



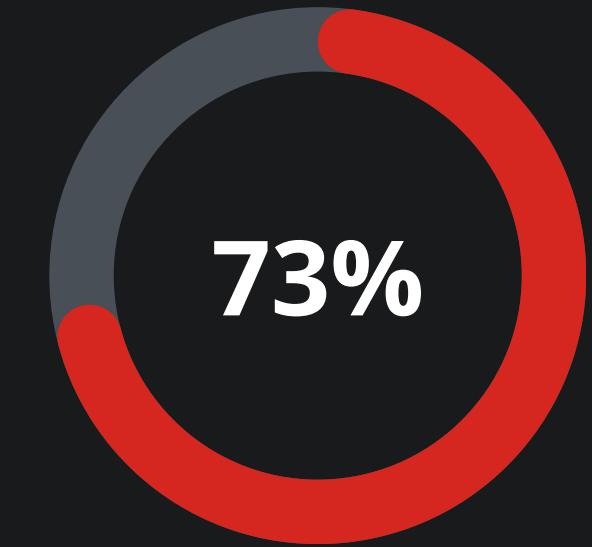
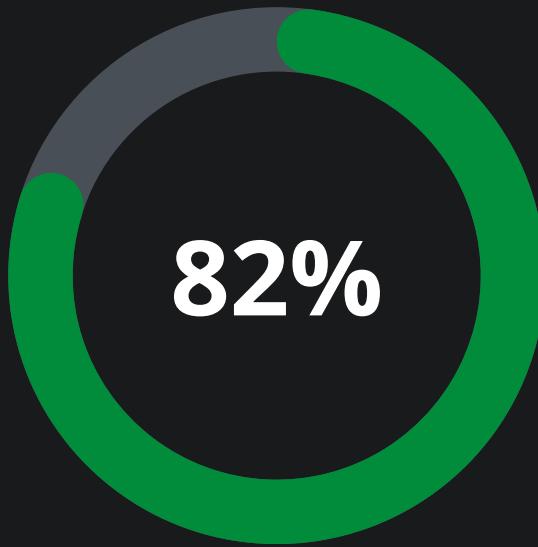
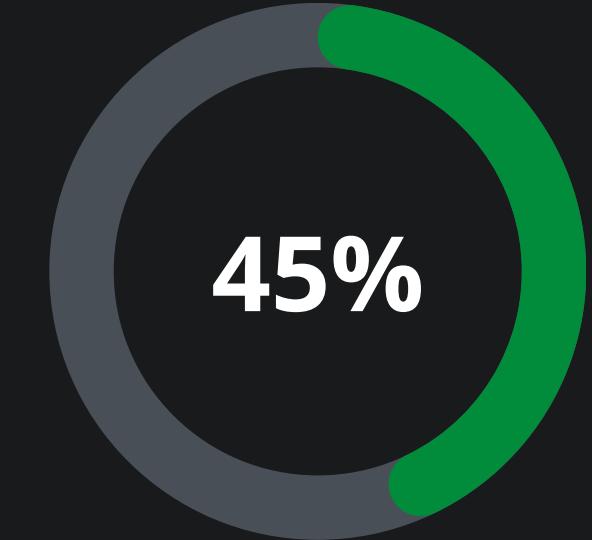
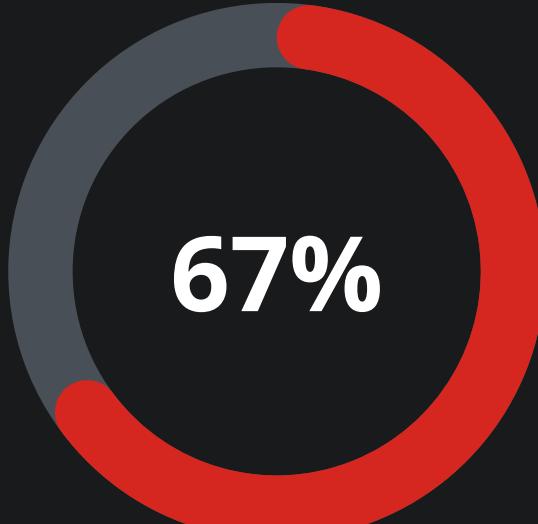
MySQL®

SQL ANALYTICS UNVEILED:

A Data-Driven Study of
Pizza Sales – From Crust to Profit



PROJECT SCOPE AND OBJECTIVES



Basic Analysis

- **Total Orders:** Retrieve the total number of orders placed.
- **Total Revenue:** Calculate the total revenue generated from pizza sales.
- **Highest Priced Pizza:** Identify the highest-priced pizza in the menu.
- **Popular Size:** Identify the most common pizza size ordered.
- **Top Pizza Types:** List the top 5 most ordered pizza types along with their quantities.

Intermediate Analysis

- **Category-Wise Quantity:** Join tables to find the total quantity of each pizza category ordered.
- **Hourly Distribution:** Analyze the distribution of orders by hour of the day.
- **Category Distribution:** Join tables to find the category-wise distribution of pizzas.
- **Daily Grouping:** Group orders by date and calculate the average number of pizzas ordered per day.
- **Revenue Leaders:** Determine the top 3 most ordered pizza types based on revenue.

Advanced Analysis

- **Revenue Contribution:** Calculate the percentage contribution of each pizza type to total revenue.
- **Cumulative Revenue:** Analyze the cumulative revenue generated over time.
- **Category Revenue Leaders:** Determine the top 3 most ordered pizza types based on revenue for each pizza category.

QUESTION 1

BASIC

RETRIEVE THE TOTAL NUMBER OF ORDERS
PLACED

```
SELECT  
    COUNT(*) as total  
FROM orders_details;
```

total
48620



QUESTION 2

BASIC

CALCULATE THE TOTAL REVENUE GENERATED FROM PIZZA SALES.

```
SELECT  
    ROUND(SUM(orders_details.quantity * pizzas.price)) AS Total_Revenue  
FROM orders_details  
JOIN pizzas  
ON orders_details.pizza_id = pizzas.pizza_id;
```

Total_Revenue
817860



QUESTION 3

BASIC

IDENTIFY THE HIGHEST-PRICED PIZZA.

```
SELECT
    pizza_types.name AS Pizza_name,
    pizzas.price AS Price
FROM pizza_types
JOIN pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
ORDER BY Price DESC
LIMIT 5;
```

Pizza_name	Price
The Greek Pizza	35.95
The Greek Pizza	25.5
The Brie Carre Pizza	23.65
The Italian Vegetables Pizza	21
The Barbecue Chicken Pizza	20.75

5 rows in set (0.0013 sec)



QUESTION 4

BASIC

IDENTIFY THE MOST COMMON PIZZA SIZE ORDERED.

```
SELECT quantity,  
       COUNT(order_details_id) AS most_sold  
FROM orders_details  
GROUP BY quantity  
ORDER BY most_sold desc  
LIMIT 3 ;
```

quantity	most_sold
1	47693
2	903
3	21

3 rows in set (0.0195 sec)



QUESTION 5

BASIC

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

```
SELECT pizza_types.name AS NAME,
       SUM(orders_details.quantity) AS most_ordered
  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 most_ordered DESC
 LIMIT 5;
```

NAME	most_ordered
The Classic Deluxe Pizza	2453
The Barbecue Chicken Pizza	2432
The Hawaiian Pizza	2422
The Pepperoni Pizza	2418
The Thai Chicken Pizza	2371



QUESTION 6

JOIN THE NECESSARY TABLES TO FIND THE TOTAL QUANTITY OF EACH PIZZA CATEGORY ORDERED.

```
SELECT pizza_types.name AS name,  
       pizza_types.category AS category,  
       SUM(orders_details.quantity) AS quantity  
FROM pizza_types  
JOIN pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id  
JOIN orders_details ON orders_details.pizza_id = pizzas.pizza_id  
GROUP BY name, category  
ORDER BY quantity DESC;
```

INTERMEDIATE

name	category	quantity
The Classic Deluxe Pizza	Classic	2453
The Barbecue Chicken Pizza	Chicken	2432
The Hawaiian Pizza	Classic	2422
The Pepperoni Pizza	Classic	2418
The Thai Chicken Pizza	Chicken	2371
The California Chicken Pizza	Chicken	2370
The Sicilian Pizza	Supreme	1938
The Spicy Italian Pizza	Supreme	1924
The Southwest Chicken Pizza	Chicken	1917
The Big Meat Pizza	Classic	1914
The Four Cheese Pizza	Veggie	1902
The Italian Supreme Pizza	Supreme	1884
The Vegetables + Vegetables Pizza	Veggie	1526
The Mexicana Pizza	Veggie	1484
The Napolitana Pizza	Classic	1464
The Prosciutto and Arugula Pizza	Supreme	1457
The Pepper Salami Pizza	Supreme	1446
The Spinach and Feta Pizza	Veggie	1446
The Italian Capocollo Pizza	Classic	1438
The Greek Pizza	Classic	1420
The Five Cheese Pizza	Veggie	1409
The Pepperoni, Mushroom, and Peppers Pizza	Classic	1359
The Green Garden Pizza	Veggie	997
The Chicken Alfredo Pizza	Chicken	987
The Italian Vegetables Pizza	Veggie	981
The Chicken Pesto Pizza	Chicken	973
The Spinach Pesto Pizza	Veggie	970
The Soppressata Pizza	Supreme	961
The Spinach Supreme Pizza	Supreme	950
The Calabrese Pizza	Supreme	937
The Mediterranean Pizza	Veggie	934
The Brie Carre Pizza	Supreme	490



QUESTION 7

INTERMEDIATE

DETERMINE THE DISTRIBUTION OF ORDERS BY HOUR OF THE DAY.

```
SELECT HOUR(orders.order_time) AS hour,  
       COUNT(orders_details.order_details_id) AS total  
FROM orders  
JOIN orders_details ON orders_details.order_id = orders.order_id  
GROUP BY hour  
ORDER BY hour;
```

hour	total
9	4
10	17
11	2672
12	6543
13	6203
14	3521
15	3170
16	4185
17	5143
18	5359
19	4350
20	3487
21	2528
22	1370
23	68



QUESTION 8

JOIN RELEVANT TABLES TO FIND THE CATEGORY-WISE DISTRIBUTION OF PIZZAS.

```
SELECT pizza_types.category AS category,
       SUM(orders_details.order_details_id) AS total_distribution
  FROM pizza_types
 JOIN pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
 JOIN orders_details ON orders_details.pizza_id = pizzas.pizza_id
 GROUP BY category
 ORDER BY total_distribution;
```

INTERMEDIATE

category	total_distribution
Chicken	263672767
Veggie	276348618
Supreme	286412905
Classic	355542220
..	... 60 more ..



QUESTION 9

GROUP THE ORDERS BY DAY AND CALCULATE THE AVERAGE NUMBER OF PIZZAS ORDERED PER DAY.

```
SELECT  
    DAYNAME(orders.order_date) AS day,  
    ROUND(AVG(orders_details.order_details_id), 2) AS avg_orders  
FROM orders  
JOIN orders_details ON orders_details.order_id = orders.order_id  
GROUP BY day  
ORDER BY avg_orders DESC;
```

day	avg_orders
Thursday	24957.56
Wednesday	24624.40
Saturday	24385.69
Sunday	24359.46
Tuesday	24286.32
Friday	24029.95
Monday	23481.90



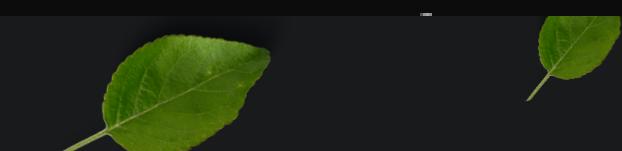
QUESTION 10

INTERMEDIATE

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

```
SELECT pizza_types.name AS name,
       SUM(orders_details.quantity * pizzas.price) AS revenue
  FROM pizza_types
 JOIN pizzas ON pizzas.pizza_type_id = pizza_types.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;
```

+-----+ <th> name <th> revenue <th>+-----+</th></th></th>	name <th> revenue <th>+-----+</th></th>	revenue <th>+-----+</th>	+-----+
	The Thai Chicken Pizza	43434.25	
	The Barbecue Chicken Pizza	42768	
	The California Chicken Pizza	41409.5	



QUESTION 11

ADVANCE

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

```
SELECT
    pizza_types.name AS name,
    SUM(orders_details.quantity * pizzas.price) AS revenue,
    ROUND(
        (SUM(orders_details.quantity * pizzas.price) /
         (SELECT SUM(orders_details.quantity * pizzas.price)
          FROM pizza_types
          JOIN pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
          JOIN orders_details ON orders_details.pizza_id = pizzas.pizza_id)) * 100, 2) AS percentage
FROM pizza_types
JOIN pizzas ON pizzas.pizza_type_id = pizza_types.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;
```

name	revenue	percentage
The Thai Chicken Pizza	43434.25	5.31
The Barbecue Chicken Pizza	42768	5.23
The California Chicken Pizza	41409.5	5.06



QUESTION 12

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;
```

order_date	cum_revenue	
2015-01-01	2713.850000000004	2015-11-22 731181.7500000001
2015-01-02	5445.75	2015-11-23 733646.9000000001
2015-01-03	8108.15	2015-11-24 735876.9500000002
2015-01-04	9863.6	2015-11-25 738240.2000000002
2015-01-05	11929.55	2015-11-26 742646.1500000001
2015-01-06	14358.5	2015-11-27 747068.6000000001
2015-01-07	16560.7	2015-11-28 749036.6500000001
2015-01-08	19399.05	2015-11-29 750935.6500000001
2015-01-09	21526.4	2015-11-30 753158.9000000001
2015-01-10	23990.350000000002	2015-12-01 755235.6000000001
2015-01-11	25862.65	2015-12-02 757449.7000000001
2015-01-12	27781.7	2015-12-03 759692.9
2015-01-13	29831.300000000003	2015-12-04 762571.25
2015-01-14	32358.700000000004	2015-12-05 765199.2
2015-01-15	34343.5000000001	2015-12-06 767549.45
2015-01-16	36937.6500000001	2015-12-07 769964.25
2015-01-17	39001.7500000001	2015-12-08 771820.5
2015-01-18	40978.6000000006	2015-12-09 774392.05
2015-01-19	43365.7500000001	2015-12-10 776377.65
2015-01-20	45763.6500000001	2015-12-11 779011.65
2015-01-21	47804.2000000001	2015-12-12 780971.8
2015-01-22	50300.9000000001	2015-12-13 783216.9500000001
2015-01-23	52724.6000000006	2015-12-14 785389.55
2015-01-24	55013.8500000006	2015-12-15 787777
2015-01-25	56631.4000000001	2015-12-16 790011.8
2015-01-26	58515.8000000001	2015-12-17 791892.55
2015-01-27	61043.8500000001	2015-12-18 794778.8500000001
2015-01-28	63059.8500000001	2015-12-19 797083.05
2015-01-29	65105.15000000016	2015-12-20 799187.9500000001
2015-01-30	67375.4500000001	2015-12-21 801288.65
2015-01-31	69793.3000000002	2015-12-22 803171.6
2015-02-01	72982.5000000001	2015-12-23 805415.9
2015-02-02	75311.1000000002	2015-12-24 807553.75
2015-02-03	77925.9000000002	2015-12-26 809196.8
2015-02-04	80159.8000000002	2015-12-27 810615.8
		2015-12-28 812253
		2015-12-29 813606.25
		2015-12-30 814944.05
		2015-12-31 817860.05



QUESTION 13

ADVANCE

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

```
SELECT name, category, revenue,
       RANK() OVER (PARTITION BY category ORDER BY revenue DESC) AS rn
FROM
  (SELECT pizza_types.name AS name,
         pizza_types.category AS category,
         SUM(orders_details.quantity * pizzas.price) AS revenue
      FROM pizza_types
     JOIN pizzas ON pizzas.pizza_type_id = pizza_types.pizza_type_id
     JOIN orders_details ON orders_details.pizza_id = pizzas.pizza_id
    GROUP BY pizza_types.name, pizza_types.category
  ) AS subquery
ORDER BY category, rn;
```

name	category	revenue	rn
The Thai Chicken Pizza	Chicken	43434.25	1
The Barbecue Chicken Pizza	Chicken	42768	2
The California Chicken Pizza	Chicken	41409.5	3
The Southwest Chicken Pizza	Chicken	34705.75	4
The Chicken Alfredo Pizza	Chicken	16900.25	5
The Chicken Pesto Pizza	Chicken	16701.75	6
The Classic Deluxe Pizza	Classic	38180.5	1
The Hawaiian Pizza	Classic	32273.25	2
The Pepperoni Pizza	Classic	30161.75	3
The Greek Pizza	Classic	28454.100000000013	4
The Italian Capocollo Pizza	Classic	25094	5
The Napolitana Pizza	Classic	24087	6
The Big Meat Pizza	Classic	22968	7
The Pepperoni, Mushroom, and Peppers Pizza	Classic	18834.5	8
The Spicy Italian Pizza	Supreme	34831.25	1
The Italian Supreme Pizza	Supreme	33476.75	2
The Sicilian Pizza	Supreme	30940.5	3
The Pepper Salami Pizza	Supreme	25529	4
The Prosciutto and Arugula Pizza	Supreme	24193.25	5
The Soppressata Pizza	Supreme	16425.75	6
The Calabrese Pizza	Supreme	15934.25	7
The Spinach Supreme Pizza	Supreme	15277.75	8
The Brie Carre Pizza	Supreme	11588.4999999999	9
The Four Cheese Pizza	Veggie	32265.70000000065	1
The Mexicana Pizza	Veggie	26780.75	2
The Five Cheese Pizza	Veggie	26066.5	3
The Vegetables + Vegetables Pizza	Veggie	24374.75	4
The Spinach and Feta Pizza	Veggie	23271.25	5
The Italian Vegetables Pizza	Veggie	16019.25	6
The Spinach Pesto Pizza	Veggie	15596	7
The Mediterranean Pizza	Veggie	15360.5	8
The Green Garden Pizza	Veggie	13955.75	9

32 rows in set (0.2581 sec)



THANK YOU

CONTACT
FOR MORE
INFORMATION

+91 9873411090

 [linkedin.com/in/anujsharma1203](https://www.linkedin.com/in/anujsharma1203)

 sharma.anuj1203@gmail.com