

Delicious Pizza for Everyone!

PIZZA SALES PROJECT USING SQL

<https://github.com/HuyQuangOP>



Hello!

We are a pizza boxcar serving delicious pizza via the food truck way. we are ready to go around to deliver and serve pizza for you lovers!

Data Sample

	order_details_id	order_id	pizza_id	quantity
1		1	hawaiian_m	1
2		2	classic_dlx_m	1
3		3	five_cheese_l	1
4		4	ital_supr_l	1
5		5	mexicana_m	1
6		6	thai_ckn_l	1
7		7	ital_supr_m	1
8		8	prsc_argla_l	1
9		9	ital_supr_m	1

	order_id	date	time
1	1	01/01/15	11:38:36 AM
2	2	01/01/15	11:57:40 AM
3	3	01/01/15	12:12:28 PM
4	4	01/01/15	12:16:31 PM
5	5	01/01/15	12:21:30 PM

Order_details

Orders

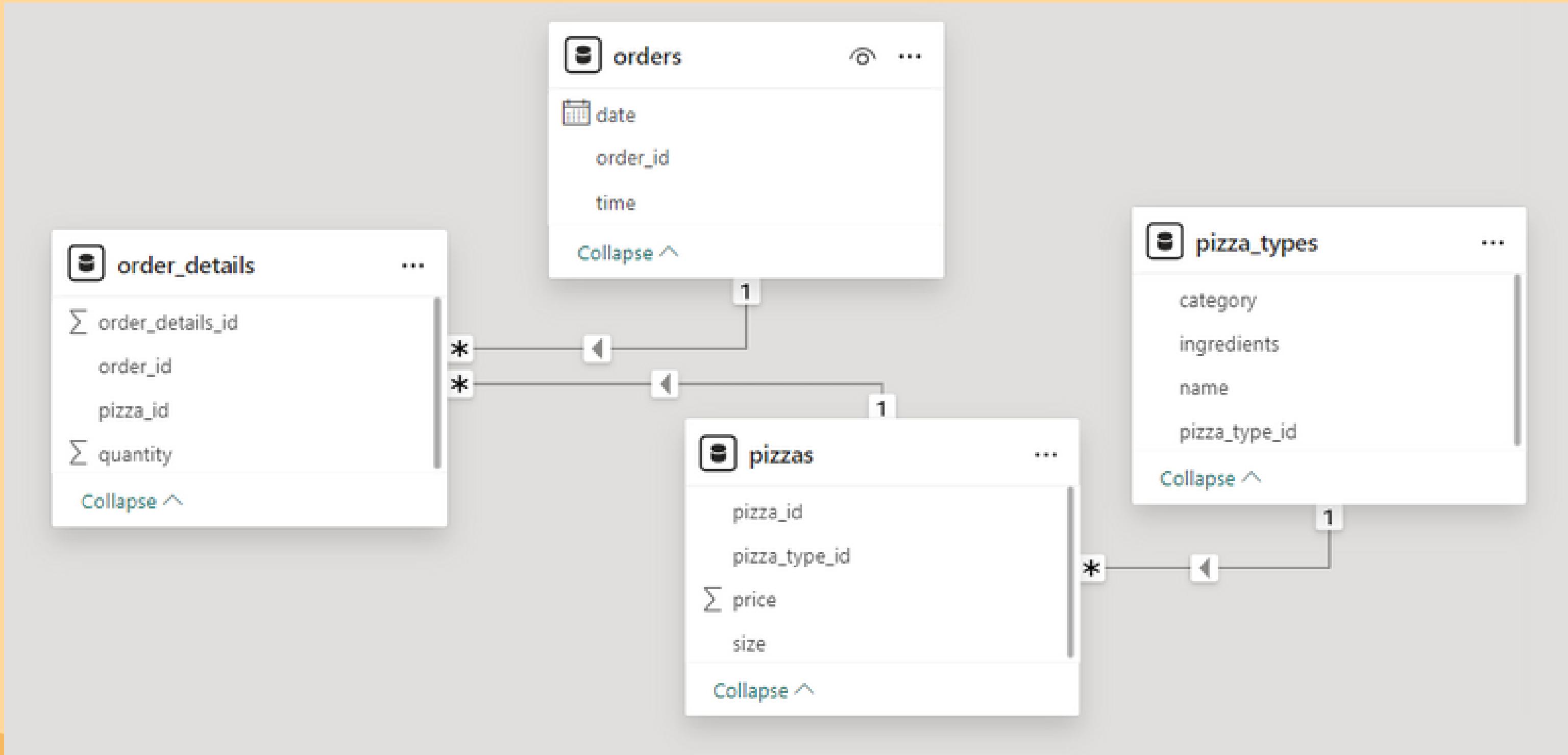
	pizza_id	pizza_type_id	size	price
1	bbq_ckn_s	bbq_ckn	S	12.75
2	bbq_ckn_m	bbq_ckn	M	16.75
3	bbq_ckn_l	bbq_ckn	L	20.75
4	cali_ckn_s	cali_ckn	S	12.75
5	cali_ckn_m	cali_ckn	M	16.75
6	cali_ckn_l	cali_ckn	L	20.75

	pizza_type_id	name	category	ingredients
1	bbq_ckn	The Barbecue Chicken Pizza	Chicken	Barbecued Chicken, Red Peppers,...
2	cali_ckn	The California Chicken Pizza	Chicken	Chicken, Artichoke, Spinach, Garli...
3	ckn_alfredo	The Chicken Alfredo Pizza	Chicken	Chicken, Red Onions, Red Pepper...
4	ckn_pesto	The Chicken Pesto Pizza	Chicken	Chicken, Tomatoes, Red Peppers,...
5	southw_ckn	The Southwest Chicken Pizza	Chicken	Chicken, Tomatoes, Red Peppers,...
6	thai_ckn	The Thai Chicken Pizza	Chicken	Chicken, Pineapple, Tomatoes, R...

Pizzas

Pizzas_types

Data Schema



Retrieve the total number of orders placed.

```
SELECT  
    COUNT(ORDER_ID) AS TOTAL_ORDERS  
FROM  
    PortfolioProject..orders
```

TOTAL_ORDERS	
1	21350

Calculate the total revenue generated from pizza sales

```
SELECT  
    SUM(quantity*price) AS TOTAL_REVENUE  
FROM  
    PortfolioProject..order_details OD  
JOIN  
    PortfolioProject..pizzas P  
ON  
    OD.pizza_id = P.pizza_id
```

	TOTAL_REVENUE
1	817860.05083847

Identify the highest-priced pizza

```
SELECT  
    TOP(1) price  
FROM  
    PortfolioProject..pizzas
```

	price
1	20.75

Identify the most common pizza size ordered.

```
SELECT
    size, COUNT(size) AS SIZE_ORD
FROM
    PortfolioProject..order_details OD
JOIN
    PortfolioProject..pizzas P ON OD.pizza_id=P.pizza_id
GROUP BY
    size
ORDER BY
    SIZE_ORD DESC
```

	size	SIZE_ORD
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  
    TOP(5) name, SUM(quantity) AS QUANTITIES  
FROM  
    PortfolioProject..order_details OD  
JOIN  
    PortfolioProject..pizzas P  
    ON OD.pizza_id=P.pizza_id  
JOIN  
    PortfolioProject..pizza_types PT  
    ON P.pizza_type_id=PT.pizza_type_id  
GROUP BY name  
ORDER BY QUANTITIES DESC
```

	name	QUANTITIES
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
    category, SUM(quantity) AS TOTAL_QUANTITY
FROM
    PortfolioProject..order_details OD
JOIN
    PortfolioProject..pizzas P
    ON OD.pizza_id=P.pizza_id
JOIN
    PortfolioProject..pizza_types PT
    ON P.pizza_type_id=PT.pizza_type_id
GROUP BY category
ORDER BY TOTAL_QUANTITY DESC
```

	category	TOTAL_QUANTITY
1	Classic	14888
2	Supreme	11987
3	Veggie	11649
4	Chicken	11050

Determine the distribution of orders by hour of the day

```
SELECT  
    DATEPART(HOUR, TIME) AS hour, COUNT(order_id)  
FROM  
    PortfolioProject..orders  
GROUP BY  
    DATEPART(HOUR, TIME)  
ORDER BY  
    DATEPART(HOUR, TIME)
```

	hour	(No column name)
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

Join relevant tables to find the category-wise distribution of pizzas

```
SELECT  
    category, COUNT(NAME) AS type  
FROM  
    PortfolioProject..pizza_types  
GROUP BY  
    category
```

	category	type
1	Chicken	6
2	Classic	8
3	Supreme	9
4	Veggie	9

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

```
SELECT
    ROUND(AVG(CNT),0) AS AVG_PIZZA_DAY
FROM(
    SELECT
        DATE, sum(quantity) AS CNT
    FROM
        PortfolioProject..order_details OD
    JOIN
        PortfolioProject..orders O
    ON OD.order_id=O.order_id
    GROUP BY
        date)
    AS order_quantity
```

	AVG_PIZZA_DAY
1	138

Determine the top 3 most ordered pizza types based on revenue

```
SELECT  
    TOP 3 NAME, SUM(quantity * price) AS TOTAL_REV  
FROM  
    PortfolioProject..order_details OD  
JOIN  
    PortfolioProject..pizzas P  
    ON OD.pizza_id=P.pizza_id  
JOIN  
    PortfolioProject..pizza_types PT  
    ON P.pizza_type_id=PT.pizza_type_id  
GROUP BY  
    NAME  
ORDER BY  
    TOTAL_REV DESC
```

	NAME	TOTAL_REV
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768
3	The California Chicken Pizza	41409.5

Calculate the percentage contribution of each pizza type to total revenue

```
SELECT
    category,
    SUM(quantity * price) AS TOTAL_REV,
    ROUND(100 * SUM(quantity * price)/
        (SELECT SUM(quantity * price)
    FROM
        PortfolioProject..order_details
    JOIN PortfolioProject..pizzas
        ON order_details.pizza_id=pizzas.pizza_id), 2)
    AS PCT_REV
FROM
    PortfolioProject..order_details OD
JOIN
    PortfolioProject..pizzas P ON OD.pizza_id=P.pizza_id
JOIN
    PortfolioProject..pizza_types PT ON P.pizza_type_id=PT.pizza_type_id
GROUP BY category
```

	category	TOTAL_REV	PCT_REV
1	Chicken	195919.5	23.96
2	Supreme	208196.99981308	25.46
3	Classic	220053.100021362	26.91
4	Veggie	193690.451004028	23.68

Analyze the cumulative revenue generated over time

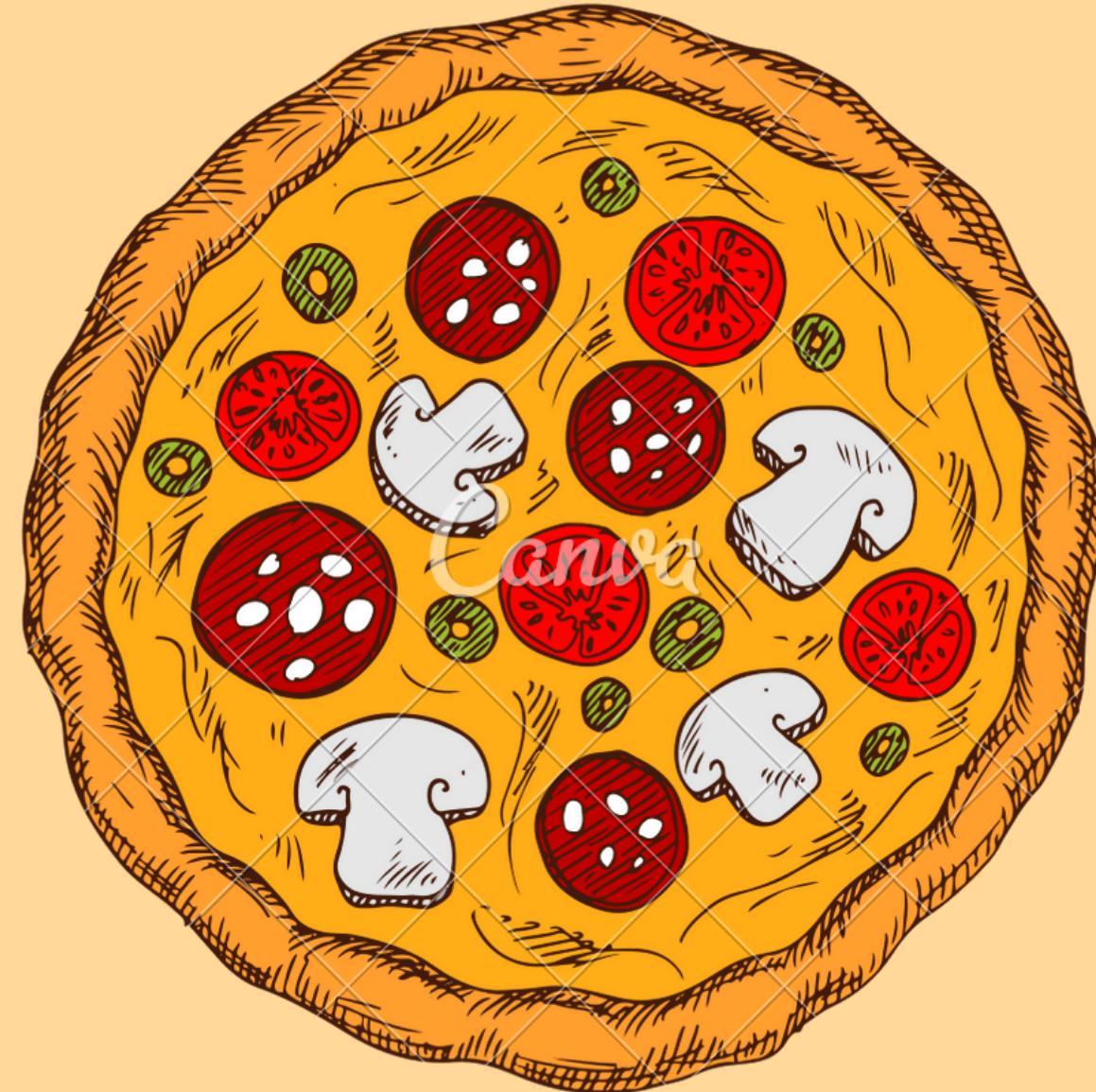
```
SELECT DATE,  
       ROUND(SUM(REVENUE) OVER (ORDER BY DATE),1) AS CumulativeRevenue  
FROM  
  (SELECT  
      DATE, SUM(quantity * price) AS REVENUE  
   FROM  
     PortfolioProject..orders O  
  JOIN  
     PortfolioProject..order_details OD  
    ON O.order_id = OD.order_id  
  JOIN  
     PortfolioProject..pizzas P  
    ON OD.pizza_id = P.pizza_id  
  JOIN  
     PortfolioProject..pizza_types PT  
    ON P.pizza_type_id = PT.pizza_type_id  
 GROUP BY DATE) AS DATE_REV;
```

	DATE	CumulativeRevenue
1	2015-01-01	2713.9
2	2015-01-02	5445.8
3	2015-01-03	8108.2
4	2015-01-04	9863.6
5	2015-01-05	11929.6
6	2015-01-06	14358.5
7	2015-01-07	16560.7
8	2015-01-08	19399.1
9	2015-01-09	21526.4
10	2015-01-10	23990.4
11	2015-01-11	25862.7
12	2015-01-12	27781.7
13	2015-01-13	29831.3
14	2015-01-14	32358.7
15	2015-01-15	34343.5

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 CATEGORY, NAME, SUM(QUANTITY*PRICE) AS REVENUE
    FROM
        PortfolioProject..order_details OD
    JOIN
        PortfolioProject..pizzas P
    ON OD.pizza_id=P.pizza_id
    JOIN
        PortfolioProject..pizza_types PT
    ON P.pizza_type_id=PT.pizza_type_id
    GROUP BY category, NAME) AS CAT_REV) AS RANK_BY_CAT
WHERE RN <=3;
```

	NAME	REVENUE
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	32265.7010040283
11	The Mexicana Pizza	26780.75
12	The Five Cheese Pizza	26066.5



Pizza Boxcar Present

**THANK
YOU**

quang.huy1543@gmail.com