



PIZZA CLOUD

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WELCOME TO PIZZA CLOUD

Welcome to the Pizza Cloud Project, a comprehensive data analytics case study that dives deep into the world of pizza sales! This project showcases how advanced SQL techniques can be leveraged to analyze business data, extract meaningful insights, and drive informed decision-making.

In this project, I worked with a fictional pizza sales dataset to answer real-world business questions, focusing on revenue, order trends, and customer preferences. By using powerful SQL concepts such as window functions, aggregation, joins, and ranking, I was able to uncover valuable insights that are critical for business strategy and growth.





RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

SELECT

COUNT(order_id) AS Total_Orders

FROM

pizzahut.orders;

Total_Orders

21350



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CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

SELECT

```
ROUND(SUM(pizzas.price * order_details.quantity),  
2) AS Total_Revenue
```

FROM

```
pizzas
```

JOIN

```
order_details ON pizzas.pizza_id = order_details.pizza_id;
```

Total_Revenue

817860.05



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IDENTIFY THE HIGHEST-PRICED PIZZA.

SELECT

pizza_types.name, pizzas.price

FROM

pizza_types

JOIN

pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id

ORDER BY pizzas.price DESC

LIMIT 1;

name	price
The Greek Pizza	35.95



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IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

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	Order_Count
L	18526
M	15385
S	14137
XL	544
XXL	28



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

```
SELECT pizza_types.name, SUM(order_details.quantity) AS quantity
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.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



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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

```
 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

ORDER BY Total_Quantity DESC

category	Total_Quantity
Classic	14888
Supreme	11987
Veggie	11649
Chicken	11050



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DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

SELECT

HOUR(order_time) AS hour, COUNT(order_id) AS Orders_Count

FROM

orders

GROUP BY HOUR(orders.order_time)

hour	Orders_Count
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
10	8
9	1





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

```
SELECT  
    category, COUNT(name)  
FROM  
    pizza_types  
GROUP BY pizza_types.category
```

category	COUNT(name)
Chicken	6
Classic	8
Supreme	9
Veggie	9





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

```
SELECT
    pizza_types.name,
    SUM(pizzas.price * order_details.quantity) 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.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

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

```
SELECT
    ROUND(AVG(Quantity), 0) AS Pizzas_Order_Per_Day
FROM
    (SELECT
        (orders.order_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) AS Order_Quantity
```

Pizzas_Order_Per_Day
138



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

```
SELECT
    pizza_types.category,
    ROUND(SUM(pizzas.price * order_details.quantity) / (SELECT
        ROUND(SUM(pizzas.price * order_details.quantity),
        2) AS Total_Sales
    )
    FROM
        pizzas
        JOIN
            order_details ON pizzas.pizza_id = order_details.pizza_id) * 100,
    2) AS Total_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;
```

category	Total_Revenue
Classic	26.91
Veggie	23.68
Supreme	25.46
Chicken	23.96





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ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.

```
select order_date,round(sum(Revenue) over (order by order_date) ,2)as Cum_Revenue  
from  
(select orders.order_date, round(sum(pizzas.price * order_details.quantity),2) as Revenue  
from orders join order_details on  
orders.order_id = order_details.order_id join pizzas on  
order_details.pizza_id = pizzas.pizza_id  
group by orders.order_date)as Sales;
```

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
2015-01-07	16560.7
2015-01-08	19399.05

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

```
select name,category,Revenue
from
(select name,category,Revenue, rank() over (partition by category order by Revenue desc) as Rank_Revenue
from
(select pizza_types.name, pizza_types.category, round(sum(pizzas.price * order_details.quantity),2) as Revenue
from pizza_types |
join pizzas on
pizza_types.pizza_type_id = pizzas.pizza_type_id
join order_details on
pizzas.pizza_id = order_details.pizza_id
group by pizza_types.category, pizza_types.name) as a) as b
where Rank_Revenue <=3
```

name	category	Revenue
The Thai Chicken Pizza	Chicken	43434.25
The Barbecue Chicken Pizza	Chicken	42768
The California Chicken Pizza	Chicken	41409.5
The Classic Deluxe Pizza	Classic	38180.5
The Hawaiian Pizza	Classic	32273.25
The Pepperoni Pizza	Classic	30161.75
The Spicy Italian Pizza	Supreme	34831.25
The Italian Supreme Pizza	Supreme	33476.75
The Sicilian Pizza	Supreme	30940.5
The Four Cheese Pizza	Veggie	32265.7
The Mexicana Pizza	Veggie	26780.75
The Five Cheese Pizza	Veggie	26066.5



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THANK YOU!

