

PIZZA SALES ANALYSIS USING SQL



WELCOME TO INTRODUCTION

This project analyzes pizza sales data using SQL to understand customer ordering patterns, sales performance, and revenue trends.

It identifies top-selling pizzas, popular sizes, peak order hours, and category-wise revenue to support data-driven business decisions.



RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

```
SELECT  
    COUNT(order_id) AS total_order  
FROM  
    pizzahut.orders;
```

total_order
21350

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

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

	total_sales
▶	817860.05

IDENTIFY THE HIGHEST-PRICED PIZZA.

```
SELECT
    pizza_types.name, pizzas.price
FROM
    pizzahut.pizza_types
    JOIN
    pizzahut.pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY price DESC
LIMIT 1;
```

	name	price
▶	The Greek Pizza	35.95

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

```
SELECT  
    pizzas.size,  
    COUNT(order_details.order_details_id) AS pizza_count  
FROM  
    pizzahut.order_details  
    JOIN  
    pizzahut.pizzas ON order_details.pizza_id = pizzas.pizza_id  
GROUP BY pizzas.size  
ORDER BY pizza_count DESC;
```

size	pizza_count
L	18526
M	15385
S	14137
XL	544
XXL	28

LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES.

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

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

JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED.

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

category	total_quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```
SELECT  
    HOUR(time) AS hour, COUNT(order_id) AS order_count  
FROM  
    pizzahut.orders  
GROUP BY hour  
ORDER BY hour ASC;
```

hour	order_count
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

JOIN RELEVANT TABLES TO FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS.

```
SELECT  
    category, COUNT(name) AS Pizza_Name  
FROM  
    pizzahut.pizza_types  
GROUP BY category;
```

category	Pizza_Name
Chicken	6
Classic	8
Supreme	9
Veggie	9

GROUP THE ORDERS BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY.

```
SELECT  
    ROUND(AVG(quantity), 0) AS avg_pizza_order_per_day  
FROM  
    (SELECT  
        orders.date, SUM(order_details.quantity) AS quantity  
    FROM  
        pizzahut.orders  
    JOIN pizzahut.order_details ON orders.order_id = order_details.order_id  
    GROUP BY orders.date) AS avg_pizza_order_per_day;
```

avg_pizza_order_per_day

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DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE.

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

name	revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5

CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.

```
SELECT
    pizza_types.category,
    round(sum(pizzas.price * order_details.quantity) / (SELECT
        SUM(pizzas.price * order_details.quantity) AS revenue
    FROM
        pizzahut.order_details
        JOIN
        pizzahut.pizzas ON order_details.pizza_id = pizzas.pizza_id) * 100, 2) AS revenue
FROM
    pizzahut.pizza_types
    JOIN
    pizzahut.pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
    pizzahut.order_details ON order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY revenue DESC;
```

category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.

```
SELECT
    order_date,
    SUM(revenue) OVER (ORDER BY order_date) AS cumulative_revenue
FROM (
    SELECT
        orders.date AS order_date,
        SUM(pizzas.price * order_details.quantity) AS revenue
    FROM pizzahut.pizzas
    JOIN pizzahut.order_details
        ON order_details.pizza_id = pizzas.pizza_id
    JOIN pizzahut.orders
        ON orders.order_id = order_details.order_id
    GROUP BY orders.date
) AS daily_sales
ORDER BY order_date;
```

order_date	cumulative_revenue
2015-01-01	2713.850000000004
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
2015-01-07	16560.7
2015-01-08	19399.05
2015-01-09	21526.4
2015-01-10	23990.35000000002
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.30000000003
2015-01-14	32358.70000000004
2015-01-15	34343.50000000001
2015-01-16	36937.65000000001
2015-01-17	39001.75000000001
2015-01-18	40978.60000000006
2015-01-19	43365.75000000001

DETERMINE THE TOP 3 MOST ORDERED PIZZA TYPES BASED ON REVENUE FOR EACH PIZZA CATEGORY.

name	revenue	category
The Thai Chicken Pizza	43434.25	Chicken
The Barbecue Chicken Pizza	42768	Chicken
The California Chicken Pizza	41409.5	Chicken
The Classic Deluxe Pizza	38180.5	Classic
The Hawaiian Pizza	32273.25	Classic
The Pepperoni Pizza	30161.75	Classic
The Spicy Italian Pizza	34831.25	Supreme
The Italian Supreme Pizza	33476.75	Supreme
The Sicilian Pizza	30940.5	Supreme
The Four Cheese Pizza	32265.70000000065	Veggie
The Mexicana Pizza	26780.75	Veggie
The Five Cheese Pizza	26066.5	Veggie

```
SELECT name, revenue, category
FROM (
    SELECT
        name,
        category,
        revenue,
        RANK() OVER (
            PARTITION BY category
            ORDER BY revenue DESC
        ) AS ranking
    FROM (
        SELECT
            pizza_types.name AS name,
            pizza_types.category AS category,
            SUM(pizzas.price * order_details.quantity) AS revenue
        FROM pizzahut.pizza_types
        JOIN pizzahut.pizzas
            ON pizza_types.pizza_type_id = pizzas.pizza_type_id
        JOIN pizzahut.order_details
            ON order_details.pizza_id = pizzas.pizza_id
        GROUP BY name, category
    ) AS a
) AS b
WHERE ranking <= 3;
```

THANK YOU!

