

SQL Query (Answers) – Pizza Sales Analysis

Q1: The Total Number of Orders Placed

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

Q2: The Total Revenue Generated from Pizza Sales

```
SELECT SUM(od.quantity * p.price) AS total_revenue  
FROM order_details od  
JOIN pizza p ON od.pizza_id = p.pizza_id;
```

Q3: The Highest Priced Pizza

```
SELECT name, price  
FROM pizza p  
JOIN pizza_type pt ON p.pizza_type_id = pt.pizza_type_id  
ORDER BY price DESC  
LIMIT 1;
```

Q4: The Most Common Pizza Size Ordered

```
SELECT p.size, COUNT(od.pizza_id) AS size_count  
FROM order_details od  
JOIN pizza p ON od.pizza_id = p.pizza_id  
GROUP BY p.size  
ORDER BY size_count DESC  
LIMIT 1;
```

Q5: The Top 5 Most Ordered Pizza Types Along with Their Quantities

```
SELECT pt.name AS pizza_name, SUM(od.quantity) AS total_quantity
FROM order_details od
JOIN pizza p ON od.pizza_id = p.pizza_id
JOIN pizza_type pt ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.name
ORDER BY total_quantity DESC
LIMIT 5;
```

Q6: The Quantity of Each Pizza Category Ordered

```
SELECT pt.category, SUM(od.quantity) AS total_quantity
FROM order_details od
JOIN pizza p ON od.pizza_id = p.pizza_id
JOIN pizza_type pt ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.category
ORDER BY total_quantity DESC;
```

Q7: The Distribution of Orders by Hours of the Day

```
SELECT EXTRACT(HOUR FROM time) AS hour, COUNT(order_id) AS order_count
FROM orders
GROUP BY EXTRACT(HOUR FROM time)
ORDER BY hour;
```

Q8: The Category-wise Distribution of Pizzas

```
SELECT pt.category, COUNT(p.pizza_id) AS pizza_count
FROM pizza p
JOIN pizza_type pt ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.category
ORDER BY pizza_count DESC;
```

Q9: The Average Number of Pizzas Ordered Per Day

```
SELECT AVG(daily_orders.total_pizzas) AS avg_pizzas_per_day
FROM (
    SELECT date, SUM(od.quantity) AS total_pizzas
    FROM orders o
    JOIN order_details od ON o.order_id = od.order_id
    GROUP BY date
) AS daily_orders;
```

Q10: Top 3 Most Ordered Pizza Types Based on Revenue

```
SELECT pt.name AS pizza_name, SUM(od.quantity * p.price) AS total_revenue
FROM order_details od
JOIN pizza p ON od.pizza_id = p.pizza_id
JOIN pizza_type pt ON p.pizza_type_id = pt.pizza_type_id
GROUP BY pt.name
ORDER BY total_revenue DESC
LIMIT 3;
```

Q11: The Percentage Contribution of Each Pizza Type to Revenue

```
SELECT pt.name AS pizza_name,  
       SUM(od.quantity * p.price) * 100.0 / (SELECT SUM(od.quantity * p.price) FROM  
order_details od JOIN pizza p ON od.pizza_id = p.pizza_id) AS revenue_percentage  
FROM order_details od  
JOIN pizza p ON od.pizza_id = p.pizza_id  
JOIN pizza_type pt ON p.pizza_type_id = pt.pizza_type_id  
GROUP BY pt.name  
ORDER BY revenue_percentage DESC;
```

Q12: The Cumulative Revenue Generated Over Time

```
SELECT o.date, SUM(od.quantity * p.price) AS daily_revenue,  
       SUM(SUM(od.quantity * p.price)) OVER (ORDER BY o.date) AS cumulative_revenue  
FROM orders o  
JOIN order_details od ON o.order_id = od.order_id  
JOIN pizza p ON od.pizza_id = p.pizza_id  
GROUP BY o.date  
ORDER BY o.date;
```

Q13: The Top 3 Most Ordered Pizza Types Based on Revenue for Each Pizza Category

```
SELECT pt.category, pt.name AS pizza_name, SUM(od.quantity * p.price) AS total_revenue  
FROM order_details od  
JOIN pizza p ON od.pizza_id = p.pizza_id  
JOIN pizza_type pt ON p.pizza_type_id = pt.pizza_type_id  
GROUP BY pt.category, pt.name  
ORDER BY pt.category, total_revenue DESC  
LIMIT 3;
```