

PIZZA SALES SQL PROJECT

ANALYZING AND ANSWERING REAL-
WORLD SQL QUESTIONS

JAYANTA NATH

IIT Guwahati

 nathjayanta772@gmail.com

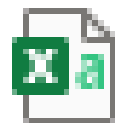




PIZZA SALES SQL PROJECT



pizzahut



order_details.csv



orders.csv



pizza_types.csv



pizzas.csv

THE COLUMNS :

order_details_id / order_id / pizza_id / quantity

order_id / date / time

pizza_type_id / name / category / ingredients

pizza_id / pizza_type_id / size / price



PIZZA SALES SQL PROJECT

>>>THE QUESTIONS : FROM BASIC TO ADVANCED LEVEL

BASIC:

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

INTERMEDIATE:

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

ADVANCED:

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



PIZZA SALES SQL PROJECT

>>>THE QUESTIONS : FROM BASIC TO ADVANCED LEVEL

BASIC:

1.Retrieve the total number of orders placed.

```
SELECT * FROM pizzahut.orders;  
select count(*) total_orders  
from pizzahut.orders ;
```

Result Grid	
	total_orders
▶	21350

BASIC:

2.Calculate the total revenue generated from pizza sales.

```
select round(sum(order_details.quantity * pizzas.price),2)  
as total_sales  
from pizzahut.order_details  
join pizzahut.pizzas  
on order_details.pizza_id = pizzas.pizza_id ;
```

Result Grid	
	total_sales
▶	817860.05



PIZZA SALES SQL PROJECT

>>>THE QUESTIONS : FROM BASIC TO ADVANCED LEVEL

BASIC:

3. Identify the highest-priced pizza.

```
SELECT * FROM pizzahut.pizzas;  
select pizza_types.name, pizzas.price  
from pizzahut.pizzas  
join pizzahut.pizza_types  
on pizzas.pizza_type_id = pizza_types.pizza_type_id  
order by pizzas.price desc limit 1;
```

Result Grid			Filter Rows
	name	price	
▶	The Greek Pizza	35.95	



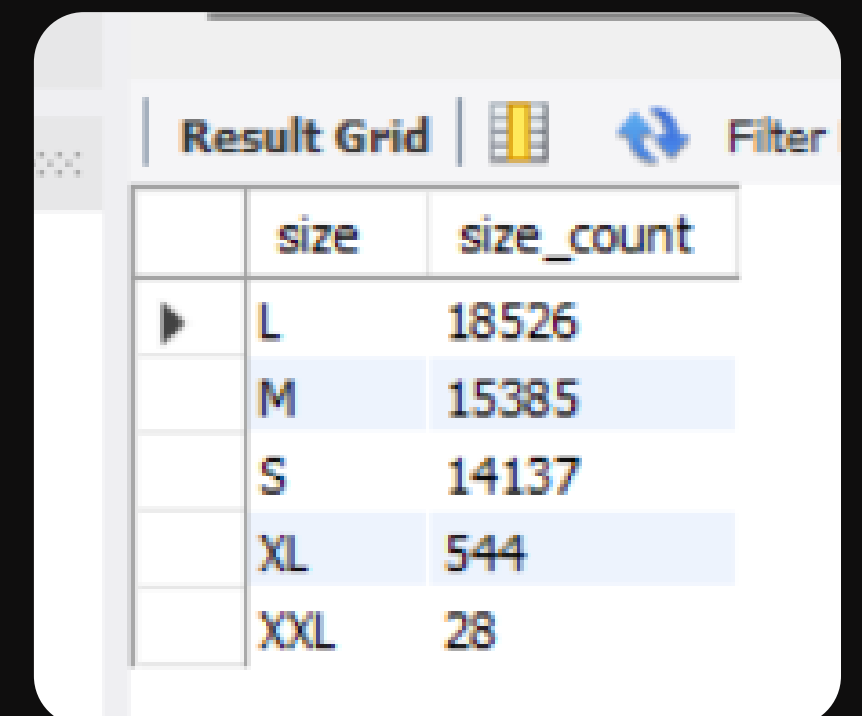
PIZZA SALES SQL PROJECT

>>>THE QUESTIONS : FROM BASIC TO ADVANCED LEVEL

BASIC:

4. Identify the most common pizza size ordered.

```
select pizzas.size, count(order_details.order_details_id)
as size_count
from pizzahut.pizzas
join pizzahut.order_details
on pizzas.pizza_id = order_details.pizza_id
group by pizzas.size
order by size_count desc;
```



The screenshot shows a 'Result Grid' window with a table containing the results of the SQL query. The table has two columns: 'size' and 'size_count'. The data is sorted in descending order of 'size_count'. The rows are: L (18526), M (15385), S (14137), XL (544), and XXL (28). There are navigation icons at the top of the grid, including a 'Filter' button.

	size	size_count
▶	L	18526
	M	15385
	S	14137
	XL	544
	XXL	28





PIZZA SALES SQL PROJECT

>>>THE QUESTIONS : FROM BASIC TO ADVANCED LEVEL

BASIC:

5.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 pizza_types.name
order by quantity desc
limit 5;
```

Result Grid   Filter Rows: <input type="text"/>		
	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



PIZZA SALES SQL PROJECT

>>>THE QUESTIONS : FROM BASIC TO ADVANCED LEVEL

INTERMEDIATE:

1.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 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 quantity desc ;
```

Result Grid			Filter
	category	quantity	
▶	Classic	14888	
	Supreme	11987	
	Veggie	11649	
	Chicken	11050	



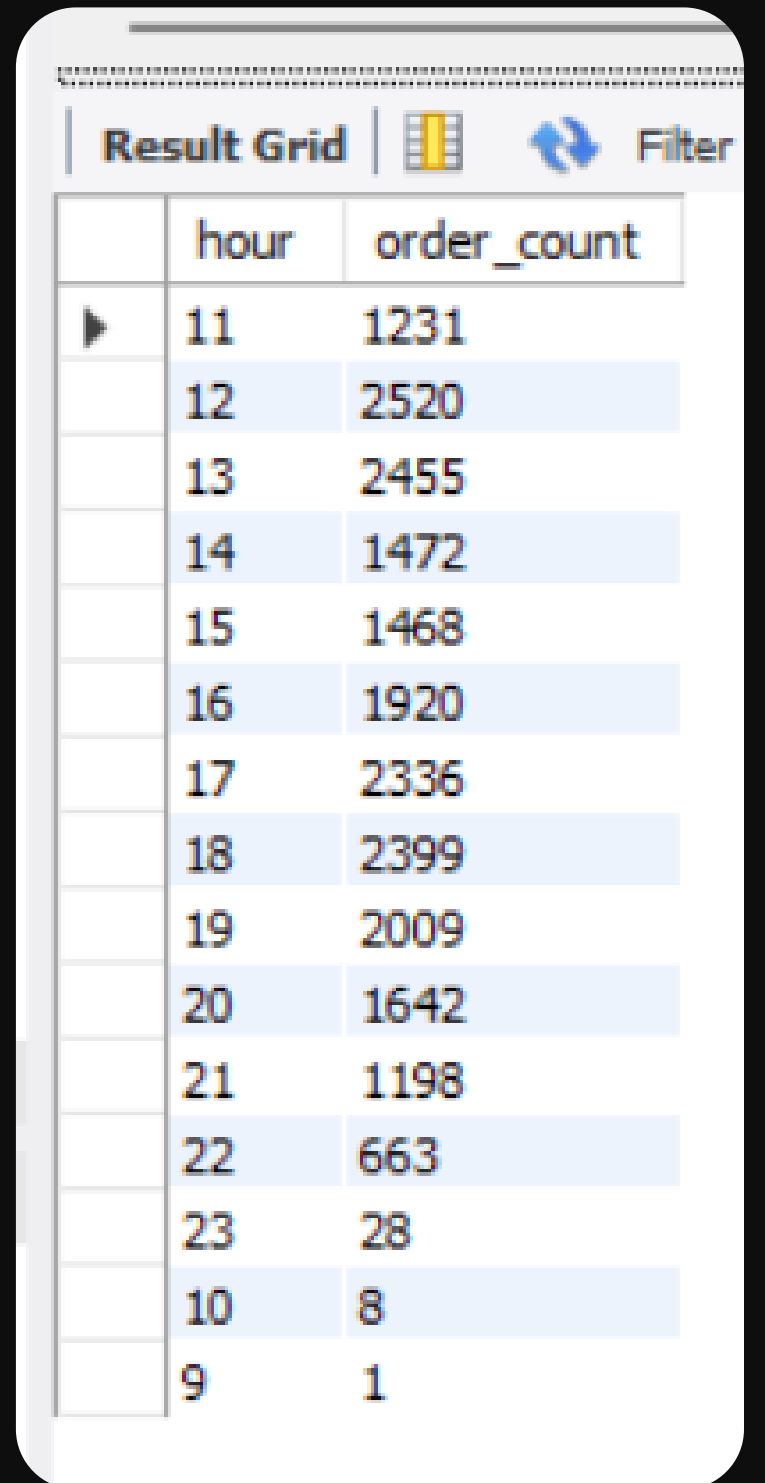
PIZZA SALES SQL PROJECT

>>>THE QUESTIONS : FROM BASIC TO ADVANCED LEVEL

INTERMEDIATE:

2.Determine the distribution of orders by hour of the day.

```
select hour(order_time) as hour,  
count(order_id) as order_count  
from pizzahut.orders  
group by hour(order_time) ;
```



The screenshot shows a database interface with a 'Result Grid' tab. It displays the output of the SQL query, showing the hour of the day and the corresponding order count. The data is as follows:

	hour	order_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



PIZZA SALES SQL PROJECT

>>>THE QUESTIONS : FROM BASIC TO ADVANCED LEVEL

INTERMEDIATE:

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

```
select category, count(name)
from pizzahut.pizza_types
group by category ;
```

Result Grid			Filter R
	category	count(name)	
▶	Chicken	6	
	Classic	8	
	Supreme	9	
	Veggie	9	



PIZZA SALES SQL PROJECT

>>>THE QUESTIONS : FROM BASIC TO ADVANCED LEVEL

INTERMEDIATE:

4.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.order_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.order_date) as order_quantity;
```

Result Grid		Filter Rows
	avg_pizza_order_per_day	
▶	138	



PIZZA SALES SQL PROJECT

>>>THE QUESTIONS : FROM BASIC TO ADVANCED LEVEL

INTERMEDIATE:

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

```
select pizza_types.name,  
sum(order_details.quantity*pizzas.price) 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 ;
```

Result Grid			Filter Rows:
	name	revenue	
▶	The Thai Chicken Pizza	43434.25	
	The Barbecue Chicken Pizza	42768	
	The California Chicken Pizza	41409.5	



PIZZA SALES SQL PROJECT

>>>THE QUESTIONS : FROM BASIC TO ADVANCED LEVEL

ADVANCED:

1. Calculate the percentage contribution of each pizza type to total revenue.

```
select pizza_types.category,  
round(sum(order_details.quantity*pizzas.price)/  
  (select round(sum(order_details.quantity * pizzas.price),2) as total_sales  
  from pizzahut.order_details  
  join pizzahut.pizzas  
  on order_details.pizza_id = pizzas.pizza_id)*100,2)  
  as percentage_contribution  
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 percentage_contribution desc
```

Result Grid			Filter Rows:
	category	percentage_contribution	
▶	Classic	26.91	
	Supreme	25.46	
	Chicken	23.96	
	Veggie	23.68	



PIZZA SALES SQL PROJECT

>>>THE QUESTIONS : FROM BASIC TO ADVANCED LEVEL

ADVANCED:

2.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 pizzahut.orders  
join pizzahut.order_details  
on orders.order_id = order_details.order_id  
join pizzahut.pizzas  
on pizzas.pizza_id = order_details.pizza_id  
group by orders.order_date) as sales;
```

Result Grid			Filter Rows:
	order_date	cum_revenue	
▶	2015-01-01	2713.8500000000004	
	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	23990.350000000002	
	2015-01-11	25862.65	
	2015-01-12	27781.7	
	2015-01-13	29831.300000000003	
	2015-01-14	32358.700000000004	
	2015-01-15	34343.50000000001	
	2015-01-16	36937.65000000001	
	2015-01-17	39001.75000000001	
	2015-01-18	40978.600000000006	
	2015-01-19	43365.75000000001	
	2015-01-20	45763.65000000001	
	2015-01-21	47804.20000000001	
	2015-01-22	50300.90000000001	
	2015-01-23	52724.600000000006	



PIZZA SALES SQL PROJECT

>>>THE QUESTIONS : FROM BASIC TO ADVANCED LEVEL

ADVANCED:

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

```
select category, name, revenue, ranking
from
(select category, name, revenue,
rank() over(partition by category order by revenue desc) as ranking
from
(select pizza_types.category, pizza_types.name,
sum((order_details.quantity) * pizzas.price) 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, pizza_types.name) as a) as b
where ranking <= 3;
```

Result Grid	Filter Rows:	Export:	Wrap Ce
category	name	revenue	ranking
Chicken	The Thai Chicken Pizza	43434.25	1
Chicken	The Barbecue Chicken Pizza	42768	2
Chicken	The California Chicken Pizza	41409.5	3
Classic	The Classic Deluxe Pizza	38180.5	1
Classic	The Hawaiian Pizza	32273.25	2
Classic	The Pepperoni Pizza	30161.75	3
Supreme	The Spicy Italian Pizza	34831.25	1
Supreme	The Italian Supreme Pizza	33476.75	2
Supreme	The Sicilian Pizza	30940.5	3
Veggie	The Four Cheese Pizza	32265.700000000065	1
Veggie	The Mexicana Pizza	26780.75	2
Veggie	The Five Cheese Pizza	26066.5	3



THANK YOU!

Feel free to ask questions or connect with me for collaboration!

Jayanta Nath, IIT Guwahati



[Github Source](#)



nathjayanta772@gmail.com



Guwahati-781039 , Assam

