



MENTORNESS

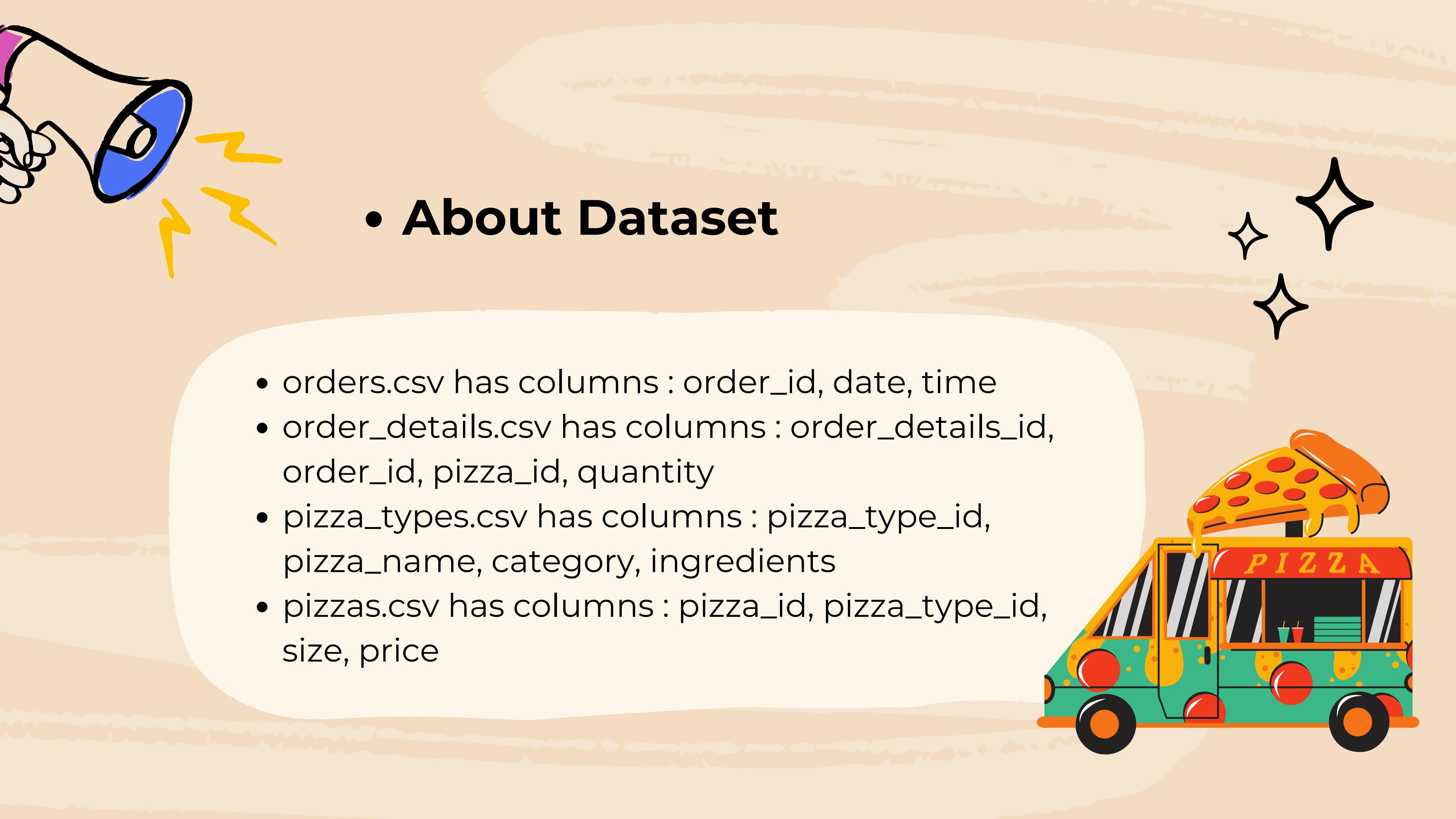
Pizza Sales Data

Analysis with

SQL

—By Chinmai Nimgade—





• About Dataset

- orders.csv has columns : order_id, date, time
- order_details.csv has columns : order_details_id, order_id, pizza_id, quantity
- pizza_types.csv has columns : pizza_type_id, pizza_name, category, ingredients
- pizzas.csv has columns : pizza_id, pizza_type_id, size, price



Q1: The total number of order place

- `show databases;`
 - `use pizzadb;`
 - `show tables;`
 - `select * from pizza_orders;`
- 1. The total no of orders placed
- `select count(*) from pizza_orders;`
- '21350'

Q2: The total revenue generated from pizza sales

```
-- 2. The total revenue generated  
• select round(sum(price*quantity),2)  
from pizzas, order_detail  
where pizzas.pizza_id = order_detail.pizza_id;  
-- '817860.05'
```

Q3: The highest priced pizza.

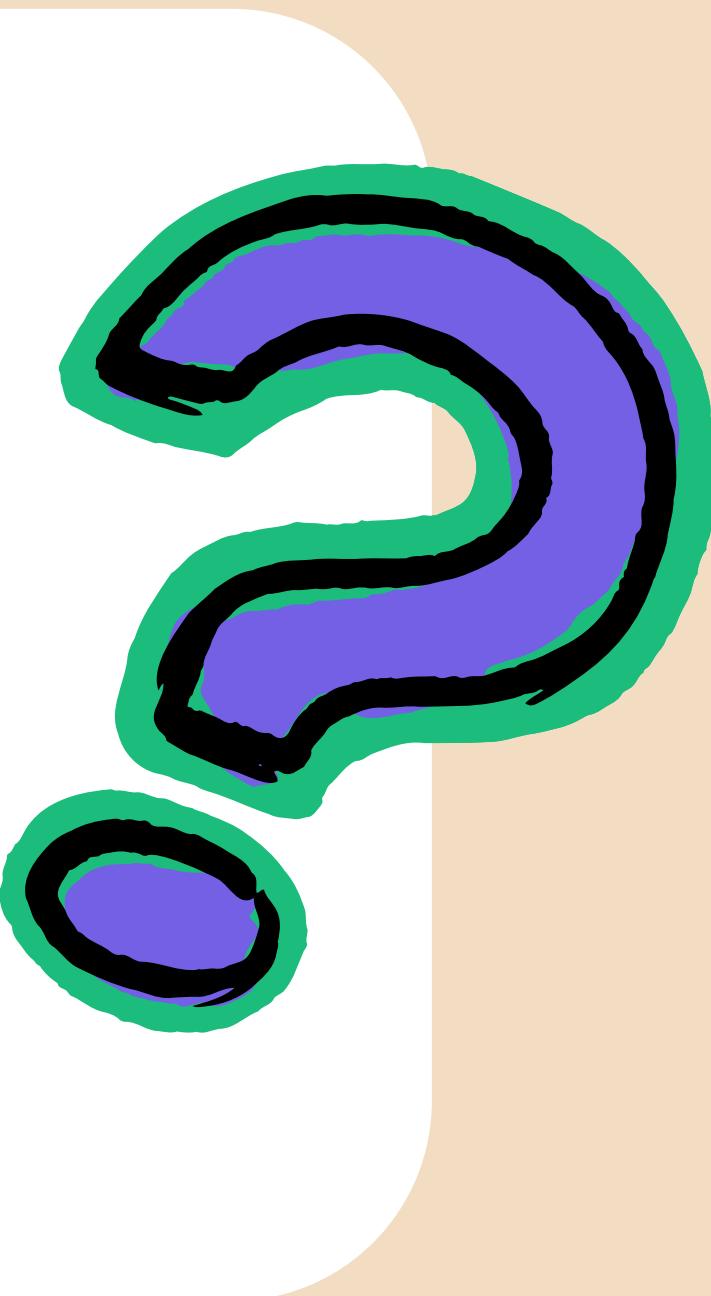
```
-- 3. The highest priced pizza.  
• SELECT ptypes.pizza_name, pizzas.price  
FROM ptypes JOIN pizzas  
ON ptypes.pizza_type_id = pizzas.pizza_type_id  
ORDER BY pizzas.price DESC LIMIT 1;  
-- 'The Barbecue Chicken Pizza', '35.95'
```



Q4: The most common pizza size ordered.



- ```
-- 4. The most common pizza size ordered.
select count(size), size
from pizzas, order_detail
where pizzas.pizza_id = order_detail.pizza_id
group by size order by count(size) desc;
-- '18526', 'L'
-- '15385', 'M'
-- '14137', 'S'
-- '544', 'XL'
-- '28', 'XXL'
```



# Q5: The top 5 most ordered pizza types along their quantities.

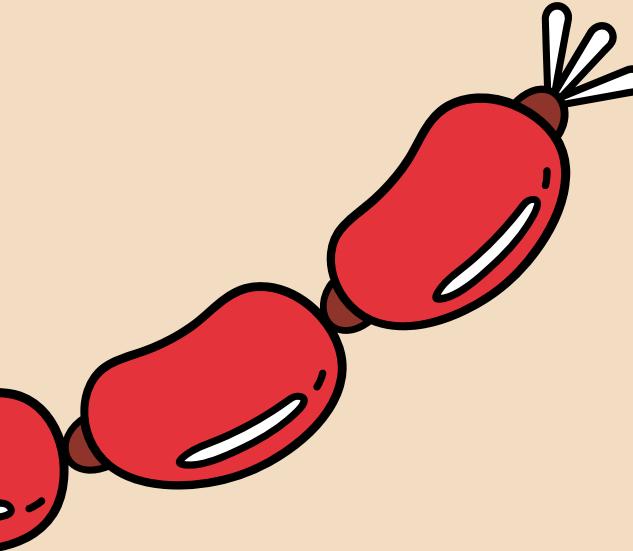
```
-- 5. The top 5 most ordered pizza types along their quantities.
• SELECT pizza_name, sum(quantity) FROM pizzas
JOIN order_detail
ON pizzas.pizza_id = order_detail.pizza_id
JOIN ptypes ON ptypes.pizza_type_id=pizzas.pizza_type_id
GROUP BY pizza_name
ORDER BY sum(quantity) DESC limit 5;
-- 'The Classic Deluxe Pizza', '2453'
-- 'The Barbecue Chicken Pizza', '2432'
-- 'The Hawaiian Pizza', '2422'
-- 'The Pepperoni Pizza', '2418'
-- 'The Thai Chicken Pizza', '2371'
```

# Q6: The quantity of each pizza categories ordered.

-- 6. The quantity of each pizza categories ordered.

- ```
SELECT ptypes.category, sum(quantity) FROM pizzas
JOIN order_detail ON pizzas.pizza_id = order_detail.pizza_id
JOIN ptypes ON ptypes.pizza_type_id = pizzas.pizza_type_id
JOIN pizza_orders ON pizza_orders.order_id = order_detail.order_id
GROUP BY ptypes.category
ORDER BY sum(quantity) DESC ;
```

-- 'Classic', '14888'
-- 'Supreme', '11987'
-- 'Veggie', '11649'
-- 'Chicken', '11050'



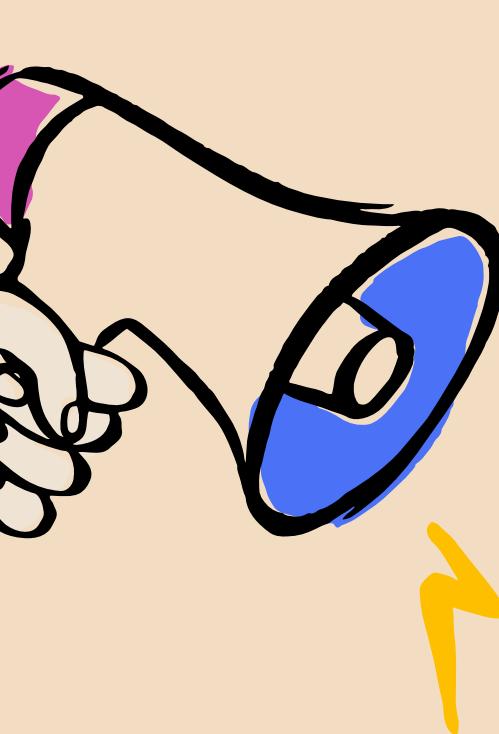
Q7: The distribution of orders by hours of the day.

```
-- 7. The distribution of orders by hours of the day.  
• SELECT hour(time), sum(quantity) FROM pizzas  
JOIN order_detail ON pizzas.pizza_id = order_detail.pizza_id  
JOIN ptypes ON ptypes.pizza_type_id = pizzas.pizza_type_id  
JOIN pizza_orders ON pizza_orders.order_id = order_detail.order_id  
GROUP BY hour(time)  
ORDER BY sum(quantity) DESC ;  
-- '12', '6776'  
-- '13', '6413'  
-- '18', '5417'  
-- '17', '5211'
```



Q8: The category-wise distribution of pizzas.

```
-- 8. The category-wise distribution of pizzas.  
• SELECT category, count(pizza_name) FROM pizzas  
JOIN order_detail ON pizzas.pizza_id = order_detail.pizza_id  
JOIN ptypes ON ptypes.pizza_type_id = pizzas.pizza_type_id  
JOIN pizza_orders ON pizza_orders.order_id = order_detail.order_id  
GROUP BY category  
ORDER BY count(pizza_name) DESC ;  
-- 'Classic', '14579'  
-- 'Supreme', '11777'  
-- 'Veggie', '11449'  
-- 'Chicken', '10815'
```



Q9: The average number of pizzas ordered per day.

```
-- 9. The average number of pizzas ordered per day.  
• SELECT round(avg(Quantity),0) from  
  (SELECT pizza_orders.date, sum(order_detail.quantity)  
   as quantity  
   FROM pizza_orders JOIN order_detail  
   ON pizza_orders.order_id = order_detail.order_id  
   GROUP BY pizza_orders.date) as sum;  
-- '138'
```



Q10: Top 3 most ordered pizza type based on revenue.

```
-- 10. Top 3 most ordered pizza type base on revenue.  
•   SELECT pizza_name , sum(Quantity*Price) as Revenue FROM pizzas  
JOIN order_detail ON pizzas.pizza_id = order_detail.pizza_id  
JOIN ptypes ON ptypes.pizza_type_id = pizzas.pizza_type_id  
JOIN pizza_orders ON pizza_orders.order_id = order_detail.order_id  
GROUP BY pizza_name  
ORDER BY Revenue DESC LIMIT 3;  
-- 'The Thai Chicken Pizza', '43434.25'  
-- 'The Barbecue Chicken Pizza', '42768'  
-- 'The California Chicken Pizza', '41409.5'
```

Q11: The percentage contribution of each pizza type to revenue.

-- 11. The percentage contribution of each pizza type to revenue.

- ```
SELECT pizza_name , round(sum(Quantity*Price)/
(SELECT sum(Quantity*Price) FROM pizzas
JOIN order_detail ON pizzas.pizza_id = order_detail.pizza_id
JOIN ptypes ON ptypes.pizza_type_id = pizzas.pizza_type_id)*100,2)
as Revenue_pc FROM pizzas
JOIN order_detail ON pizzas.pizza_id = order_detail.pizza_id
JOIN ptypes ON ptypes.pizza_type_id = pizzas.pizza_type_id
JOIN pizza_orders ON pizza_orders.order_id = order_detail.order_id
GROUP BY pizza_name ORDER BY Revenue_pc DESC ;
```



# Q12: The cumulative revenue generated over time.



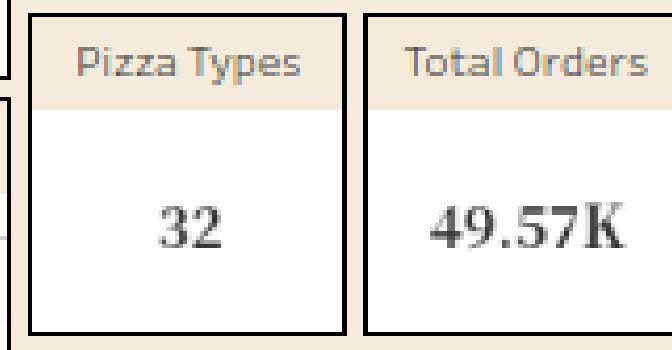
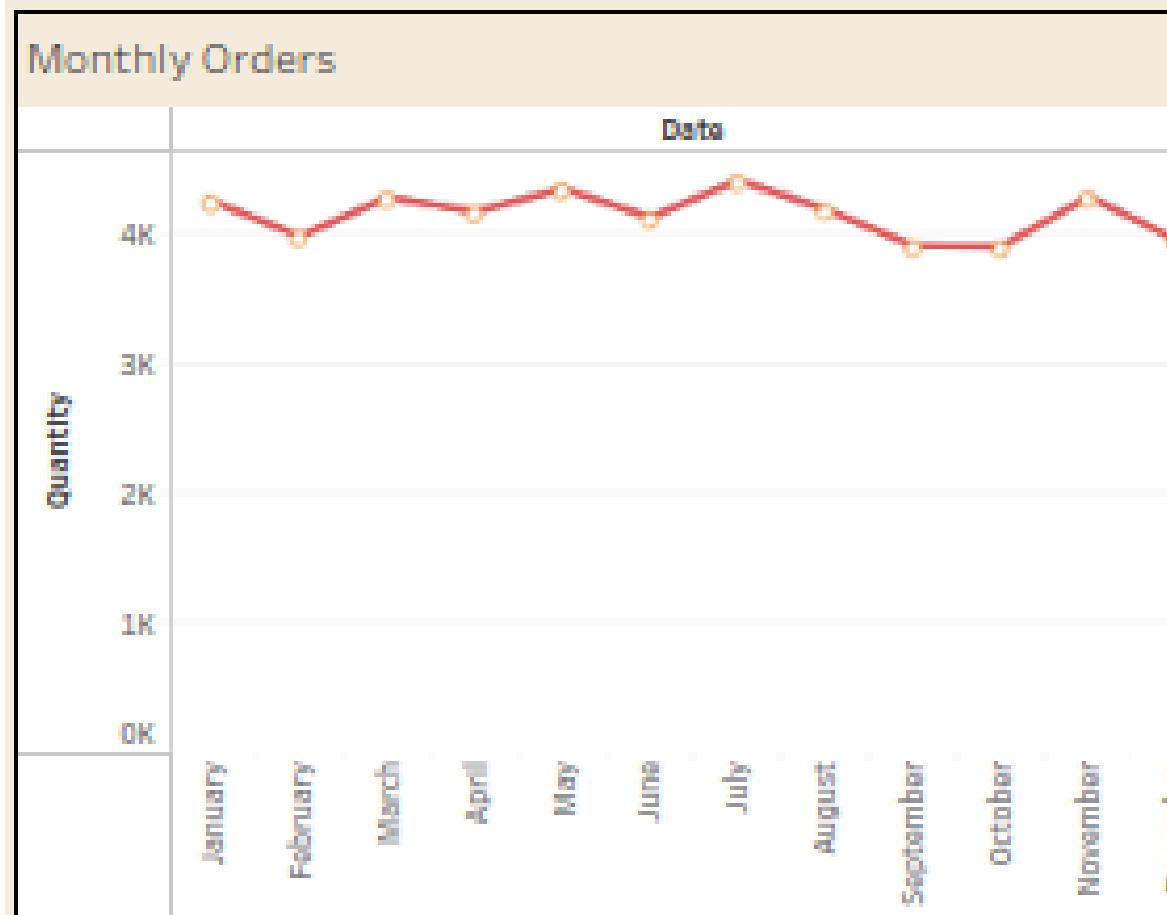
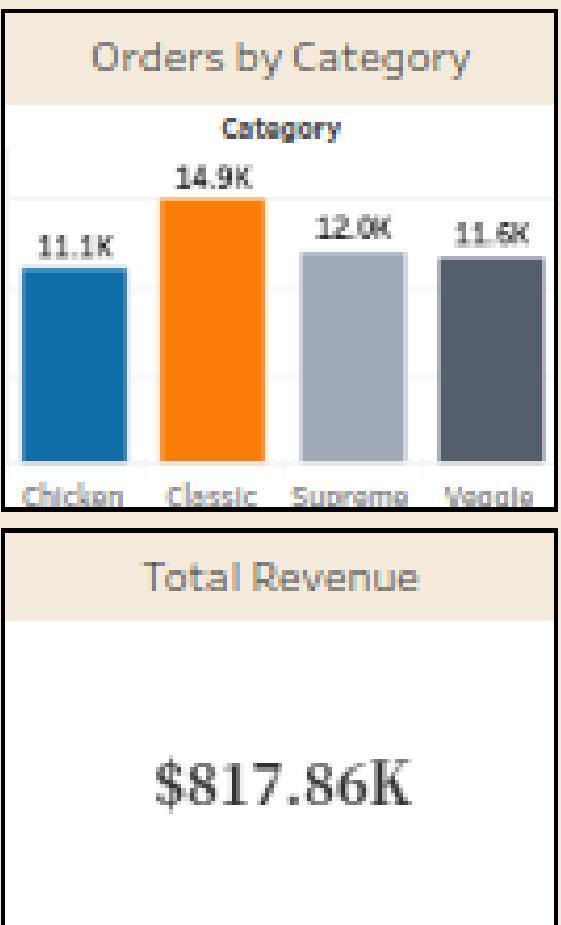
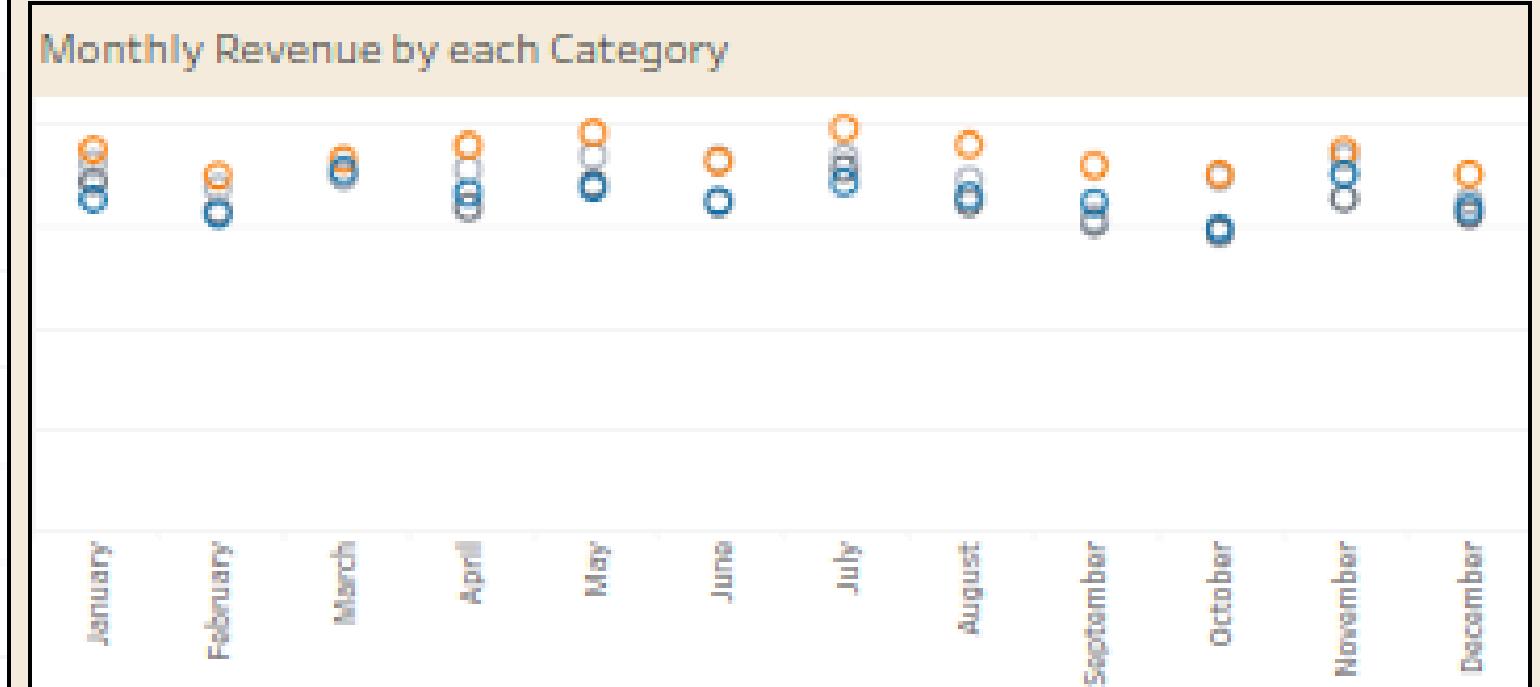
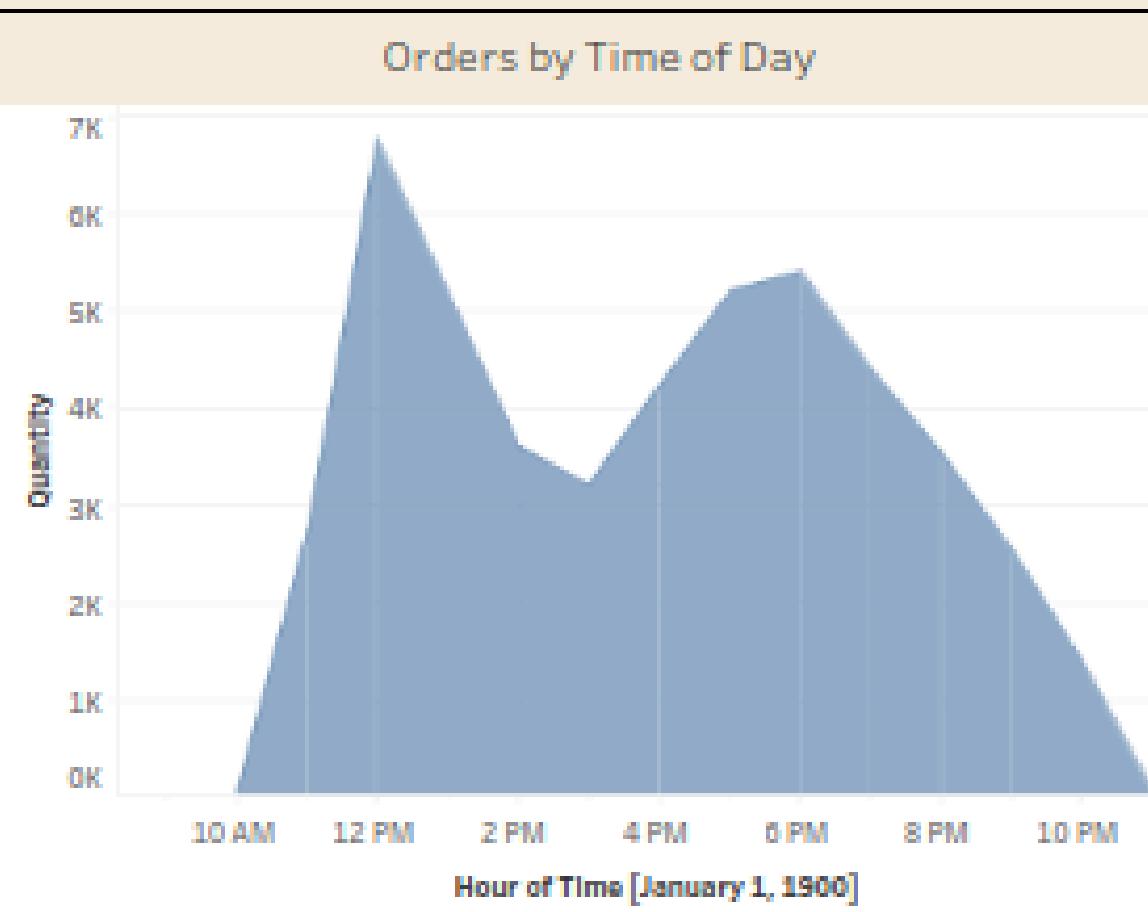
```
-- 12. The cumulative revenue generated over time.
• SELECT date , SUM(Revenue) OVER (ORDER BY date) as Cumulative_Rev
 FROM (SELECT date, ROUND(SUM(Quantity*Price),0) AS Revenue FROM pizzas
 JOIN order_detail ON pizzas.pizza_id = order_detail.pizza_id
 JOIN ptypes ON ptypes.pizza_type_id = pizzas.pizza_type_id
 JOIN pizza_orders ON pizza_orders.order_id = order_detail.order_id
 GROUP BY date) AS Rev;
 -- date,Cumulative_Rev
 -- 2015-01-01,2714
 -- 2015-01-02,5446
 -- 2015-01-03,8108
```



# Q13: The top 3 most ordered pizza type based on revenue for each pizza category.

```
-- Top 3 most ordered pizza type based on revenue for each pizza category.
• select Category, pizza_name, Revenue
 from (select category, pizza_name, Revenue, Rank()
 over (PARTITION BY Category order by Revenue) as ranks
 from (SELECT Category , pizza_name, sum(Quantity*Price) as Revenue FROM
 pizzas JOIN order_detail ON pizzas.pizza_id = order_detail.pizza_id
 JOIN ptypes ON ptypes.pizza_type_id = pizzas.pizza_type_id
 JOIN pizza_orders ON pizza_orders.order_id = order_detail.order_id
 GROUP BY Category, pizza_name
 ORDER BY Revenue DESC) as r
 where ranks <= 3;
```

# Pizza Sales Analysis



# Thank You!

