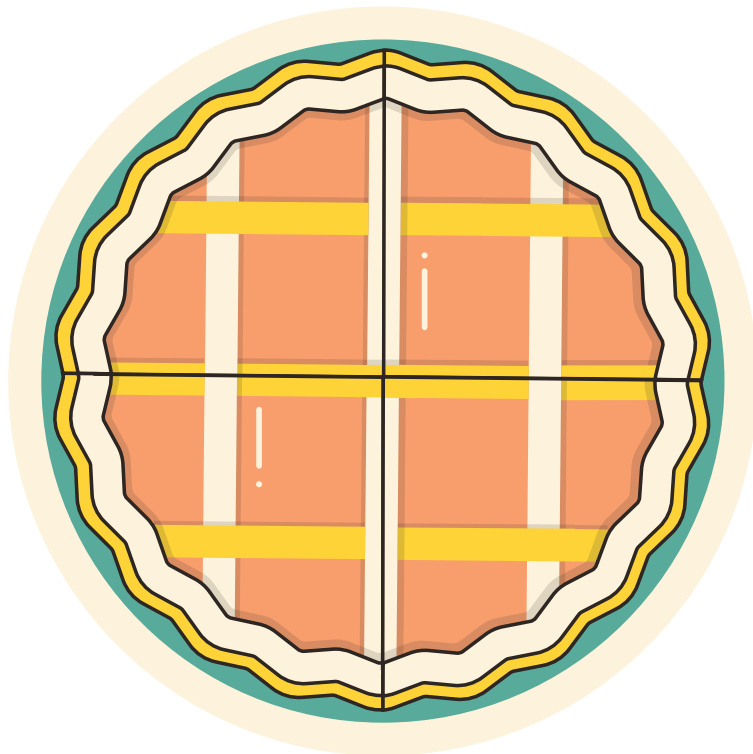
```
ROUND(SUM(order_details.quantity * pizzas.price),  
2) AS total_sales
```

FROM

```
order_details
```

JOIN

```
pizzas ON pizzas.pizza_id = order_details.pizza_id;
```



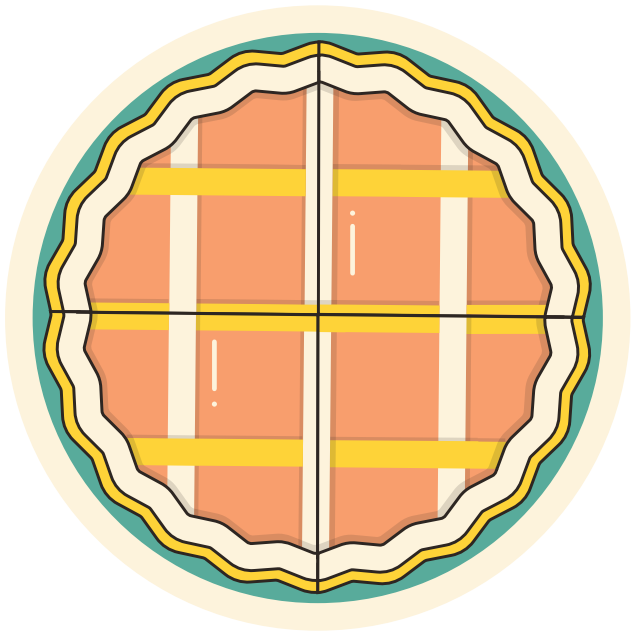
Result Grid



	total_sales
▶	817860.05

# Identify the highest-priced pizza.

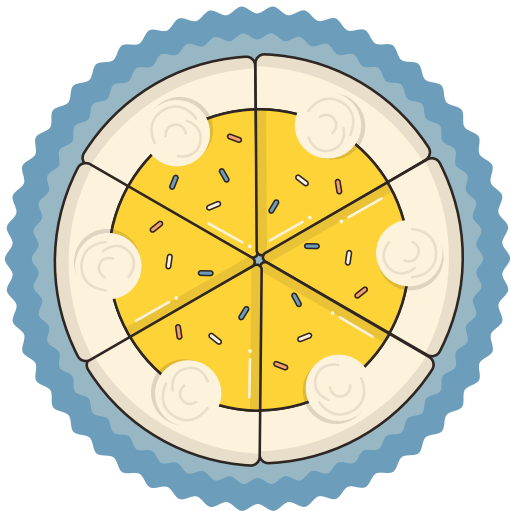
```
SELECT
    pizza_types.name, pizzas.price
FROM
    pizza_types
    JOIN
        pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY pizzas.price DESC
LIMIT 1;
```



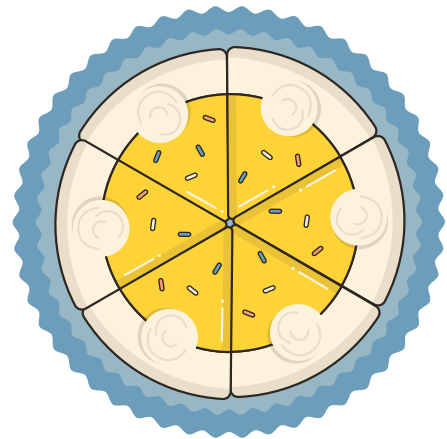
Result Grid			Filter Rows:	
	name	price		
▶	The Greek Pizza	35.95		

# Identify the most common pizza size ordered.

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



Result Grid			Filter Rows:
	size	order_count	
▶	L	18526	
	M	15385	
	S	14137	
	XL	544	
	XXL	28	



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

SELECT

    pizza\_types.name, 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.name

ORDER BY quantity DESC

LIMIT 5;

Result Grid     Filter Rows: <input type="text"/>		
	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
    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;
```

Result Grid			Filter Rows:
	category	quantity	
▶	Classic	14888	
	Supreme	11987	
	Veggie	11649	
	Chicken	11050	



# Determine the distribution of orders by hour of the day.

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



Result Grid			Filter Rows:
	HOUR(order_time)	COUNT(order_id)	
▶	11	1231	
	12	2520	
	13	2455	
	14	1472	
	15	1468	
	16	1920	
	17	2336	
	18	2399	

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

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



Result Grid			Filter Rows:
	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(quantity), 0) as avg_pizza_ordered_per_day
FROM
    (SELECT
        orders.order_date, SUM(order_details.quantity) AS quantity
    FROM
        orders
    JOIN order_details ON orders.order_id = order_details.order_id
    GROUP BY orders.order_date) AS order_quantity;
```

Result Grid		Filter Rows:	
		avg_pizza_ordered_per_day	
▶		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;
```

Result Grid			Filter Rows:
	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
        order_details
        JOIN
            pizzas ON pizzas.pizza_id = order_details.pizza_id) * 100,
        2) 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
ORDER BY revenue DESC;
```

Result Grid					Filter Rows:
	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(order_details.quantity * pizzas.price) as 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 orders.order_date) as sales ;
```

Result Grid			Filter Rows:
	order_date	cum_revenue	
▶	2015-01-01	2713.850000000000004	
	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	

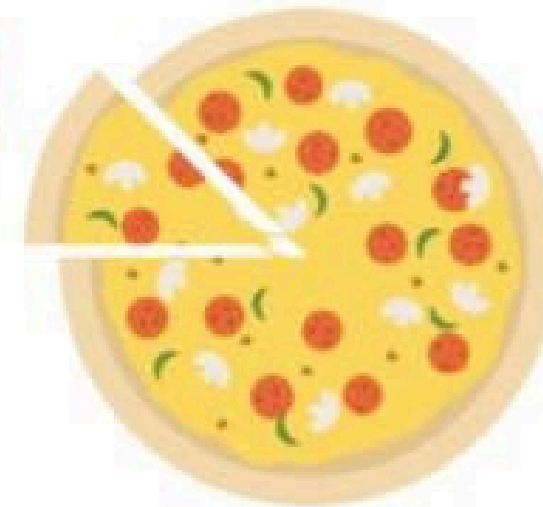
Determine the top 3 most ordered pizza types based on revenue for each pizza category.

```
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((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 ;
```

Result Grid			Filter Rows:
	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	

THANK

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