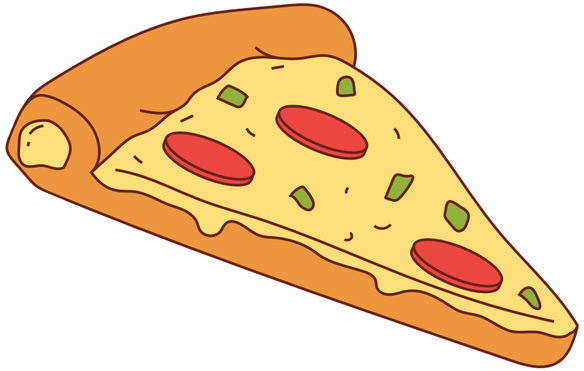
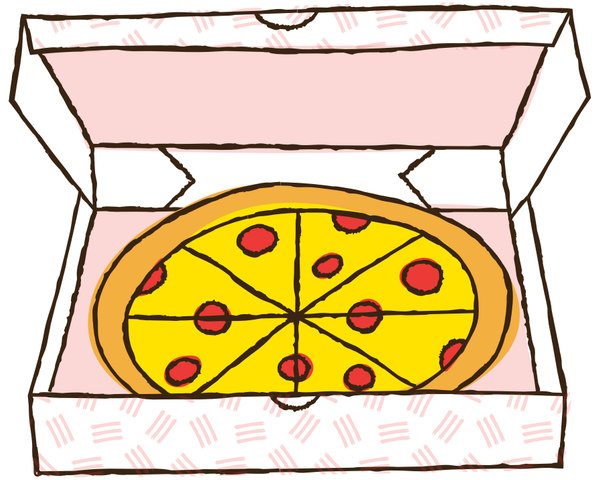
SQL PROJECT FOR PIZZA SALES

Hello!

This is Amrita Dey, in this Project I have utilized SQL Queries to solve Questions related to Pizza Sales..



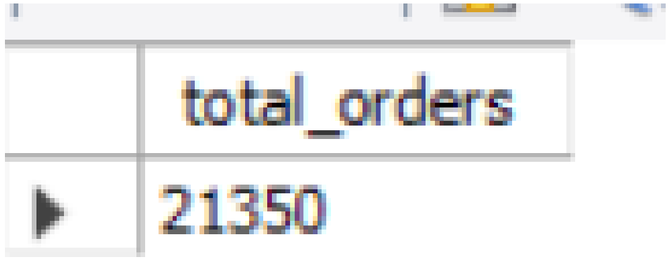
Requirements as Follows



- 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.

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



	total_orders
▶	21350

Calculate the total revenue generated from pizza sales.

```sql
SELECT
    ROUND(SUM(orders_details.quantity * pizzas.price),
            2) AS total_revenue
FROM
    orders_details
        JOIN
    pizzas ON orders_details.pizza_id = pizzas.pizza_id;
```

	total_revenue
▶	817860.05

Identify the most common pizza size ordered.

```sql
SELECT
    pizzas.size,
    COUNT(orders_details.order_details_id) AS order_count
FROM
    pizzas
        JOIN
    orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY pizzas.size
ORDER BY order_count DESC
LIMIT 1;
```

size	order_count
L	18526

Identify the highest-priced pizza.

```
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY pizzas.price DESC
LIMIT 1;
```

	name	price
▶	The Greek Pizza	35.95

List the top 5 most ordered pizza types, along with their quantities.

```sql
SELECT
    pizza_types.name, SUM(orders_details.quantity) AS quantity
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    orders_details ON pizzas.pizza_id = orders_details.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT 5;
```

name	quantity
The Barbecue Chicken Pizza	2432
The Classic Deluxe Pizza	2453
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.

```sql
SELECT
    pizza_types.category,
    SUM(orders_details.quantity) AS quantity
FROM
    orders_details
        JOIN
    pizzas ON orders_details.pizza_id = pizzas.pizza_id
        JOIN
    pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
GROUP BY pizza_types.category
ORDER BY quantity DESC;
```

category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

Determine the distribution of orders by hour of the day.

```sql
SELECT
    HOUR(orders.order_time) AS order_hour,
    COUNT(orders.order_id) AS order_count
FROM
    orders
GROUP BY order_hour
ORDER BY order_count DESC;
```

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

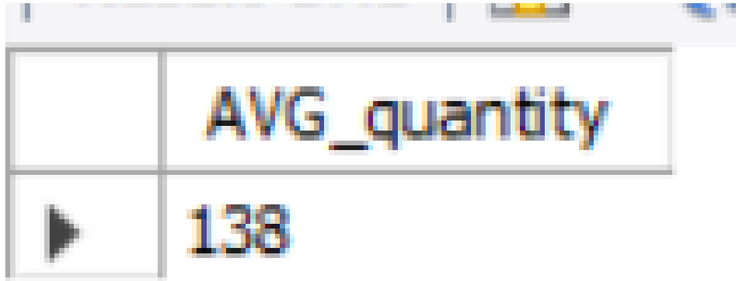
Join relevant tables to find the category-wise distribution of pizzas.

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

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)
FROM
    (SELECT
        orders.order_date, SUM(orders_details.quantity) AS quantity
    FROM
        orders
    JOIN orders_details ON orders.order_id = orders_details.order_id
    GROUP BY orders.order_date) AS order_quantity;
```



	AVG_quantity
▶	138

Determine the top 3 most ordered pizza types based on revenue.

```sql
SELECT
    pizza_types.name,
    ROUND(SUM(orders_details.quantity * pizzas.price),
            2) AS revenue
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    orders_details ON orders_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

Calculate the percentage contribution of each pizza type to total revenue.

```sql
SELECT
    pizza_types.category,
    ROUND(SUM(orders_details.quantity * pizzas.price)/(select round(sum(orders_details.quantity * pizzas.price),
            2) AS total_revenue
FROM
    orders_details
        JOIN
    pizzas ON orders_details.pizza_id = pizzas.pizza_id)*100,2)as revenue
FROM
    pizza_types
        JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category;
```

	category	revenue
▶	Classic	26.91
	Veggie	23.68
	Supreme	25.46
	Chicken	23.96

Analyze the cumulative revenue generated over time.

```sql
select order_date,
round(sum(revenue) over(order by order_date),2) as cum_revenue
from
(select orders.order_date,
sum(orders_details.quantity * pizzas.price) as revenue
from orders join orders_details on orders.order_id=orders_details.order_id
join pizzas on pizzas.pizza_id=orders_details.pizza_id
group by orders.order_date order by revenue desc) as sales;
```

order_date	cum_revenue
2015-01-01	2713.85
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	23990.35
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.3
2015-01-14	32358.7
2015-01-15	34343.5

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

```sql
select category,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(orders_details.quantity * pizzas.price) as revenue
from pizza_types join pizzas on pizza_types.pizza_type_id=pizzas.pizza_type_id
join orders_details on orders_details.pizza_id=pizzas.pizza_id
group by pizza_types.category,pizza_types.name) as a) as b
where rn>=3;
```

category	name	revenue
Chicken	The California Chicken Pizza	41409.5
Chicken	The Southwest Chicken Pizza	34705.75
Chicken	The Chicken Alfredo Pizza	16900.25
Chicken	The Chicken Pesto Pizza	16701.75
Classic	The Pepperoni Pizza	30161.75
Classic	The Greek Pizza	28454.100000000013
Classic	The Italian Capocollo Pizza	25094
Classic	The Napolitana Pizza	24087
Classic	The Big Meat Pizza	22968
Classic	The Pepperoni, Mushroom, and Peppers Pizza	18834.5
Supreme	The Sicilian Pizza	30940.5
Supreme	The Pepper Salami Pizza	25529
Supreme	The Prosciutto and Arugula Pizza	24193.25
Supreme	The Soppressata Pizza	16425.75
Supreme	The Calabrese Pizza	15934.25

Thank You