

Q1: What was the best month for sales? How much was earned that month?

- SQL Query:

```
1 SELECT
2   EXTRACT(MONTH FROM Order_Date) AS Month,
3   SUM(Quantity_Ordered * Price_Each) AS Total_Sales
4 FROM
5   `sales-394900.Sales.new_sales`
6 GROUP BY
7   Month
8 ORDER BY
9   Total_Sales DESC
10 LIMIT 1;
```

Press Alt+F1 for Accessibility Options.

Query results

 SAVE RESULTS ▾

 EXPLORE DATA ▾



< JOB INFORMATION RESULTS JSON EXECUTION DETAILS CHART PREVIEW EXEC >			
Row	Month ▾	Total_Sales ▾	
1	12	4608295.700001...	

The best month for sales was December with \$4,608,296

Q2: What City had the highest number of sales?

 Untitled 2  RUN  SAVE ▾  SHARE ▾  SCHEDULE  MORE ▾  Query completed.

```
1 SELECT
2   City,
3   SUM(Quantity_Ordered * Price_Each) AS Total_Sales
4 FROM
5   `sales-394900.Sales.new_sales`
6 GROUP BY
7   City
8 ORDER BY
9   Total_Sales DESC
10 LIMIT 1;
```

Press Alt+F1 for Accessibility Options.

Query results

 SAVE RESULTS ▾

 EXPLORE DATA ▾



< JOB INFORMATION RESULTS JSON EXECUTION DETAILS CHART PREVIEW EXEC >			
Row	City ▾	Total_Sales ▾	
1	San Francisco	8252258.670005...	

The city with the highest number of sales is San Francisco with \$8,252,259

Q3: What time should we display advertisement to maximize likelihood of customer's buying product?

Untitled 2 **RUN** **SAVE** **SHARE** **SCHEDULE** **MORE** Query completed.

```
1 SELECT
2   Hours,
3   COUNT(*) AS Total_Orders
4 FROM
5   `sales-394900.Sales.new_sales`
6 GROUP BY
7   Hours
8 ORDER BY
9   Total_Orders DESC
10 LIMIT 4;
11
```

Press Alt+F1 for Accessibility Options.

Query results **SAVE RESULTS** **EXPLORE DATA**

JOB INFORMATION **RESULTS** JSON EXECUTION DETAILS CHART **PREVIEW** EXEC

Row	Hours	Total_Orders
1	19	12886
2	12	12573
3	11	12392
4	18	12263

From 11:00 to 12:00 or from 18:00 to 19:00 because it's the start of Orders increasing .

Q4: What product sold the most? Why do you think it sold the most?

new_sales x *Untitled 2 x *Untitled x **RUN** **SAVE** **SHARE** **SCHEDULE** **MORE** Query completed.

```
1 SELECT
2   Product,
3   SUM(Quantity_Ordered) AS Total_Sold
4 FROM
5   `sales-394900.Sales.new_sales`
6 GROUP BY
7   Product
8 ORDER BY
9   Total_Sold DESC
10 LIMIT 1;

```

Press Alt+F1 for Accessibility Options.

Query results **SAVE RESULTS** **EXPLORE DATA**

JOB INFORMATION **RESULTS** JSON EXECUTION DETAILS CHART **PREVIEW** EXECUTION GRAPH

Row	Product	Total_Sold
1	AAA Batteries (4-pack)	30981

The most sold products is AAA Batteries (4-pack). Why do this product sell more than others? This is because the prices of product have a low price compared to other products and the continues need of it is so high.

Q5: What products are most often sold together?

```
Untitled 2 [RUN] [SAVE] [SHARE] [SCHEDULE] [MORE]
1 WITH OrderProducts AS (
2   SELECT
3     Order_ID,
4     STRING_AGG(Product, ', ' ) AS Products
5   FROM
6     `sales-394900.Sales.new_sales`
7   GROUP BY
8     Order_ID
9 )
10 SELECT
11   Products,
12   COUNT(*) AS Frequency
13 FROM
14   OrderProducts
15 WHERE
16   ARRAY_LENGTH(SPLIT(Products, ', ')) > 1
17 GROUP BY
18   Products
19 ORDER BY
20   Frequency DESC;
```

Press Alt+F1 for Accessibility Options.

Output:

JOB INFORMATION			RESULTS	JSON	EXECUTION DETAILS	CHART	PREVIEW	EXEC
Row	Products	Frequency						
1	iPhone, Lightning Charging Cab...	894						
2	Google Phone, USB-C Charging...	869						
3	iPhone, Wired Headphones	374						
4	Vareebadd Phone, USB-C Char...	318						
5	Google Phone, Wired Headpho...	311						
6	Apple Airpods Headphones, iP...	298						
7	Google Phone, Bose SoundSpo...	169						
8	Vareebadd Phone, Wired Head...	110						
9	Lightning Charging Cable, AA B...	101						
10	USB-C Charging Cable, AAA Ba...	92						

Results per page: 50 1 - 50 of 228

iPhone, lightning charging cable with 894 frequency

Q6. How much probability for next people will ordered USB-C Charging Cable? How much probability for next people will ordered iPhone? How much probability for next people will ordered Google Phone? How much probability other peoples will ordered Wired Headphones?

new_sales x *Untitled 2 x *Untitled x +

Untitled 2 RUN SAVE SHARE SCHEDULE MORE Query completed.

```

1 WITH Probabilities AS (
2   SELECT
3     CONCAT('USB-C Charging Cable', ': ', FORMAT('%2.2f', 100 * SUM(IF(Product = 'USB-C Charging Cable', Quantity_Ordered, 0)) / SUM
4     (Quantity_Ordered)), '%') AS Product_Probability_USB_C_Cable,
5     CONCAT('iPhone', ': ', FORMAT('%2.2f', 100 * SUM(IF(Product = 'iPhone', Quantity_Ordered, 0)) / SUM(Quantity_Ordered))), '%') AS
6     Product_Probability_iPhone,
7     CONCAT('Google Phone', ': ', FORMAT('%2.2f', 100 * SUM(IF(Product = 'Google Phone', Quantity_Ordered, 0)) / SUM(Quantity_Ordered))), '%')
8     AS Product_Probability_Google_Phone,
9     CONCAT('Wired Headphones', ': ', FORMAT('%2.2f', 100 * SUM(IF(Product = 'Wired Headphones', Quantity_Ordered, 0)) / SUM
10    (Quantity_Ordered))), '%') AS Product_Probability_Wired_Headphones
11 FROM
12   'sales-394900.Sales.new_sales'
13 )
14 SELECT
15   Product_Probability_USB_C_Cable,
16   Product_Probability_iPhone,
17   Product_Probability_Google_Phone,
18   Product_Probability_Wired_Headphones
19 FROM
20   Probabilities;

```

Press Alt+F1 for Accessibility Options.

Query results SAVE RESULTS EXPLORE DATA

JOB INFORMATION	RESULTS	JSON	EXECUTION DETAILS	CHART	PREVIEW	EXECUTION GRAPH
Row	Product_Probability_USB_C_Cable	Product_Probability_iPhone	Product_Probability_Google_Phone	Product_Probability_Wired_Headph		
1	USB-C Charging Cable: 11.46%	iPhone: 3.28%	Google Phone: 2.65%	Wired Headphones: 9.83%		

USB-C Charging Cable : 11.46%

Wired Headphones : 9.83%

iPhone : 3.28%

Google Phone : 2.65%