



Pizza Sales Analysis Using SQL

This project presents a comprehensive analysis of pizza sales data using structured query language (SQL). The primary objective was to explore transactional data and uncover actionable business insights.

Key techniques applied:

- **JOINS** across multiple tables: orders, orders_details, pizzas, pizza_types
- **Aggregate functions:** SUM, ROUND, GROUP BY to summarize sales
- **Subqueries and nested calculations** for category-level insights

```
1 -- determine the top 3 most ordered pizza types
2 -- based on revenue for each pizza category
3
4 • SELECT
5     pizza_types.category,
6     pizza_types.name,
7     SUM(orders_details.quantity * pizzas.price) AS revenue
8 FROM
9     pizza_types
10 JOIN
11     pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
12 JOIN
13     orders_details ON orders_details.pizza_id = pizzas.pizza_id
```

	category	name	revenue
▶	Chicken	The Thai Chicken Pizza	43434.25
	Chicken	The Barbecue Chicken Pizza	42768
	Chicken	The California Chicken Pizza	41409.5
	Classic	The Classic Deluxe Pizza	38180.5
	Supreme	The Spicy Italian Pizza	34831.25

```

1      -- analyze the cumulative revenue generated over time.
2
3 •  SELECT
4      orders.order_date,
5      SUM(orders_details.quantity * pizzas.price) AS revenue
6  FROM
7      orders_details
8  JOIN
9      pizzas ON orders_details.pizza_id = pizzas.pizza_id
10 JOIN
11     orders ON orders.order_id = orders_details.order_id
12 GROUP BY
13     orders.order_date

```

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

	order_date	revenue
▶	2015-01-01	2713.8500000000004
	2015-01-02	2731.8999999999996
	2015-01-03	2662.399999999996
	2015-01-04	1755.4500000000003
	2015-01-05	2065.95
	2015-01-06	2420.05

```

1      -- calculate the percentage contribution of each pizza type to total revenue.
2
3 •  SELECT
4      pt.category,
5      ROUND(
6          SUM(od.quantity * p.price) /
7          (
8              SELECT SUM(od2.quantity * p2.price)
9              FROM orders_details od2
10             JOIN pizzas p2 ON od2.pizza_id = p2.pizza_id
11          ) * 100, 2
12      ) AS revenue_percentage
13  FROM
14      pizzas_types pt

```

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

	category	revenue_percentage
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

```
3 •  SELECT
4      pizza_types.name,
5      SUM(orders_details.quantity * pizzas.price) AS revenue
6  FROM
7      pizza_types
8          JOIN
9      pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
10         JOIN
11     orders_details ON orders_details.pizza_id = pizzas.pizza_id
12 GROUP BY pizza_types.name
13 ORDER BY revenue DESC
14 LIMIT 5;
```

```
3
4 •  SELECT
5      pizza_types.category,
6      SUM(orders_details.quantity) AS quantity
7  FROM
8      pizza_types
9          JOIN
10     pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
11         JOIN
12     orders_details ON orders_details.pizza_id = pizzas.pizza_id
13 GROUP BY pizza_types.category
14 ORDER BY quantity DESC;
```

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

	category	quantity
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050



```
1 -- list the top 5 most ordered pizza
2 -- along with their quantities
3
4 • SELECT
5     pizza_types.name, SUM(orders_details.quantity) AS quantity
6     FROM
7     pizza_types
8         JOIN
9     pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
10        JOIN
11    orders_details ON orders_details.pizza_id = pizzas.pizza_id
12    GROUP BY pizza_types.name
13    ORDER BY quantity DESC;
```

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

	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
	The California Chicken Pizza	2370

```
1      -- identify the most common pizza size ordered.  
2  
3 •   select size from pizzas;  
4 •   select quantity, count(order_details_id)  
5     from orders_details group by quantity;  
6  
7 •   SELECT  
8       pizzas.size, COUNT(orders_details.order_details_id)  
9     FROM  
10    pizzas  
11      JOIN  
12        orders_details ON pizzas.pizza_id = orders_details.pizza_id  
13    GROUP BY pizzas.size;
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
size	COUNT(orders_details.order_details_id)			
M	15385			
L	18526			
S	14137			
XL	544			
XXL	28			