



# PIZZAHUT

## R E S T A U R A N T

*Specialist in Italian Food*







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# ABOUT

In my project, I leveraged a pizza dataset to execute complex queries, demonstrating my problem-solving skills. I'm Yohan, responsible for data analysis and SQL query implementation.



RETRIEVE THE TOTAL NUMBER OF ORDERS PLACED.

```
SELECT  
    COUNT(order_id) AS Total_Order  
FROM  
    orders;
```

	Total_Order
▶	21350

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```
SELECT  
    ROUND(SUM(o.quantity * p.price)) AS total_sales  
FROM  
    order_detail o  
    JOIN  
    pizzas p ON p.pizza_id = o.pizza_id;
```

total_sales
817860

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;
```

name	price
The Greek Pizza	35.95



IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

```
SELECT
    p.size, COUNT(o.order_detail_id) AS common_size
FROM
    order_detail o
    JOIN
    pizzas p ON o.pizza_id = p.pizza_id
GROUP BY p.size
ORDER BY common_size DESC
LIMIT 1;
```

size	common_size
L	18526

LIST THE TOP 5 MOST ORDERED PIZZA TYPES ALONG WITH THEIR QUANTITIES.

```
SELECT
    pizza_types.name, COUNT(o.order_detail_id) AS common_size
FROM
    order_detail o
    JOIN
    pizzas p ON o.pizza_id = p.pizza_id
    JOIN
    pizza_types ON pizza_types.pizza_type_id = p.pizza_type_id
GROUP BY pizza_types.name
ORDER BY common_size DESC
LIMIT 5;
```

name	common_size
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
    pizza_types.category, SUM(order_detail.quantity) AS quantity
FROM
    pizza_types
    JOIN
    pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
    JOIN
    order_detail ON order_detail.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 ORDERS BY HOUR OF THE DAY.

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

hours	order_count
9	1
10	8
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



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
    orders.order_date, SUM(order_detail.quantity)
FROM
    orders
    JOIN
    order_detail ON orders.order_id = order_detail.order_id
GROUP BY orders.order_date;
```

order_date	SUM(order_detail.quantity)
2015-01-01	162
2015-01-02	165
2015-01-03	158
2015-01-04	106
2015-01-05	125
2015-01-06	147
2015-01-07	138
2015-01-08	173
2015-01-09	127
2015-01-10	146

# QUERY

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

```
SELECT
    pizza_types.name,
    ROUND(SUM(pizzas.price * order_detail.quantity)) AS revenue
FROM
    pizzas
    JOIN
    order_detail ON pizzas.pizza_id = order_detail.pizza_id
    JOIN
    pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
GROUP BY pizza_types.name
ORDER BY revenue DESC
LIMIT 3;
```

name	revenue
The Thai Chicken Pizza	43434
The Barbecue Chicken Pizza	42768
The California Chicken Pizza	41410



# QUERY



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CALCULATE THE PERCENTAGE CONTRIBUTION OF EACH PIZZA TYPE TO TOTAL REVENUE.

```
SELECT
    pizza_types.category,
    ROUND((SUM(pizzas.price * order_detail.quantity) / (SELECT
        ROUND(SUM(o.quantity * p.price)) AS total_sales
    FROM
        order_detail o
        JOIN
        pizzas p ON p.pizza_id = o.pizza_id)) * 100,
    2) AS revenue
FROM
    pizzas
    JOIN
    order_detail ON pizzas.pizza_id = order_detail.pizza_id
    JOIN
    pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
GROUP BY pizza_types.category
ORDER BY revenue DESC
```

category	revenue
Classic	26.91
Supreme	25.46
Chicken	23.96
Veggie	23.68

# QUERY

ANALYZE THE CUMULATIVE REVENUE GENERATED OVER TIME.

```
SELECT
    order_date,
    ROUND(SUM(revenue) OVER (ORDER BY order_date), 2) AS cum_revenue
FROM
    (SELECT
        orders.order_date,
        SUM(order_detail.quantity * pizzas.price) AS revenue
    FROM
        order_detail
    JOIN pizzas ON order_detail.pizza_id = pizzas.pizza_id
    JOIN orders ON orders.order_id = order_detail.order_id
    GROUP BY orders.order_date) AS sales;
```

order_date	cum_revenue
2015-01-01	2713.85
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	23990.35
2015-01-11	25862.65
2015-01-12	27781.7
2015-01-13	29831.3
2015-01-14	32358.7

## 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,
      ROUND(SUM(pizzas.price * order_detail.quantity)) AS revenue
    FROM
      pizzas
    JOIN order_detail ON pizzas.pizza_id = order_detail.pizza_id
    JOIN pizza_types ON pizzas.pizza_type_id = pizza_types.pizza_type_id
    GROUP BY pizza_types.category, pizza_types.name
  ) AS a
) AS b
WHERE rn <= 3;
```

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



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# CONCLUSION

WE ANALYZED A PIZZA ORDERS DATABASE USING SQL QUERIES. OUR ANALYSIS REVEALED TOTAL ORDERS PLACED, REVENUE GENERATED, AND POPULAR PIZZA TYPES AND SIZES. THESE FINDINGS PROVIDE VALUABLE INSIGHTS THAT CAN INFORM BUSINESS DECISIONS RELATED TO INVENTORY MANAGEMENT AND CUSTOMER SATISFACTION STRATEGIES. FURTHER EXPLORATION INTO PREDICTIVE MODELING AND CUSTOMER BEHAVIOR ANALYSIS COULD ENHANCE BUSINESS STRATEGIES.