SQL PROJECT ON PIZZA SALES

FREE DELIVERY

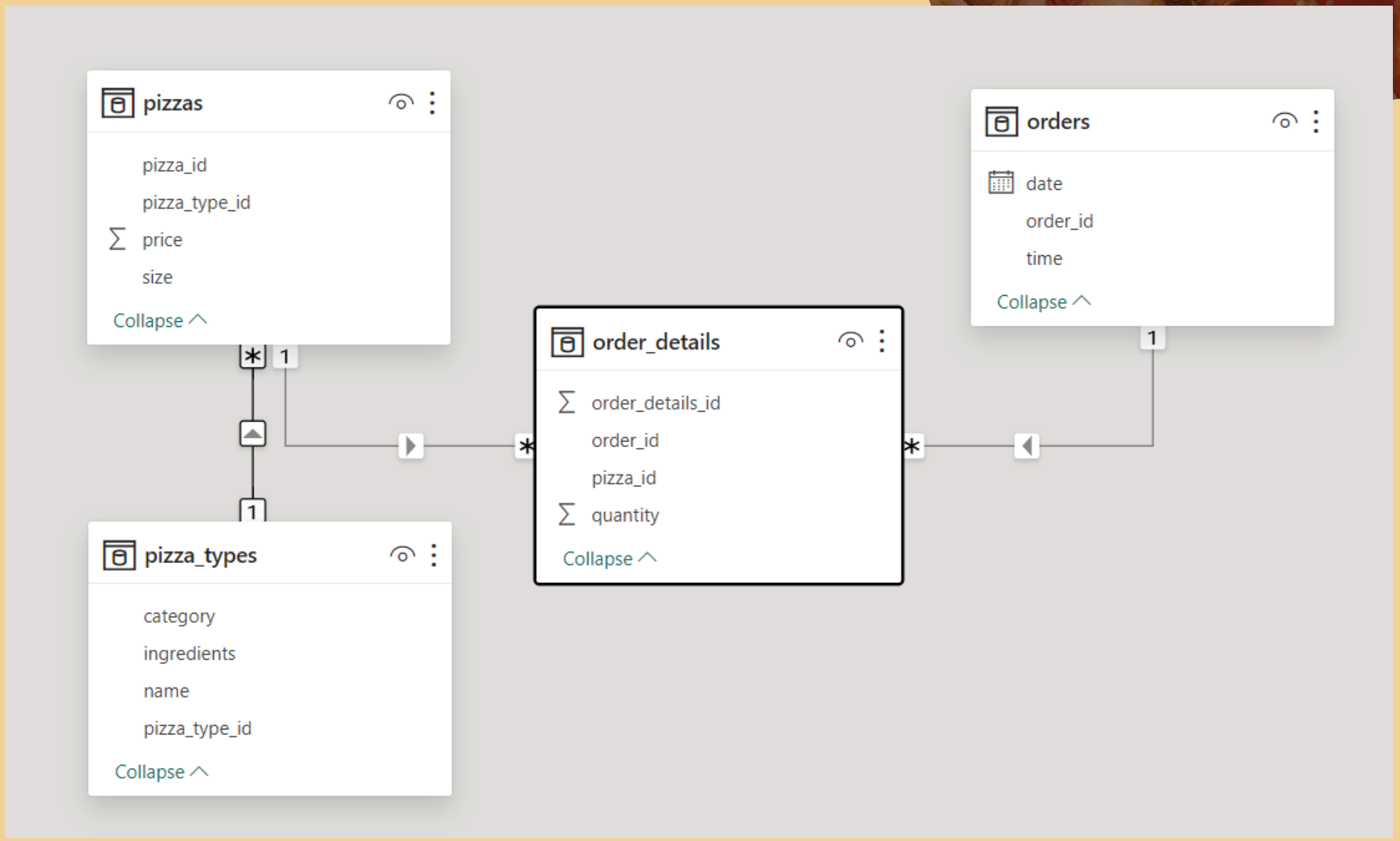
Contact Us:

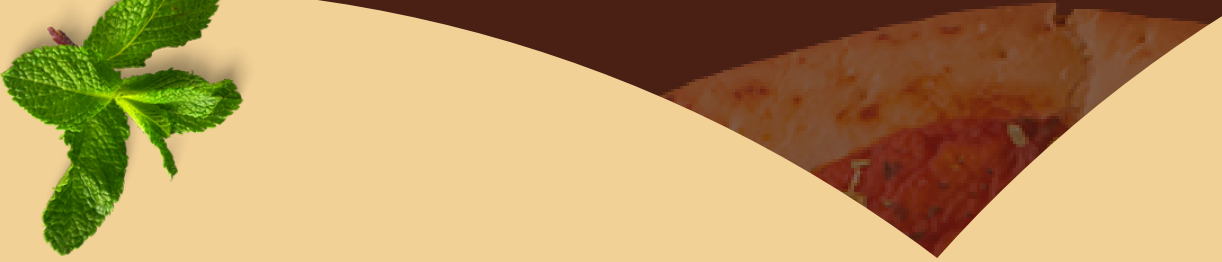
- +9822813160
- www.offavkash98@gmail.com

Hello

My Name is Avkash Khandekar & In this project I have utilized SQL queries to solve Questions that are related to Pizza Sales.

DataBase Schemas





Project : Sales Analysis

Basic Analysis:

1. Total Orders: Retrieved the total number of orders placed.
2. Total Revenue: Calculated the total revenue generated from pizza sales.
3. Highest-priced Pizza: Identified the pizza with the highest price.
4. Most Common Size: Identified the most common pizza size ordered.
5. Top 5 Pizza Types: Listed the top 5 most ordered pizza types along with their quantities.

Intermediate Analysis:

1. Quantity by Pizza Category: Joined tables to find the total quantity of each pizza category ordered.
2. Orders Distribution: Determined the distribution of orders by hour of the day.
3. Category-wise Pizza Distribution: Joined relevant tables to find the category-wise distribution of pizzas.
4. Average Daily Orders: Grouped orders by date and calculated the average number of pizzas ordered per day.
5. Top Pizza Types by Revenue: Determined the top 3 most ordered pizza types based on revenue.

Advanced Analysis:

1. Contribution to Revenue: Calculated the percentage contribution of each pizza type to total revenue.
2. Cumulative Revenue: Analyzed the cumulative revenue generated over time.
3. Top Pizza Types by Revenue (by Category): Determined the top 3 most ordered pizza types based on revenue for each pizza category.

1) Retrieve the total number of orders placed.

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

Result Grid | Filter Rows: | Export:

total_orders
21350

2) 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;
```

Result Grid | Filter Rows: | Export:

Total_revenue
817860.05

3) 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:

name	price
The Greek Pizza	35.95

4) Identify the most common pizza size ordered.

```sql
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;
```

Result Grid | Filter Rows: | Export:

size	Order_count
L	18526
M	15385
S	14137
XL	544
XXL	28

5) 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:

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

6) 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 pizza_types.category
ORDER BY quantity DESC;
```

Result Grid | Filter Rows: | Export:

category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

7) Determine the distribution of orders by hour of the day.

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

Result Grid | Filter

hour	order_count
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399

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

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

Result Grid | Filter Rows:

category	COUNT(name)
Chicken	6
Classic	8
Supreme	9
Veggie	9

9) Group the orders by date and calculate the average number of pizzas ordered per day.

```
SELECT
    round(AVG(quantity),0)
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;
```

Result Grid | Filter Rows:

round(AVG(quantity),0)
138

10) 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 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;
```

Result Grid | Filter Rows: | Export:

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

11) 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_sales
            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 Rows: | Export:

category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

12) 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: | Export: | Wra

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

13) 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

5) 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:

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

Conclusion:

Through this analysis, we gained insights into various aspects of pizza sales, including popular pizza types, sales trends over time, revenue contribution by pizza type, and more. These insights can be valuable for strategic decision-making, such as menu optimization, pricing strategies, and resource allocation.