

## 1. Find out total sales by state

```
WITH Total_Sales_State AS
(
  SELECT
    State,
    CAST(SUM(Sales*Quantity) AS INT64) AS Total_Sales,
    COUNT(Order_ID) AS Total_Orders_State,
    (
      SELECT
        COUNT(*)
      FROM
        iconic-works-395802.superstore.superstore_info
    ) AS Total_Orders,
    CASE
      WHEN COUNT(Order_ID)/(SELECT COUNT(*) FROM iconic-works-
395802.superstore.superstore_info) <= 0.2
      THEN 'Less than 20%'
      WHEN COUNT(Order_ID)/(SELECT COUNT(*) FROM iconic-works-
395802.superstore.superstore_info) > 0.2
      AND COUNT(Order_ID)/(SELECT COUNT(*) FROM iconic-works-
395802.superstore.superstore_info) <= 0.6
      THEN '20-60%'
      ELSE 'More than 60%'
    END AS Total_Fulfillment
  FROM
    iconic-works-395802.superstore.superstore_info
  GROUP BY
    State
  ORDER BY
    Total_Sales DESC
),
```

## 2. Identification of total sales by year and month

```
Total_Sales_Trend AS
(
  SELECT
    EXTRACT(YEAR FROM Order_Date) AS Order_Year,
    EXTRACT(MONTH FROM Order_Date) AS Order_Month,
    CAST(SUM(Sales*Quantity) AS INT64) AS Total_Sales
  FROM
    iconic-works-395802.superstore.superstore_info
  GROUP BY
    Order_Year,
    Order_Month
  ORDER BY
    Order_Year
),
```

## 3. Find out total sales by category and sub category including total profit margins

```
Total_Sales_Category AS
(
  SELECT
    Category,
```

```

        Sub_Category,
        CAST(SUM(Sales*Quantity) AS INT64) AS Total_Sales,
        CAST(SUM(Profit*Quantity) AS INT64) AS Total_Profit_Margin
FROM
    iconic-works-395802.superstore.superstore_info
GROUP BY
    Category,
    Sub_Category
ORDER BY
    Category DESC
),

```

## 4. For 3 sub categories, i.e., tables, supplies, and bookcases, the profit margins are negative. So, investigate why the profit margins are negative. Check the discount column to get leads. Group discount by category for e.g, < 25%, b/w 25-50% and >50% and add profit margins accordingly to get an understanding of what discount categories lead to losses.

```

Negative_Profit_Margin AS
(
    SELECT
        Sub_Category,
        CAST(SUM(CASE WHEN Discount <= 0.25 THEN PROFIT ELSE 0 END) AS INT64) AS Upto_25_Disc,
        CAST(SUM(CASE WHEN Discount > 0.25 AND Discount <= 0.5 THEN PROFIT ELSE 0 END) AS INT64)
AS Between_25to50_Disc,
        CAST(SUM(CASE WHEN Discount > 0.5 THEN PROFIT ELSE 0 END) AS INT64) AS Morethan_50_Disc,
        CAST(SUM(Profit) AS INT64) AS Total_Profit_Margin
FROM
    iconic-works-395802.superstore.superstore_info
WHERE
    Sub_Category = 'Tables'
    OR Sub_Category = 'Supplies'
    OR Sub_Category = 'Bookcases'
GROUP BY
    Sub_Category
),

```

## 5. List of top 10 loyal customers so far by spending to introduce special offers

```

Loyal_Customers_List AS
(
    SELECT
        Customer_Name,
        CAST(SUM(Sales*Quantity) AS INT64) AS Total_Sales
FROM
    iconic-works-395802.superstore.superstore_info
GROUP BY
    Customer_Name
ORDER BY
    Total_Sales DESC
LIMIT 10
)

```

```
## Select tables to return values
```

```
SELECT
```

```
*
```

```
FROM
```

```
Loyal_Customers_List
```