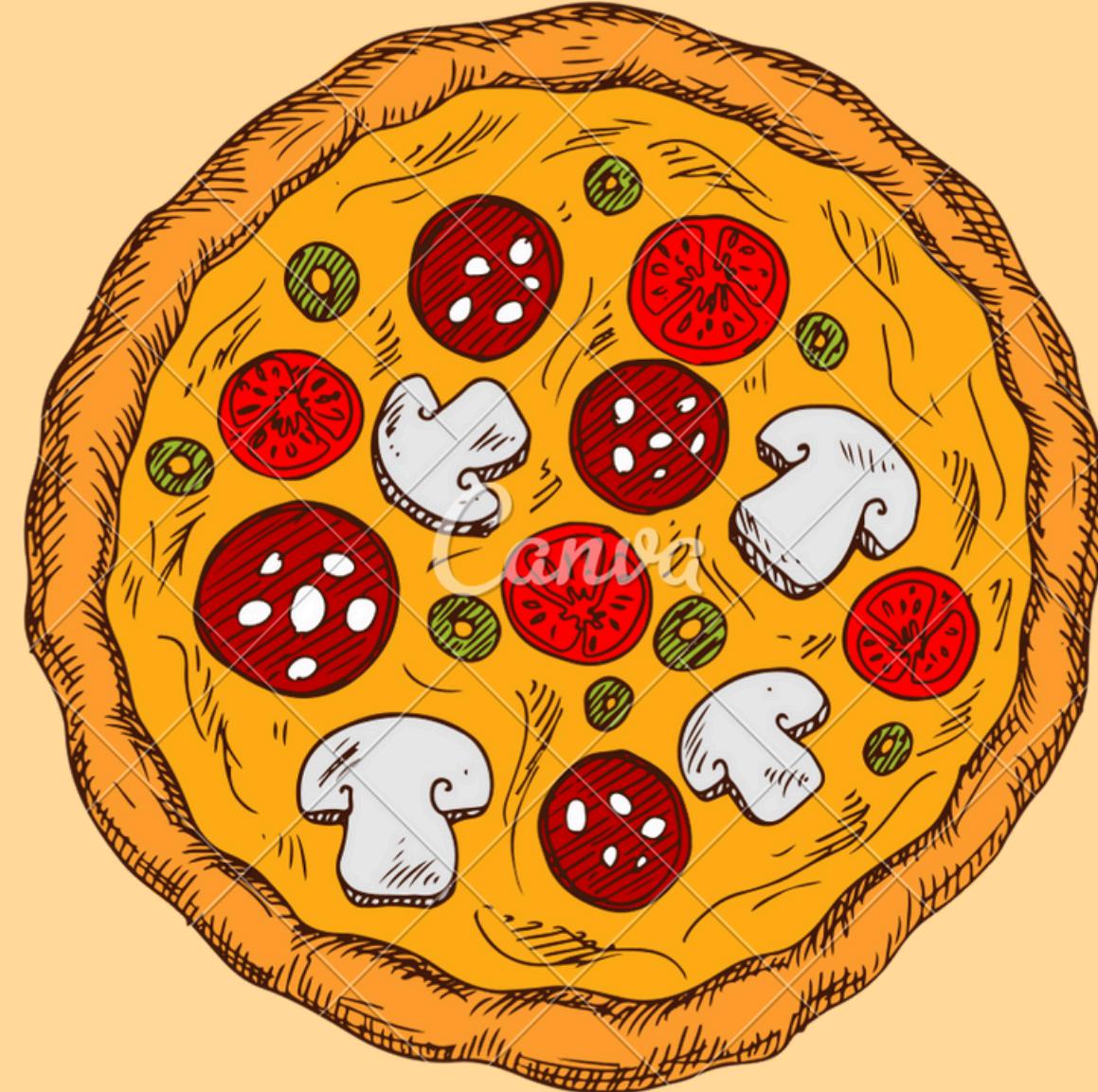


PIZZA SALES ANALYSIS

BY SHIVKANT TIWARI



Hello!

Greetings, I am Shivkant Tiwari, and in this project, I leverage **SQL** to address queries pertaining to a comprehensive Pizza Sales Report. Through **SQL**, I analyze and extract insights from the dataset, focusing on sales trends, customer behavior, and business performance within the pizza industry.



Project's Aim

This **SQL** project on sales analysis aim to leverage data analysis techniques to extract valuable insights from a database, enabling stakeholders to make informed decisions and drive business growth in the competitive pizza industry.

Data Collection

The Dataset was collected in csv format containing four main files:

- **Orders:** information's about the orders placed, including order date and time.
- **Orders_details:** Detailed breakdown of each order, including pizza types and quantity.
- **Pizzas:** Information about pizzas, including price and size.
- **Pizza_types:** categorizes pizzas by ingredients, size, and type.

QUESTIONS

Basic:

- 1-Retrieve the total number of orders placed.
- 2-Calculate the total revenue generated from pizza sales.
- 3- Identify the highest-priced pizza.
- 4- Identify the most common pizza size ordered.
- 5-List the top 5 most ordered pizza types along with their quantities.

Intermediate:

- 1-Join the necessary tables to find the total quantity of each pizza category ordered.
- 2- Determine the distribution of orders by hour of the day.
- 3- Join relevant tables to find the category-wise distribution of pizzas.

Advanced:

- 1- Group the orders by date and calculate the average number of pizzas ordered per day.
- 2- Determine the top 3 most ordered pizza types based on revenue.

Retrieve 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(order_details.quantity * pizzas.price),  
        2) AS total_revenue  
FROM  
    order_details  
    JOIN  
    pizzas ON order_details.pizza_id = pizzas.pizza_id;
```

	total_revenue
▶	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 most common pizza size ordered.

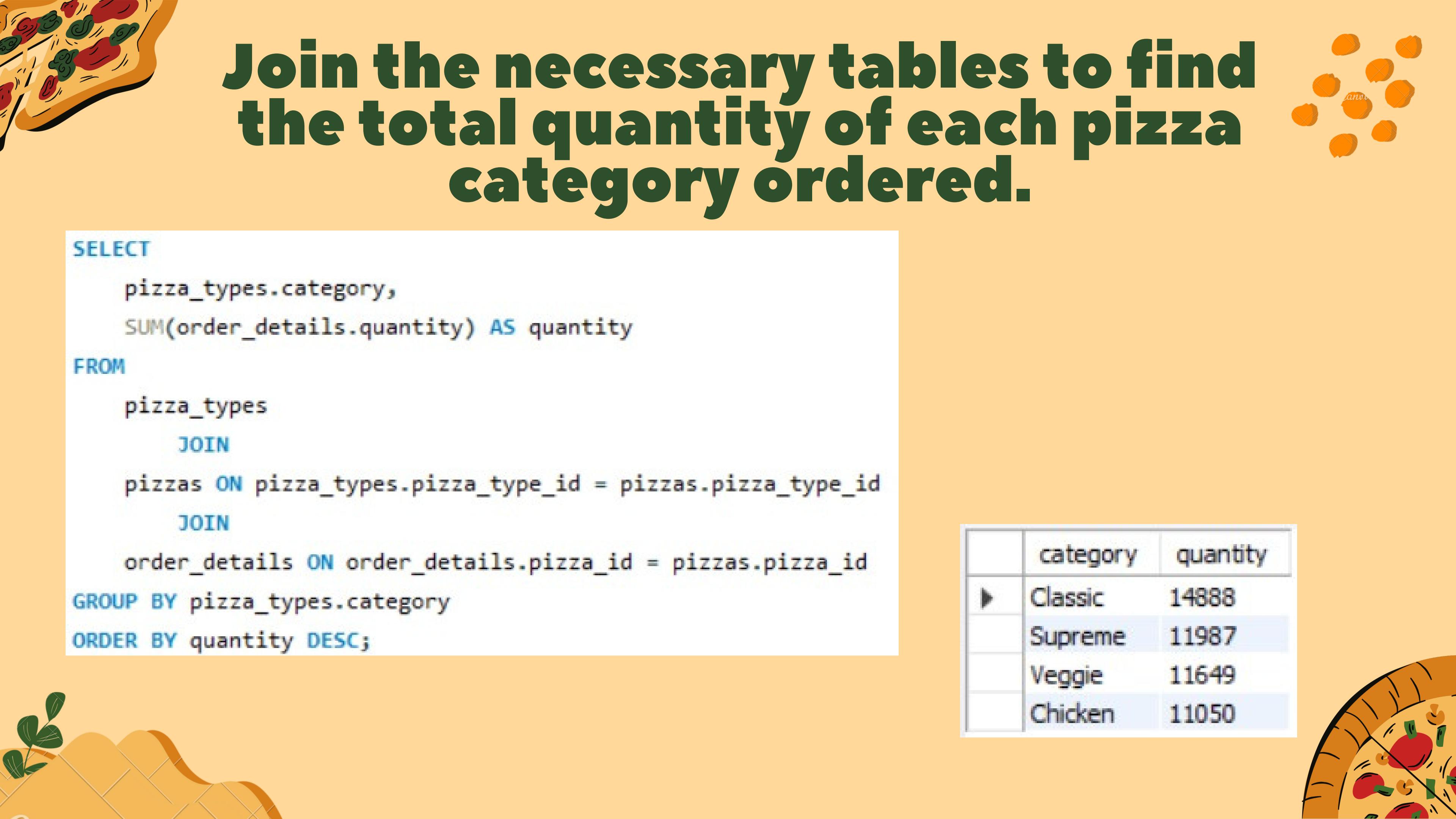
```
SELECT  
    pizzas.size,  
    COUNT(order_details.order_details_id) AS order_count  
FROM  
    pizzas  
        JOIN  
            order_details ON pizzas.pizza_id = order_details.pizza_id  
GROUP BY pizzas.size  
ORDER BY order_count DESC;
```

	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;
```

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.

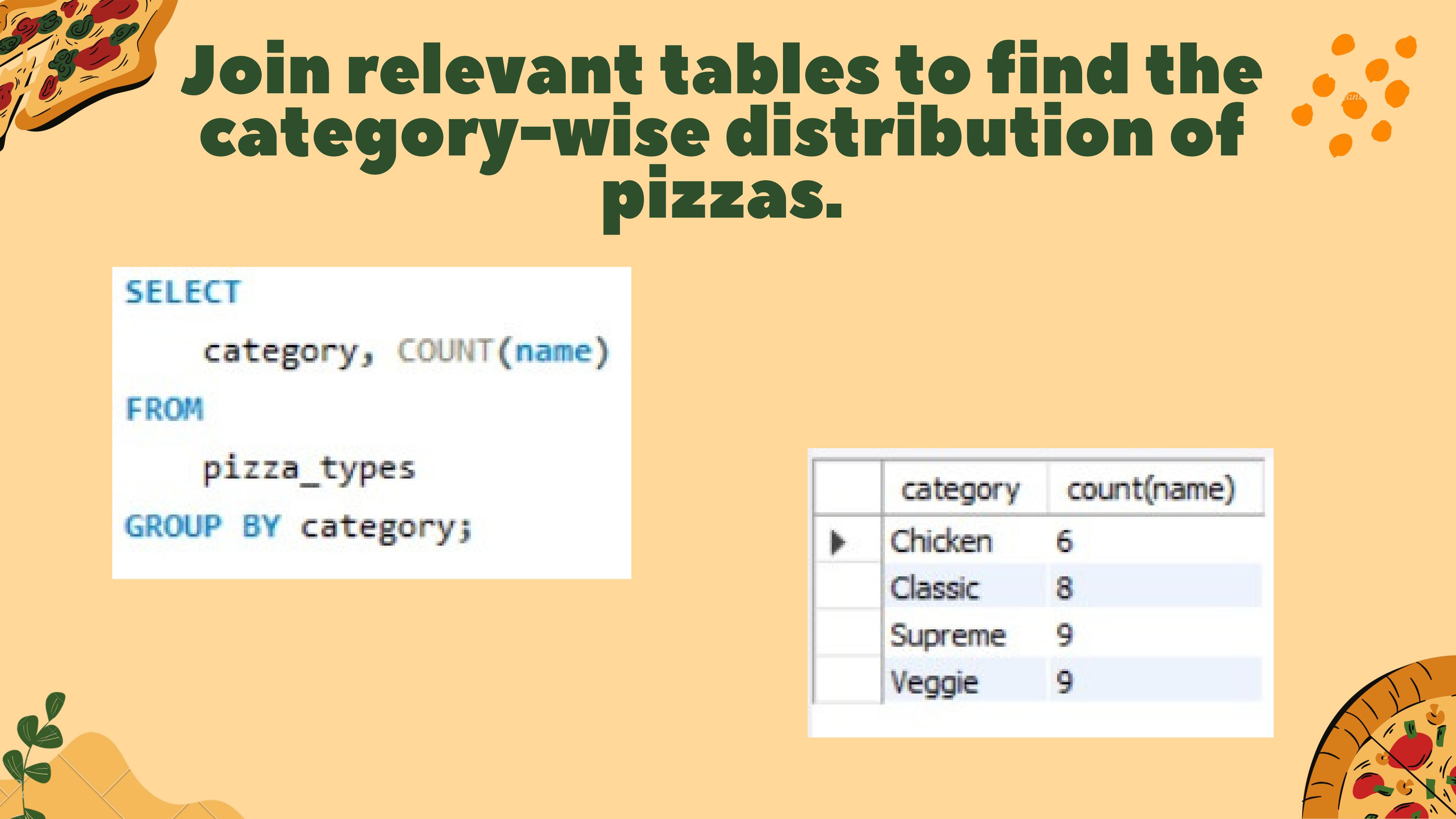
```
SELECT  
    pizza_types.category,  
    SUM(order_details.quantity) AS quantity  
FROM  
    pizza_types  
        JOIN  
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id  
        JOIN  
    order_details ON order_details.pizza_id = pizzas.pizza_id  
GROUP BY pizza_types.category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

	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 order_count  
FROM  
    orders  
GROUP BY HOUR(order_time);
```

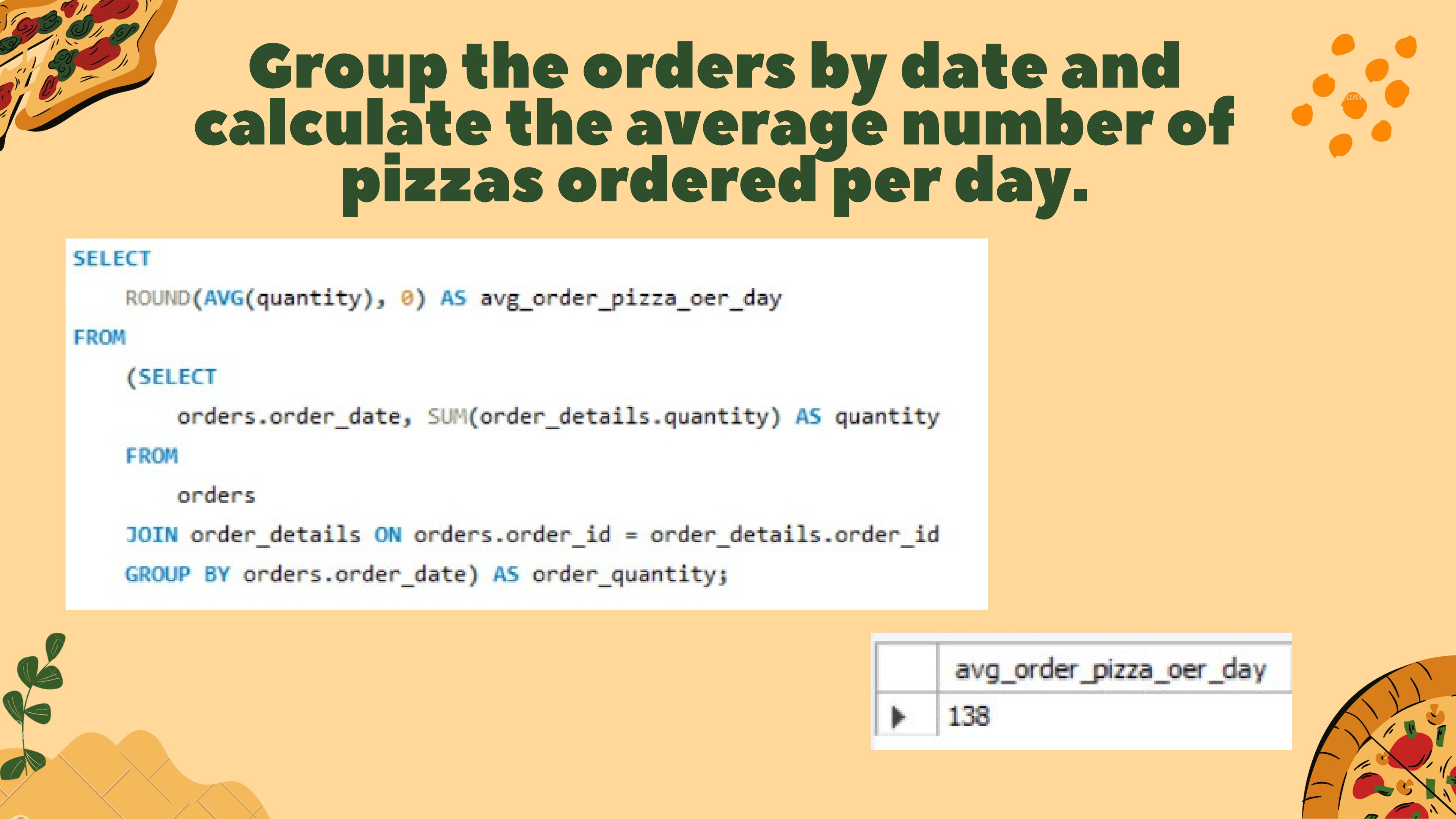
	hour	order_count
▶	11	1231
	12	2520
	13	2455
	14	1472
	15	1468
	16	1920
	17	2336
	18	2399
	19	2009
	20	1642
	21	1198
	22	663
	23	28
	10	8
	9	1



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



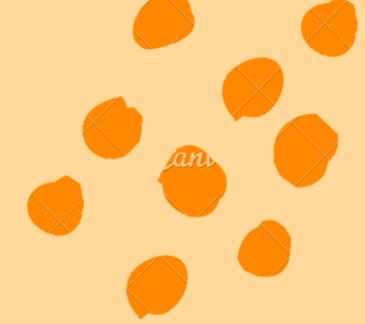
Group the orders by date and calculate the average number of pizzas ordered per day.

```
SELECT  
    ROUND(AVG(quantity), 0) AS avg_order_pizza_oer_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;
```

	avg_order_pizza_oer_day
▶	138



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



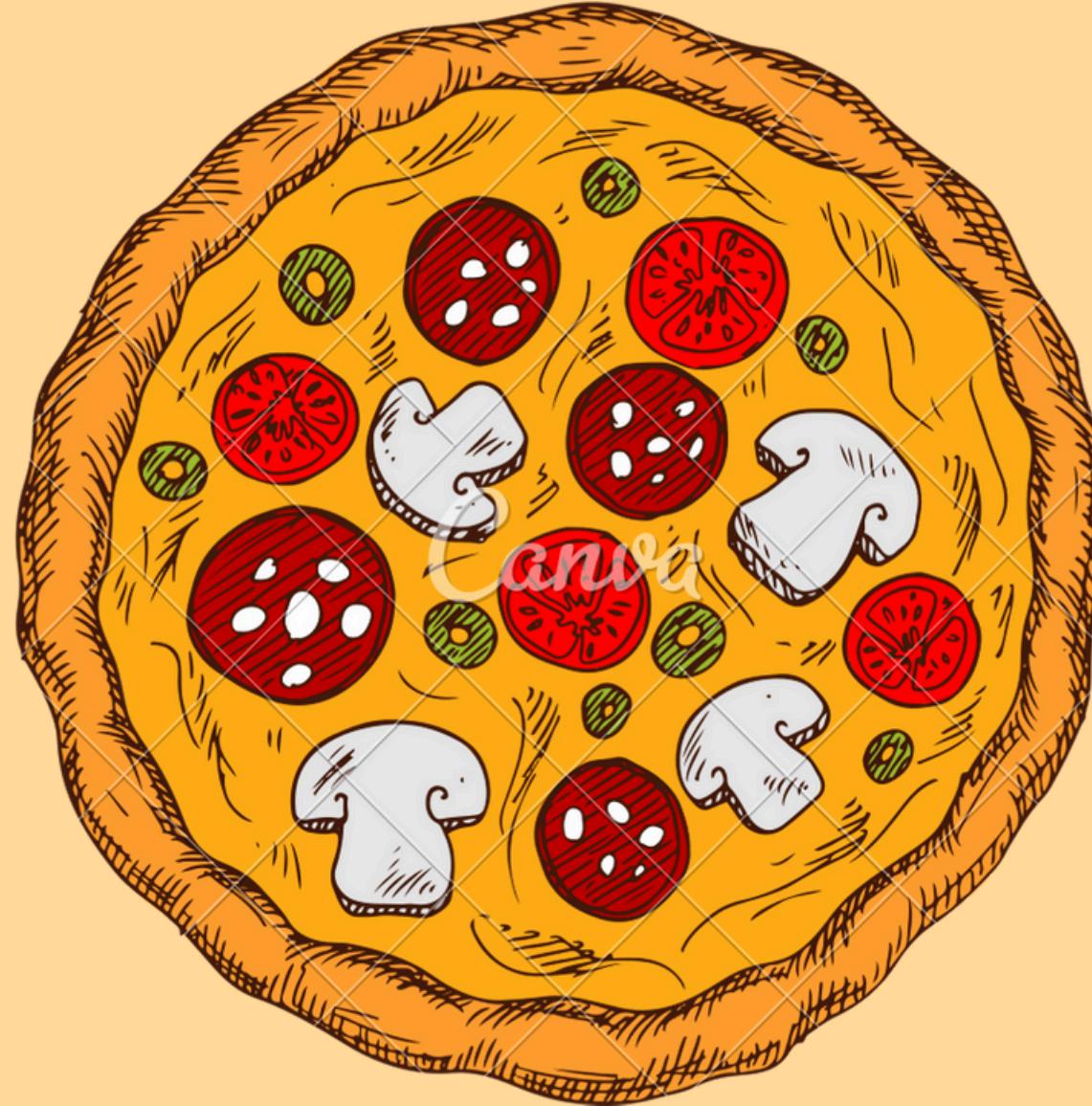
```
SELECT  
    pizza_types.name,  
    SUM(order_details.quantity * pizzas.price) AS revenue  
FROM  
    pizza_types  
        JOIN  
        pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id  
        JOIN  
        order_details ON order_details.pizza_id = pizzas.pizza_id  
GROUP BY pizza_types.name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

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



Recommendations

- 1. focus on classic pizzas**
- 2. optimize inventory for peak hour (12-1 pm and 5-7pm)**
- 3. upsell large sizes**
- 4. Targeting Thai chicken & barbecue chicken to maximize profit.**



Pizza Sales Analysis

**THANK
YOU**

Shivkant Tiwari