

**1] Retrieve the total number of orders placed.**

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

**2] Calculate the total revenue generated from pizza sales.**

```
SELECT
    ROUND(SUM(order_details.quantity * pizzas.price),
          2) AS Total_Sales
FROM
    order_details
    JOIN
    pizzas ON pizzas.pizza_id = order_details.pizza_id;
```

**3] 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;
```

**4] Identify the most common pizza size ordered.**

```
SELECT
    pizzas.Size,
    COUNT(order_details.orders_details_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;
```

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

```
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;
```

**6] Join the necessary tables to find the total quantity of each pizza category ordered.**

```
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;
```

**7] Determine the distribution of orders by hour of the day.**

```
SELECT
    HOUR(order_time), COUNT(order_id) AS Order_Count
FROM
    orders
GROUP BY HOUR(Order_Time);
```

**8] Join relevant tables to find the category-wise distribution of pizzas.**

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

**9] Group the orders by date and calculate the average number of pizzas ordered per day.**

```
SELECT
    ROUND(AVG(quantity), 0) AS Avg_pizza_Ordered_Per_Day
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_quantity;
```

**10] Determine the top 3 most ordered pizza types based on 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;
```

**11] Calculate the percentage contribution of each pizza type to total revenue.**

```
SELECT
  pizza_types.Category,
  ROUND(SUM(order_details.quantity * pizzas.price) / (SELECT
    ROUND(SUM(order_details.quantity * pizzas.price),
      2) AS Total_sales
    FROM
      order_details
      JOIN
      pizzas ON pizzas.pizza_id = order_details.pizza_id) *
    100,
    2) 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
ORDER BY revenue DESC;
```

**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(order_details.quantity*pizzas.price) as revenue
from order_details join pizzas
on order_details.pizza_id = pizzas.pizza_id
join orders
on orders.order_id = order_details.order_id
group by orders.order_date) as Sales;
```

**13] 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 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;
```