



**PIZZAHUT**

**SQL**

**PROJECT**



The background is a warm orange color with a faint, stylized illustration of a pizza in the center. The pizza has a thick crust, a layer of melted cheese, and various toppings including green herbs, red tomato slices, and small round toppings. The background is decorated with various food-related illustrations: a slice of pizza with toppings in the top left, a green leafy vegetable in the top center, a cluster of small round toppings in the top right, a slice of pizza with toppings in the bottom right, and several green leaves and small round toppings in the bottom left and bottom center.

# ABOUT ME

- Hi! My name is Soham Das a graduate with a keen interest in data analysis and SQL. Recently, I worked on a project called "Pizza Hut Sales Analysis," where I analyzed customer orders, sales trends, and menu preference using SQL.



1) Retrieve the total number of orders placed.

```
select count(order_id) as total_id from orders;
```

**-OUTPUT-**

	total_id
▶	21350



2) Calculate the total revenue generated from pizza sales.

```
SELECT  
    ROUND(SUM(orders_details.quantity * pizzas.price),  
          2) AS total_revenue  
FROM  
    orders_details  
    JOIN  
    pizzas ON orders_details.pizza_id = pizzas.pizza_id
```

-OUTPUT-

	total_revenue
▶	817860.05



3) 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;
```

-OUTPUT-

	name	price
▶	The Greek Pizza	35.95



4) Identify the most common pizza size ordered.

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

-OUTPUT-

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



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

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

- OUTPUT -

	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



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

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

- OUTPUT -

	category	QUANTITY
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050



7) Determine the distribution of orders  
by hour of the day.

```
SELECT  
    HOUR(order_time) AS Hours, COUNT(order_id) AS Orders  
FROM  
    orders  
GROUP BY HOUR(order_time)  
ORDER BY COUNT(order_id);
```

-OUTPUT-

	Hours	Orders
▶	9	1
	10	8
	23	28
	22	663
	21	1198
	11	1231
	15	1468
	14	1472
	20	1642
	16	1920
	19	2009
	17	2336
	18	2399
	13	2455
	12	2520



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

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

-OUTPUT-

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



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

```
SELECT  
    ROUND(AVG(quantity), 0) as average_pizza_orders_per_day  
FROM  
    (  
        SELECT  
            orders.order_date, SUM(orders_details.quantity) AS quantity  
        FROM  
            orders  
        JOIN orders_details ON orders.order_id = orders_details.order_id  
        GROUP BY orders.order_date) AS order_quantity;
```

-OUTPUT-

	average_pizza_orders_per_day
▶	138



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

```
SELECT
    pizza_types.name,
    round(SUM(orders_details.quantity * pizzas.price), 2)
        AS Revenue
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY Revenue DESC
LIMIT 3;
```

-OUTPUT-

	name	Revenue
▶	The Thai Chicken Pizza	43434.25
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41409.5



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

```
SELECT
    pizza_types.name,
    round(SUM(orders_details.quantity * pizzas.price), 2)
        AS Revenue
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
    orders_details ON orders_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.name
ORDER BY Revenue DESC
LIMIT 3;
```

-OUTPUT-

	name	Revenue
▶	The Thai Chicken Pizza	43434.25
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41409.5



12) 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,  
sum(orders_details.quantity * pizzas.price) as revenue  
from orders_details join pizzas  
on orders_details.pizza_id = pizzas.pizza_id  
join orders  
on orders.order_id = orders_details.order_id  
group by orders.order_date) as sales;
```



# -OUTPUT-

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1	order_date	cum_revenu	order_date	cum_revenu	order_date	cum_revenu	order_date	cum_revenu	order_date	cum_revenue	order_date	cum_revenue	order_date	cum_revenu	order_date	cum_revenu	order_date	cum_revenu	order_date	cum_revenu	order_date	cum_revenu	order_date	cum_revenue
2	1/1/2015	2713.85	2/1/2015	72982.5	3/1/2015	136551.45	4/1/2015	207526.85	5/1/2015	276658.75	6/1/2015	348557.3	7/1/2015	415951.25	8/1/2015	488718.2	9/1/2015	556908.75	10/1/2015	621938.1	11/1/2015	684750.2	12/1/2015	755235.6
3	1/2/2015	5445.75	2/2/2015	75311.1	3/2/2015	138930.5	4/2/2015	210074	5/2/2015	279058.95	6/2/2015	351007.25	7/2/2015	418246.05	8/2/2015	490628.35	9/2/2015	558774.3	10/2/2015	624012.95	11/2/2015	687049.3	12/2/2015	757449.7
4	1/3/2015	8108.15	2/3/2015	77925.9	3/3/2015	141218.4	4/3/2015	212612.2	5/3/2015	280891.2	6/3/2015	352914.3	7/3/2015	421689.05	8/3/2015	492610.6	9/3/2015	561026.9	10/3/2015	626413.9	11/3/2015	688877.85	12/3/2015	759692.9
5	1/4/2015	9863.6	2/4/2015	80159.8	3/4/2015	143662.7	4/4/2015	215379.75	5/4/2015	283180.1	6/4/2015	355197.9	7/4/2015	425553.25	8/4/2015	494700.75	9/4/2015	563987.85	10/4/2015	628556.1	11/4/2015	690843.95	12/4/2015	762571.25
6	1/5/2015	11929.55	2/5/2015	82375.6	3/5/2015	146013.35	4/5/2015	217289.6	5/5/2015	284893.7	6/5/2015	357898.05	7/5/2015	427144.7	8/5/2015	496795.6	9/5/2015	566525.65	10/6/2015	630772.05	11/5/2015	693024.3	12/5/2015	765199.2
7	1/6/2015	14358.5	2/6/2015	84885.55	3/6/2015	148527.3	4/6/2015	219911.95	5/6/2015	287203.5	6/6/2015	360179	7/6/2015	429261.6	8/6/2015	498894.85	9/6/2015	568017.3	10/7/2015	632864.4	11/6/2015	696181.8	12/6/2015	767549.45
8	1/7/2015	16560.7	2/7/2015	87123.2	3/7/2015	150927.75	4/7/2015	222146.2	5/7/2015	289432.35	6/7/2015	362139.75	7/7/2015	431636	8/7/2015	501521.25	9/7/2015	570300.65	10/8/2015	634840.25	11/7/2015	698762.75	12/7/2015	769964.25
9	1/8/2015	19399.05	2/8/2015	89158.2	3/8/2015	153115.9	4/8/2015	224440.15	5/8/2015	292484.65	6/8/2015	364404.7	7/8/2015	434032.05	8/8/2015	504237.65	9/8/2015	572550.15	10/9/2015	637352.85	11/8/2015	700872.9	12/8/2015	771820.5
10	1/9/2015	21526.4	2/9/2015	91353.55	3/9/2015	155450.45	4/9/2015	226487.45	5/9/2015	294853.05	6/9/2015	366847.25	7/9/2015	436329.8	8/9/2015	506240.3	9/9/2015	575130.25	10/10/2015	639663.05	11/9/2015	703356.65	12/9/2015	774392.05
11	1/10/2015	23990.35	2/10/2015	93410.05	3/10/2015	157839.15	4/10/2015	228912.4	5/10/2015	297141.4	6/10/2015	368866.65	7/10/2015	438762.2	8/10/2015	508379.75	9/10/2015	577546.1	10/11/2015	641579.3	11/10/2015	705399.25	12/10/2015	776377.65
12	1/11/2015	25862.65	2/11/2015	95870.05	3/11/2015	160046.85	4/11/2015	231456.15	5/11/2015	299529.45	6/11/2015	371517.15	7/11/2015	440847.75	8/11/2015	510669.75	9/11/2015	580308	10/13/2015	643905.25	11/11/2015	707345.45	12/11/2015	779011.65
13	1/12/2015	27781.7	2/12/2015	98028.85	3/12/2015	162041.75	4/12/2015	233450.45	5/12/2015	301829.15	6/12/2015	373655.75	7/12/2015	443033.4	8/12/2015	513035.5	9/12/2015	582896.15	10/14/2015	646051.6	11/12/2015	709910.25	12/12/2015	780971.8
14	1/13/2015	29831.3	2/13/2015	100783.35	3/13/2015	164828.4	4/13/2015	235946.65	5/13/2015	304090.95	6/13/2015	376164.65	7/13/2015	445092.9	8/13/2015	515109.65	9/13/2015	584734.3	10/15/2015	650371.8	11/13/2015	712174.8	12/13/2015	783216.95
15	1/14/2015	32358.7	2/14/2015	103102.5	3/14/2015	166867.85	4/14/2015	238452.35	5/14/2015	306785.45	6/14/2015	378023.65	7/14/2015	447049.4	8/14/2015	518126.25	9/14/2015	586899.55	10/16/2015	652926.9	11/14/2015	714499.55	12/14/2015	785389.55
16	1/15/2015	34343.5	2/15/2015	105243.75	3/15/2015	168936.45	4/15/2015	241031.2	5/15/2015	310171.6	6/15/2015	380619.25	7/15/2015	449551.2	8/15/2015	520378.6	9/15/2015	589449.75	10/17/2015	655266.7	11/15/2015	716321.2	12/15/2015	787777
17	1/16/2015	36937.65	2/16/2015	107212.55	3/16/2015	171231.5	4/16/2015	243049.15	5/16/2015	312452.7	6/16/2015	382517.55	7/16/2015	452015.1	8/16/2015	522517.9	9/16/2015	591635	10/18/2015	657062	11/16/2015	718577.85	12/16/2015	790011.8
18	1/17/2015	39001.75	2/17/2015	109334.45	3/17/2015	174196.8	4/17/2015	245724.8	5/17/2015	314281.1	6/17/2015	384654.65	7/17/2015	455146.75	8/17/2015	525143.9	9/17/2015	593877.05	10/20/2015	659499.15	11/17/2015	720534.4	12/17/2015	791892.55
19	1/18/2015	40978.6	2/18/2015	111977.3	3/18/2015	176272.2	4/18/2015	248011	5/18/2015	316490.75	6/18/2015	386639.15	7/18/2015	457268.95	8/18/2015	527245.1	9/18/2015	596598.6	10/21/2015	661959.65	11/18/2015	722646.1	12/18/2015	794778.85
20	1/19/2015	43365.75	2/19/2015	114007.55	3/19/2015	178660.8	4/19/2015	249538.95	5/19/2015	318477.75	6/19/2015	389432.6	7/19/2015	459291.65	8/19/2015	529578.05	9/19/2015	598885.15	10/22/2015	664360.55	11/19/2015	725341	12/19/2015	797083.05
21	1/20/2015	45763.65	2/20/2015	116898.7	3/20/2015	181122.05	4/20/2015	251998.4	5/20/2015	320850.75	6/20/2015	391493.2	7/20/2015	461792.65	8/20/2015	531485.75	9/20/2015	600714.15	10/23/2015	666971.2	11/20/2015	727729.1	12/20/2015	799187.95
22	1/21/2015	47804.2	2/21/2015	119009.7	3/21/2015	183389.45	4/21/2015	254211.55	5/21/2015	322913.3	6/21/2015	393418.4	7/21/2015	463823.5	8/21/2015	534087.15	9/21/2015	602845.6	10/24/2015	669650.7	11/21/2015	729813.05	12/21/2015	801288.65
23	1/22/2015	50300.9	2/22/2015	120589.65	3/22/2015	184648.7	4/22/2015	256405	5/22/2015	325548.4	6/22/2015	395737.7	7/22/2015	466115.6	8/22/2015	536493.15	9/22/2015	605016	10/25/2015	671487.75	11/22/2015	731181.75	12/22/2015	803171.6
24	1/23/2015	52724.6	2/23/2015	122758.2	3/23/2015	186881.25	4/23/2015	258831.15	5/23/2015	327992.55	6/23/2015	397780.45	7/23/2015	468330.1	8/23/2015	538194.75	9/23/2015	607179	10/27/2015	673476.4	11/23/2015	733646.9	12/23/2015	805415.9
25	1/24/2015	55013.85	2/24/2015	124952.75	3/24/2015	189043.55	4/24/2015	261810.35	5/24/2015	330189.5	6/24/2015	400107.95	7/24/2015	471534.5	8/24/2015	539891.8	9/26/2015	609425.85	10/28/2015	675112.35	11/24/2015	735876.95	12/24/2015	807553.75
26	1/25/2015	56631.4	2/25/2015	127294.05	3/25/2015	190971.3	4/25/2015	263899.55	5/25/2015	332293.9	6/25/2015	402507.1	7/25/2015	473771.75	8/25/2015	541850.7	9/27/2015	611740.55	10/29/2015	677282.1	11/25/2015	738240.2	12/26/2015	809196.8
27	1/26/2015	58515.8	2/26/2015	129555.35	3/26/2015	193186.8	4/26/2015	265666.95	5/26/2015	334170.35	6/26/2015	405252.6	7/26/2015	475643.3	8/26/2015	544180.1	9/28/2015	613775.85	10/30/2015	680018.7	11/26/2015	742646.15	12/27/2015	810615.8
28	1/27/2015	61043.85	2/27/2015	132413.3	3/27/2015	195931.6	4/27/2015	267847.75	5/27/2015	336267.35	6/27/2015	408065.5	7/27/2015	477815.3	8/27/2015	546297.75	9/29/2015	616537.9	10/31/2015	682763.55	11/27/2015	747068.6	12/28/2015	812253
29	1/28/2015	63059.85	2/28/2015	134952.9	3/28/2015	198183.7	4/28/2015	269590.55	5/28/2015	338283.75	6/28/2015	409635.2	7/28/2015	479909.85	8/28/2015	548944.95	9/30/2015	618735.95			11/28/2015	749036.65	12/29/2015	813606.25
30	1/29/2015	65105.15			3/29/2015	200337.95	4/29/2015	271419.3	5/29/2015	341284.95	6/29/2015	411508.8	7/29/2015	481833.1	8/29/2015	550979.95					11/29/2015	750935.65	12/30/2015	814944.05
31	1/30/2015	67375.45			3/30/2015	202593.4	4/30/2015	274086.8	5/30/2015	343771.9	6/30/2015	413719.75	7/30/2015	484182.25	8/30/2015	552474.55					11/30/2015	753158.9	12/31/2015	817860.05
32	1/31/2015	69793.3			3/31/2015	205350			5/31/2015	345489.55			7/31/2015	486277.65	8/31/2015	554555.9								



13) 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((orders_details.quantity)* pizzas.price) as revenue
from pizza_types join pizzas
on pizza_types.pizza_type_id = pizzas.pizza_type_id
join orders_details
on orders_details.pizza_id = pizzas.pizza_id
group by pizza_types.category, pizza_types.name) as a) as b
where rn <= 3;
```

-OUTPUT-

	name	revenue
▶	The Thai Chicken Pizza	43434.25
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41409.5
	The Classic Deluxe Pizza	38180.5
	The Hawaiian Pizza	32273.25
	The Pepperoni Pizza	30161.75
	The Spicy Italian Pizza	34831.25
	The Italian Supreme Pizza	33476.75
	The Sicilian Pizza	30940.5
	The Four Cheese Pizza	32265.700000000065
	The Mexicana Pizza	26780.75
	The Five Cheese Pizza	26066.5





**THANK YOU  
FOR ATTENTION.**