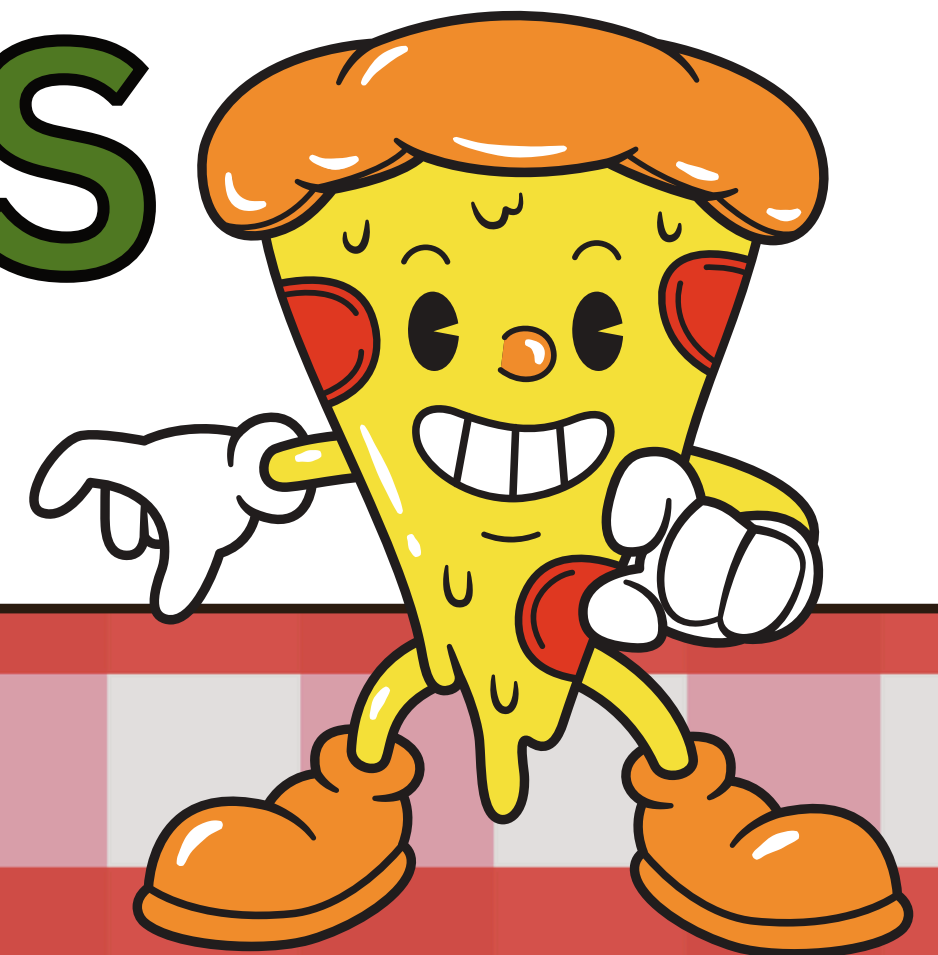# PIZZA SALES
DATA ANALYSIS

Retrieve the total number of orders placed.

```sql
SELECT
    COUNT(Order_id) AS Total_orders
FROM
    orders;
```

Total_orders
21350

Calculate the total revenue generated from pizza sales.

```sql
SELECT
    ROUND(SUM((Order_details.Quantity * Pizzas.Price)),
        2) Total_Sales
FROM
    order_details
        JOIN
    pizzas ON Pizzas.Pizza_id = Order_details.Pizza_id;
```

Total_Sales
817860.05

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;
  ```

	name	Price
▶	The Greek Pizza	35.95

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 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

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

```sql
SELECT
    pizza_types.name, SUM(order_details.quantity) AS Total_order
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 Total_order DESC
LIMIT 5;
```

name	Total_order
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
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(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

Determine the distribution of orders by hour of the day.

```sql
SELECT
    HOUR(Order_time) AS Hour,
    COUNT(Order_id) AS Order_Count
FROM
    orders
GROUP BY Hour;
```

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

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) AS Avg_order_per_day
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
    ORDER BY Quantity) AS Order_quantity;
```

Avg_order_per_day
138

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

```sql
SELECT
    pizza_types.name,
    SUM(order_details.Quantity * pizzas.price) AS Total
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 Total DESC
LIMIT 3;
```

name	Total
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(order_details.Quantity * pizzas.price) / (SELECT
                        ROUND(SUM((Order_details.Quantity * Pizzas.Price)),
                            2) 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 pizzas.pizza_type_id = pizza_types.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

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(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	2713.85
2015-01-02	5445.75
2015-01-03	8108.15
2015-01-04	9863.6
2015-01-05	11929.55

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 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

THANK YOU!