

PIZZA SALES REPORT - SQL

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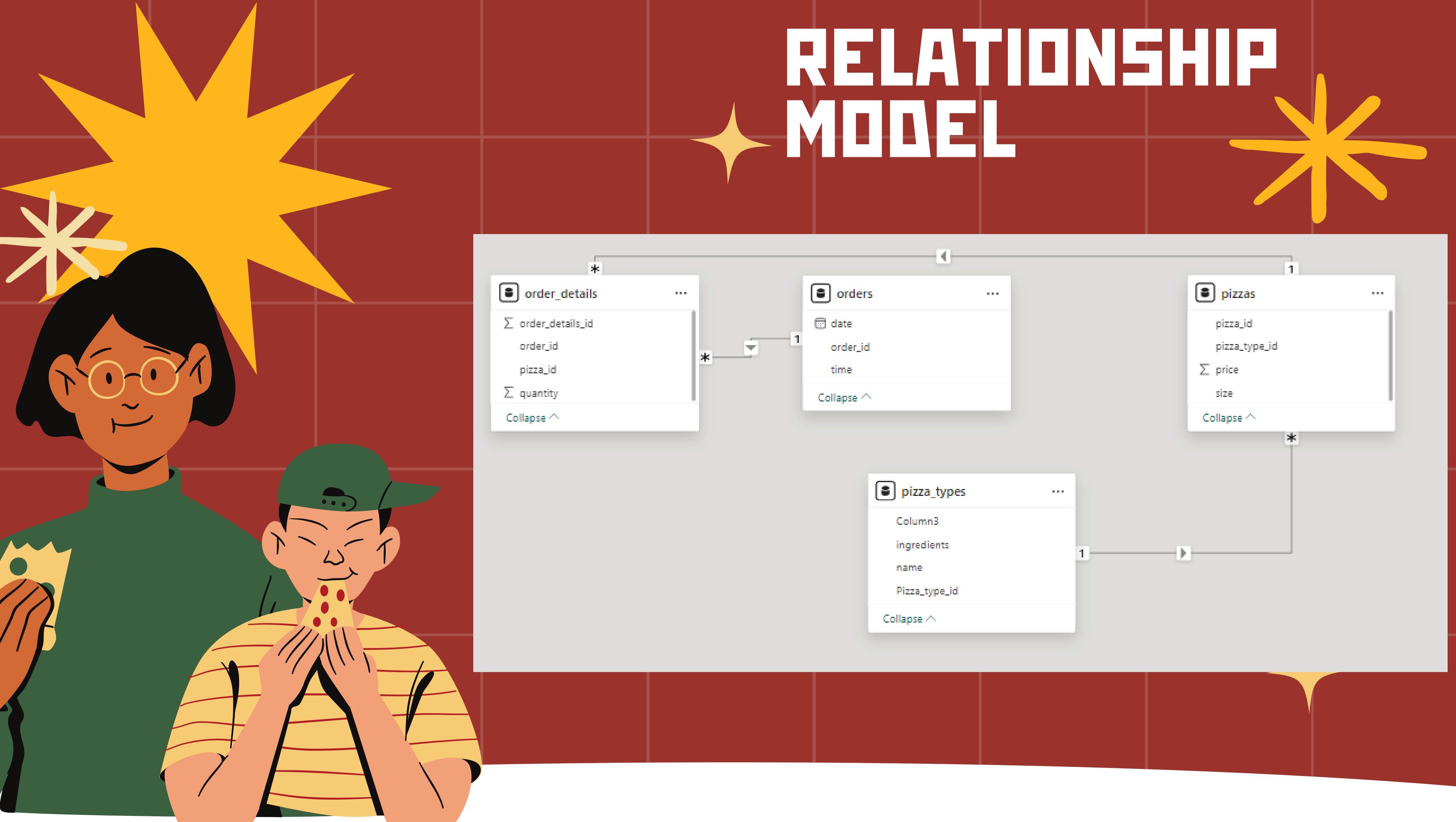


INTRODUCTION

"Welcome to the ultimate slice of data analysis! In this project, we're diving into the world of pizza sales, where every transaction tells a story of customer cravings, top-selling toppings, and business insights. Through SQL, we've sliced through the data to uncover trends, optimize operations, and boost sales—proving that the secret ingredient to success is in the numbers."

Done entirely on MySQL

RELATIONSHIP MODEL



QUERIES:

Divided into 3 categories namely
basic, intermediate and advanced



Basic:

- Retrieve the total number of orders placed.
- Calculate the total revenue generated from pizza sales.
- Identify the highest-priced pizza.
- Identify the most common pizza size ordered.
- List the top 5 most ordered pizza types along with their quantities.

Intermediate:

- Join the necessary tables to find the total quantity of each pizza category ordered.
- Determine the distribution of orders by hour of the day.
- Join relevant tables to find the category-wise distribution of pizzas.
- Group the orders by date and calculate the average number of pizzas ordered per day.
- Determine the top 3 most ordered pizza types based on revenue.

Advanced:

- Calculate the percentage contribution of each pizza type to total revenue.
- Analyze the cumulative revenue generated over time.
- Determine the top 3 most ordered pizza types based on revenue for each pizza category.



Q1

```
12    -- Basic:  
13    -- Retrieve the total number of orders placed.  
14  
15 • select count(order_id) as total_orders from orders;
```

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

total_orders
21350

Q2

```
17    -- Calculate the total revenue generated from pizza sales.  
18  
19 • SELECT  
20      ROUND(SUM(o.quantity * p.price), 2) AS total_revenue  
21  FROM  
22    order_details o  
23    JOIN  
24      pizzas p ON p.pizza_id = o.pizza_id;  
25  
26  
27
```

[Result Grid](#) | [Filter Rows:](#) [Export:](#) [Wrap Cell Content:](#)

	total_revenue
▶	817860.05

Q3



```
26    -- Identify the highest-priced pizza.  
27  
28 •   SELECT  
29      pt.name, p.price  
30  FROM  
31      pizzas p  
32      JOIN  
33      pizza_types pt ON pt.pizza_type_id = p.pizza_type_id  
34  ORDER BY price DESC  
35  LIMIT 1;
```

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

	name	price
▶	The Greek Pizza	35.95

Q4



```
39      -- Identify the most common pizza size ordered.  
40  
41 •   SELECT DISTINCT  
42       p.size, COUNT(o.order_details_id) AS times_ordered  
43   FROM  
44       pizzas p  
45       JOIN  
46       order_details o ON p.pizza_id = o.pizza_id  
47   GROUP BY size  
48   ORDER BY COUNT(o.order_details_id) DESC  
49   LIMIT 1;
```

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

size	times_ordered
L	18526

VARIATIONS



AS

```
53     -- List the top 5 most ordered pizza types along with their quantities.
54 • SELECT
55     pt.name, SUM(o.quantity) AS quantities
56 FROM
57     pizza_types pt
58     JOIN
59     pizzas p ON p.pizza_type_id = pt.pizza_type_id
60     JOIN
61     order_details o ON o.pizza_id = p.pizza_id
62 GROUP BY pt.name
63 ORDER BY SUM(o.quantity) DESC LIMIT 5;
```

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

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



```
66      -- Intermediate:  
67      -- Join the necessary tables to find the total quantity of each pizza category ordered.  
68  
69 •   SELECT pt.category, COUNT(quantity) AS total_quantity  
70     FROM  
71       pizza_types pt  
72     JOIN  
73       pizzas p ON p.pizza_type_id = pt.pizza_type_id  
74     JOIN  
75       order_details o ON o.pizza_id = p.pizza_id  
76   GROUP BY pt.category  
77   ORDER BY COUNT(quantity) DESC;
```

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

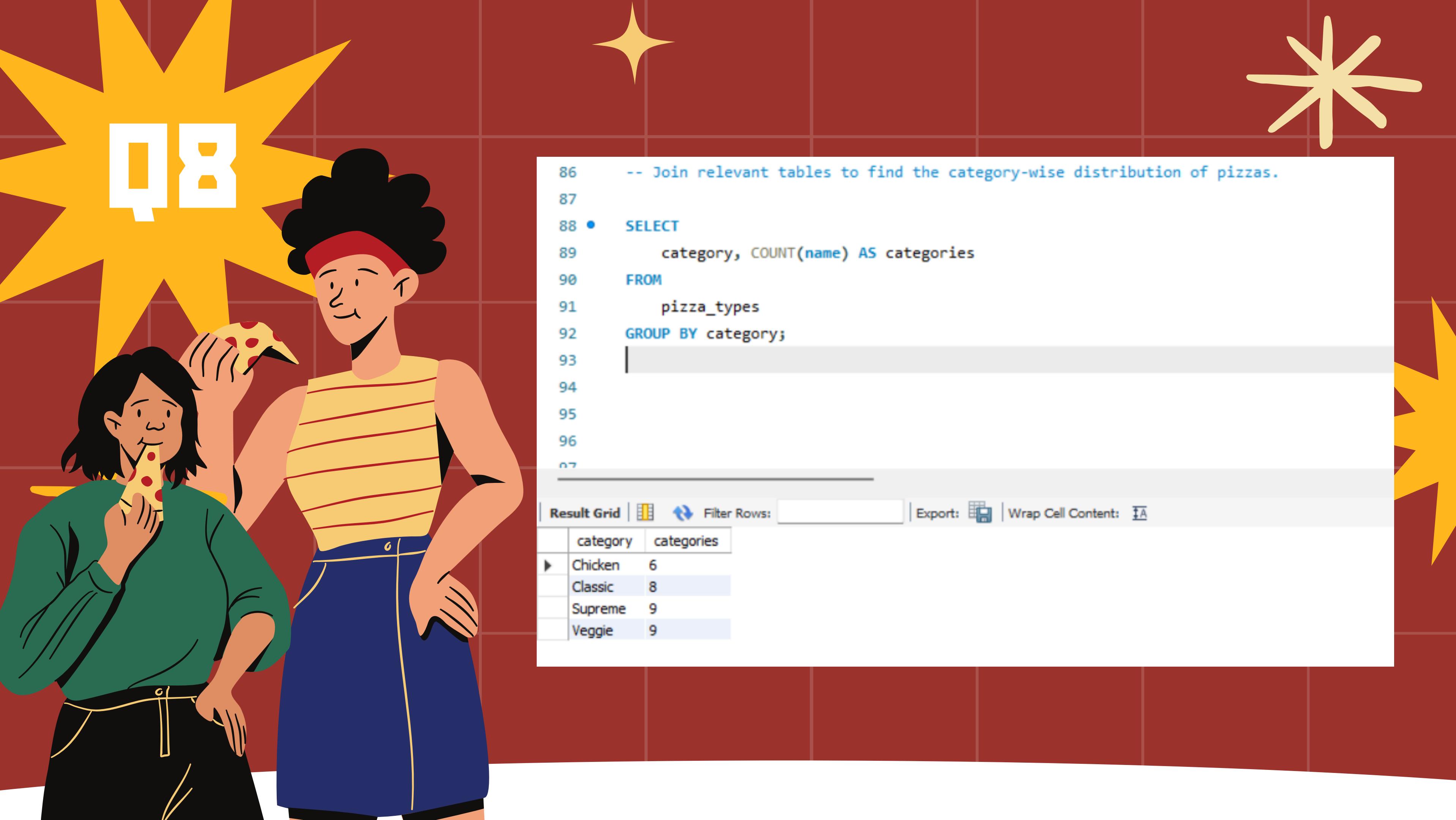
	category	total_quantity
▶	Classic	14579
	Supreme	11777
	Veggie	11449
	Chicken	10815

Q7

```
79      -- Determine the distribution of orders by hour of the day.  
80  
81 •  select hour(order_time) as hour_of_the_day, count(order_id) as total_orders from orders  
82     group by hour(order_time)  
83     order by hour(order_time);
```

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

hour_of_the_day	total_orders
9	1
10	8
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



```
86    -- Join relevant tables to find the category-wise distribution of pizzas.  
87  
88 •  SELECT  
89      category, COUNT(name) AS categories  
90  FROM  
91    pizza_types  
92 GROUP BY category;  
93  
94  
95  
96  
97
```

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

category	categories
Chicken	6
Classic	8
Supreme	9
Veggie	9



```
96  
97      -- Group the orders by date and calculate the average number of pizzas ordered per day.  
98 •  SELECT  
99      ROUND(AVG(quantity), 0) AS per_day_quantity  
100     FROM  
101     (SELECT  
102         o.order_date, SUM(od.quantity) AS quantity  
103     FROM  
104         orders o  
105     JOIN order_details od ON od.order_id = o.order_id  
106     GROUP BY o.order_date) AS order_quantity;  
107  
108
```

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

per_day_quantity
138

Q10

```
109 -- Determine the top 3 most ordered pizza types based on revenue.  
110  
111 • SELECT  
112     pt.name, ROUND(SUM(o.quantity * p.price), 0) AS revenue  
113     FROM  
114         pizza_types pt  
115             JOIN  
116                 pizzas p ON pt.pizza_type_id = p.pizza_type_id  
117                 JOIN  
118                     order_details o ON o.pizza_id = p.pizza_id  
119             GROUP BY pt.name  
120             ORDER BY revenue DESC LIMIT 3
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:	Fetch rows:
	name	revenue			
▶	The Thai Chicken Pizza	43434			
	The Barbecue Chicken Pizza	42768			
	The California Chicken Pizza	41410			

Q11



```
122    -- Advanced:  
123    -- Calculate the percentage contribution of each pizza type to total revenue.  
124  
125 •   SELECT  
126      pt.category,  
127      CONCAT(ROUND(SUM(o.quantity * p.price) /  
128          (SELECT SUM(o.quantity * p.price)  
129              FROM order_details o  
130                  JOIN pizzas p ON p.pizza_id = o.pizza_id) * 100, 2), '%') AS revenue  
131  FROM pizza_types pt  
132      JOIN pizzas p ON pt.pizza_type_id = p.pizza_type_id  
133      JOIN order_details o ON o.pizza_id = p.pizza_id  
134  GROUP BY pt.category  
135  ORDER BY revenue DESC;  
136
```

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

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



Q12

```
139   -- Analyze the cumulative revenue generated over time.  
140  
141 • select order_date,round(sum(revenue) over(order by order_date),2) as cum_revenue from  
142   (select orders.order_date,sum(order_details.quantity * pizzas.price) as revenue  
143     from order_details join pizzas  
144       on order_details.pizza_id=pizzas.pizza_id  
145     join orders on orders.order_id=order_details.order_id  
146   group by orders.order_date) as sales
```

```
147  
148  
149  
150  
151  
152
```

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

	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
	2015-01-06	14358.5

Q13

```
150 -- Determine the top 3 most ordered pizza types based on revenue for each pizza category.  
151 • select name,revenue,rn,category from  
152  
153 (select category,name,revenue,  
154 rank() over(partition by category order by revenue desc) as rn  
155 from(  
156 select pizza_types.category,pizza_types.name,  
157 sum(order_details.quantity *pizzas.price) as revenue  
158 from pizza_types join pizzas  
159 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  
162 where rn<=3;
```

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

name	revenue	rn	category
The Thai Chicken Pizza	43434.25	1	Chicken
The Barbecue Chicken Pizza	42768	2	Chicken
The California Chicken Pizza	41409.5	3	Chicken
The Classic Deluxe Pizza	38180.5	1	Classic
The Hawaiian Pizza	32273.25	2	Classic
The Pepperoni Pizza	30161.75	3	Classic
The Spicy Italian Pizza	24831.25	1	Supreme



THANK YOU

for joining me on this delicious journey through the world of pizza sales data! Your attention and curiosity have been the perfect toppings to this presentation. I hope my exploration has given you a taste of how powerful data can be in driving business success. Let's keep slicing through the numbers and cooking up insights together. Grazie