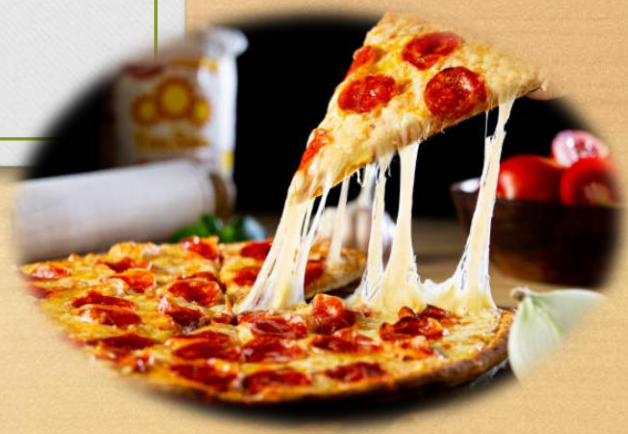
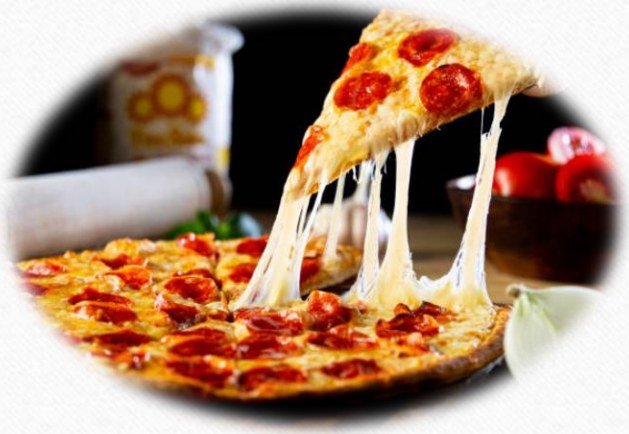
PIZZA SALES REPORT

2015



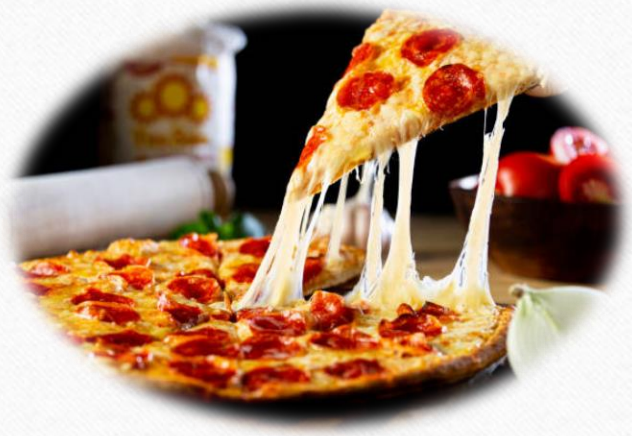
Content

- Objective
- Data Overview
- Methodology
- Analysis and Findings
- Conclusion
- Appendices



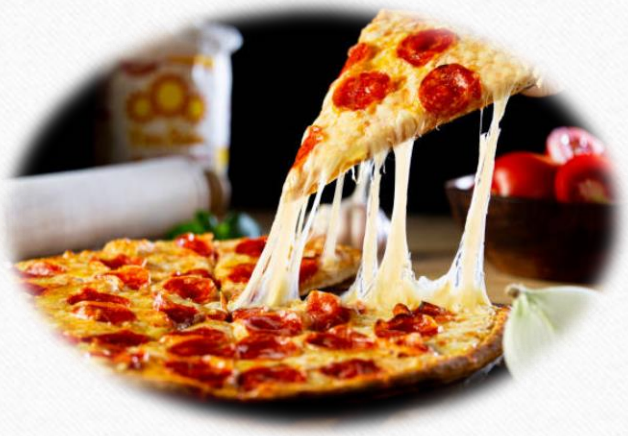
Objective

- Aim to analyse and review pizza sales performance over specific period. By examining key metrics and insights, optimize SQL queries for better performace.



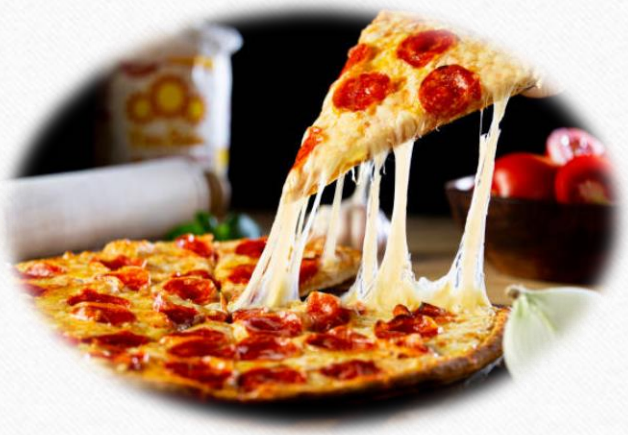
Data Overview

- Import csv file to SQL workbench

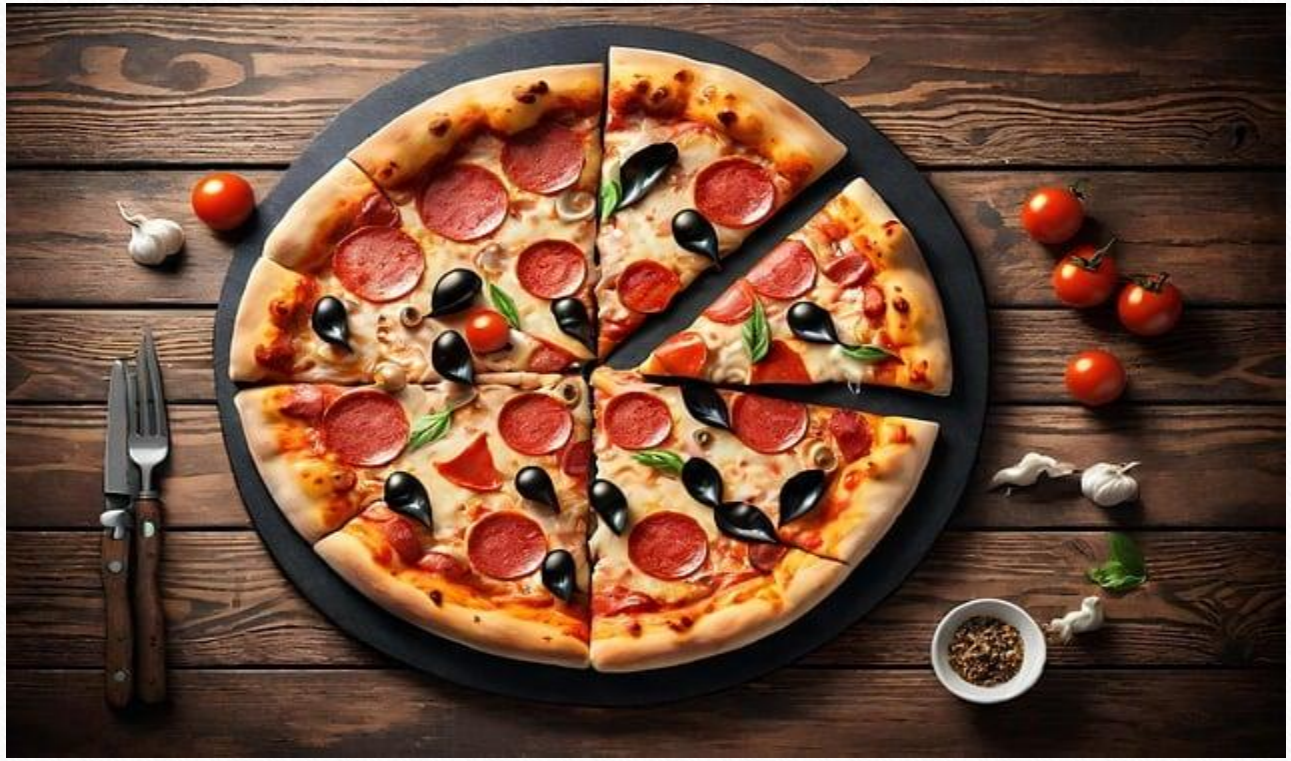


Methodology

- Outline the SQL techniques and methods used for analysis
- Joines- Inner Join
- Aggregations- SUM(), AVG(), COUNT()
- Filtering- Where Clause
- Windows Function- RANK()



Analysis And Findings



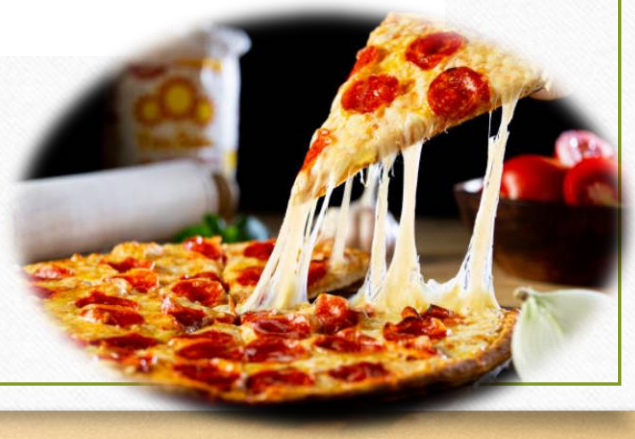
Total number of Order placed

21350 total orders we get in 2015.

```
4    #  Retrieve the total number of orders placed.
5
6 •  select count(order_id) as Total_Orders from orders;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Cor

Total_Orders
21350



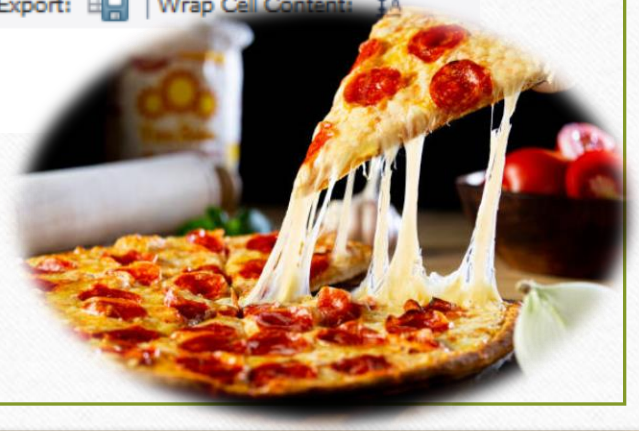
Total revenue generated from pizza sales.

817860.05 is a total revenue

```
8   # Calculate the total revenue generated from pizza sales.
9
10  SELECT
11      ROUND(SUM(o.quantity * p.price), 2) AS Total_Revenue
12  FROM
13      order_details o
14          INNER JOIN
15      pizzas p ON o.pizza_id = p.pizza_id;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Total_Revenue
817860.05



Highest Priced Pizza

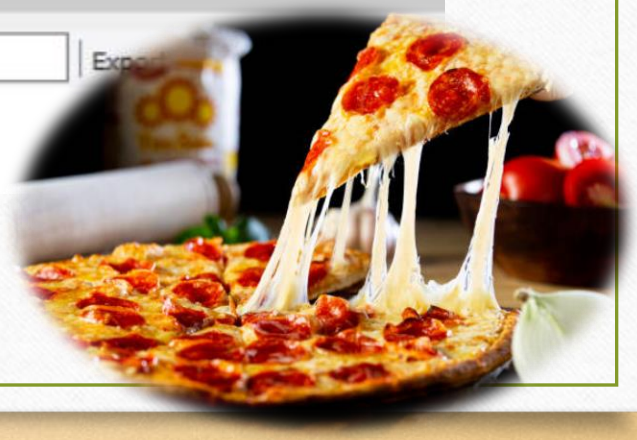
The Greek Pizza

```sql
# Identify the highest-priced pizza.

SELECT
    pt.name, p.price
FROM
    pizza_types pt
        INNER JOIN
    pizzas p ON pt.pizza_type_id = p.pizza_type_id
ORDER BY p.price DESC
LIMIT 1;
```

Result Grid | Filter Rows:

name	price
The Greek Pizza	35.95



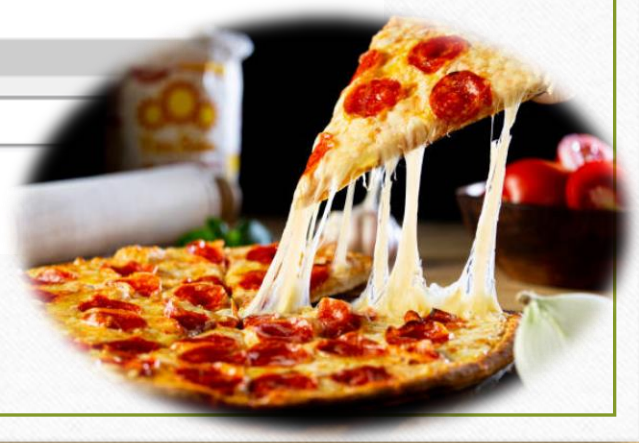
Most common pizza size ordered

Most of the time customers buy L size of Pizza compare to others.

```
28    #Identify the most common pizza size ordered.
29
30    SELECT
31        p.size, COUNT(od.quantity)
32    FROM
33        order_details od
34            INNER JOIN
35        pizzas p ON od.pizza_id = p.pizza_id
36    GROUP BY p.size
37    ORDER BY COUNT(od.quantity) DESC
38    LIMIT 1;
39
```

Result Grid | Filter Rows:

size	count(od.quantity)
L	18526



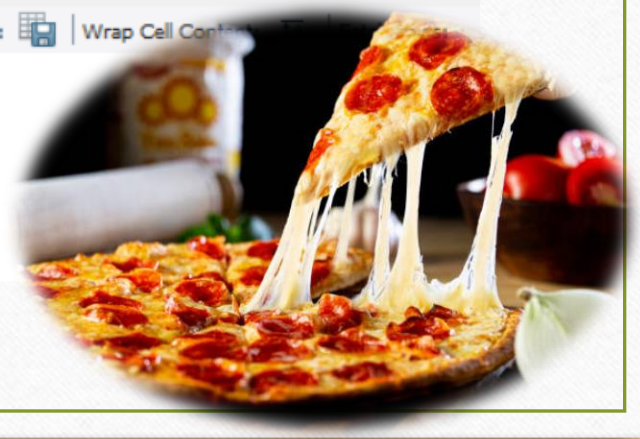
Top 5 most of ordered pizza types

- The Classic delux pizza
- The Barbrcue Chiken Pizza
- The Hawailan Pizza
- The Pepperoni Pizza
- The Thai Chiken Pizza

```
40  #List the top 5 most ordered pizza types along with their quantities.
41
42  SELECT
43      pt.name, SUM(od.quantity) as Quantity
44  FROM
45      order_details od
46          INNER JOIN
47      pizzas p ON od.pizza_id = p.pizza_id
48          INNER JOIN
49      pizza_types pt ON p.pizza_type_id = pt.pizza_type_id
50  GROUP BY pt.name
51  ORDER BY SUM(od.quantity) DESC
52  LIMIT 5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Con

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



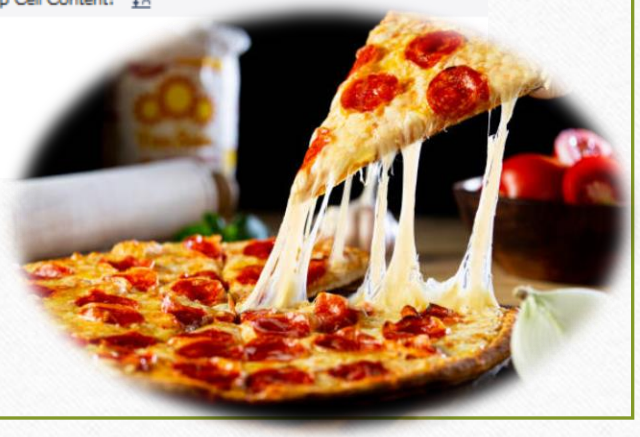
Quantity of each pizza category ordered

Classic Pizza ordered most of the time

```
55    #Join the necessary tables to find the total quantity of each pizza category ordered.
56
57    SELECT
58        pt.category, SUM(od.quantity) as Quantity
59    FROM
60        order_details od
61            INNER JOIN
62        pizzas p ON od.pizza_id = p.pizza_id
63            INNER JOIN
64        pizza_types pt ON p.pizza_type_id = pt.pizza_type_id
65    group by pt.category
66    order by Quantity desc;
67
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

category	Quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050



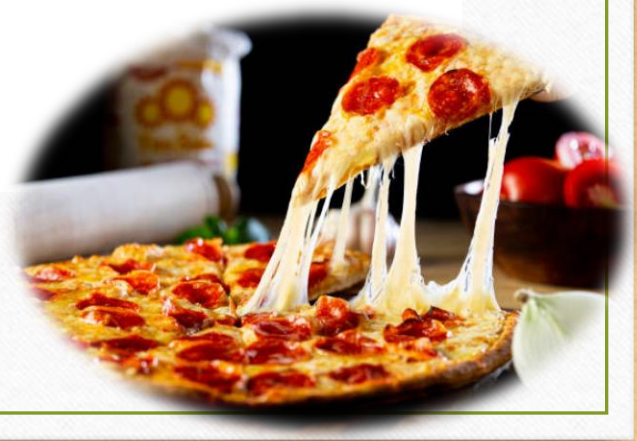
Distribution of orderd hour of the day

```sql
#Determine the distribution of orders by hour of the day.

SELECT
    HOUR(time) AS Hour, COUNT(order_id) AS Order_count
FROM
    orders
GROUP BY HOUR(time);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Hour	Order_count
11	1231
12	2520
13	2455
14	1472
15	1468



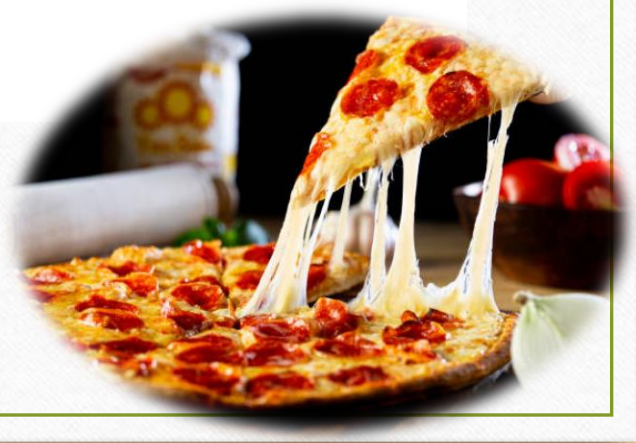
Category wise distribution of pizzas

- Chicken have 6 types of pizza
- Classic have 8 types of pizza
- Supreme have 9 types of pizza
- Veggie have 9 types of pizza

```
76    #Join relevant tables to find the category-wise distribution of pizzas.
77
78    select category, count(name) as pizza_count from pizza_types
79    group by category;
80
81
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

category	pizza_count
Chicken	6
Classic	8
Supreme	9
Veggie	9



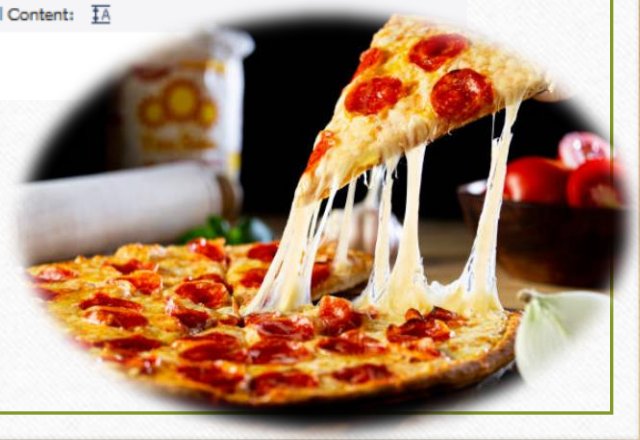
Average number of places ordered by per day

138.47

```
81  #Group the orders by date and calculate the average number of pizzas ordered per day.
82
83  SELECT
84      ROUND(AVG(quantity), 2)
85  FROM
86      (SELECT
87          date, SUM(od.quantity) AS quantity
88      FROM
89          order_details od
90      INNER JOIN orders o ON od.order_id = o.order_id
91      GROUP BY date) AS order_quantity;
92
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

round(avg(quantity),2)
138.47



Top 3 most ordered pizza by Revenue

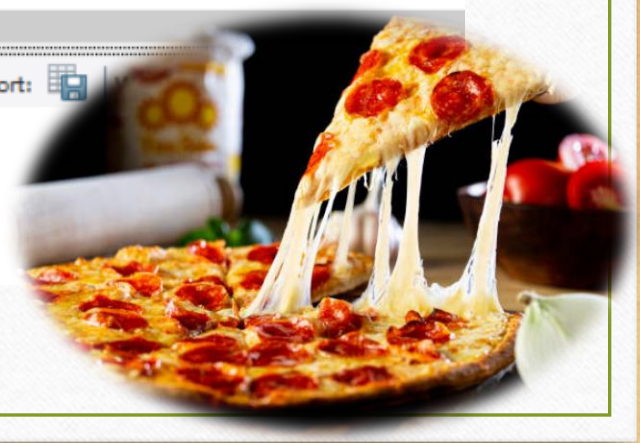
- The Thai Chicken Pizza
- The Barbecue Chicken Pizza
- The California Chicken Pizza

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

SELECT
    pt.name,
    ROUND(SUM(o.quantity * p.price), 2) AS Total_Revenue
FROM
    order_details o
        INNER JOIN
    pizzas p ON o.pizza_id = p.pizza_id
        INNER JOIN
    pizza_types pt ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.name
ORDER BY Total_revenue DESC
LIMIT 3;
```

Result Grid | Filter Rows: | Export:

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



Revenue in % for each Category

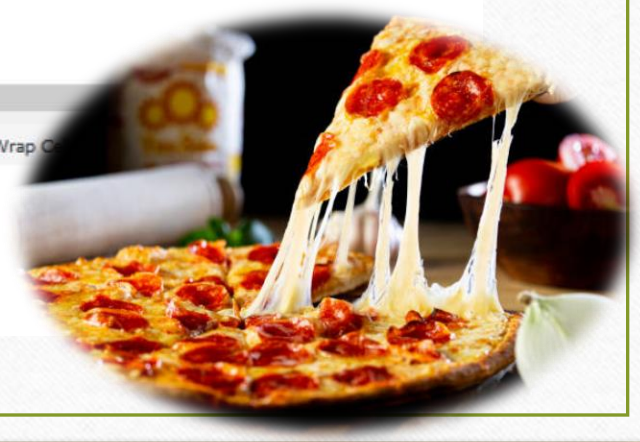
- Classic have highest contribution i.e. 26.91% .

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

SELECT
    pt.category,
    CONCAT(ROUND((SUM(od.quantity * p.price) / (SELECT
                        ROUND(SUM(o.quantity * p.price), 2) AS Total_Revenue
                    FROM
                        order_details o
                            INNER JOIN
                        pizzas p ON o.pizza_id = p.pizza_id)) * 100,
                2),
            '%') AS revenue
FROM
    pizza_types pt
        INNER JOIN
    pizzas p ON pt.pizza_type_id = p.pizza_type_id
        INNER JOIN
    order_details od ON od.pizza_id = p.pizza_id
GROUP BY pt.category
ORDER BY revenue DESC;
```

Result Grid | Filter Rows: | Export: | Wrap

category	revenue
Classic	26.91%
Supreme	25.46%
Chicken	23.96%
Veggie	23.68%



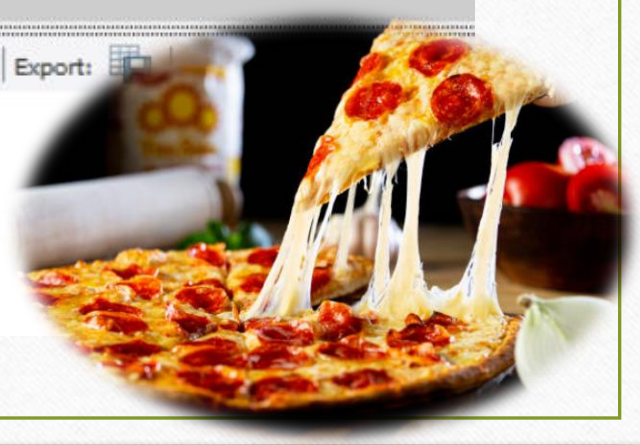
Cumulative Revenue over Time

2015-12-31 - 817860.05

```
131    #Analyze the cumulative revenue generated over time.
132
133    select date,
134    sum(revenue) over(order by date) as cum_revenue
135    from
136    (SELECT o.date,
137        ROUND(SUM(od.quantity * p.price), 2) AS Revenue
138    FROM order_details od
139    INNER JOIN pizzas p
140    ON od.pizza_id = p.pizza_id
141    inner join orders o
142    on od.order_id=o.order_id
143    group by o.date) as sales;
144
```

Result Grid | Filter Rows: | Export:

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

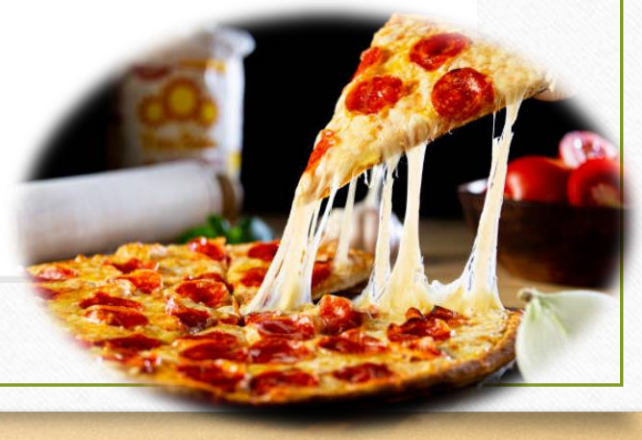


3 most Ordered pizza for each category

```
145  #Determine the top 3 most ordered pizza types based on revenue for each pizza category.
146
147  select name, revenue from
148  (select category, name, revenue,
149  rank() over(partition by category order by revenue desc) as rn
150  from
151  (select pt.category, pt.name,
152  sum(od.quantity*p.price) as revenue
153  from pizza_types pt
154  inner join pizzas p
155  on pt.pizza_type_id=p.pizza_type_id
156  inner join order_details od
157  on od.pizza_id=p.pizza_id
158  group by pt.category, pt.name) as a) as b
159  where rn<=3;
```

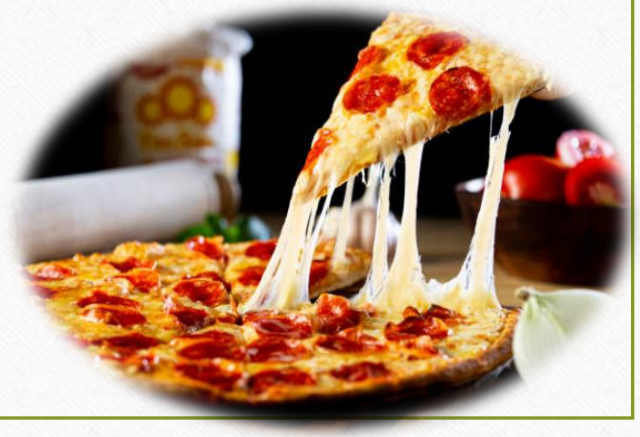
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

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



Conclusion

- Total revenue generated is 817860.05.
- Customer buying L size of Pizza mostly
- Most of the pizza ordered by Classic and Supreme Category, 26.91%and 25.26% contribution respectively.



Thank YOU