

```
CREATE DATABASE salesdb;

USE salesdb;

Select * From sales_data;

SHOW columns from sales_data;

UPDATE sales_data

SET Order_Date = STR_TO_DATE(Order_Date, '%d-%m-%Y %H:%i');

ALTER TABLE sales_data

MODIFY COLUMN Order_Date DATETIME;

ALTER TABLE sales_data

DROP COLUMN Hour;

Select Order_Date From sales_data

Where Order_Date is NULL;

UPDATE sales_data

SET Month = CASE

    WHEN Month = '1' THEN 'January'

    WHEN Month = '2' THEN 'February'

    WHEN Month = '3' THEN 'March'

    WHEN Month = '4' THEN 'April'

    WHEN Month = '5' THEN 'May'

    WHEN Month = '6' THEN 'June'

    WHEN Month = '7' THEN 'July'

    WHEN Month = '8' THEN 'August'

    WHEN Month = '9' THEN 'September'

    WHEN Month = '10' THEN 'October'

    WHEN Month = '11' THEN 'November'

    WHEN Month = '12' THEN 'December'

END;
```

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12  -- what are the different types of products have been sold by the store and total count.
13  • Select DISTINCT Product From sales_data;
14  • Select COUNT(DISTINCT Product) From sales_data;
15

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| Result Grid                |  | Filter Rows: | Export: | Wrap Cell Content: |
|----------------------------|--|--------------|---------|--------------------|
| Product                    |  |              |         |                    |
| Macbook Pro Laptop         |  |              |         |                    |
| LG Washing Machine         |  |              |         |                    |
| USB-C Charging Cable       |  |              |         |                    |
| 27in FHD Monitor           |  |              |         |                    |
| AA Batteries (4-pack)      |  |              |         |                    |
| Bose SoundSport Headphones |  |              |         |                    |
| AAA Batteries (4-pack)     |  |              |         |                    |
| ThinkPad Laptop            |  |              |         |                    |
| Lightning Charging Cable   |  |              |         |                    |
| Google Phone               |  |              |         |                    |
| Wired Headphones           |  |              |         |                    |
| Apple Airpods Headphones   |  |              |         |                    |
| Vareebadd Phone            |  |              |         |                    |
| iPhone                     |  |              |         |                    |
| 20in Monitor               |  |              |         |                    |
| 34in Ultrawide Monitor     |  |              |         |                    |
| Flatscreen TV              |  |              |         |                    |
| 27in 4K Gaming Monitor     |  |              |         |                    |
| LG Dryer                   |  |              |         |                    |

```

14 • Select COUNT(DISTINCT Product) AS Total_Number_of_Product From sales_data;

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| Result Grid             |  | Filter Rows: | Export: | Wrap Cell Content: |
|-------------------------|--|--------------|---------|--------------------|
| Total_Number_of_Product |  |              |         |                    |
| 19                      |  |              |         |                    |

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33  -- Total COUNT of each product sold
34  • Select Distinct Product, SUM(Quantity_Ordered) AS Total_Product_Count From sales_data
35  Group By Product
36  Order By Total_Product_Count DESC;
37

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| Result Grid                |                     | Filter Rows: | Export: | Wrap Cell Content: |
|----------------------------|---------------------|--------------|---------|--------------------|
| Product                    | Total_Product_Count |              |         |                    |
| AAA Batteries (4-pack)     | 31017               |              |         |                    |
| AA Batteries (4-pack)      | 27635               |              |         |                    |
| USB-C Charging Cable       | 23975               |              |         |                    |
| Lightning Charging Cable   | 23217               |              |         |                    |
| Wired Headphones           | 20557               |              |         |                    |
| Apple Airpods Headphones   | 15661               |              |         |                    |
| Bose SoundSport Headphones | 13457               |              |         |                    |
| 27in FHD Monitor           | 7550                |              |         |                    |
| iPhone                     | 6849                |              |         |                    |
| 27in 4K Gaming Monitor     | 6244                |              |         |                    |
| 34in Ultrawide Monitor     | 6199                |              |         |                    |
| Google Phone               | 5532                |              |         |                    |
| Flatscreen TV              | 4819                |              |         |                    |
| Macbook Pro Laptop         | 4728                |              |         |                    |
| ThinkPad Laptop            | 4130                |              |         |                    |
| 20in Monitor               | 4129                |              |         |                    |
| Vareebadd Phone            | 2068                |              |         |                    |
| LG Washing Machine         | 666                 |              |         |                    |
| LG Dryer                   | 646                 |              |         |                    |

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38  -- Total Sale of each product
39  • Select Distinct Product, ROUND(SUM(Sales),2) AS Total_Product_Sales From sales_data
40  Group by Product
41  Order by Total_Product_Sales DESC;

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Result Grid   Filter Rows:  Export:  Wrap Cell Content: 

| Product                    | Total_Product_Sales |
|----------------------------|---------------------|
| Macbook Pro Laptop         | 8037600             |
| iPhone                     | 4794300             |
| ThinkPad Laptop            | 4129958.7           |
| Google Phone               | 3319200             |
| 27in 4K Gaming Monitor     | 2435097.56          |
| 34in Ultrawide Monitor     | 2355558.01          |
| Apple Airpods Headphones   | 2349150             |
| Flatscreen TV              | 1445700             |
| Bose SoundSport Headphones | 1345565.43          |
| 27in FHD Monitor           | 1132424.5           |
| Vareebadd Phone            | 827200              |
| 20in Monitor               | 454148.71           |
| LG Washing Machine         | 399600              |
| LG Dryer                   | 387600              |
| Lightning Charging Cable   | 347094.15           |
| USB-C Charging Cable       | 286501.25           |
| Wired Headphones           | 246478.43           |
| AA Batteries (4-pack)      | 106118.4            |
| AAA Batteries (4-pack)     | 92740.83            |

```

43  -- Average Order value
44  • Select ROUND(SUM(Sales)/COUNT(Distinct Order_ID), 2) AS Average_Order_Value
45  From sales_data;

```

Result Grid   Filter Rows:  Export:  Wrap Cell Content: 

| Average_Order_Value |
|---------------------|
| 193.3               |

```

49  -- Monthly Trend for Product Sale
50  • Select Month, COUNT(Distinct Order_ID) AS Monthly_Order, ROUND(SUM(Sales), 2) AS Total_Monthly_Sales From sales_data
51  Group by Month
52  Order by Monthly_Order DESC, Total_Monthly_Sales DESC;
53

```

Result Grid   Filter Rows:  Export:  Wrap Cell Content: 

| Month     | Monthly_Order | Total_Monthly_Sales |
|-----------|---------------|---------------------|
| December  | 24004         | 4613443.34          |
| October   | 19436         | 3736726.88          |
| April     | 17528         | 3390670.24          |
| November  | 16859         | 3199603.2           |
| May       | 15836         | 3152606.75          |
| March     | 14549         | 2807100.38          |
| July      | 13761         | 2647775.76          |
| June      | 12989         | 2577802.26          |
| February  | 11496         | 2202022.42          |
| August    | 11484         | 2244467.88          |
| September | 11202         | 2097560.13          |
| January   | 9293          | 1822256.73          |

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33  -- Month wise Count of Products sold by the store.
34  • Select DISTINCT Product, COUNT(Product)AS Total_Count, Month From sales_data
35  Group By Month, Product
36  Order By Month;

```

| Product                    | Total_Count | Month |
|----------------------------|-------------|-------|
| 20in Monitor               | 388         | April |
| 27in 4K Gaming Monitor     | 564         | April |
| 27in FHD Monitor           | 733         | April |
| 34in Ultrawide Monitor     | 651         | April |
| AA Batteries (4-pack)      | 2063        | April |
| AAA Batteries (4-pack)     | 1991        | April |
| Apple AirPods Headphones   | 1509        | April |
| Bose SoundSport Headphones | 1279        | April |
| Flatscreen TV              | 459         | April |

```

37  -- Total Sales of Products Monthwise.
38  • Select Distinct Product, ROUND(SUM(Sales),2) AS Product_Sale, Month From sales_data
39  Group By Product, Month
40  Order By Month;

```

| Product                  | Product_Sale | Month |
|--------------------------|--------------|-------|
| Macbook Pro Laptop       | 771800       | April |
| Lightning Charging Cable | 35476.35     | April |
| 27in 4K Gaming Monitor   | 220734.34    | April |
| AA Batteries (4-pack)    | 10832.64     | April |
| Apple AirPods Headphones | 227850       | April |
| AAA Batteries (4-pack)   | 8787.61      | April |
| iPhone                   | 485100       | April |
| Flatscreen TV            | 138000       | April |
| 27in FHD Monitor         | 110392.64    | April |
| 20in Monitor             | 43226.07     | April |
| LG Dryer                 | 46800        | April |
| ThinkPad Laptop          | 389996.1     | April |

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41  -- Different cities where products are sold
42  • Select Distinct City From sales_data;

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| City          |
|---------------|
| New York City |
| San Francisco |
| Atlanta       |
| Portland      |
| Dallas        |
| Los Angeles   |
| Boston        |
| Austin        |
| Seattle       |

```

73 -- Citywise Trend for Product Sale
74 • Select City, COUNT(DISTINCT Order_ID) AS City_Order, ROUND(SUM(Sales), 2) AS Sale_Volume From sales_data
75 Group by City
76 Order by City_Order DESC, Sale_Volume DESC;
77

```

Result Grid   Filter Rows:  Export:  Wrap Cell Content: 



| City          | City_Order | Sale_Volume |
|---------------|------------|-------------|
| San Francisco | 42898      | 8262203.91  |
| Los Angeles   | 28498      | 5452570.8   |
| New York City | 23848      | 4664317.43  |
| Boston        | 19092      | 3661642.01  |
| Atlanta       | 14253      | 2795498.58  |
| Dallas        | 14240      | 2767975.4   |
| Seattle       | 14119      | 2747755.48  |
| Portland      | 11980      | 2320490.61  |
| Austin        | 9509       | 1819581.75  |

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48 -- Total Sale of Product citywise
49 • Select Distinct Product, ROUND(SUM(Sales),2) AS Product_sale, City From sales_data
50 Group by Product, City

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Result Grid   Filter Rows:  Export:  Wrap Cell Content: 

| Product                | Product_sale | City    |
|------------------------|--------------|---------|
| AA Batteries (4-pack)  | 8421.12      | Atlanta |
| Macbook Pro Laptop     | 644300       | Atlanta |
| LG Washing Machine     | 31200        | Atlanta |
| LG Dryer               | 35400        | Atlanta |
| USB-C Charging Cable   | 22884.25     | Atlanta |
| ThinkPad Laptop        | 356996.43    | Atlanta |
| 20in Monitor           | 37616.58     | Atlanta |
| Vareebadd Phone        | 69200        | Atlanta |
| Wired Headphones       | 18932.21     | Atlanta |
| AAA Batteries (4-pack) | 7053.41      | Atlanta |
| Google Phone           | 270600       | Atlanta |
| Rose SoundSport Hea    | 108389.16    | Atlanta |



```

76 -- Top 3 revenue generating products city wise
77 With Ranked_Products AS(
78   Select City, Product, ROUND(SUM(Sales), 2) AS Total_Sale,
79   ROW_NUMBER() OVER (PARTITION BY City ORDER BY ROUND(SUM(Sales), 2) DESC) AS Product_Rank From sales_data
80   Group by City, Product
81 )
82 Select City, Product, Total_Sale From Ranked_Products
83 Where Product_Rank <= 3
84 Order by City, Product_Rank;

```

Result Grid Filter Rows: Export: Wrap Cell Content: [IA](#)

|   | City      | Product            | Total_Sale |
|---|-----------|--------------------|------------|
| ▶ | Atlanta   | Macbook Pro Laptop | 644300     |
|   | Atlanta   | iPhone             | 380800     |
|   | Atlanta   | ThinkPad Laptop    | 356996.43  |
|   | Austin    | Macbook Pro Laptop | 426700     |
|   | Austin    | iPhone             | 263900     |
|   | Austin    | ThinkPad Laptop    | 209997.9   |
|   | Boston    | Macbook Pro Laptop | 814300     |
|   | Boston    | iPhone             | 527100     |
|   | Boston    | ThinkPad Laptop    | 446995.53  |
|   | Dallas    | Macbook Pro Laptop | 649400     |
|   | Dallas    | iPhone             | 363300     |
|   | Dallas    | ThinkPad Laptop    | 344996.55  |
|   | Los An... | Macbook Pro Laptop | 1276700    |
|   | Los An... | iPhone             | 782600     |

```

96 -- Top 3 revenue generating products monthwise
97 With Ranked_Products AS(
98   Select Month, Product, ROUND(SUM(Sales), 2) AS Total_Sale,
99   ROW_NUMBER() OVER (PARTITION BY Month ORDER BY ROUND(SUM(Sales), 2) DESC) AS Product_Rank From sales_data
100   Group by Month, Product
101 )
102 Select Month, Product, Total_Sale From Ranked_Products
103 Where Product_Rank <= 3
104 Order by Month, Product_Rank;

```

Result Grid Filter Rows: Export: Wrap Cell Content: [IA](#)

|   | Month    | Product            | Total_Sale |
|---|----------|--------------------|------------|
| ▶ | April    | Macbook Pro Laptop | 771800     |
|   | April    | iPhone             | 485100     |
|   | April    | ThinkPad Laptop    | 389996.1   |
|   | August   | Macbook Pro Laptop | 508300     |
|   | August   | iPhone             | 307300     |
|   | August   | ThinkPad Laptop    | 273997.26  |
|   | December | Macbook Pro Laptop | 1093100    |
|   | December | iPhone             | 634200     |
|   | December | ThinkPad Laptop    | 538994.61  |
|   | February | Macbook Pro Laptop | 469200     |
|   | February | iPhone             | 307300     |
|   | February | ThinkPad Laptop    | 274997.25  |

```

86  -- Bottom 3 revenue generating products city wise
87  With Ranked_Products AS(
88  Select City, Product, ROUND(SUM(Sales), 2) AS Total_Sale,
89  ROW_NUMBER() OVER (PARTITION BY City ORDER BY ROUND(SUM(Sales), 2) ASC) AS Product_Rank From sales_data
90  Group by City, Product
91  )
92  Select City, Product, Total_Sale From Ranked_Products
93  Where Product_Rank <= 3
94  Order by City, Product_Rank;

```

Result Grid  Filter Rows:  Export:  Wrap Cell Content: 

| City    | Product                | Total_Sale |
|---------|------------------------|------------|
| Atlanta | AAA Batteries (4-pack) | 7053.41    |
| Atlanta | AA Batteries (4-pack)  | 8421.12    |
| Atlanta | Wired Headphones       | 18932.21   |
| Austin  | AAA Batteries (4-pack) | 4987.32    |
| Austin  | AA Batteries (4-pack)  | 5468.16    |
| Austin  | Wired Headphones       | 13548.7    |
| Boston  | AAA Batteries (4-pack) | 10348.39   |
| Boston  | AA Batteries (4-pack)  | 11581.44   |

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106  -- Bottom 3 revenue generating products monthwise
107  With Ranked_Products AS(
108  Select Month, Product, ROUND(SUM(Sales), 2) AS Total_Sale,
109  ROW_NUMBER() OVER (PARTITION BY Month ORDER BY ROUND(SUM(Sales), 2) ASC) AS Product_Rank From sales_data
110  Group by Month, Product
111  )
112  Select Month, Product, Total_Sale From Ranked_Products
113  Where Product_Rank <= 3
114  Order by Month, Product_Rank;

```

Result Grid  Filter Rows:  Export:  Wrap Cell Content: 

| Month    | Product                | Total_Sale |
|----------|------------------------|------------|
| April    | AAA Batteries (4-pack) | 8787.61    |
| April    | AA Batteries (4-pack)  | 10832.64   |
| April    | Wired Headphones       | 24759.35   |
| August   | AAA Batteries (4-pack) | 6042.79    |
| August   | AA Batteries (4-pack)  | 7019.52    |
| August   | Wired Headphones       | 15479.09   |
| December | AAA Batteries (4-pack) | 12680.59   |
| December | AA Batteries (4-pack)  | 14300.16   |
| December | Wired Headphones       | 32960.51   |
| February | AAA Batteries (4-pack) | 5896.78    |

#### Insights:

- It is found that in the month of December, the number of orders reaches to **24004**, which is the maximum with the highest sales volume of **\$4613443.34** in the year. And the minimum number of orders is **9293**, which is observed in the month of January with the lowest sales volume of **\$1822256.73** in the same year. It shows that in the winter season and mostly during the time of Christmas, product sale increases.
- San Francisco city has contributed the most to revenue with the order number **42898** and an elite sales volume of **\$8262203.91** whereas Austin city has the least contribution to the revenue with **9509** orders amounting to **\$1819581.75** of sales volume in the year. Hence, management has to give more focus to the market of Austin to enhance revenue from the city.
- MacBook Pro Laptop, iPhone and ThinkPad Laptop** are the most revenue generating products whereas **AAA Batteries (4-pack), AA Batteries (4-pack) and Wired Headphones** are the least revenue generating products across the cities.