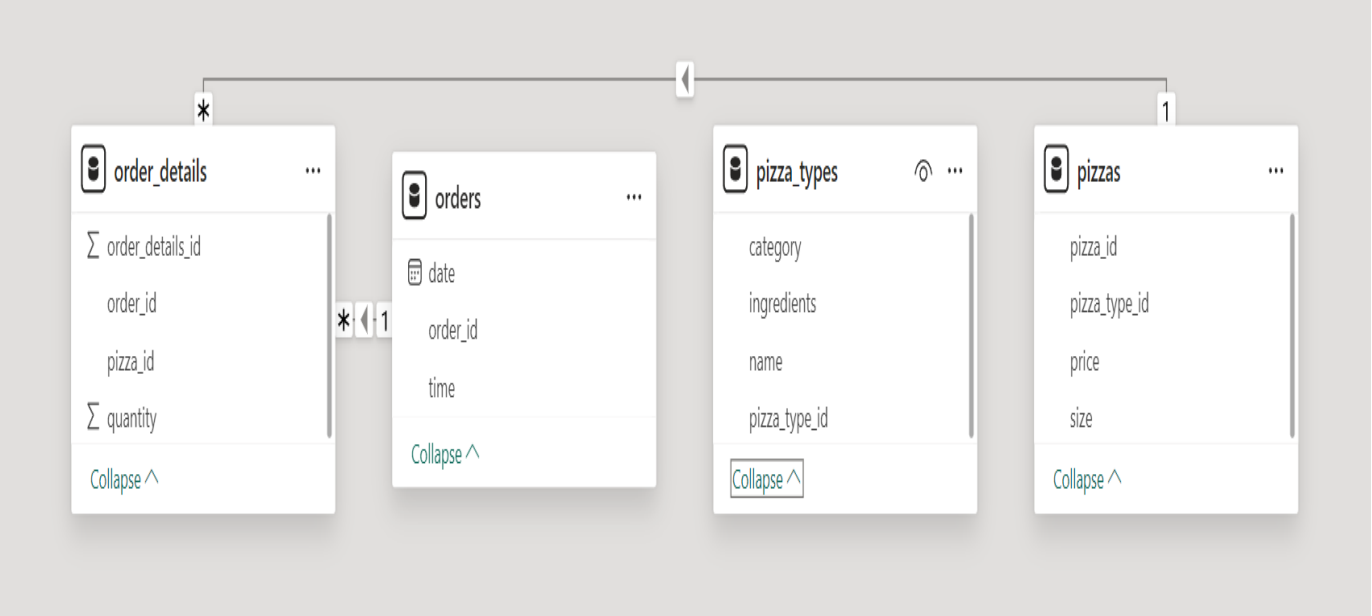
-- PIZZA SALES SQL QUERIES



-- Question Level : Basic, Intermediate, Advanced

-- Basic:

-- 1) Retrieve the total number of orders placed.

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

-- 2) 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;

-- 3) 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;

-- 4) 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;

-- 5) 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;

-- Intermediate:

-- 6) 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;

-- 7) 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);

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

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

-- 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;

-- 10) 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;

-- Advanced:

-- 11) 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 pizzas.pizza_type_id = pizza_types.pizza_type_id
    JOIN
  order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY revenue DESC;

-- 12) 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 sale;


-- 13) 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;
```