

PIZZA SALES ANALYSIS

By MySQL 



Retrieve the total number of orders placed.

```
SELECT  
    COUNT(*) AS total_orders  
FROM  
    orders
```

	total_orders
▶	21350

Calculate the total revenue generated from pizza sales

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

	total_revenue
▶	817860.05

Identify the highest-priced pizza

```
SELECT
    pizza_types.name, pizzas.price
FROM
    pizzas
    INNER JOIN
    pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
ORDER BY price DESC
LIMIT 1
```

	name	price
▶	The Greek Pizza	35.95

Identify the most common pizza size ordered

```
SELECT
    size, COUNT(od.order_details_id) AS total_count
FROM
    pizzas p
    INNER JOIN
    order_details od ON p.pizza_id = od.pizza_id
GROUP BY size
ORDER BY total_count DESC
```

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

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

```
SELECT
    pt.name, COUNT(od.quantity) AS total_count
FROM
    pizzas p
    INNER JOIN
    order_details od ON p.pizza_id = od.pizza_id
    INNER JOIN
    pizza_types pt ON pt.pizza_type_id = p.pizza_type_id
GROUP BY pt.name
ORDER BY total_count DESC
LIMIT 5
```

	name	total_count
▶	The Classic Deluxe Pizza	2416
	The Barbecue Chicken Pizza	2372
	The Hawaiian Pizza	2370
	The Pepperoni Pizza	2369
	The Thai Chicken Pizza	2315

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

```
SELECT
    pt.category, sum(od.quantity) AS total_count
FROM
    pizzas p
    INNER JOIN
    order_details od ON p.pizza_id = od.pizza_id
    INNER JOIN
    pizza_types pt ON pt.pizza_type_id = p.pizza_type_id
GROUP BY pt.category
ORDER BY total_count DESC
LIMIT 5
```

	category	total_count
▶	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050

Determine the distribution of orders by hour of the day

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

	hour	total_order
▶	11	1231
	12	2520
	13	2455
	14	1472
	15	1468
	16	1920
	17	2225

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

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

	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(total_quantity), 0) AS avg_quantity
FROM
    (SELECT
        order_date, SUM(order_details.quantity) AS total_quantity
    FROM
        orders
    INNER JOIN order_details ON orders.order_id = order_details.order_id
    GROUP BY order_date) AS order_quantity
```

	avg_quantity
▶	138

Determine the top 3 most ordered pizza types based on revenue

```
SELECT
    pt.name, ROUND(SUM(p.price * od.quantity), 0) AS total_sales
FROM
    pizzas p
    INNER JOIN
    order_details od ON p.pizza_id = od.pizza_id
    INNER JOIN
    pizza_types pt ON pt.pizza_type_id = p.pizza_type_id
GROUP BY pt.name
ORDER BY total_sales DESC
LIMIT 3
```

	name	total_sales
▶	The Thai Chicken Pizza	43434
	The Barbecue Chicken Pizza	42768
	The California Chicken Pizza	41410

Calculate the percentage contribution of each pizza type to total revenue

```
SELECT
  pt.category, ROUND(SUM(p.price * od.quantity) / (SELECT
    ROUND(SUM(p.price * od.quantity), 0) AS total_sales
FROM
  pizzas p
    INNER JOIN
  order_details od ON p.pizza_id = od.pizza_id) * 100,2)
AS total_sales
FROM
  pizzas p
    INNER JOIN
  order_details od ON p.pizza_id = od.pizza_id
    INNER JOIN
  pizza_types pt ON pt.pizza_type_id = p.pizza_type_id
GROUP BY pt.category
ORDER BY total sales DESC
```

	category	total_sales
▶	Classic	26.91
	Supreme	25.46
	Chicken	23.96
	Veggie	23.68

Analyze the cumulative revenue generated over time

```
select order_date, sum(revenue) Over(order by order_date) as cum_revnuue
from
(select o.order_date, sum(od.quantity * p.price) as revenue from orders o inner join order_details od
on o.order_id = od.order_id inner join pizzas p
on p.pizza_id = od.pizza_id
group by order_date) as sales
```

	order_date	cum_revnuue
►	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

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 pt.category, pt.name, round(sum(p.price * od.quantity),0) as revenue from pizzas p Inner Join order_details od
on p.pizza_id = od.pizza_id inner join
pizza_types pt on p.pizza_type_id = pt.pizza_type_id
group by pt.category, pt.name
order by revenue DESC) as a) as b
where rn <= 3
```

	category	name	revenue
►	Chicken	The Thai Chicken Pizza	43434
	Chicken	The Barbecue Chicken Pizza	42768
	Chicken	The California Chicken Pizza	41410
	Classic	The Classic Deluxe Pizza	38180
	Classic	The Hawaiian Pizza	32273
	Classic	The Pepperoni Pizza	30162
	Supreme	The Spicy Italian Pizza	34831
	Supreme	The Italian Supreme Pizza	33477
	Supreme	The Sicilian Pizza	30940
	Veggie	The Four Cheese Pizza	32266
	Veggie	The Mexicana Pizza	26781
	Veggie	The Five Cheese Pizza	26066



THANK YOU!

