

HOT & SPICY

PIZZA



Pizza Sales Analysis

Using SQL for Business Insights

Objective:

To analyze PizzaHut's sales data using SQL and extract meaningful business insights to understand sales trends, customer preferences, and performance of various product categories.



Tools Used:

SQL (MySQL / PostgreSQL), Excel / Google Sheets
(optional)



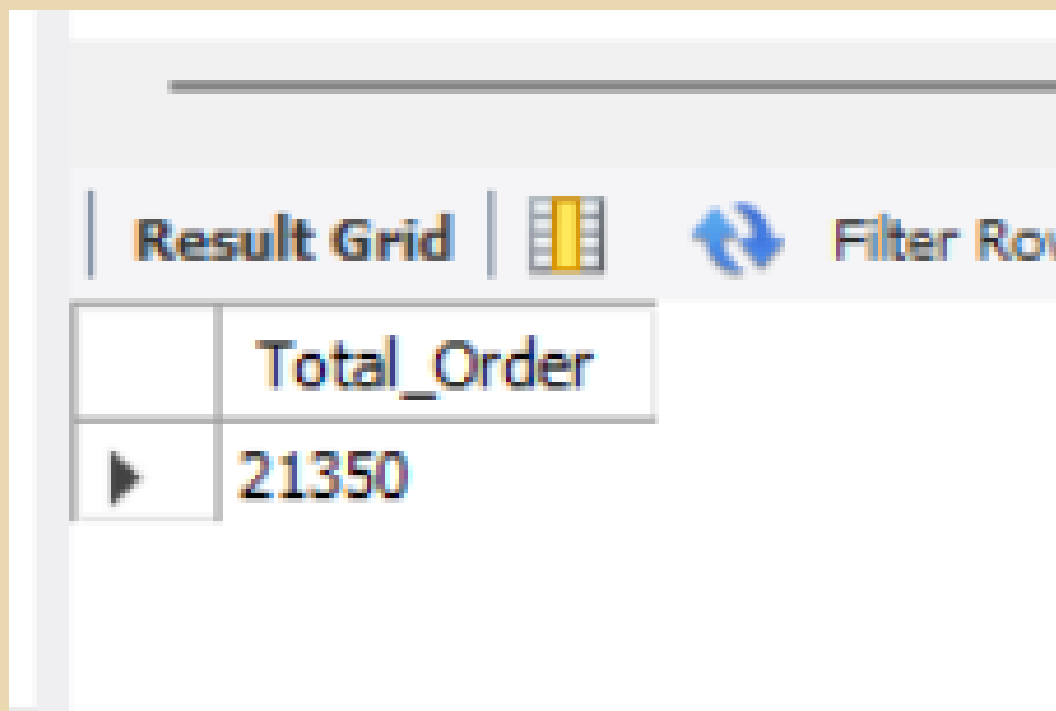
Presented By:

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RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

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

OUTPUT



The screenshot shows a database interface with a 'Result Grid' tab. The grid contains one row with the column name 'Total_Order' and the value '21350'. There is a play button icon in the first column of the row.

	Total_Order
▶	21350

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

SELECT

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

FROM

```
order_details
```

JOIN

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

Output

Result Grid		Filter Rows
	total_Sales	
▶	213955.9	

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

Result Grid			Filter Rows:	
	name	price		
▶	The Greek Pizza	35.95		

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
```

Output

Result Grid			Filter Rows
	size	order_count	
▶	L	4899	
	M	3930	
	S	3767	
	XL	141	
	XXL	8	

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
```

Output

Result Grid			Filter Rows:
	name	quantity	
▶	The Barbecue Chicken Pizza	653	
	The Pepperoni Pizza	650	
	The Hawaiian Pizza	634	
	The California Chicken Pizza	622	
	The Thai Chicken Pizza	603	

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
    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 quantity DESC
```

Output

Result Grid			Filter Rows:
	category	quantity	
▶	Classic	3848	
	Supreme	3132	
	Veggie	3108	
	Chicken	2891	

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```
SELECT
    HOUR(order_time) AS hour, COUNT(order_id) AS order_count
FROM
    orders
GROUP BY HOUR(order_time);
```

Output

Result Grid			Filter Rows:
	hour	order_count	
▶	11	1231	
	12	2520	
	13	2455	
	14	1472	
	15	1468	
	16	1920	
	17	2336	
	18	2399	
	19	2009	
Result 1			×

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

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

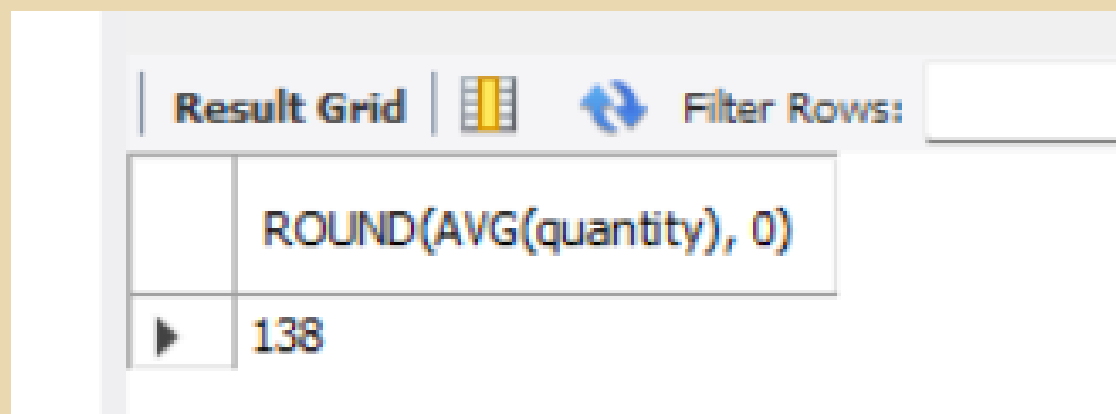
Output

Result Grid			Filter Rows:
	category	COUNT(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)
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
```

Output



The screenshot shows a database interface with a 'Result Grid' tab. The grid contains one row with the SQL expression 'ROUND(AVG(quantity), 0)' in the first column and the value '138' in the second column. Above the grid, there are icons for a grid, a refresh button, and a 'Filter Rows:' input field.

	ROUND(AVG(quantity), 0)
▶	138

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

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

Output

Result Grid			Filter Rows:	Export
	name	revenue		
▶	The Barbecue Chicken Pizza	11549.75		
	The Thai Chicken Pizza	10952.25		
	The California Chicken Pizza	10846.5		

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  
    order_details  
    JOIN  
        pizzas ON pizzas.pizza_id = order_details.pizza_id) * 100 , 2) 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.category order by revenue desc
```

Output

	category	revenue
▶	Classic	26.51
	Supreme	25.39
	Veggie	24.17
	Chicken	23.93

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

Output

	order_date	cum_revenue
	2015-01-13	29831.300000000003
	2015-01-14	32358.700000000004
	2015-01-15	34343.500000000001
	2015-01-16	36937.650000000001
	2015-01-17	39001.750000000001
	2015-01-18	40978.600000000006
	2015-01-19	43365.750000000001
	2015-01-20	45763.650000000001
	2015-01-21	47804.200000000001

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(order_details.quantity * pizzas.price) 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.category, pizza_types.name ) as a) as b
where rn <= 3;
```

Output

	name	revenue
►	The Barbecue Chicken Pizza	11549.75
	The Thai Chicken Pizza	10952.25
	The California Chicken Pizza	10846.5
	The Classic Deluxe Pizza	9196
	The Hawaiian Pizza	8404.75
	The Pepperoni Pizza	8111.25
	The Spicy Italian Pizza	8987.25
	The Italian Supreme Pizza	8527
	The Sicilian Pizza	8282.75

Result 1 ×