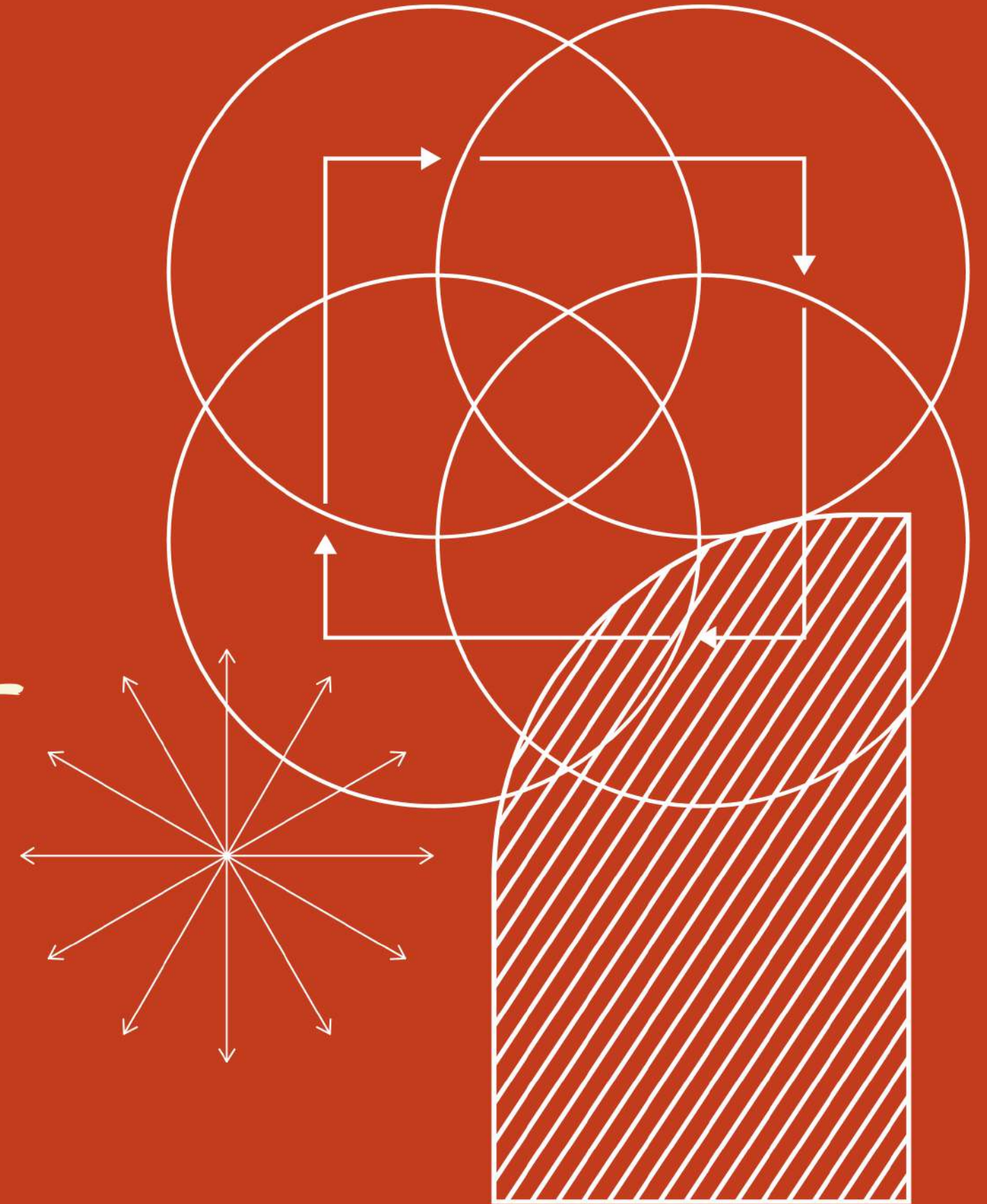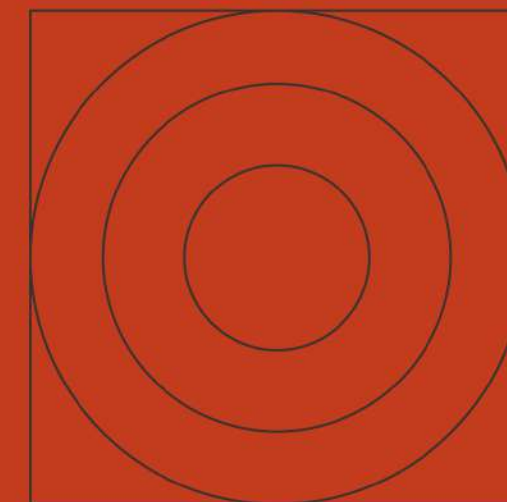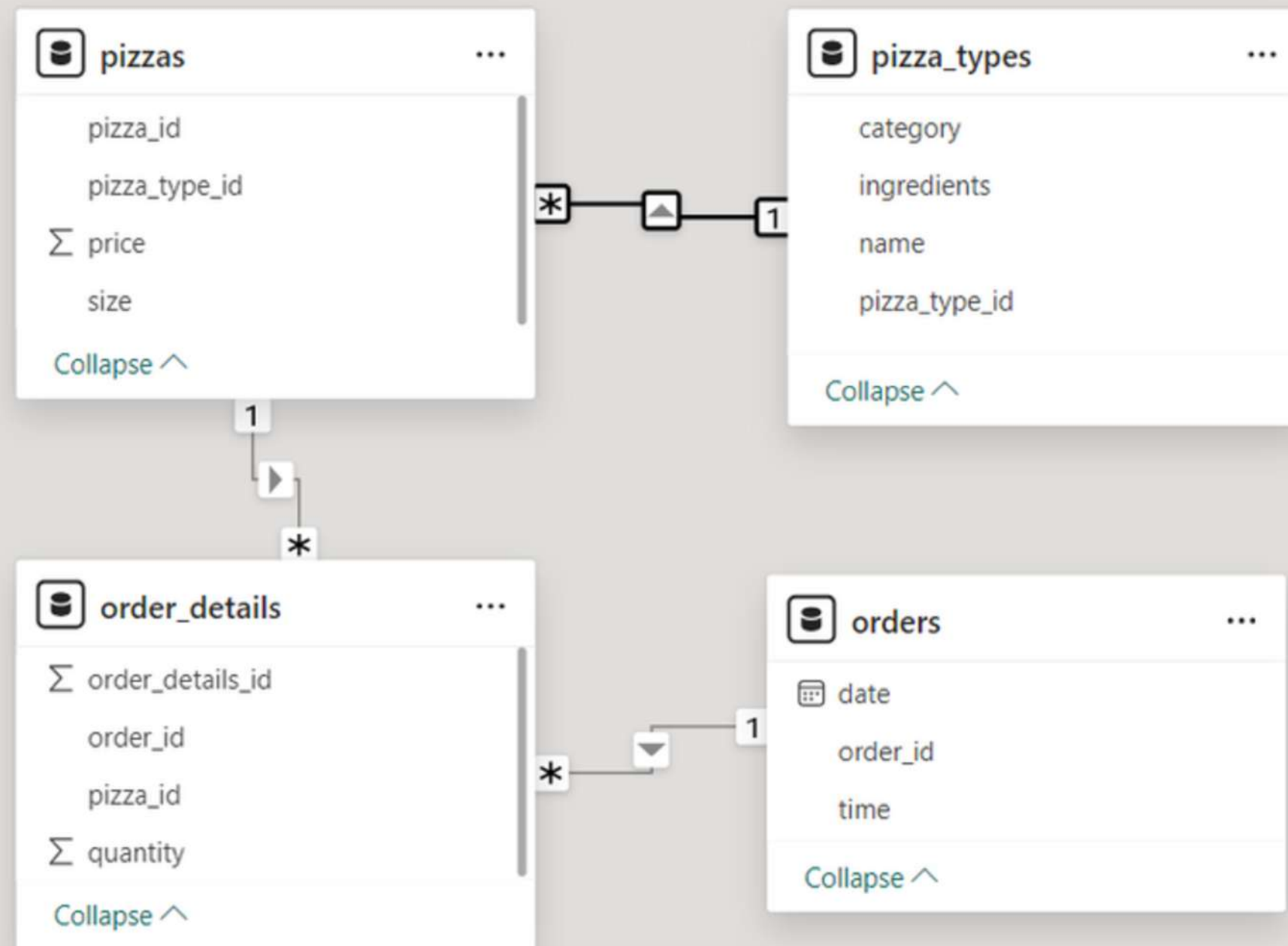# Pizza Sales Analysis

using MySQL

Objective

The objective of this SQL project is to analyze pizza sales data to gain insights into customer behavior and identify popular pizza types. It aims to uncover sales trends and assess overall performance, enabling data-driven decisions to optimize sales strategies and operational efficiency

Database schema

Table Details

- pizzas: The pizza table contains details about pizzas with columns for pizza_id (unique identifier), pizza_type_id (links to pizza_types table), size (e.g., small, medium, large), and price.
- pizza _ types: The pizza_type table lists pizza types with columns for pizza_type_id (unique identifier), nam
- order _ details: The order_details table tracks individual items in orders with columns for order_details_id, order_id, pizza_id, and quantity, linking orders to specific pizzas and their quantities.e, category (e.g., vegetarian, meat), and ingredients (list of ingredients).
- orders: The orders table records order information with columns for order_id (unique identifier), date (order date), and time (order time).

Total revenue generated from pizza sales.

```
10
11  ●  SELECT
12         ROUND(SUM(p.price * od.quantity), 2) AS total_revenue
13  FROM
14         pizzas p
15             JOIN
16      order_details od ON p.pizza_id = od.pizza_id;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: IA

total_revenue
817860.05

Top 5 most ordered pizza types along with their quantities

```sql
54 ● SELECT
55     pt.name,
56     COUNT(od.order_details_id) AS order_count,
57     SUM(od.quantity) AS order_quantity
58 FROM
59     pizza_types pt
60         JOIN
61     pizzas p ON pt.pizza_type_id = p.pizza_type_id
62         JOIN
63     order_details od ON p.pizza_id = od.pizza_id
64 GROUP BY pt.name
65 ORDER BY order_count DESC
66 LIMIT 5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Co

name	order_count	order_quantity
The Classic Deluxe Pizza	2416	2453
The Barbecue Chicken Pizza	2372	2432
The Hawaiian Pizza	2370	2422
The Pepperoni Pizza	2369	2418
The Thai Chicken Pizza	2315	2371

Most common pizza size ordered

```
42 ●   SELECT
43         p.size, COUNT(od.order_details_id) AS order_count
44     FROM
45         pizzas p
46             JOIN
47         order_details od ON p.pizza_id = od.pizza_id
48     GROUP BY p.size
49     ORDER BY order_count DESC
50     limit 1;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

size	order_count
L	18526

Total quantity of each pizza category ordered

```sql
6  •     SELECT
7              pt.category, SUM(od.quantity) AS quantity_ordered
8        FROM
9              pizza_types pt
10                 JOIN
11             pizzas p ON pt.pizza_type_id = p.pizza_type_id
12                 JOIN
13             order_details od ON p.pizza_id = od.pizza_id
14        GROUP BY pt.category
15        ORDER BY quantity_ordered DESC;
```
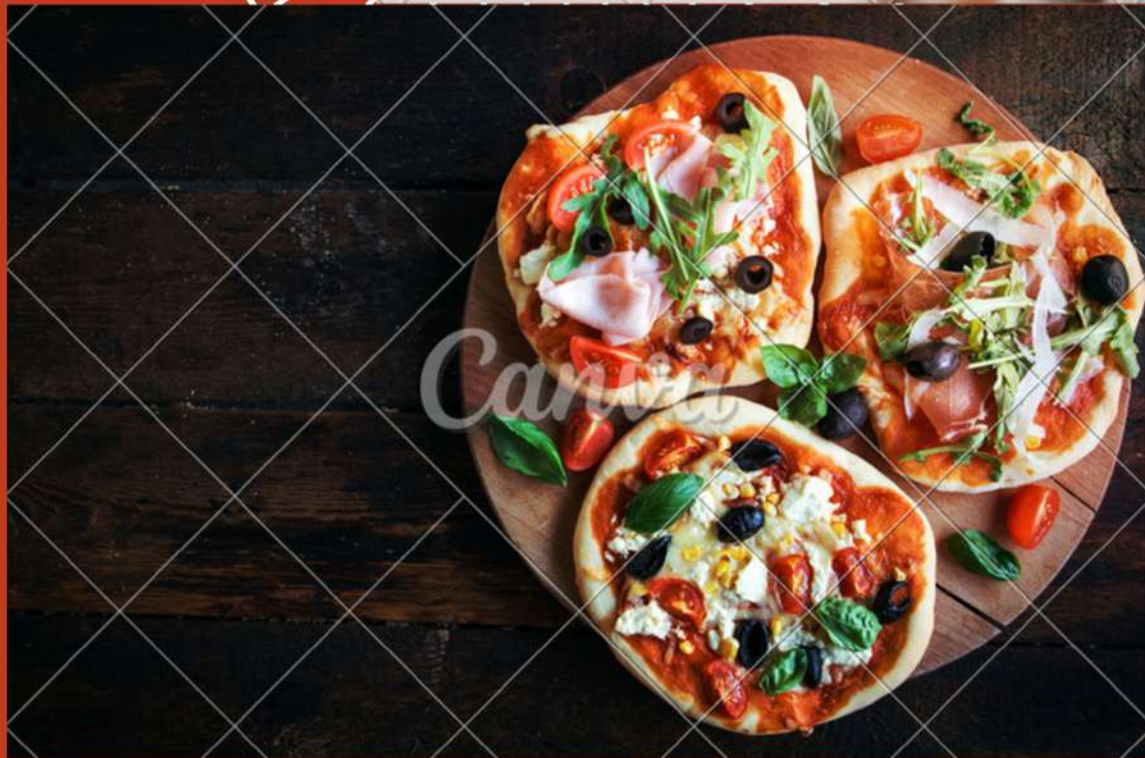
esult Grid | 🗏 | 🔁 Filter Rows: | Export: 🖫 | Wrap Cell Content:

category	quantity_ordered
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

Top 3 most ordered pizza types based on revenue


```sql
SELECT
    pt.name AS pizza_name,
    ROUND(SUM(p.price * od.quantity), 2) AS revenue
FROM
    pizza_types pt
        JOIN
    pizzas p ON pt.pizza_type_id = p.pizza_type_id
        JOIN
    order_details od ON p.pizza_id = od.pizza_id
GROUP BY pizza_name
ORDER BY revenue DESC
Limit 3;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

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

% contribution of each pizza type to total revenue

```sql
SELECT
    pt.name AS pizza_name,
    pt.category AS category,
    ROUND(SUM(p.price * od.quantity) / total_revenue * 100,
        2) AS percentage_contribution
FROM
    pizza_types pt
        JOIN
    pizzas p ON pt.pizza_type_id = p.pizza_type_id
        JOIN
    order_details od ON p.pizza_id = od.pizza_id
        JOIN
    (SELECT
        SUM(p.price * od.quantity) AS total_revenue
    FROM
        pizzas p
    JOIN order_details od ON p.pizza_id = od.pizza_id) AS tr
GROUP BY pt.pizza_type_id , pt.name , pt.category, tr.total_reve
ORDER BY percentage_contribution DESC;
```

t Grid | ▦ | ⟳ Filter Rows: | Export: ▦ | Wra

pizza_name	category	percentage_contribution
ne Thai Chicken Pizza	Chicken	5.31
ne Barbecue Chicken Pizza	Chicken	5.23
ne California Chicken Pizza	Chicken	5.06
ne Classic Deluxe Pizza	Classic	4.67
ne Spicy Italian Pizza	Supreme	4.26
ne Southwest Chicken Pizza	Chicken	4.24

Total quantity of each pizza category ordered

```sql
6  ●     SELECT
7            pt.category, SUM(od.quantity) AS quantity_ordered
8        FROM
9            pizza_types pt
10               JOIN
11           pizzas p ON pt.pizza_type_id = p.pizza_type_id
12               JOIN
13           order_details od ON p.pizza_id = od.pizza_id
14       GROUP BY pt.category
15       ORDER BY quantity_ordered DESC;
```
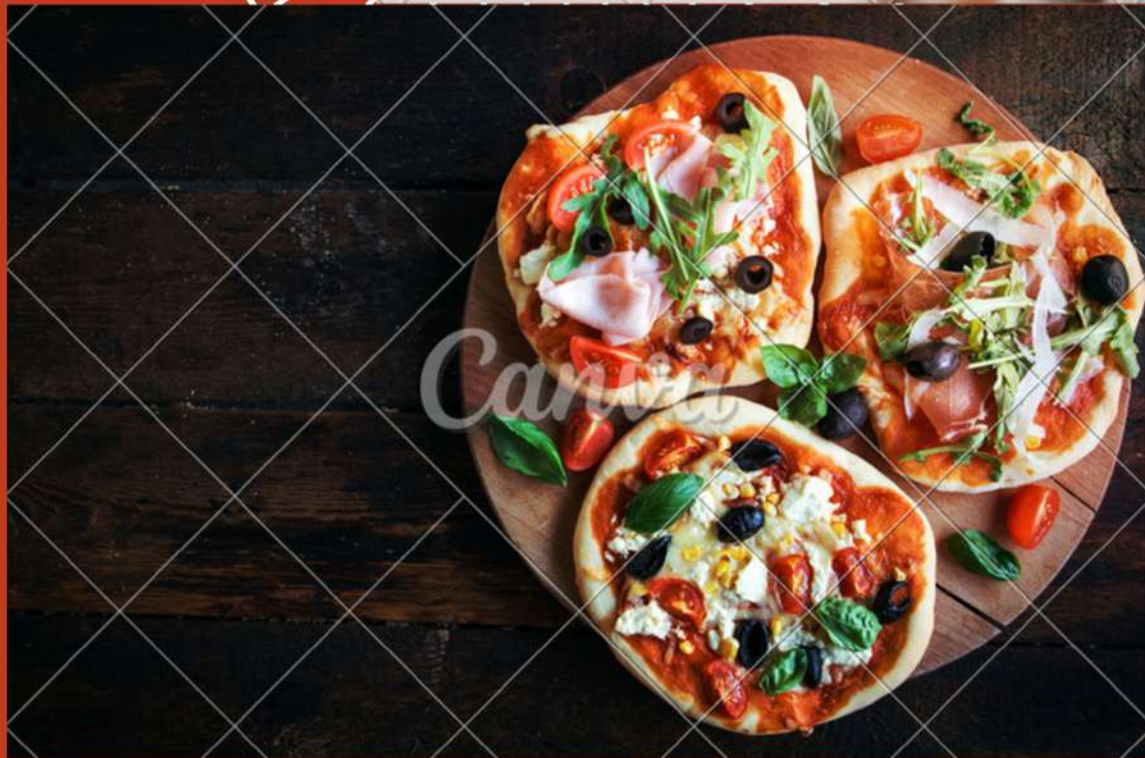
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

category	quantity_ordered
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

Average number of pizzas ordered per day

```sql
54  ●     SELECT
55            DATE(order_date) AS order_date,
56            ROUND(AVG(total_quantity), 0) AS avg_orders_per_day
57        FROM
58            (SELECT
59                DATE(order_date) AS order_date,
60                    SUM(od.quantity) AS total_quantity
61            FROM
62                orders o
63            JOIN order_details od ON o.order_id = od.order_id
64            GROUP BY order_date
65            ORDER BY order_date) AS daily_orders
66        GROUP BY order_date;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

order_date	avg_orders_per_day
2015-01-01	162
2015-01-02	165
2015-01-03	158
2015-01-04	106
2015-01-05	125
2015-01-06	147

INSIGHTS

- Total Orders and Revenue: The store received a total of 21,350 orders, generating a total revenue of $ 8,17,860.05.
- Highest Priced Pizza: The Greek pizza is the most expensive, priced at $ 35.95. Most Common Pizza Size: The large pizza size ("L") is the most popular, with 18,526 orders.
- Most Ordered Pizza Category: The classic pizza category leads in popularity with 14,888 orders.
- Peak Ordering Hours: The busiest times for orders are between 12 PM and 1 PM.
- Average Pizzas Ordered Per Day: On average, 138 pizzas are ordered daily at the store.
- Top Ordered Pizza by Revenue: The Thai Chicken pizza generated the highest revenue, totaling $ 43,434.25.
- Revenue Contribution: Classic pizza dominates the total revenue with $ 2,20,053.10, accounting for a contribution of 26.91%

Thank You