

1. Total Number of Orders Completed on 18th March 2023

```
SELECT COUNT(DISTINCT Order_id) AS Total_Orders
FROM SALES
WHERE Date = '2023-03-18';
```

2. Total Number of Orders Completed on 18th March 2023 with First Name 'John' and Last Name 'Doe'

```
SELECT COUNT(DISTINCT S.Order_id) AS Total_Orders
FROM SALES S
JOIN CUSTOMERS C ON S.Customer_id = C.Customer_id
WHERE S.Date = '2023-03-18'
AND C.first_name = 'John'
AND C.last_name = 'Doe';
```

3. Total Number of Customers that Purchased in January 2023 and Average Amount Spent per Customer

```
SELECT COUNT(DISTINCT Customer_id) AS Total_Customers,
       AVG(Total_Spend) AS Avg_Spend_Per_Customer
FROM (
    SELECT Customer_id, SUM(Revenue) AS Total_Spend
    FROM SALES
    WHERE Date BETWEEN '2023-01-01' AND '2023-01-31'
    GROUP BY Customer_id
) AS Customer_Spend;
```

4. Departments that Generated Less Than \$600 in 2022

```
SELECT I.department, SUM(S.Revenue) AS Total_Revenue
FROM SALES S
JOIN ITEMS I ON S.Item_id = I.Item_id
WHERE YEAR(S.Date) = 2022
GROUP BY I.department
HAVING SUM(S.Revenue) < 600;
```

5. Most and Least Revenue Generated by an Order

```
SELECT MAX(Total_Revenue) AS Most_Revenue,
       MIN(Total_Revenue) AS Least_Revenue
FROM (
    SELECT Order_id, SUM(Revenue) AS Total_Revenue
    FROM SALES
    GROUP BY Order_id
) AS Order_Revenue;
```

6. Orders in the Most Lucrative Order

```
WITH Max_Revenue_Order AS (  
    SELECT Order_id  
    FROM SALES  
    GROUP BY Order_id  
    ORDER BY SUM(Revenue) DESC  
    LIMIT 1  
)  
SELECT S.Order_id, S.Item_id, S.Quantity, S.Revenue, I.Item_name, I.department  
FROM SALES S  
JOIN ITEMS I ON S.Item_id = I.Item_id  
JOIN Max_Revenue_Order MRO ON S.Order_id = MRO.Order_id;
```