PIZZA SALES

S Q L P R O J E C T

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In this project I have utilized SQL queries to solve questions that were related to Pizza Sales

BASIC QUESTIONS

- 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.

INTERMEDIATE QUESTIONS

- 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.

ADVANCED QUESTIONS

- 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.

1 - Retrieve the total number of orders placed.

```sql
Select count(Order_ID) as Total_orders from orders;
```

Result Grid

	Total_orders
▶	21350

2- Calculate the total revenue generated from pizza sales.

```
4       ROUND(SUM(order_details.quantity * Pizzas.price),
5               2) AS Total_sales
6   FROM
7       order_details
8           JOIN
9       Pizzas ON pizzas.pizza_id = order_details.pizza_id;
```

Result Grid

	Total_sales
▶	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 Ro

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 Limit 1;
```

Result Grid | Filter Rows:

	size	order_count
▶	L	18526

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 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 Quantity desc Limit 5;
```

Result Grid | Filter 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

6 - 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

category	Quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

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;
```

Result Grid

Hour	Order_count
11	1231
12	2520
13	2455
14	1472
15	1468
16	1920
17	2336
18	2399
19	2009
20	1642
21	1198
22	663
23	28
10	8
9	1

8 - Find the category-wise distribution of pizzas.

```
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) as Avg_Pizza_Ordered_Per_Day
from
(Select orders.order_date, Sum(Order_details.quantity) as Quantity
from orders join order_details on order_details.order_ID = orders.order_ID
Group by Orders.order_date) as Order_Quantity;
```

Result Grid | Filter Rows:

Avg_Pizza_Ordered_Per_Day
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 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;
```

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.

```
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;
```

Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

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 Sales;
```

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

13 - Determine the top 3 most ordered pizza types based on revenue for each pizza category.

```
(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 Pizzas join pizza_types 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;
```

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

THANK YOU