PIZZA SALES ANALYSIS

Data Model

pizzahut order_details
- $\sum$ order_details_id
- order_id
- pizza_id
- $\sum$ quantity
- Collapse ∧

pizzahut pizza_types
- category
- ingredients
- name
- pizza_type_id
- Collapse ∧

pizzahut orders
- order_date
- order_id
- order_time
- Collapse ∧
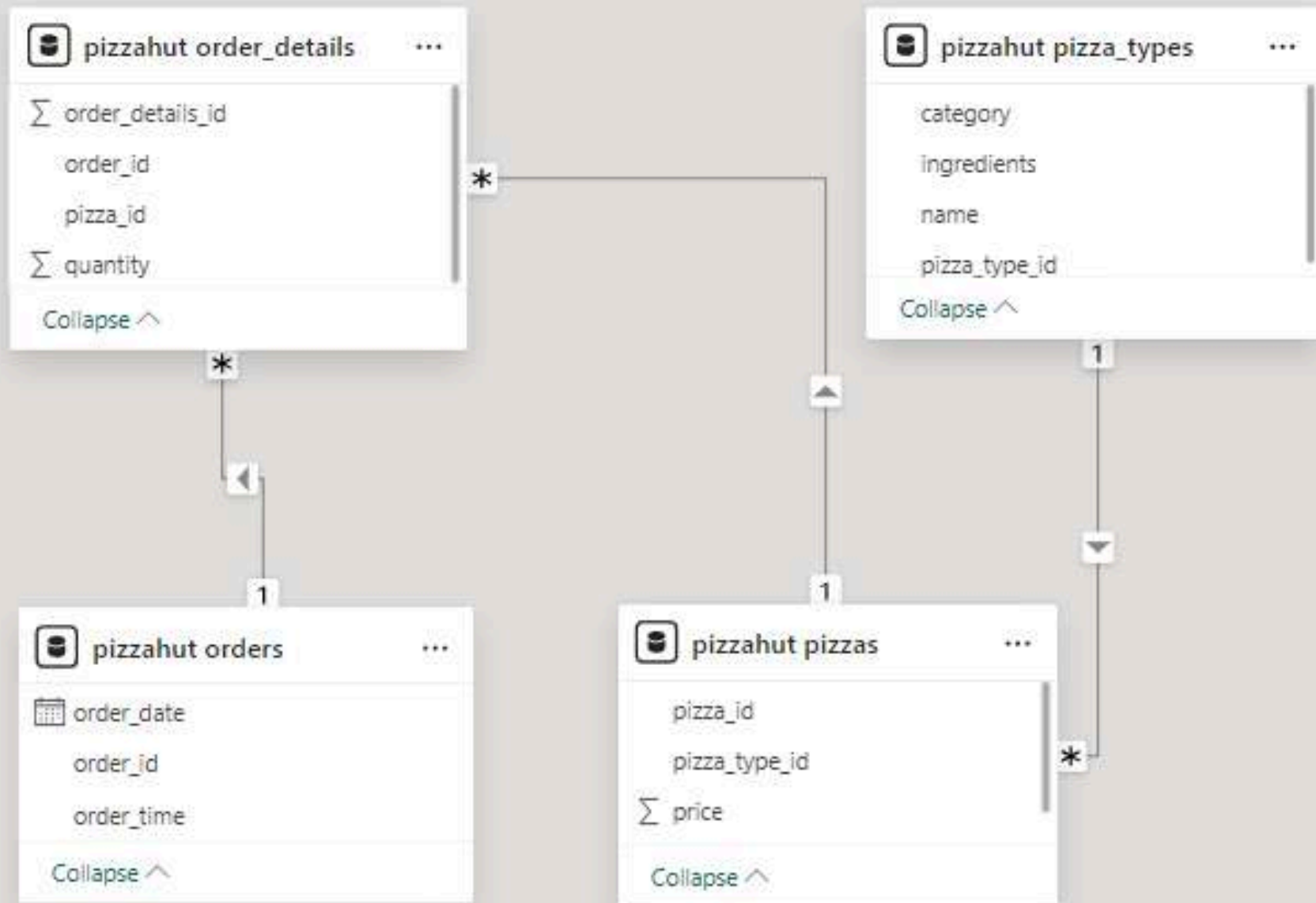
pizzahut pizzas
- pizza_id
- pizza_type_id
- $\sum$ price
- Collapse ∧

Basic Queries

Retrieve the total number of orders placed.

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

The result shows that there are 21,350 orders placed.

Result Grid

total_orders
21350

Calculate the total revenue generated from pizza sales.

```sql
SELECT
    ROUND(SUM(order_details.quantity * pizzas.price),
        2) AS total_revenue
FROM
    order_details
        JOIN
    pizzas ON pizzas.pizza_id = order_details.pizza_id;
```

The total revenue generated from pizza sales is 817,860.05.

Result Grid

	total_revenue
▶	817860.05

Identify the highest-priced pizza.

```sql
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
name		price
The Greek Pizza		35.95

Most Common Pizza Size Ordered: The Greek Pizza (35.95)

Identify the most common pizza size ordered.

```
    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

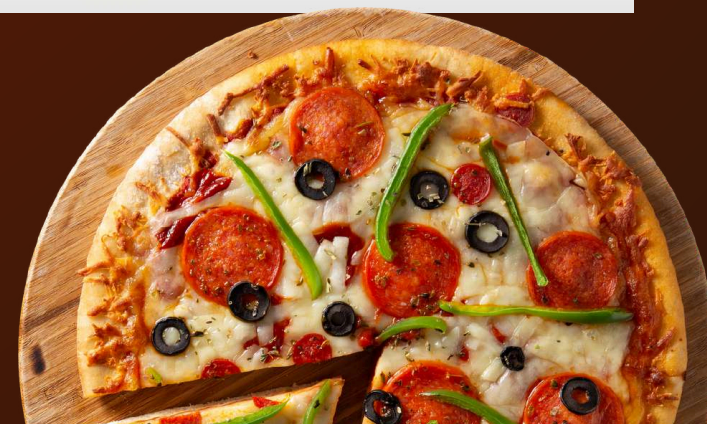| size	order_count
L	18526
M	15385
S	14137

Most Common Pizza Size Ordered: Large (L) with 18,526 orders

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

```sql
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;
```

The most ordered pizza types are The Classic Deluxe Pizza with 2,453 orders, followed by The Barbecue Chicken Pizza at 2,432, The Hawaiian Pizza at 2,422, The Pepperoni Pizza at 2,418, and The Thai Chicken Pizza at 2,371.

name	quantity
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	243 2453
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371

Intermediate Queries

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

```sql
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 category
ORDER BY quantity DESC;
```

Result Grid

category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

The query results show the total quantities ordered for each pizza category: Classic (14,888), Supreme (11,987), Veggie (11,649), and Chicken (11,050).

Determine the distribution of orders by hour of the day.

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

The distribution of orders by hour of the day shows peaks at 12 PM with 2,520 orders and 5 PM with 2,336 orders, reflecting typical mealtime patterns.

Result Grid

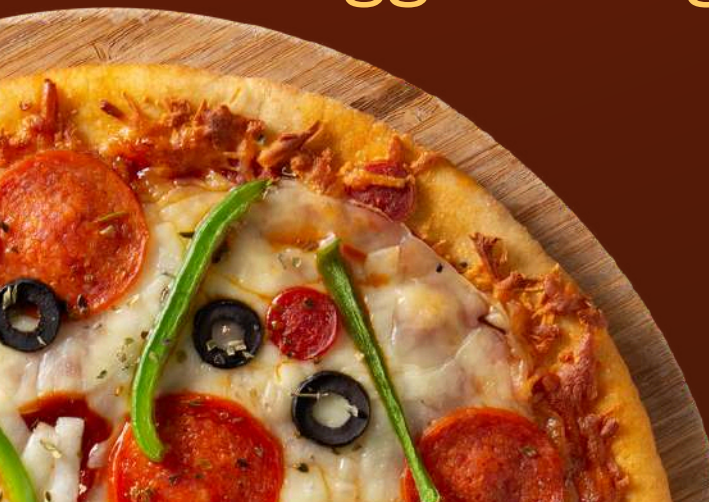| hour	order_cout
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336

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

```sql
select category,count(name)
from pizza_types
group by category;
```

The distribution shows 6 pizzas in the Chicken category, 8 in Classic, and 9 each in Supreme and Veggie categories.

Result Grid		Filter
	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.

```sql
SELECT
    ROUND(AVG(quantity), 0) AS avg_quantity
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;
```

The average number of Pizza ordered is 138

Result Grid	
	avg_quantity
▶	138

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

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

The top 3 most ordered pizza types based on revenue are The Thai Chicken Pizza (43,434.25), The Barbecue Chicken Pizza (42,768), and The California Chicken Pizza (41,409.5).

Result Grid		Filter Rows:
	name	total_revenue
▶	The Thai Chicken Pizza	43434.25
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41409.5