

# Pizza Sales Analysis:

1. Retrieve the total number of orders placed.

```
-- Retrieve the total number of orders placed.  
select count(order_id) as Total_orders from orders;
```

Result

Result Grid	
	Total_orders
▶	21350

2 Calculate the total revenue generated from pizza sales.

```
-- Calculate the total revenue generated from pizza sales.
```

```
• SELECT  
    ROUND(SUM(order_details.quantity * pizzas.price),  
          2) AS Total_Revenue  
FROM  
    order_details  
    JOIN pizzas  
    pizzas ON pizzas.pizza_id = order_details.pizza_id;
```

result

Result Grid	
	Total_Revenue
▶	817860.05

3. Identify the highest-priced pizza.

```
1  -- Identify the highest-priced pizza.
2
3  •  SELECT
4      pizza_types.name, pizzas.price
5  FROM
6      pizza_types
7      JOIN
8      pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
9  ORDER BY pizzas.price DESC
10 LIMIT 1;
11
```

result

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

4. Identify the most common pizza size ordered.

```
-- Identify the most common pizza size ordered.
SELECT
    pizzas.size,
    COUNT(order_details.order_details_id) AS Pizza_count
FROM
    pizzas
    JOIN
    order_details ON pizzas.pizza_id = order_details.pizza_id
GROUP BY pizzas.size
ORDER BY pizza_count DESC
LIMIT 1;
```

result

Result Grid			Filter
	size	Pizza_count	
▶	L	18526	

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

```
-- 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;
```

result

	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.

```
-- 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;
```

result

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

```
-- determine the distribution of orders by hour of the day.  
SELECT  
    HOUR(order_time) AS hours, COUNT(order_id) AS order_cout  
FROM  
    orders  
GROUP BY hours;
```

Result

	hours	order_cout
	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

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

```
-- Join relevant tables to find the category-wise distribution of pizzas.
SELECT
    category, COUNT(name)
FROM
    pizza_types
GROUP BY category;
```

Result

	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.

```
-- Group the orders by date and calculate the average number of pizzas ordered per day.
SELECT
    AVG(quantity) avg_per_day
FROM
    (SELECT
        (order_date) AS order_date,
        SUM(order_details.quantity) AS quantity
    FROM
        orders
    JOIN order_details ON order_details.order_id = orders.order_id
    GROUP BY order_date) AS order_quantity;
```

Result

	avg_per_day
▶	138.4749

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

```
-- Determine the top 3 most ordered pizza types based on revenue.  
SELECT  
    name, SUM(order_details.quantity * pizzas.price) AS revenue  
FROM  
    pizza_types  
    JOIN  
    pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id  
    JOIN  
    order_details ON order_details.pizza_id = pizzas.pizza_id  
GROUP BY name  
ORDER BY revenue DESC  
LIMIT 3;
```

result

	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.

```
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;
```

result

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

12 .Analyze the cumulative revenue generated over time.

```
-- Analyze the cumulative revenue generated over time.
select order_date, sum(revenue) over (order by order_date) as cumulative_rev
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 t
```

result

order_date	cumulative_rev
2015-01-01 00:00:00	2713.8500000000004
2015-01-02 00:00:00	5445.75
2015-01-03 00:00:00	8108.15
2015-01-04 00:00:00	9863.6
2015-01-05 00:00:00	11929.55
2015-01-06 00:00:00	14358.5
2015-01-07 00:00:00	16560.7

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

```
-- Determine the top 3 most ordered pizza types based on revenue for each pizza category.
select category, 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;
```

result

	category	name	revenue
	Supreme	The Spicy Italian Pizza	34831.25
	Supreme	The Italian Supreme Pizza	33476.75
	Supreme	The Sicilian Pizza	30940.5
	Veggie	The Four Cheese Pizza	32265.700000000065
	Veggie	The Mexicana Pizza	26780.75
	Veggie	The Five Cheese Pizza	26066.5