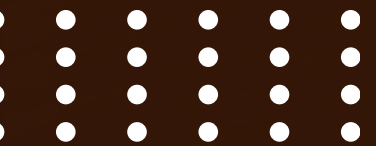


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# PIZZA SALES ANALYSIS SQL

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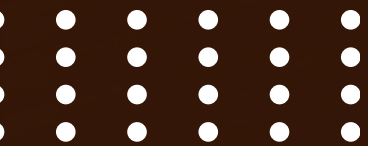




# Project Objective

**Clearly state the purpose of your analysis, e.g.:**

- **Analyze sales trends of different pizza types**
- **Find revenue contribution of each pizza type**
- **Identify best-selling pizza types & peak order hours**
- **Support business decision-making**





# Dataset Description

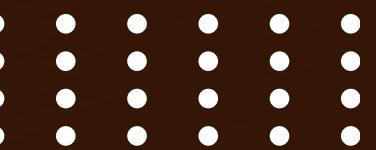
**Number of tables and key columns:**

**Orders** → order\_id, order\_date, order\_time

**Order\_details** → order\_detail\_id, order\_id, pizza\_id, quantity

**Pizzas** → pizza\_id, price, pizza\_type\_id, size

**Pizza\_types** → pizza\_type\_id, name, category, ingredients





# RETRIVE THE TOTAL NUMBER OF ORDERS PLACED

```
SELECT COUNT(order_id) as total_orders  
FROM orders;
```

	total_orders
▶	21350



# CALCULATE THE TOTAL REVENUE GENERATE FROM THE PIZZA SALES

```
SELECT  
sum(order_details.quantity * pizzas.price) as total_sales  
FROM order_details join pizzas  
ON order_details.pizza_id = pizzas.pizza_id;
```

	total_sales
▶	817860.0499999993



# IDENTIFY THE HIGHEST PRIZE OF 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;
```

	name	price
▶	The Greek Pizza	35.95



# IDENTIFY THE MOST COMMON PIZZA SIZE IS ORDER

```
SELECT pizzas.size, count(order_details.order_detail_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;
```

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



# LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITY

```
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;
```

	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



# JOIN THE NECESSARY TABLE TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY

```
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;
```

	category	quantity
►	Classic	14888
	Supreme	11987
	Veggie	11649
	Chicken	11050



# DETERMINE THE DISTRIBUTION OF ORDER BY HOUR OF THE DAY

```
SELECT HOUR(order_time) as order_hr , COUNT(order_id)
FROM orders
GROUP BY order_hr
ORDER BY order_hr DESC;
```

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



# JOIN THE RELEVANT TABLE TO FIND THE CATEGORY WISE DISTRIBUTION OF PIZZA

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

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



# GROUP THE BY DATE AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDER PER DAY

```
SELECT ROUND(AVG(quantity),0)AS avg_order_perday
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_perday ;
```

	avg_order_perday
▶	138



# DETERMINE THE TOP 3 MOST ORDERS PIZZA TYPES BASED ON THE REVENUE

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

name	revenue
The Thai Chicken Pizza	43434.25
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41409.5



# CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE BASED ON CATEGORY)

```
SELECT
    pizza_types.category,
    SUM(order_details.quantity * pizzas.price) * 100
    / SUM(SUM(order_details.quantity * pizzas.price)) OVER() AS percentage_contribution
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 percentage_contribution DESC;
```

category	percentage_contribution
Classic	26.905960255669623
Supreme	25.45631126009858
Chicken	23.955137556847248
Veggie	23.682590927384542



# ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME

```
SELECT order_date,  
SUM(revenue) OVER(ORDER BY order_date) AS cumulative_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 order_details.order_id = orders.order_id  
GROUP BY orders.order_date) AS sales;
```

order_date	cumulative_revenue
2015-01-01	2713.85000000000004
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



# DETERMINE THE TOP 3 MOST ORDERS 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;
```

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	32265.70000000065
The Mexicana Pizza	26780.75
The Five Cheese Pizza	26066.5