

```
-- retrieve the total number of orders placed
```

```
SELECT
```

```
    COUNT(order_id) AS Total_Orders
```

```
FROM
```

```
    orders;
```

```
-- 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;
```

```
-- 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;
```

```
-- identify the most common pizza size ordered.  
SELECT  
    pizzas.size,  
    COUNT(order_details.order_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  
LIMIT 1;
```

```
-- List the top 5 most ordered pizza type 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 pizzas.pizza_id = order_details.pizza_id
GROUP BY pizza_types.name
ORDER BY quantity DESC
LIMIT 5;
```

```
-- 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 pizzas.pizza_id = order_details.pizza_id  
GROUP BY pizza_types.category  
ORDER BY Quantity DESC;
```

```
-- determine the distribution of orders by hour of the day.
```

```
SELECT
```

```
    HOUR(order_time) AS hour, COUNT(order_id) AS order_count
```

```
FROM
```

```
    orders
```

```
GROUP BY HOUR(order_time);
```

```
-- find the category-wise distribution of pizzas.
```

```
SELECT
```

```
    category, COUNT(name)
```

```
FROM
```

```
    pizza_types
```

```
GROUP BY category;
```

```
-- 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;
```



```
-- Determine the top 3 most ordered pizza_types based on their revenue.  
SELECT  
    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 pizzas.pizza_id = order_details.pizza_id  
GROUP BY pizza_types.name  
ORDER BY revenue DESC  
LIMIT 3;
```

```
-- 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 pizzas.pizza_id = order_details.pizza_id
GROUP BY pizza_types.category
ORDER BY revenue DESC;
```

```
-- 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 orders.order_id = order_details.order_id  
group by orders.order_date) as sales;
```

-- Determine the top 3 most ordered pizza_types based on their 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 pizzas.pizza_id=order_details.pizza_id

group by pizza_types.category, pizza_types.name) as a) as b

where rn<=3;