

SQL PROJECT

PIZZA  
SALES

--Aum Sarthak--





# OBJECTIVES

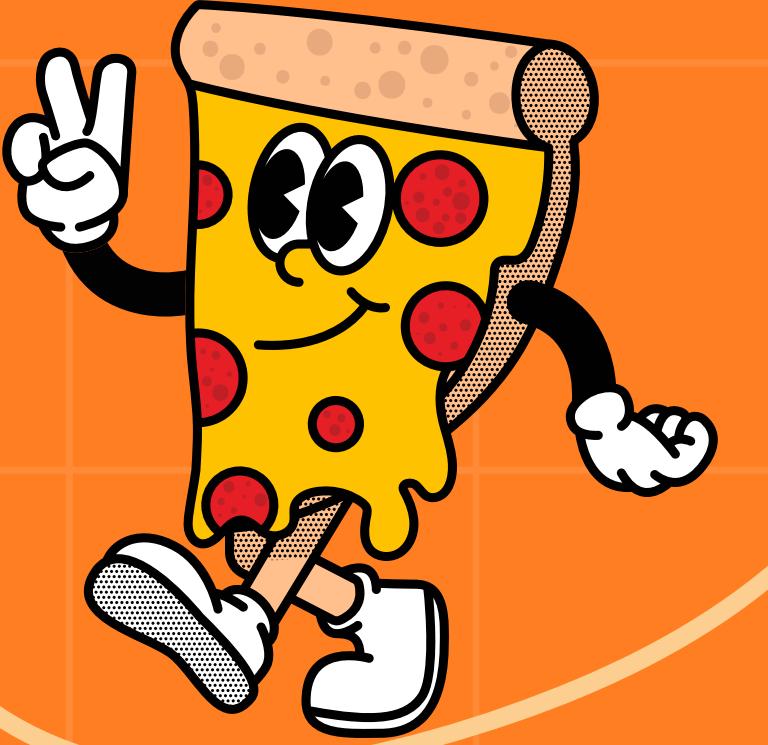


Dive deep into this dataset to uncover the secrets of pizza sales success. With its wealth of information on orders, pizza types, ingredients, sizes, and pricing, it provides a clear picture of customer preferences and revenue drivers. Armed with these insights, the business can make informed decisions to tailor menus, optimize pricing strategies, and streamline operations. By leveraging data-driven approaches, the business can maximize profitability, delight customers, and stay ahead in the fiercely competitive pizza market.



# 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. List the top 5 most ordered pizza types along with their quantities.
5. Find the total quantity of each pizza category ordered.
6. Find the category-wise distribution of pizzas.
7. Determine the distribution of orders by hour of the day.
8. Group the orders by date and calculate the average number of pizzas ordered per day.
9. Determine the top 3 most ordered pizza types based on total revenue.
10. Determine the top 3 most ordered pizza types based on revenue for each pizza category.
11. Calculate the percentage contribution of each pizza type to total revenue.



## The table schema are as follows:

Table1:

order\_details

order_details_id	int
order_id	int
pizza_id	varchar(18)
quantity	int

Table2: orders

order_id	int
order_date	date
order_time	datetime

Table3:

pizza\_type

pizza_type_id	varchar(15)
name	varchar(28)
category	varchar(15)
ingredients	varchar(60)

Table4: pizzas

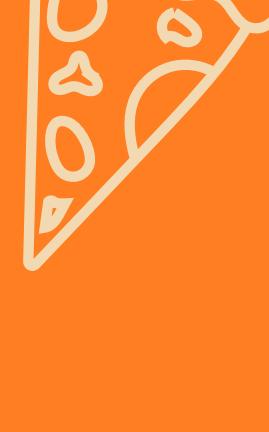
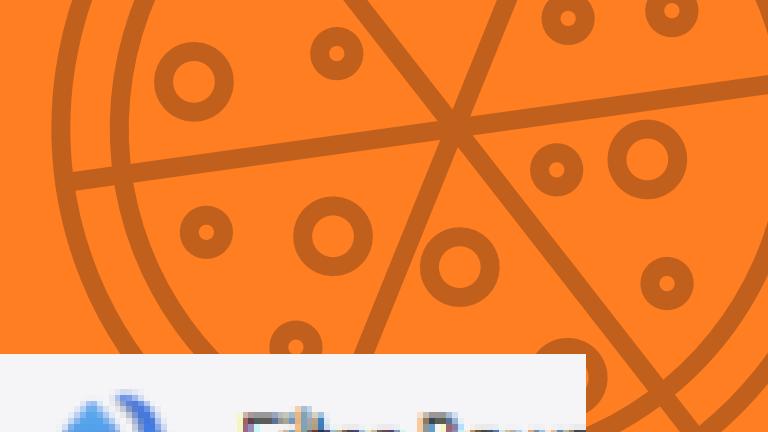
pizza_id	varchar(20)
pizza_type_id	varchar(15)
size	varchar(1)
price	numeric

# 1. Retrieve the total number of orders placed

## Query

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

## Output



	total_no_of_orders
▶	21350

## 2. Calculate the total revenue generated from pizza sales

### Query

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

### Output

	total_revenue
▶	817860.05

### 3. Identify the highest-priced pizza

#### Query

```
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;
```

#### Output

Result Grid | Filter Rows:

	name	price
▶	The Greek Pizza	35.95

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

### Query

```
SELECT pt.name, SUM(od.quantity) AS total_quantity
FROM order_details od
JOIN pizzas p ON od.pizza_id = p.pizza_id
JOIN pizza_types pt ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.name
ORDER BY total_quantity DESC
LIMIT 5;
```

### Output

	name	total_quantity
▶	The Classic Deluxe Pizza	2453
	The Barbecue Chicken Pizza	2432
	The Hawaiian Pizza	2422
	The Pepperoni Pizza	2418
	The Thai Chicken Pizza	2371

## 5. Find the total quantity of each pizza category ordered

### Query

```
SELECT pt.category, SUM(od.quantity) AS total_quantity
FROM pizza_types pt
JOIN pizzas p ON pt.pizza_type_id = p.pizza_type_id
JOIN order_details od ON p.pizza_id = od.pizza_id
GROUP BY pt.category
ORDER BY total_quantity DESC;
```

### Output

Result Grid | Filter Rows:

	category	total_quantity
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

## 6. Find the category-wise distribution of pizzas

### Query

```
SELECT pt.category, COUNT(p.pizza_id) AS total_pizzas  
FROM pizza_types pt  
JOIN pizzas p ON pt.pizza_type_id = p.pizza_type_id  
GROUP BY pt.category;
```

### Output

	category	total_pizzas
▶	Chicken	18
	Classic	26
	Supreme	25
	Veggie	27

## 7. Determine the distribution of orders by hour of the day

### Query

```
SELECT HOUR(order_time) AS hour_of_day,  
       COUNT(order_id) AS order_count  
  FROM orders  
 GROUP BY HOUR(order_time);
```

### Output

	hour_of_day	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

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

### Query

```
SELECT order_date,  
       COUNT(od.order_id)  
             AS total_pizzas_ordered,  
       ROUND(COUNT(od.order_id) /  
             COUNT(DISTINCT order_date))  
             AS average_pizzas_per_day  
FROM orders o  
JOIN order_details od  
ON o.order_id = od.order_id  
GROUP BY order_date;
```

### Output

	order_date	total_pizzas_ordered	average_pizzas_per_day
▶	2015-01-01	161	161
	2015-01-02	160	160
	2015-01-03	154	154
	2015-01-04	106	106
	2015-01-05	121	121
	2015-01-06	144	144
	2015-01-07	133	133
	2015-01-08	171	171
	2015-01-09	123	123
	2015-01-10	145	145
	2015-01-11	114	114
	2015-01-12	118	118
	2015-01-13	117	117
	2015-01-14	144	144
	2015-01-15	123	123
	2015-01-16	155	155
	2015-01-17	122	122
	2015-01-18	119	119
	2015-01-19	139	139
	2015-01-20	139	139
	2015-01-21	127	127

\*and so many dates

	order_date	total_pizzas_ordered	average_pizzas_per_day
	2015-12-07	147	147
	2015-12-08	109	109
	2015-12-09	156	156
	2015-12-10	118	118
	2015-12-11	161	161
	2015-12-12	125	125
	2015-12-13	126	126
	2015-12-14	131	131
	2015-12-15	142	142
	2015-12-16	133	133
	2015-12-17	110	110
	2015-12-18	174	174
	2015-12-19	138	138
	2015-12-20	122	122
	2015-12-21	128	128
	2015-12-22	111	111
	2015-12-23	130	130
	2015-12-24	129	129
	2015-12-26	95	95
	2015-12-27	87	87
	2015-12-28	102	102
	2015-12-29	77	77
	2015-12-30	73	73
	2015-12-31	171	171

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

### Query

```
SELECT pt.name, SUM(od.quantity * p.price) AS total_revenue
FROM order_details od
JOIN pizzas p ON od.pizza_id = p.pizza_id
JOIN pizza_types pt ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.name
ORDER BY total_revenue DESC
LIMIT 3;
```

### Output

Result Grid | Filter Rows:

	name	total_revenue
▶	The Thai Chicken Pizza	43434.25
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41409.5

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

## Query

```
SELECT pt.category, pt.name,  
       SUM(od.quantity) * p.price)  
             AS revenue  
  
FROM pizza_types pt JOIN pizzas p  
ON pt.pizza_type_id  
= p.pizza_type_id  
JOIN order_details od  
ON od.pizza_id = p.pizza_id  
GROUP BY pt.category, pt.name;
```

## Output

	category	name	revenue
▶	Classic	The Hawaiian Pizza	32273.25
	Classic	The Classic Deluxe Pizza	38180.5
	Veggie	The Five Cheese Pizza	26066.5
	Supreme	The Italian Supreme Pizza	33476.75
	Veggie	The Mexicana Pizza	26780.75
	Chicken	The Thai Chicken Pizza	43434.25
	Supreme	The Prosciutto and Arugula Pizza	24193.25
	Chicken	The Barbecue Chicken Pizza	42768
	Classic	The Greek Pizza	28454.100000000013
	Supreme	The Spinach Supreme Pizza	15277.75
	Veggie	The Green Garden Pizza	13955.75
	Classic	The Italian Capocollo Pizza	25094
	Supreme	The Spicy Italian Pizza	34831.25
	Veggie	The Spinach Pesto Pizza	15596
	Veggie	The Vegetables + Vegetables Pi...	24374.75
	Chicken	The Southwest Chicken Pizza	34705.75
	Chicken	The California Chicken Pizza	41409.5
	Classic	The Pepperoni Pizza	30161.75
	Chicken	The Chicken Pesto Pizza	16701.75
	Classic	The Big Meat Pizza	22968
	Supreme	The Soppressata Pizza	16425.75
	Veggie	The Four Cheese Pizza	32265.70000000065
	Classic	The Napolitana Pizza	24087
	Supreme	The Calabrese Pizza	15934.25
	Veggie	The Italian Vegetables Pizza	16019.25
	Veggie	The Mediterranean Pizza	15360.5
	Supreme	The Pepper Salami Pizza	25529

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

## Query

```
SELECT pt.name, SUM(od.quantity * p.price)
  AS pizza_type_revenue,
  ROUND(100.0 * SUM(od.quantity * p.price) /
  (SELECT SUM(od2.quantity * p2.price)
   FROM order_details od2
   JOIN pizzas p2 ON od2.pizza_id = p2.pizza_id
  ), 2) AS percentage_contribution
  FROM order_details od
  JOIN pizzas p ON od.pizza_id = p.pizza_id
  JOIN pizza_types pt ON p.pizza_type_id
  = pt.pizza_type_id
 GROUP BY pt.name
 ORDER BY pizza_type_revenue DESC;
```

## Output

	name	pizza_type_revenue	percentage_contribution
▶	The Thai Chicken Pizza	43434.25	5.31
	The Barbecue Chicken Pizza	42768	5.23
	The California Chicken Pizza	41409.5	5.06
	The Classic Deluxe Pizza	38180.5	4.67
	The Spicy Italian Pizza	34831.25	4.26
	The Southwest Chicken Pizza	34705.75	4.24
	The Italian Supreme Pizza	33476.75	4.09
	The Hawaiian Pizza	32273.25	3.95
	The Four Cheese Pizza	32265.70000000065	3.95
	The Sicilian Pizza	30940.5	3.78
	The Pepperoni Pizza	30161.75	3.69
	The Greek Pizza	28454.10000000013	3.48
	The Mexicana Pizza	26780.75	3.27
	The Five Cheese Pizza	26066.5	3.19
	The Pepper Salami Pizza	25529	3.12
	The Italian Capocollo Pizza	25094	3.07
	The Vegetables + Vegetable...	24374.75	2.98
	The Prosciutto and Arugula ...	24193.25	2.96
	The Napolitana Pizza	24087	2.95
	The Spinach and Feta Pizza	23271.25	2.85
	The Big Meat Pizza	22968	2.81
	The Pepperoni, Mushroom, ...	18834.5	2.3
	The Chicken Alfredo Pizza	16900.25	2.07
	The Chicken Pesto Pizza	16701.75	2.04
	The Soppressata Pizza	16425.75	2.01
	The Italian Vegetables Pizza	16019.25	1.96
	The Calabrese Pizza	15934.25	1.95
	The Spinach Pesto Pizza	15596	1.91
	The Mediterranean Pizza	15360.5	1.88
	The Spinach Supreme Pizza	15277.75	1.87
	The Green Garden Pizza	13955.75	1.71

# Thank you



PIZZA

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