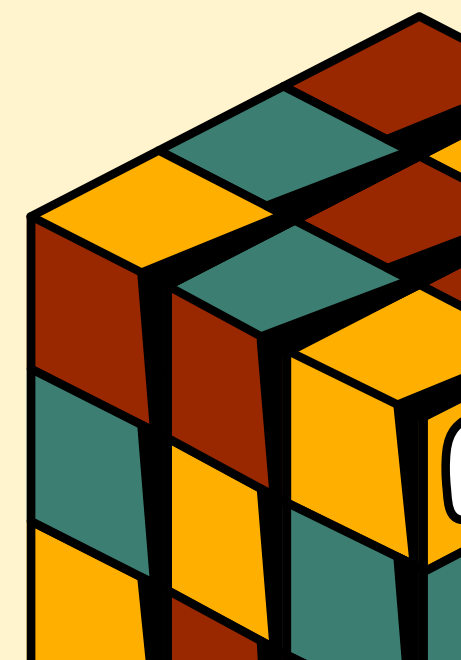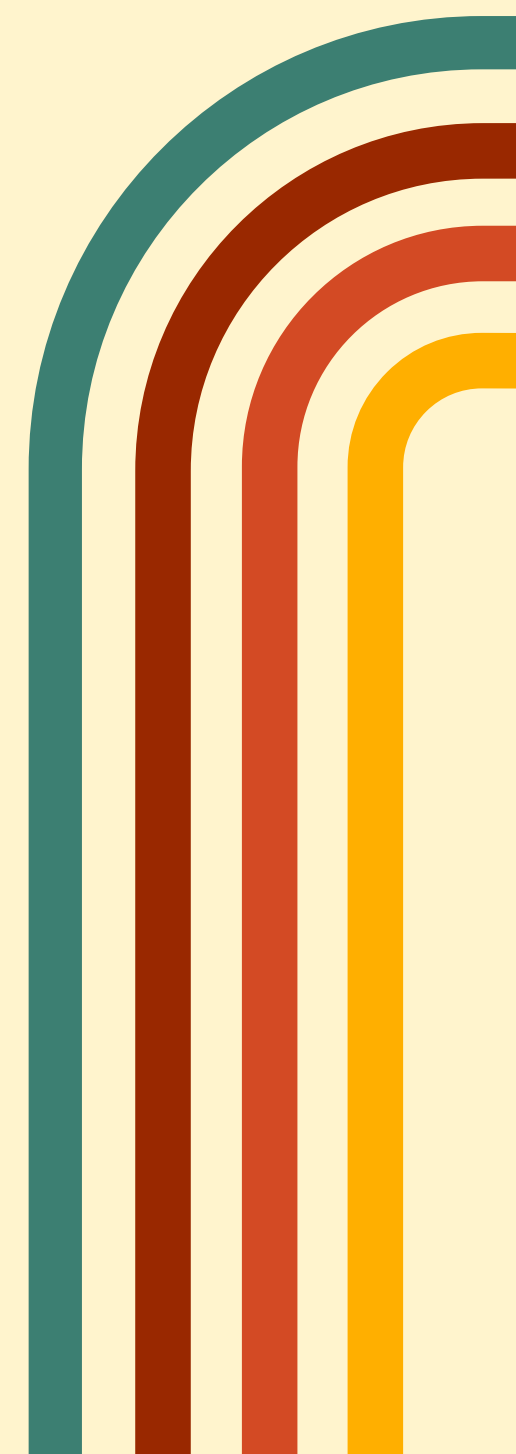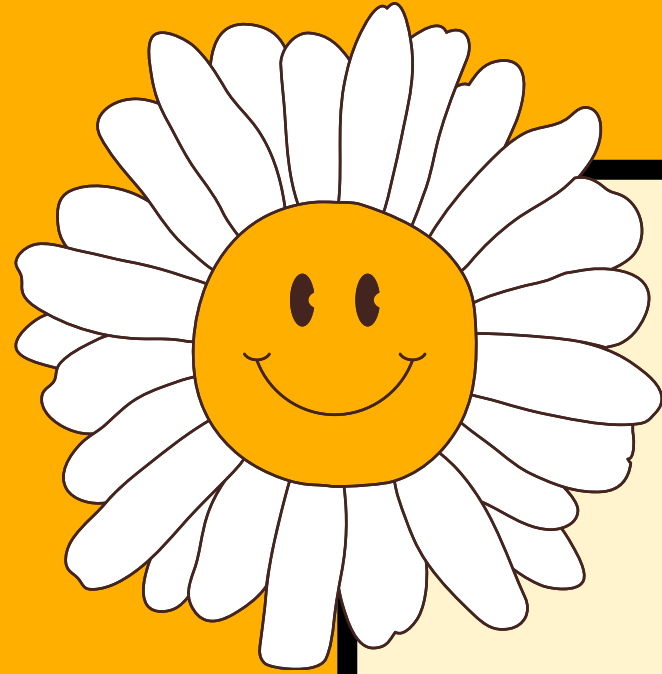# Pizza Sales Report

Hello!

My Name is Shubham jaiswal.I have done BE. In this project I have utilize sql

queries to solve questions related to pizza sales.we use joins,group by,order by,subqueries,aggreagte functions and window functions .

Basic Questions

1.Retrieve the total number of orders placed.
2.Calculate the total revenue generated from pizza sales.

3.Identify the highest-priced pizza.
4.Identify the most common pizza size ordered.

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

Intermediate Questions

1. Join the necessary tables to find the total quantity of each pizza category.
2. Determine the distribution of orders by hour of the day.

3. Join relevant tables to find the category-wise distribution of pizzas.
4. Group the orders by date and calculate the average number of pizzas ordered per day.

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

Advanced Questions

1. Calculate the percentage contribution of each pizza type to total rev

2. Analyze the cumulative revenue generated over time.

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

Level 1

Basic questions
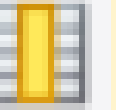
1.Retrieve the total number of orders placed.

```sql
select count(order_id) as total_orders from orders;
```

	total_orders
▶	21350

Result Grid

2.Calculate the total revenue generated from pizza sales.

```sql
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
```

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 Rc

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 order_details join pizzas
on order_details.pizza_id = pizzas.pizza_id
group by pizzas.size
order by order_count desc;
```

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;
```

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

Level 2

Intermediate questions

1.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;
```

category	quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

2.Determine the distribution of orders by hour of the day.

```sql
select hour(order_time) as hourly_order,
count(order_id) as order_count
from orders
group by hourly_order;
```

hourly_order	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

3.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

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

```sql
select round(avg(quantity),0) as avg_pizza 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;
```

	avg_pizza
▶	138

5.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;
```

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

Level 3

Advanced questions

1.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;
```

category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

2.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;
```

order_date	cum_revenue
2015-01-01	2713.850000000000
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

3.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;
```

name	revenue
The Italian Supreme Pizza	33476.75
The Sicilian Pizza	30940.5
The Four Cheese Pizza	32265.7000
The Mexicana Pizza	26780.75
The Five Cheese Pizza	26066.5

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

Thank You