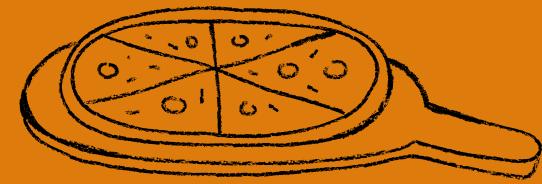




Pizza Sale



HOT



Spicy



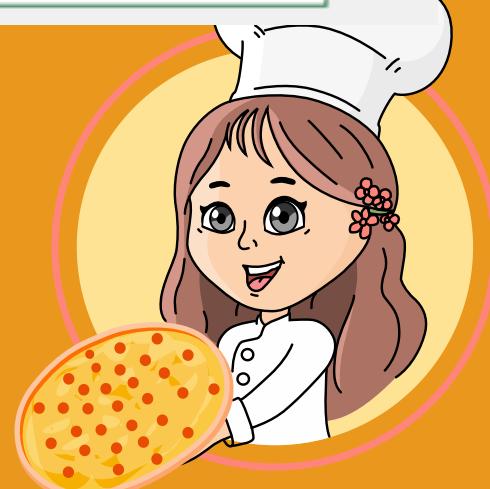
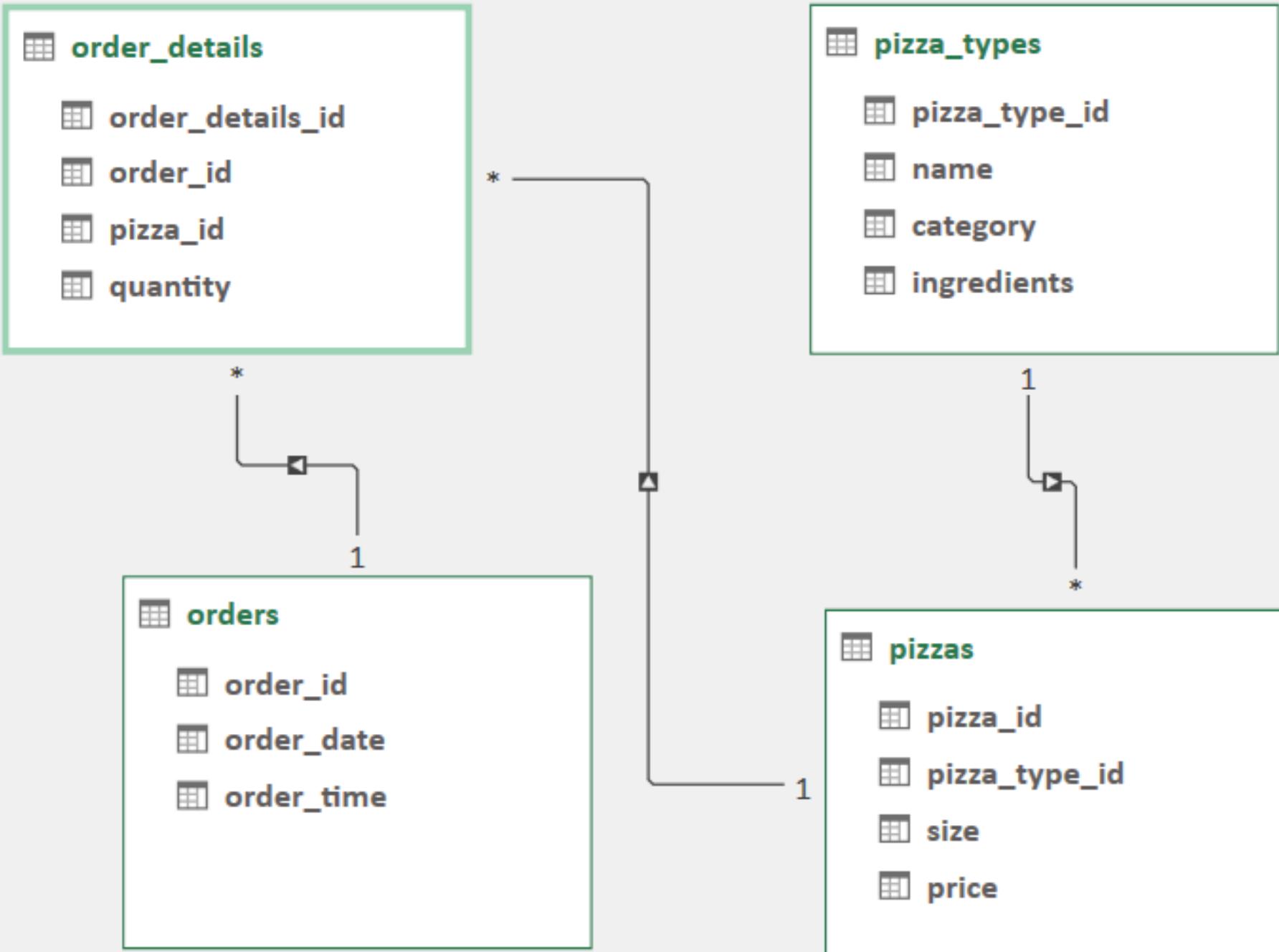
Once upon a time in the bustling town of Gourmet Valley, Chef Nail ran a charming pizza store known for its unique, delicious pizzas. Despite his culinary skills, Chef Nail noticed a stagnation in sales and realized that it was time to dig deeper into the numbers to uncover hidden insights and opportunities for growth.



Enter Jyoti, a sharp and skilled Data Analyst with a knack for transforming numbers into actionable strategies. Jyoti, having heard of Chef Nail's predicament through the local business grapevine, offered her expertise to help revitalize his pizza business.



SCHEMA



--Retrieve the total number of orders placed.

```
SELECT COUNT(ORDER_ID) AS TOTAL_ORDERS  
FROM ORDERS; -
```

	total_orders	bigint
1	21350	



--Calculate the total revenue generated from pizza sales.

```
SELECT SUM(ORDER_DETAILS.QUANTITY * PIZZAS.PRICE) AS TOTAL_SALE  
FROM ORDER_DETAILS  
JOIN PIZZAS ON ORDER_DETAILS.PIZZA_ID = PIZZAS.PIZZA_ID;
```

	total_sale	locked
	double precision	
1	817860.0508384705	



--Identify the highest-priced pizza.

```
SELECT PIZZAS.PRICE,  
       PIZZA_TYPES.NAME  
  FROM PIZZAS  
 JOIN PIZZA_TYPES ON PIZZAS.PIZZA_TYPE_ID = PIZZA_TYPES.PIZZA_TYPE_ID  
 ORDER BY PIZZAS.PRICE DESC  
 LIMIT 1;
```

	price real	name
1	35.95	The Greek Pizza



--Identify the most common pizza size ordered.

```
SELECT *  
FROM pizzas;
```

```
SELECT PIZZAS.SIZE,  
       COUNT(ORDER_DETAILS.ORDER_DETAILS_ID) AS ORDER_COUNT  
FROM PIZZAS  
JOIN ORDER_DETAILS ON PIZZAS.PIZZA_ID = ORDER_DETAILS.PIZZA_ID  
GROUP BY PIZZAS.SIZE  
ORDER BY ORDER_COUNT DESC;
```

	size text	order_count bigint
1	L	18526
2	M	15385
3	S	14137
4	XL	544
5	XXL	28



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

```
SELECT PIZZA_TYPES.NAME,  
       SUM(ORDER_DETAILS.QUANTITY) AS QTY  
  FROM ORDER_DETAILS  
 JOIN PIZZAS ON ORDER_DETAILS.PIZZA_ID = PIZZAS.PIZZA_ID  
 JOIN PIZZA_TYPES ON PIZZAS.PIZZA_TYPE_ID = PIZZA_TYPES.PIZZA_TYPE_ID  
 GROUP BY PIZZA_TYPES.NAME  
 ORDER BY QTY DESC  
 LIMIT 5;
```

	name	qty
	text	bigint
1	The Classic Deluxe Pizza	2453
2	The Barbecue Chicken Pizza	2432
3	The Hawaiian Pizza	2422
4	The Pepperoni Pizza	2418
5	The Thai Chicken Pizza	2371



--Join the necessary tables to find the total quantity of each
--pizza category ordered.

```
SELECT PIZZA_TYPES.CATEGORY,  
       SUM(ORDER_DETAILS.QUANTITY) AS QUANTITY  
FROM ORDER_DETAILS  
JOIN PIZZAS ON ORDER_DETAILS.PIZZA_ID = PIZZAS.PIZZA_ID  
JOIN PIZZA_TYPES ON PIZZAS.PIZZA_TYPE_ID = PIZZA_TYPES.PIZZA_TYPE_ID  
GROUP BY PIZZA_TYPES.CATEGORY  
ORDER BY QUANTITY DESC;
```

	category text	quantity bigint
1	Classic	14888
2	Supreme	11987
3	Veggie	11649
4	Chicken	11050



--Determine the distribution of orders by hour of the day

```
SELECT EXTRACT(HOUR FROM order_time)as order_hour,  
      COUNT(ORDER_ID) as order_count  
FROM ORDERS  
GROUP BY EXTRACT(HOUR from ORDER_TIME)  
ORDER BY ORDER_HOUR;
```

	order_hour numeric	order_count bigint
1	9	1
2	10	8
3	11	1231
4	12	2520
5	13	2455
6	14	1472
7	15	1468
8	16	1920
9	17	2336
10	18	2399
11	19	2009
12	20	1642
13	21	1198
14	22	663
15	23	28



--| find the category-wise distribution of pizzas.

```
SELECT CATEGORY,  
       COUNT(NAME)  
FROM PIZZA_TYPES  
GROUP BY CATEGORY;
```

	category	count
	text	bigint
1	Supreme	9
2	Chicken	6
3	Classic	8
4	Veggie	9



```
--Group the orders by date and calculate the average number  
--of pizzas ordered per day.  
SELECT ROUND(AVG(QUANTITY),2) as Avg_orders_per_day  
FROM  
  (SELECT ORDERS.ORDER_DATE AS 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);
```

avg_orders_per_day



numeric

138.47



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

```
select pizza_types.name, sum(order_details.quantity * pizzas.price) 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.name
order by revenue DESC limit 3;
```

name	revenue
text	double precision
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5



```

SELECT PIZZA_TYPES.CATEGORY,
       (SUM(ORDER_DETAILS.QUANTITY * PIZZAS.PRICE) /
        (SELECT SUM(ORDER_DETAILS.QUANTITY * PIZZAS.PRICE) AS TOTAL_SALE
         FROM ORDER_DETAILS)
         JOIN PIZZAS ON ORDER_DETAILS.PIZZA_ID = PIZZAS.PIZZA_ID))*100 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;

```

	category text	revenue double precision
	Veggie	23.682591025867662
	Chicken	23.95513753228847
	Supreme	25.456311211146232
	Classic	26.905960230697634



--Analyze the cumulative revenue generated over time.

```
SELECT ORDER_DATE,  
       SUM(REVENUE) OVER(ORDER BY ORDER_DATE) 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;
```

350	2015-12-22	803171.600818634
351	2015-12-23	805415.9008178711
352	2015-12-24	807553.7508201599
353	2015-12-26	809196.800825119
354	2015-12-27	810615.8008270264
355	2015-12-28	812253.0008296967
356	2015-12-29	813606.250831604
357	2015-12-30	814944.0508346558
358	2015-12-31	817860.0508384705



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

```
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 text	revenue double precision
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768
3	The California Chicken Pizza	41409.5
4	The Classic Deluxe Pizza	38180.5
5	The Hawaiian Pizza	32273.25
6	The Pepperoni Pizza	30161.75
7	The Spicy Italian Pizza	34831.25
8	The Italian Supreme Pizza	33476.75
9	The Sicilian Pizza	30940.5
10	The Four Cheese Pizza	32265.70100402832
11	The Mexicana Pizza	26780.75
12	The Five Cheese Pizza	26066.5



Chef Nail and Jyoti continued to refine their strategies based on ongoing data analysis, keeping the business adaptable and ahead of culinary trends. The duo's collaboration not only revived a beloved local eatery but also set a benchmark for how data-driven decisions can lead to palpable success in the culinary industry.



Thus, Jyoti, the data wizard, and Chef Nail, the pizza maestro, became celebrated figures in Gourmet Valley, proving that when culinary arts meet data science, the results are nothing short of delicious!

