

SQL Project - Pizza Sales

This SQL project analyzes pizza sales data to uncover key business insights. It includes calculating total orders, revenue, and identifying popular pizzas by size, category, and time. Advanced queries highlight revenue trends and top-performing items, using data aggregation and table joins for in-depth analysis.

Retrieve the total number of orders placed.

```
1      -- Retrieve the total number order placed
2
3  •    Select count(order_id) as total_orders
4      from orders;
```

Result Grid	
	total_orders
▶	21350



Calculate the total revenue generated
from pizza sales.alter

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

Result Grid	
	total_sales
▶	23726.35

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;
```

Result Grid   Filter Rows		
	name	price
▶	The Greek Pizza	35.95

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
LIMIT 1;
```

Result Grid				 Filter
	size	order_count		
▶	L	558		

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;
```

Result Grid			Filter Rows:
	name	quantity	
▶	The Pepperoni Pizza	82	
	The Classic Deluxe Piz	The Pepperoni Pizz	
	The Thai Chicken Pizza	70	
	The Hawaiian Pizza	66	
	The Italian Supreme Pizza	65	

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;
```

Result Grid			Filter R
	category	quantity	
▶	Classic	424	
	Supreme	354	
	Veggie	347	
	Chicken	306	

Determine the distribution of orders by hour of the day.

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

Result Grid			Filter Rows
	hour	number_of_orders	
▶	11	1231	
	12	2520	
	13	2455	
	14	1472	
	15	1468	
	16	1920	
	17	2226	



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

```
Select category, count(name) from pizza_types  
group by category;
```

Result Grid			Filter Rows
	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),2) 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;
```

Result Grid			 Filter
	round(Avg(quantity),2)		
▶	143.10		

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

```
SELECT
    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.name
ORDER BY revenue DESC
LIMIT 3;
```

Result Grid			Filter Rows:
	name	revenue	
▶	The Thai Chicken Pizza	1296.5	
	The Barbecue Chicken Pizza	1160.75	
	The Italian Supreme Pizza	1158.75	

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

```
SELECT
    pizza_types.category,
    ROUND(SUM(orders_details.quantity * pizzas.price) / (SELECT
        ROUND(SUM(orders_details.quantity * pizzas.price),
            2) AS total_sales
    FROM
        orders_details
        JOIN
        pizzas ON orders_details.pizza_id = pizzas.pizza_id) * 100, 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.category ORDER BY revenue;
```

Result Grid					Filter
	category	revenue			
▶	Chicken	23.05			
	Veggie	24.67			
	Supreme	26.06			
	Classic	26.22			



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(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;
```

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	

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

```
Select name, revenue,rank_pizza_types
from(
Select category,name,revenue,
rank() over(partition by category order by revenue desc) as rank_pizza_types
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 rank_pizza_types<=3 ;
```

Result Grid   Filter Rows: <input type="text"/>			
	name	revenue	rank_pizz
1	The Thai Chicken Pizza	1296.5	1
2	The Barbecue Chicken Pizza	1160.75	2
3	The California Chicken Pizza	1115.25	3
4	The Classic Deluxe Pizza	1100	1
5	The Pepperoni Pizza	1038.75	2
6	The Greek Pizza	899	3
7	The Thai Chicken Pizza	1150.75	1