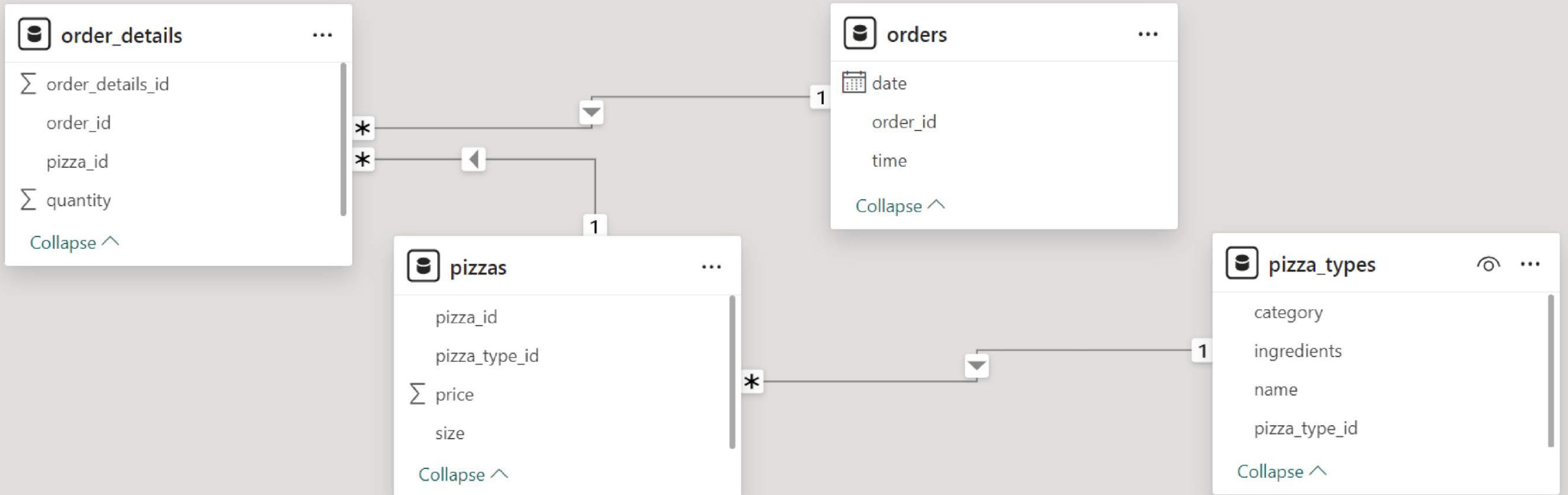# PIZZA SALES ANALYSIS

TABLE USED

RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED

```sql
select count(distinct order_id)
from orders as total_orders;
```

	total_orders
1	21350

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES

```sql
select
Round(sum(order_details.quantity * pizzas.price),2)
as total_sales
from order_details
inner join pizzas
on
order_details.pizza_id = pizzas.pizza_id;
```

⊞ Results	🗐 Messages

	total_sales
1	817860.05

IDENTIFY THE HIGHEST-PRICED PIZZA.

```sql
select top 1 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;
```

⊞ Results   ▤ Messages

	name	price
1	The Greek Pizza	35.95

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

```sql
select pizzas.size ,
count(order_details.order_details_id) as total_orders
from pizzas
join
order_details
on pizzas.pizza_id = order_details.pizza_id
group by pizzas.size
order by count(order_details.order_details_id) desc
```

	size	total_orders
1	L	18526
2	M	15385
3	S	14137
4	XL	544
5	XXL	28

LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES

```sql
select top 5  pizza_types.name, sum(order_details.quantity) as Total_quantity
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.name
order by sum(order_details.quantity) desc;
```

▦ Results   ▥ Messages

	name	Total_quantity
1	The Classic Deluxe Pizza	2453
2	The Barbecue Chicken Pizza	2432
3	The Hawaiian Pizza	2422
4	The Pepperoni Pizza	2418
5	The Thai Chicken Pizza	2371

FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED

```sql
select  pizza_types.category ,  sum(order_details.quantity) as Total_quantity
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
order by sum(order_details.quantity) desc;
```

⊞ Results   ▤ Messages

	category	Total_quantity
1	Classic	14888
2	Supreme	11987
3	Veggie	11649
4	Chicken	11050

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY

```sql
select datepart(hour , time)as hours ,
COUNT(order_id) as total_orders from orders
group by datepart(hour , time)
order by datepart(hour , time);
```

⊞ Results 📄 Messages

	hours	total_orders
1	9	1
2	10	8
3	11	1231
4	12	2520
5	13	2455
6	14	1472
7	15	1468
8	16	1920
9	17	2336
10	18	2399
11	19	2009
12	20	1642
13	21	1198
14	22	663
15	23	28

FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS

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

	category	total
1	Chicken	6
2	Classic	8
3	Supreme	9
4	Veggie	9

Results | Messages

GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY

```sql
select round(avg(total),0) as average_quantity_ordered from
(select orders.date , sum(order_details.quantity) as total
from orders
join order_details
on orders.order_id = order_details.order_id
group by orders.date) a
```

⊞ Results   🗐 Messages

	average_quantity_ordered
1	138

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE

```sql
select top 3 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.name
order by sum(order_details.quantity* pizzas.price) desc;
```

⊞ Results   ⊡ Messages

	name	revenue
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768
3	The California Chicken Pizza	41409.5

CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE

```sql
select top 3 pizza_types.category,
concat(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 order_details.pizza_id = pizzas.pizza_id))*100,2),'%') as share
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
order by sum(order_details.quantity* pizzas.price) desc;
```

⊞ Results   📇 Messages

	category	share
1	Classic	26.91%
2	Supreme	25.46%
3	Chicken	23.96%

ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME

```sql
SELECT date,
       SUM(revenue) OVER (ORDER BY date) AS cumulative_revenue
FROM (
    SELECT orders.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.date
) a
```

	date	cumulative_revenue
1	2015-01-01	2713.85
2	2015-01-02	5445.75
3	2015-01-03	8108.15
4	2015-01-04	9863.6
5	2015-01-05	11929.55
6	2015-01-06	14358.5
7	2015-01-07	16560.7
8	2015-01-08	19399.05
9	2015-01-09	21526.4
10	2015-01-10	23990.35

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY

```sql
WITH ranks AS (
SELECT pizza_types.name,
pizza_types.category,
SUM(order_details.quantity * pizzas.price) AS revenue,
RANK() OVER (PARTITION BY pizza_types.category
ORDER BY
SUM(order_details.quantity * pizzas.price) DESC) AS rn
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)
SELECT name, revenue, category
FROM ranks
WHERE rn < 4;
```

⊞ Results ▣ Messages

	name	revenue	category
1	The Thai Chicken Pizza	43434.25	Chicken
2	The Barbecue Chicken Pizza	42768	Chicken
3	The California Chicken Pizza	41409.5	Chicken
4	The Classic Deluxe Pizza	38180.5	Classic
5	The Hawaiian Pizza	32273.25	Classic
6	The Pepperoni Pizza	30161.75	Classic
7	The Spicy Italian Pizza	34831.25	Supre...
8	The Italian Supreme Pizza	33476.75	Supre...
9	The Sicilian Pizza	30940.5	Supre...
10	The Four Cheese Pizza	32265....	Veggie
11	The Mexicana Pizza	26780.75	Veggie
12	The Five Cheese Pizza	26066.5	Veggie

THANK YOU