

Analysing Amazon Sales SQL Queries

-----SALES OVERVIEW-----

(Regions)

1. List of distinct regions covered in Amazon's sales data?

```
ELECT DISTINCT(Region) FROM [dbo].[Amazon Sales data]
```

Results		Messages
	Region	
1	Asia	
2	Australia and Oceania	
3	Central America and the Caribbean	
4	Europe	
5	Middle East and North Africa	
6	North America	
7	Sub-Saharan Africa	

S

(Total Sales Year)

2. Count of the total number of years covered in Amazon sales data?

```
SELECT COUNT(DISTINCT(Order_Year)) AS Total_Sales_Years  
FROM [dbo].[Amazon Sales data]
```

Results		Messages
	Total_Sales_Years	
1	8	

(Total Countries)

3.Count of the total number of countries involved in Amazon sales?

```
SELECT COUNT(DISTINCT(Country)) AS Total_Country FROM [dbo].[Amazon Sales data]
```

Results		Messages
	Total_Country	
1	76	

(Total Items)

4.Count of the total number of distinct items available for sale on Amazon?

```
SELECT COUNT(DISTINCT(Item_type)) AS Total_Items FROM [dbo].[Amazon Sales data]
```

Results		Messages
	Total_Items	
1	12	

(Sales Mode)

5. Different sales modes (sales channel) available?

```
SELECT DISTINCT(Sales_Channel) AS Sales_Channel FROM [dbo].[Amazon Sales data]
```

Results		Messages
	Sales_Channel	
1	Offline	
2	Online	

-----REVENUE AND PROFIT-----

(Total Revenue)

6. Sum of the total revenue generated across all sales?

```
SELECT SUM(Total_Revenue) AS Total_Revenue FROM [dbo].[Amazon Sales data]
```

Results		Messages
	Total_Revenue	
1	137348768.31	

(Revenue by Sales Mode)

7. Total Revenue generated by different sales modes?

```
SELECT Sales_Channel,  
       SUM(Total_Revenue) AS Total_Revenue  
FROM [dbo].[Amazon Sales data]  
GROUP BY Sales_Channel
```

ORDER BY SUM(Total_Revenue) DESC

Results Messages		
	Sales_Channel	Total_Revenue
1	Offline	79094809.20
2	Online	58253959.11

8. The most sold item in each sales mode?

WITH cte

```
AS (SELECT Sales_Channel,
           Item_Type,
           Sum(Units_Sold) AS Unit_Sold,
           Rank()
           OVER(
             partition BY Sales_Channel
             ORDER BY Sum(Units_Sold) DESC) Ranking
FROM [dbo].[amazon sales data]
GROUP BY Sales_Channel,
         Item_Type)
```

```
SELECT Sales_Channel,
       Item_Type,
       Unit_Sold
```

FROM cte

WHERE ranking = 1

Results Messages			
	Sales_Channel	Item_Type	Unit_Sold
1	Offline	Household	44445
2	Online	Cosmetics	41969

(Least sold item by Sales Mode)

9. The least sold item in each sales mode?

```
WITH cte
AS (SELECT Sales_Channel,
           Item_Type,
           Sum(Units_Sold) AS Unit_Sold,
           Rank()
           OVER(
               partition BY Sales_Channel
               ORDER BY Sum(Units_Sold) ASC) Ranking
FROM [dbo].[amazon sales data]
GROUP BY Sales_Channel,
         Item_Type)
SELECT Sales_Channel,
       Item_Type,
       Unit_Sold
FROM cte
WHERE ranking = 1
```

Results Messages			
	Sales_Channel	Item_Type	Unit_Sold
1	Offline	Cereal	3761
2	Online	Household	282

(Total Items Sold)

10. Sum of the total number of sold items?

```
SELECT SUM(Units_Sold) AS Total_Items_Sold FROM [dbo].[Amazon Sales data]
```

Results Messages	
	Total_Items_Sold
1	512871

(Total Cost of Sold Items)

11. Sum of the total cost of all sold items?

```
SELECT SUM(Total_Cost) Total_cost_of_all_sold_items AS FROM [dbo].[Amazon Sales data]
```

Results Messages	
	Total_cost_of_all_sold_items
1	93180569.91

-----PRICES INSIGHTS AND PROFIT MARGIN-----

(Items and Selling Prices)

12. List of distinct items and their selling prices?

```
SELECT DISTINCT(Item_Type) AS Item_Name,
        Selling_Price AS Price
FROM [dbo].[Amazon Sales data]
```

Results Messages		
	Item_Name	Selling_Price
1	Baby Food	255.28
2	Beverages	47.45
3	Cereal	205.70
4	Clothes	109.28
5	Cosmetics	437.20
6	Fruits	9.33
7	Household	668.27
8	Meat	421.89
9	Office Supplies	651.21
10	Personal Care	81.73
11	Snacks	152.58
12	Vegetables	154.06

(Items and Actual Prices)

13. List of distinct items and their actual prices?

```
SELECT DISTINCT(Item_Type) AS Item_Name,
                Unit_Cost AS Actual_Price
FROM [dbo].[Amazon Sales data]
```

Results Messages		
	Item_Name	Actual_Price
1	Baby Food	159.42
2	Beverages	31.79
3	Cereal	117.11
4	Clothes	35.84
5	Cosmetics	263.33
6	Fruits	6.92
7	Household	502.54
8	Meat	364.69
9	Office Supplies	524.96
10	Personal Care	56.67
11	Snacks	97.44
12	Vegetables	90.93

(Gross Profit Margin)

14. List of items sorted from highest to lowest profitability?

```
SELECT DISTINCT(Item_Type) AS Item_Name,
```

Unit_Price - Unit_Cost AS Profit

FROM [dbo].[Amazon Sales data]

ORDER BY Unit_Price - Unit_Cost DESC

Results			Messages		
	Item_Name	Profit			
1	Cosmetics	173.87			
2	Household	165.73			
3	Office Supplies	126.25			
4	Baby Food	95.86			
5	Cereal	88.59			
6	Clothes	73.44			
7	Vegetables	63.13			
8	Meat	57.20			
9	Snacks	55.14			
10	Personal Care	25.06			
11	Beverages	15.66			
12	Fruits	2.41			

(Profit Margin)

15. List of items sorted from highest to lowest of profit margine ?

SELECT Item_Type,

FORMAT(SUM(Total_Profit) / SUM(Total_Revenue) * 100, '0.00') + '%' AS Profit_Margin

FROM [dbo].[Amazon Sales data]

GROUP BY Item_Type

ORDER BY Profit_Margin DESC

Results Messages		
	Item_Type	Profit_Margin
1	Clothes	67.20%
2	Cereal	43.07%
3	Vegetables	40.98%
4	Cosmetics	39.77%
5	Baby Food	37.55%
6	Snacks	36.14%
7	Beverages	33.00%
8	Personal Care	30.66%
9	Fruits	25.83%
10	Household	24.80%
11	Office Supplies	19.39%
12	Meat	13.56%

(Most Expensive Item)

16. The most expensive item on Amazon?

```
SELECT DISTINCT(Item_Type) ,
               Unit_Price AS Price
FROM [dbo].[Amazon Sales data]
WHERE Unit_Price=(SELECT MAX(CONVERT(DECIMAL(10,2), Unit_Price))
                  FROM [dbo].[Amazon Sales data])
```

Results Messages		
	Item_Type	Price
1	Household	668.27

(Cheapest Item)

17. The cheapest item on Amazon?

```
SELECT DISTINCT(Item_Type) ,
               Unit_Price AS Price
FROM [dbo].[Amazon Sales data]
WHERE Unit_Price=(SELECT MIN(CONVERT(DECIMAL(10,2), Unit_Price))
                  FROM [dbo].[Amazon Sales data])
```


FROM [dbo].[Amazon Sales data])

Results			Messages	
	Item_Type	Price		
1	Fruits	9.33		

-----DELIVERY PERFORMANCE-----

(Average Delivery Days)

18. Average delivery days for each item type?

WITH cte

AS (SELECT Item_Type,

DATEDIFF(day, Order_Date, Ship_Date) AS Day_Take

FROM [dbo].[Amazon Sales data])

SELECT Item_Type,

AVG(Day_Take) AS Average_delivery_day

FROM cte

GROUP BY Item_Type

ORDER BY AVG(Day_Take) ASC

Results			Messages	
	Item_Type	Average_delivery_day		
1	Snacks	9		
2	Personal Care	19		
3	Office Supplies	20		
4	Cereal	21		
5	Beverages	22		
6	Cosmetics	23		
7	Household	23		
8	Vegetables	24		
9	Meat	25		
10	Baby Food	25		
11	Fruits	26		
12	Clothes	29		

-----SALES ANALYTICS-----

(Top 3 Most Sold Items throughout Amazon Sales)

19. List of top 3 most sold items throughout Amazon sales?

```
SELECT Top(3) Item_Type,  
            SUM(Units_Sold) AS Unit_Sold  
FROM [dbo].[Amazon Sales data]  
GROUP BY Item_Type  
ORDER BY Sum(Units_Sold) DESC
```

Results			Messages		
	Item_Type	Unit_Sold			
1	Cosmetics	83718			
2	Clothes	71260			
3	Beverages	56708			

(Top 3 Least Sold Items throughout Amazon Sales)

20. List of top 3 least sold items throughout Amazon sales?

```
SELECT Top(3) Item_Type,  
            SUM(Units_Sold) AS Unit_Sold  
FROM [dbo].[Amazon Sales data]  
GROUP BY Item_Type  
ORDER BY Sum(Units_Sold) ASC
```

Results			Messages		
	Item_Type	Unit_Sold			
1	Meat	10675			
2	Snacks	13637			
3	Vegetables	20051			

(Most Sold Item by Each Country)

21. Most sold item by each country?

```
WITH cte
AS (SELECT Country,
        Item_Type,
        Sum(Units_Sold) AS Total_Sold,
        Dense_rank()
        OVER(
            partition BY Country
            ORDER BY Sum(Units_Sold) DESC) Ranking
FROM [dbo].[amazon sales data]
GROUP BY Country,
        Item_Type)
SELECT Country,
        Item_Type
FROM cte
WHERE Ranking = 1
```

Results Messages			Results Messages		
	Country	Item_Type		Country	Item_Type
1	Albania	Clothes	36	Lithuania	Office Supplies
2	Angola	Household	37	Macedonia	Clothes
3	Australia	Beverages	38	Madagascar	Clothes
4	Austria	Cosmetics	39	Malaysia	Fruits
5	Azerbaijan	Cosmetics	40	Mali	Fruits
6	Bangladesh	Clothes	41	Mauritania	Office Supplies
7	Belize	Clothes	42	Mexico	Personal Care
8	Brunei	Office Supplies	43	Moldova	Personal Care
9	Bulgaria	Office Supplies	44	Monaco	Baby Food
10	Burkina Faso	Vegetables	45	Mongolia	Personal Care
11	Cameroon	Office Supplies	46	Mozambique	Household
12	Cape Verde	Clothes	47	Myanmar	Household
13	Comoros	Cereal	48	New Zealand	Fruits
14	Costa Rica	Personal Care	49	Nicaragua	Beverages
15	Cote d'Ivoire	Clothes	50	Niger	Personal Care
16	Democratic Republic of the Congo	Beverages	51	Norway	Baby Food
17	Djibouti	Cereal	52	Pakistan	Cosmetics
18	East Timor	Meat	53	Portugal	Baby Food
19	Federated States of Micronesia	Beverages	54	Republic of the Congo	Personal Care
20	Fiji	Clothes	55	Romania	Cosmetics
21	France	Cosmetics	56	Russia	Office Supplies
22	Gabon	Personal Care	57	Rwanda	Office Supplies
23	Grenada	Cereal	58	Samoa	Cosmetics
24	Haiti	Cosmetics	59	San Marino	Baby Food
25	Honduras	Household	60	Sao Tome and Principe	Fruits
26	Iceland	Cosmetics	61	Saudi Arabia	Cereal
27	Iran	Cosmetics	62	Senegal	Cereal
28	Kenya	Vegetables	63	Sierra Leone	Office Supplies
29	Kiribati	Fruits	64	Slovakia	Vegetables
30	Kuwait	Fruits	65	Slovenia	Beverages
31	Kyrgyzstan	Vegetables	66	Solomon Islands	Baby Food
32	Laos	Vegetables	67	South Sudan	Personal Care
33	Lebanon	Clothes	68	Spain	Household
34	Lesotho	Fruits	69	Sri Lanka	Cosmetics
35	Libya	Clothes	70	Switzerland	Cosmetics
71	Syria	Fruits			
72	The Gambia	Baby Food			
73	Turkmenistan	Office Supplies			
74	Tuvalu	Baby Food			
75	United Kingdom	Household			
76	Zambia	Snacks			


(Least Sold Item by Each Country)

22. Most sold item by each country?

```
WITH cte
AS (SELECT Country,
          Item_Type,
          Sum(Units_Sold) AS Total_Sold,
          Dense_rank()
          OVER(
            partition BY Country
            ORDER BY Sum(Units_Sold) ASC) Ranking
FROM [dbo].[amazon sales data]
GROUP BY Country,
          Item_Type)
SELECT Country,
       Item_Type
FROM cte
WHERE Ranking = 1
```

 Results	 Messages
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	Country	Item_Type
1	Albania	Clothes
2	Angola	Household
3	Australia	Cereal
4	Austria	Cosmetics
5	Azerbaijan	Office Supplies
6	Bangladesh	Clothes
7	Belize	Clothes
8	Brunei	Office Supplies
9	Bulgaria	Clothes
10	Burkina Faso	Vegetables
11	Cameroon	Beverages
12	Cape Verde	Clothes
13	Comoros	Cereal
14	Costa Rica	Personal Care
15	Cote d'Ivoire	Clothes
16	Democratic Republic of the Congo	Beverages
17	Djibouti	Cosmetics
18	East Timor	Meat
19	Federated States of Micronesia	Beverages
20	Fiji	Clothes
21	France	Cosmetics
22	Gabon	Personal Care
23	Grenada	Cereal
24	Haiti	Cosmetics
25	Honduras	Snacks
26	Iceland	Cosmetics
27	Iran	Cosmetics
28	Kenya	Vegetables
29	Kiribati	Fruits
30	Kuwait	Fruits
31	Kyrgyzstan	Vegetables
32	Laos	Vegetables
33	Lebanon	Clothes
34	Lesotho	Fruits
35	Libya	Fruits
71	Syria	Fruits
72	The Gambia	Cereal
73	Turkmenistan	Household
74	Tuvalu	Baby Food
75	United Kingdom	Household
76	Zambia	Snacks

 Results	 Messages
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	Country	Item_Type
36	Lithuania	Office Supplies
37	Macedonia	Clothes
38	Madagascar	Clothes
39	Malaysia	Fruits
40	Mali	Clothes
41	Mauritania	Office Supplies
42	Mexico	Household
43	Moldova	Personal Care
44	Monaco	Baby Food
45	Mongolia	Personal Care
46	Mozambique	Household
47	Myanmar	Clothes
48	New Zealand	Fruits
49	Nicaragua	Beverages
50	Niger	Personal Care
51	Norway	Beverages
52	Pakistan	Cosmetics
53	Portugal	Baby Food
54	Republic of the Congo	Personal Care
55	Romania	Cosmetics
56	Russia	Office Supplies
57	Rwanda	Cosmetics
58	Samoa	Cosmetics
59	San Marino	Baby Food
60	Sao Tome and Principe	Beverages
61	Saudi Arabia	Cereal
62	Senegal	Cereal
63	Sierra Leone	Vegetables
64	Slovakia	Vegetables
65	Slovenia	Beverages
66	Solomon Islands	Baby Food
67	South Sudan	Personal Care
68	Spain	Household
69	Sri Lanka	Cosmetics
70	Switzerland	Personal Care

(Total Sold Items by Region)

23. Highest to lowest total sold items by region?

```
SELECT Region,  
        SUM(Units_Sold) AS Total_Sold_Items  
FROM [dbo].[Amazon Sales data]  
GROUP BY Region  
ORDER BY Total_Sold_Items DESC
```

Results Messages		
	Region	Total_Sold_Items
1	Sub-Saharan Africa	182870
2	Europe	98117
3	Australia and Oceania	68325
4	Asia	59967
5	Middle East and North Africa	48678
6	Central America and the Caribbean	35771
7	North America	19143

(Most Sold Item by Region)

24. Find the most sold item by each region?

```
WITH cte  
AS (SELECT Region,  
        Item_Type,  
        SUM(Units_Sold) AS Unit_Sold,  
        DENSE_rank()  
        OVER(partition BY Region  
        ORDER BY SUM(Units_Sold) DESC) Ranking  
FROM [dbo].[Amazon Sales data]  
GROUP BY Region, Item_Type)
```

```

SELECT Region,
        Item_Type,
        Unit_Sold
FROM cte
WHERE Ranking=1

```

	Region	Item_Type	Unit_Sold
1	Asia	Clothes	14193
2	Australia and Oceania	Beverages	18768
3	Central America and the Caribbean	Household	8974
4	Europe	Cosmetics	30100
5	Middle East and North Africa	Cosmetics	23615
6	North America	Personal Care	12189
7	Sub-Saharan Africa	Fruits	31167

(Least Sold Item by Region)

25. Find the least sold item by each region?

```

WITH cte
AS (SELECT Region,
        Item_Type,
        SUM(Units_Sold) AS Unit_Sold,
        DENSE_rank()
        OVER(partition BY Region
        ORDER BY SUM(Units_Sold) ASC) Ranking
FROM [dbo].[Amazon Sales data]
GROUP BY Region, Item_Type)
SELECT Region,
        Item_Type,
        Units_Sold
FROM cte WHERE Ranking=1

```


	Region	Item_Type	Unit_Sold
1	Asia	Vegetables	3856
2	Australia and Oceania	Cereal	682
3	Central America and the Caribbean	Cosmetics	1705
4	Europe	Vegetables	171
5	Middle East and North Africa	Office Supplies	2021
6	North America	Household	6954
7	Sub-Saharan Africa	Meat	4767

(Total Revenue generated by Region)

26. Highest to lowest revenue generated region?

WITH cte

```
AS (SELECT Region,
           Item_Type,
           SUM(Total_Revenue) AS total_revenue,
           DENSE_rank()
             OVER(partition BY Region
                  ORDER BY SUM(Total_Revenue) DESC) Ranking
FROM [dbo].[Amazon Sales data]
GROUP BY Region, Item_Type)
```

```
SELECT Region,
       total_revenue
```

FROM cte

WHERE Ranking=1

	Region	total_revenue
1	Asia	8072701.60
2	Australia and Oceania	4220728.80
3	Central America and the Caribbean	5997054.98
4	Europe	13159720.00
5	Middle East and North Africa	10324478.00
6	North America	4647149.58
7	Sub-Saharan Africa	10582813.71

(Total Profit by Region)

27. Highest to lowest profit region?

```
WITH cte
AS (SELECT Region,
           Item_Type,
           SUM(Total_Profit) AS total_profit,
           DENSE_rank()
              OVER(partition BY Region
                  ORDER BY SUM(Total_Profit) DESC) Ranking
FROM [dbo].[Amazon Sales data]
GROUP BY Region, Item_Type)

SELECT Region,
       total_profit
FROM cte
WHERE Ranking=1
```

Results		Messages
	Region	total_profit
1	Asia	2002018.40
2	Australia and Oceania	1678540.98
3	Central America and the Caribbean	1487261.02
4	Europe	5233487.00
5	Middle East and North Africa	4105940.05
6	North America	1152486.42
7	Sub-Saharan Africa	2051688.75

(Types of Order Priority)

28. List of distinct Order Priorities?

```
SELECT DISTINCT(Order_Priority) FROM [dbo].[Amazon Sales data]
```

Results Messages	
	Order_Priority
1	Cancel
2	High
3	Low
4	Medium

(Highest Sold Item for High Priority)

29. Most highest priority item of all time in the online and offline market?

WITH cte

```
AS (SELECT Item_Type
      FROM [dbo].[Amazon Sales data]
      WHERE Order_Priority = 'High')
```

SELECT TOP(1) Item_Type

FROM cte

GROUP BY Item_Type

ORDER BY COUNT(*) DESC

Results Messages	
	Item_Type
1	Cosmetics

(Highest Sold Item for Cancel Priority)

30. Most Cancel priority item of all time in online and offline market?

WITH cte

```
AS (SELECT Item_Type
      FROM [dbo].[Amazon Sales data]
      WHERE Order_Priority = 'Cancel')
```

SELECT TOP(1) Item_Type

FROM cte

GROUP BY Item_Type

ORDER BY COUNT(*) DESC

Results		Messages
	Item_Type	
1	Beverages	

(High Priority)

31. Highest to lowest sold items for Higher Priority?

WITH cte

AS (SELECT * FROM [dbo].[Amazon Sales data] WHERE Order_Priority = 'High')

SELECT Item_Type,

SUM(Units_Sold) AS Unit_Sold

FROM cte

GROUP BY Item_Type

ORDER BY Unit_Sold DESC

Results			Messages
	Item_Type	Unit_Sold	
1	Cosmetics	42112	
2	Baby Food	19812	
3	Cereal	19010	
4	Household	17224	
5	Clothes	16214	
6	Fruits	9824	
7	Beverages	9389	
8	Office Supplies	9235	
9	Vegetables	8377	
10	Personal Care	3015	

(Cancel Priority)

32. Highest to lowest sold items for Cancel Priority?

WITH cte

```

AS (SELECT * FROM [dbo].[Amazon Sales data] WHERE Order_Priority = 'Cancel')
SELECT Item_Type,
       SUM(Units_Sold) AS Unit_Sold
FROM cte
GROUP BY Item_Type
ORDER BY Unit_Sold DESC

```

	Item_Type	Unit_Sold
1	Beverages	47319
2	Clothes	23498
3	Cosmetics	8867
4	Fruits	8102
5	Personal Care	7026
6	Household	6954
7	Vegetables	5217
8	Office Supplies	4190
9	Baby Food	2974
10	Cereal	2804

(Total Profit)

33. Sum of the total profit generated from sales?

```

SELECT SUM(Total_Profit) AS Total_Profit FROM [dbo].[Amazon Sales data]

```

	Total_Profit
1	44168198.40

(Top 5 Countries with Highest Profit)

34. List of top 5 countries with the highest profit?

```

WITH cte
AS(SELECT Country,
       SUM(Total_Profit) AS Total_Profit,
       Rank()

```

```

OVER(Order BY SUM(Total_Profit) DESC) AS Ranking

FROM [dbo].[Amazon Sales data]

GROUP BY Country)

SELECT Country,

        Total_Profit

FROM cte

WHERE Ranking IN (1,2,3,4,5)

```

	Country	Total_Profit
1	Djibouti	2425317.87
2	Myanmar	1802771.70
3	Pakistan	1719922.04
4	Samoa	1678540.98
5	Honduras	1609947.52

(Top 5 Countries with Highest Revenue)

35. List of top 5 countries with the highest Revenue?

```

WITH cte

AS(SELECT Country,

        SUM(Total_Revenue) AS Total_Revenue,

        Rank()

        OVER(Order BY SUM(Total_Revenue) DESC) AS Ranking

FROM [dbo].[Amazon Sales data]

GROUP BY Country)

SELECT Country,

        Total_Revenue

FROM cte

WHERE Ranking IN (1,2,3,4,5)

```

Results		Messages
	Country	Total_Revenue
1	Honduras	6336545.48
2	Myanmar	6161257.90
3	Djibouti	6052890.86
4	Turkmenistan	5822036.20
5	Mexico	5643356.55

(Top 5 Countries with Lowest Profit)

36. List of top 5 countries with the lowest profit?

WITH cte

AS(SELECT Country,

SUM(Total_Profit) AS Total_Profit,

Rank()

OVER(Order BY SUM(Total_Profit) ASC) AS Ranking

FROM [dbo].[Amazon Sales data]

GROUP BY Country)

SELECT Country,

Total_Profit

FROM cte

WHERE Ranking IN (1,2,3,4,5)

Results		Messages
	Country	Total_Profit
1	Kuwait	1258.02
2	New Zealand	5270.67
3	Kyrgyzstan	7828.12
4	Syria	9119.44
5	Slovakia	10795.23

(Top 5 Countries with Lowest Revenue)

37. List of top 5 countries with the lowest Revenue?

WITH cte

AS(SELECT Country,

SUM(Total_Revenue) AS Total_Revenue,

Rank()

OVER(Order BY SUM(Total_Revenue) ASC) AS Ranking

FROM [dbo].[Amazon Sales data]

GROUP BY Country)

SELECT Country,

Total_Revenue

FROM cte

WHERE Ranking IN (1,2,3,4,5)

	Country	Total_Revenue
1	Kuwait	4870.26
2	Kyrgyzstan	19103.44
3	New Zealand	20404.71
4	Slovakia	26344.26
5	Syria	35304.72

(Profit by Sales Mode)

38. Total profit generated by different sales modes?

SELECT Sales_Channel,

SUM(Total_Profit) AS Total_Profit

FROM [dbo].[Amazon Sales data]

GROUP BY Sales_Channel

ORDER BY SUM(Total_Profit) DESC

	Sales_Channel	Total_Profit
1	Offline	24920726.67
2	Online	19247471.73

(Most Profitable Item by Sales Mode)

39. The most profitable item in each sales mode?

```
WITH cte
AS (SELECT Sales_Channel,
           Item_Type,
           Sum(Total_Profit)      AS Total_Profit,
           Rank()
           OVER(
             partition BY Sales_Channel
             ORDER BY Sum(Total_Profit) DESC) Ranking
FROM [dbo].[amazon sales data]
GROUP BY Sales_Channel,
         Item_Type)
SELECT Sales_Channel,
       Item_Type,
       Total_Profit
FROM cte
WHERE ranking = 1
```

Results		Messages	
	Sales_Channel	Item_Type	Total_Profit
1	Offline	Household	7365869.85
2	Online	Cosmetics	7297150.03

(Least Profitable Item by Sales Mode)

40. The least profitable item in each sales mode?

```
WITH cte
AS (SELECT Sales_Channel,
           Item_Type,
           Sum(Total_Profit)      AS Total_Profit,
           Rank()
           OVER(
             partition BY Sales_Channel
             ORDER BY Sum(Total_Profit) DESC) Ranking
FROM [dbo].[amazon sales data]
GROUP BY Sales_Channel,
         Item_Type)
SELECT Sales_Channel,
       Item_Type,
       Total_Profit
FROM cte
WHERE ranking = 1
```

```

OVER(

    partition BY Sales_Channel

    ORDER BY Sum(Total_Profit) ASC) Ranking

FROM [dbo].[amazon sales data]

GROUP BY Sales_Channel,

        Item_Type)

SELECT Sales_Channel,

        Item_Type,

        Total_Profit

FROM cte

WHERE ranking = 1

```

	Sales_Channel	Item_Type	Total_Profit
1	Offline	Fruits	33508.64
2	Online	Household	46735.86

-----YEARLY ANALYSIS-----

(Yearly Total Profit)

41. Total profit for each year?

```

SELECT Order_Year, SUM(Total_Profit) AS total_profit FROM [dbo].[Amazon Sales data]

GROUP BY Order_Year

Order BY total_profit DESC

```

Results		Messages
	Order_Year	total_profit
1	2012	9213010.12
2	2013	6715420.04
3	2010	6629567.43
4	2014	5879461.68
5	2016	4903838.01
6	2017	4089353.45
7	2015	3996539.44
8	2011	2741008.23

(Yearly Revenue)

42. Total revenue generated for each year?

```
SELECT Order_Year AS Year,
       SUM(Total_Revenue) AS Revenue
FROM [dbo].[Amazon Sales data]
GROUP BY Order_Year
ORDER BY Revenue DESC
```

Results		Messages
	Year	Revenue
1	2012	31898644.52
2	2013	20330448.66
3	2010	19186024.92
4	2014	16630214.43
5	2017	13373419.63
6	2015	12427982.86
7	2016	12372867.22
8	2011	11129166.07

(Highest Number of Orders)

43. Highest to lowest number of orders for each year?

```
SELECT Order_Year,
       SUM(Units_Sold) AS No_of_order
FROM [dbo].[Amazon Sales data]
```

GROUP BY Order_Year

ORDER BY No_of_order DESC

Results		Messages
	Order_Year	No_of_order
1	2012	97967
2	2014	92040
3	2013	64663
4	2010	61571
5	2011	54768
6	2015	49480
7	2017	49226
8	2016	43156

(Most Sold Item Each Year)

44. The most sold item in each individual year?

WITH cte

```
AS(SELECT Order_Year,
          Item_Type,
          Sum(Units_Sold) AS Unit_Sold,
          Rank()
          OVER(
            partition BY Order_Year
            ORDER BY Sum(Units_Sold) DESC) AS Ranking
FROM [dbo].[amazon sales data]
GROUP BY Order_Year,
          Item_Type)
```

SELECT Order_Year AS Year, Item_Type

FROM cte

WHERE ranking = 1

ORDER BY order_year DESC

Results		Messages
	Year	Item_Type
1	2017	Personal Care
2	2016	Cosmetics
3	2015	Clothes
4	2014	Beverages
5	2013	Cosmetics
6	2012	Personal Care
7	2011	Beverages
8	2010	Clothes

(Least Sold Item Each Year)

45. The least sold item in each individual year?

WITH cte

```
AS(SELECT Order_Year,
          Item_Type,
          Sum(Units_Sold) AS Unit_Sold,
          Rank()
          OVER(
            partition BY Order_Year
            ORDER BY Sum(Units_Sold) ASC) AS Ranking
FROM [dbo].[amazon sales data]
GROUP BY Order_Year,
          Item_Type)
```

SELECT Order_Year AS Year, Item_Type

FROM cte

WHERE ranking = 1

ORDER BY order_year DESC

Results		Messages
	Year	Item_Type
1	2017	Cosmetics
2	2016	Office Supplies
3	2015	Fruits
4	2014	Office Supplies
5	2013	Personal Care
6	2012	Fruits
7	2011	Clothes
8	2010	Personal Care

-----MONTHLY ANALYSIS-----

(Yearly-Monthly Total Products Sold)

46. Total products sold for each year-month combination?

```

SELECT Order_Year AS Year,
        Order_Month_Name AS Month,
        SUM(Units_Sold) AS Total_Order
FROM [dbo].[Amazon Sales data]
GROUP BY Order_Year,
        Order_Month_Number,
        Order_Month_Name
ORDER BY Order_Year,
        Order_Month_Number ASC

```

Results				Messages			
	Year	Month	Total_Order				
1	2010	February	9503				
2	2010	May	15747				
3	2010	June	9905				
4	2010	October	14403				
5	2010	November	7910				
6	2010	December	4103				
7	2011	January	12914				
8	2011	February	8156				
9	2011	April	4187				
10	2011	May	5741				
11	2011	June	124	36	2014	May	9229
12	2011	July	888	37	2014	June	8102
13	2011	September	3732	38	2014	July	14513
14	2011	November	19026	39	2014	August	4168
15	2012	January	1548	40	2014	September	2187
16	2012	February	15776	41	2014	October	22619
17	2012	March	6457	42	2014	November	6954
18	2012	April	8903	43	2015	January	8250
19	2012	May	10984	44	2015	February	5821
20	2012	June	7620	45	2015	April	12772
21	2012	July	22646	46	2015	July	13110
22	2012	August	2804	47	2015	August	673
23	2012	September	16545	48	2015	October	2924
24	2012	October	4684	49	2015	November	5930
25	2013	February	5062	50	2016	March	962
26	2013	March	4063	51	2016	May	5070
27	2013	April	5010	52	2016	June	3710
28	2013	June	5432	53	2016	July	5498
29	2013	July	19546	54	2016	October	4660
30	2013	August	9606	55	2016	November	13441
31	2013	September	7637	56	2016	December	9815
32	2013	October	6182	57	2017	January	13030
33	2013	December	2125	58	2017	February	16301
34	2014	February	10460	59	2017	March	3015
35	2014	April	13808	60	2017	May	16880

(Most Sold Item Each Year-Month)

47. The most sold item in each year-month?

WITH cte

AS (SELECT Ship_Year,
Order_Month_Number,

```

        Order_Month_Name,
        Item_Type,
        Sum(Units_Sold)           AS Total_Sold,
        Dense_rank()
    OVER (
        partition BY Ship_Year, Order_Month_Number, Order_Month_Name
        ORDER BY Sum(Units_Sold) DESC) AS Ranking
FROM [dbo].[amazon sales data]
GROUP BY Ship_Year,
        Order_Month_Number,
        Order_Month_Name,
        Item_Type)
SELECT Ship_Year    AS Year,
        Order_Month_Name AS Month,
        Item_Type,
        Total_Sold
FROM cte
WHERE ranking = 1
ORDER BY Ship_Year DESC,
Total_Sold DESC;

```


Results		Messages		
	Year	Month	Item_Type	Total_Sold
1	2017	February	Household	8974
2	2017	May	Cereal	8656
3	2017	January	Clothes	8263
4	2017	March	Personal Care	3015
5	2016	November	Cosmetics	13441
6	2016	December	Cosmetics	8867
7	2016	July	Clothes	5498
8	2016	May	Personal Care	5070
9	2016	October	Beverages	4660
10	2016	June	Snacks	2225
11	2016	March	Cereal	962
12	2015	July	Personal Care	11837
13	2015	January	Household	8250
14	2015	April	Clothes	7342
15	2015	November	Clothes	5930
16	2015	February	Baby Food	2974
17	2015	October	Office Suppli...	2924
18	2015	August	Fruits	673
19	2014	July	Beverages	14513
20	2014	October	Beverages	9379
21	2014	June	Fruits	8102
22	2014	May	Baby Food	7450
23	2014	April	Cosmetics	7215
24	2014	November	Household	6954
25	2014	February	Baby Food	5559
26	2014	August	Clothes	4168
27	2014	Septemb...	Fruits	2187
28	2014	December	Personal Care	2125
29	2013	July	Cosmetics	19546
30	2013	August	Fruits	9606
31	2013	Septemb...	Fruits	7637
32	2013	October	Cosmetics	6182
33	2013	February	Office Suppli...	5062
34	2013	April	Office Suppli...	5010
35	2013	June	Baby Food	4750

(Least Sold Item Each Year-Month)

48. The least sold item in each year-month?

```
WITH cte
AS (SELECT Ship_Year,
           Order_Month_Number,
           Order_Month_Name,
           Item_Type,
           Sum(Units_Sold)      AS Total_Sold,
           Dense_rank()
           OVER (
               partition BY Ship_Year, Order_Month_Number, Order_Month_Name
               ORDER BY Sum(Units_Sold) ASC) AS Ranking
FROM [dbo].[amazon sales data]
GROUP BY Ship_Year,
         Order_Month_Number,
         Order_Month_Name,
         Item_Type)
SELECT Ship_Year AS Year,
       Order_Month_Name AS Month,
       Item_Type,
       Total_Sold
FROM cte
WHERE ranking = 1
ORDER BY Ship_Year DESC,
Total_Sold ASC;
```

	Year	Month	Item_Type	Total_Sold
1	2017	May	Cosmetics	1815
2	2017	March	Personal Care	3015
3	2017	January	Meat	4767
4	2017	February	Snacks	7327
5	2016	December	Office Supplies	948
6	2016	March	Cereal	962
7	2016	June	Vegetables	1485
8	2016	October	Beverages	4660
9	2016	May	Personal Care	5070
10	2016	July	Clothes	5498
11	2016	November	Cosmetics	13441
12	2015	August	Fruits	673
13	2015	July	Baby Food	1273
14	2015	February	Cosmetics	2847
15	2015	October	Office Supplies	2924
16	2015	April	Beverages	5430
17	2015	November	Clothes	5930
18	2015	January	Household	8250
19	2014	May	Office Supplies	1779
20	2014	December	Personal Care	2125
21	2014	September	Fruits	2187
22	2014	August	Clothes	4168
23	2014	February	Personal Care	4901
24	2014	October	Fruits	5398
25	2014	April	Cereal	6593
26	2014	November	Household	6954
27	2014	June	Fruits	8102
28	2014	July	Beverages	14513
29	2013	June	Cereal	682
30	2013	March	Cereal	4063
31	2013	April	Office Supplies	5010
32	2013	February	Office Supplies	5062
33	2013	October	Cosmetics	6182
34	2013	September	Fruits	7637
35	2013	August	Fruits	9606

36	2013	July	Cosmetics	19546
37	2012	October	Vegetables	171
38	2012	January	Household	282
39	2012	April	Fruits	522
40	2012	June	Office Supplies	2021
41	2012	May	Household	2370
42	2012	August	Cereal	2804
43	2012	November	Office Supplies	3457
44	2012	February	Office Supplies	3987
45	2012	July	Meat	5908
46	2012	March	Vegetables	6457
47	2012	September	Clothes	7884
48	2011	June	Vegetables	124
49	2011	December	Personal Care	273
50	2011	July	Clothes	888
51	2011	September	Vegetables	3732
52	2011	January	Snacks	4085
53	2011	April	Household	4187
54	2011	November	Office Supplies	5518
55	2011	May	Beverages	5741
56	2011	February	Beverages	8156
57	2010	February	Clothes	2269
58	2010	May	Fruits	5822
59	2010	October	Clothes	6116
60	2010	November	Cosmetics	7910
61	2010	June	Clothes	9905