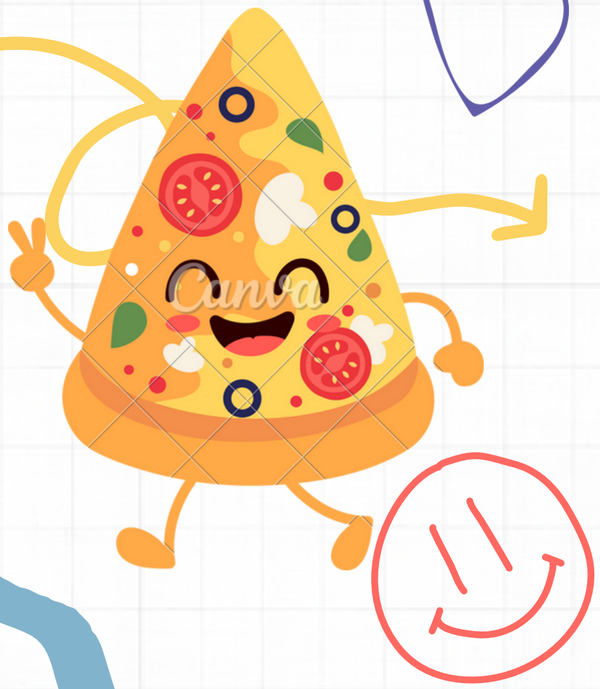
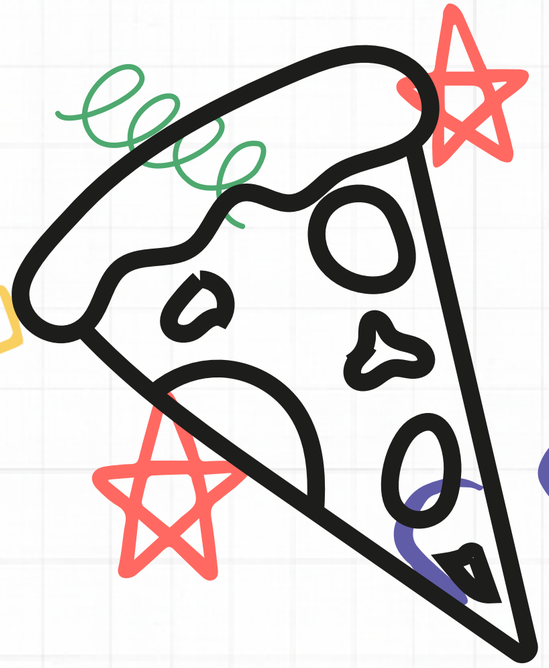
PIZZA SALES PROJECT

WITH SQL





BY

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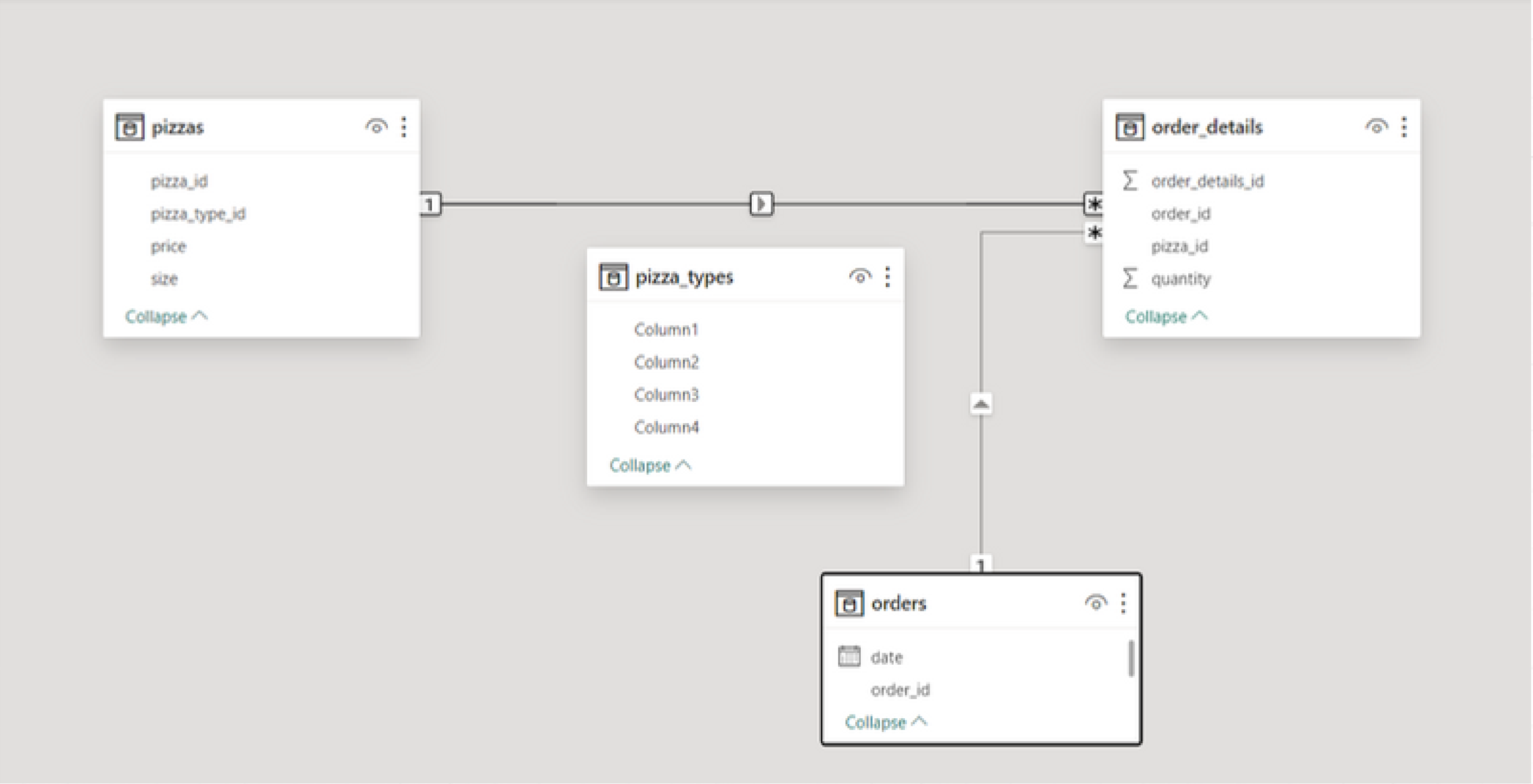
THE PROJECT

I am Ayushman. Within the scope of this project, I've leveraged the power of SQL to delve into and effectively address inquiries pertaining to pizza sales. This involved meticulously crafting queries and executing them to analyze various facets of the sales data, such as trends, customer preferences, and revenue streams. Through this process, I've not only provided answers but also gleaned valuable insights, enabling informed decision-making and optimization strategies within the realm of pizza sales.

ABOUT THE DATASET



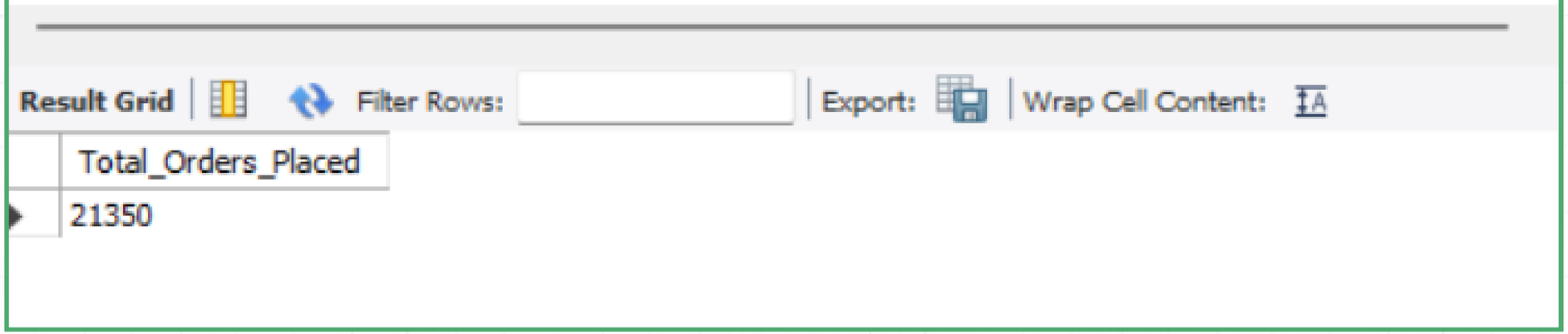
QUESTIONS RELATED TO DATASET

- Retrieve the total number of orders placed.
- Calculate the total revenue generated from pizza sales.
- Identify the highest-priced pizza.
- Identify the most common pizza size ordered.
- List the top 5 most ordered pizza types along with their quantities.
- Join the necessary tables to find the total quantity of each pizza category ordered.
- Determine the distribution of orders by hour of the day

- Join relevant tables to find the category-wise distribution of pizzas.
- Group the orders by date and calculate the average number of pizzas ordered per day.
- Determine the top 3 most ordered pizza types based on revenue.
- Calculate the percentage contribution of each pizza type to total revenue.
- Analyze the cumulative revenue generated over time.
- Determine the top 3 most ordered pizza types based on revenue for each pizza category.

RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED

```
3 •   SELECT
4         COUNT(*) AS Total_Orders_Placed
5     FROM
6         lapinos.orders;
```



CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

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

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

Total_Revenue_Generated
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 Rows: | Export: | Wrap Cell Content: | Fetch rows:

name	price
The Greek Pizza	35.95

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED

```
3    SELECT
4        pizzas.size, COUNT(order_details.order_details_id) as Order_count
5    FROM
6        pizzas
7            JOIN
8        order_details ON pizzas.pizza_id = order_details.pizza_id
9    GROUP BY pizzas.size order by Order_count desc limit 1 ;
```

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

size	Order_count
L	18526

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;
```

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

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

```
3   SELECT
4       pizza_types.category,
5       SUM(order_details.quantity) AS Quantity
6   FROM
7       pizza_types
8           JOIN
9       pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
10          JOIN
11      order_details ON order_details.pizza_id = pizzas.pizza_id
12  GROUP BY pizza_types.category
13  ORDER BY Quantity DESC;
```

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

category	Quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY

```
3 •  SELECT
4        HOUR(order_time) AS Hours, COUNT(order_id) AS Order_Count
5    FROM
6        orders
7    GROUP BY HOUR(order_time);
```

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

Hours	Order_Count
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

```
3 •  SELECT
4        category, COUNT(name)
5    FROM
6        pizza_types
7    GROUP BY category;
```

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

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 Average_Pizzas_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 ordered_quantity;
```

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

Average_Pizzas_Ordered_Per_day
138

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE

```sql
SELECT
    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.name
ORDER BY Revenue DESC
LIMIT 3;
```

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

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

CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE

```sql
SELECT
    pizza_types.category,
    round((SUM(order_details.quantity * pizzas.price) / (SELECT
            ROUND(SUM(order_details.quantity * pizzas.price),
                    2) AS Total_Revenue_Generated
        FROM
            order_details
                JOIN
            pizzas ON pizzas.pizza_id = order_details.pizza_id)) * 100,2) 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
ORDER BY Revenue DESC;
```

Result Grid | Filter Ro

category	Revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME

```sql
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 Sales ;
```

Result Grid | Filter Rows:

order_date	Cum_Revenue
2015-01-01	2713.8500000000004
2015-01-02	5445.75
2015-01-03	8108.15
2015-01-04	9863.6
2015-01-05	11929.55
2015-01-06	14358.5
2015-01-07	16560.7
2015-01-08	19399.05
2015-01-09	21526.4
2015-01-10	23990.350000000002
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.300000000003
2015-01-14	32358.700000000004
2015-01-15	34343.50000000001
2015-01-16	36937.65000000001
2015-01-17	39001.75000000001
2015-01-18	40978.600000000006
2015-01-19	43365.75000000001
2015-01-20	45763.65000000001
2015-01-21	47804.20000000001

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

```sql
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;
```

Result Grid | Filter Rows: | Export:

name	Revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5
The Classic Deluxe Pizza	38180.5
The Hawaiian Pizza	32273.25
The Pepperoni Pizza	30161.75
The Spicy Italian Pizza	34831.25
The Italian Supreme Pizza	33476.75
The Sicilian Pizza	30940.5
The Four Cheese Pizza	32265.70000000065
The Mexicana Pizza	26780.75
The Five Cheese Pizza	26066.5

CONTACT

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