```
show databases;
create database Pizza_Shop;
use Pizza_Shop;
show tables;

-- Q1 Total No of orders

SELECT
   COUNT(order_id) AS Total_Orders
FROM
   order_details;


-- Q2 Calculate total revenue generated from Pizza Sales

SELECT
   ROUND(SUM(od.quantity * p.price), 2) AS Total_Revenue
FROM
   order_details AS od
      JOIN
   Pizzas AS p ON o.pizza_id = p.pizza_id;


-- Q3 Identify the Highest Price 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;


-- Q4 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;
```

```
-- Q5 List the top 5 most ordered pizza types along with their quantity

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;


-- Q6 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 order_details.pizza_id = pizzas.pizza_id
GROUP BY pizza_types.category
ORDER BY Quantity DESC;


-- Q7 Determine distribution of the order by hour of the day

SELECT
    HOUR(time), COUNT(order_id)
FROM
    orders
GROUP BY HOUR(time)
ORDER BY HOUR(time);


-- Q8 Join relevat tables to find category wise distribution of pizza

SELECT
    category, COUNT(category)
FROM
    pizza_types
GROUP BY category;
```

```
-- Q9 Group the orders by date and calculate the average number of pizzas ordered
        per day

SELECT
   ROUND(AVG(data), 2) AS Average_Orders
FROM
   (SELECT
      orders.date, SUM(order_details.quantity) AS data
   FROM
      orders
   JOIN order_details ON orders.order_id = order_details.order_id
   GROUP BY orders.date) AS imp_table;


-- Q10 Determine the most 3 ordered Pizza Types based on 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;


-- Q11 Calculate the percentage contribution of each pizza type to total revenue

SELECT
   pizza_types.category,
   ROUND(SUM(order_details.quantity * pizzas.price) / (SELECT
               SUM(order_details.quantity * pizzas.price)
            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;
```

```
-- Q12 Analyze the cumalative revenue generated over time

SELECT
   date,
   round(SUM(revenue) OVER (ORDER BY date),2) AS cum_revenue
FROM
   (SELECT
      orders.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.date) AS sales;


-- Q13 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,
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;
```