Analysing Amazon Sales SQL Queries

SALES OVERVIEW—----

(Regions)

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

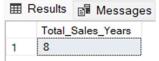
SELECT DISTINCT(Region) FROM [dbo].[Amazon Sales data]



(Total Sales Year)

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

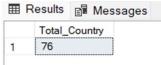
SELECT COUNT(DISTINCT(Order_Year)) AS Total_Sales_Years FROM [dbo].[Amazon Sales data]



(Total Countries)

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

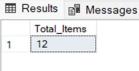
SELECT COUNT(DISTINCT(Country)) AS Total_Country FROM [dbo].[Amazon Sales data]



(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]



(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

Offline

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]

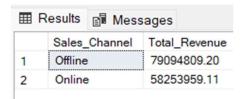
Results Messages

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
```



(Most sold item by Sales Mode)

8. The most sold item in each sales mode?

```
WITH cte

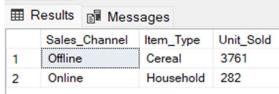
AS (SELECT Sales_Channel,
Item_Type,
Sum(Units_Sold)
Rank()
OVER(
partition BY Sales_Channel
ORDER BY Sum(Units_Sold) DESC) Ranking
```

```
FROM [dbo].[amazon sales data]
         GROUP BY Sales_Channel,
                   Item_Type)
 SELECT Sales_Channel,
         Item Type,
         Unit_Sold
 FROM cte
 WHERE ranking = 1
Sales_Channel
                 Item_Type
                           Unit_Sold
    Offline
                 Household
                           44445
1
                 Cosmetics
                           41969
2
    Online
```

(Least sold item by Sales Mode)

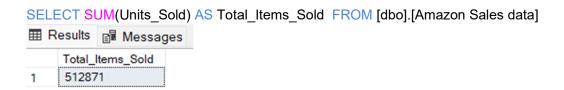
9. The least sold item in each sales mode?

```
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
```



(Total Items Sold)

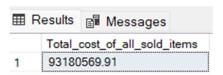
10. Sum of the total number of sold items?



(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]



------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]

	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?

⊞F	■ 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 margin ? 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 Profit_Margin Item_Type Clothes 67.20% 1 2 Cereal 43.07% Vegetables 40.98% 3 Cosmetics 4 39.77% Baby Food 37.55% 6 Snacks 36.14% 7 Beverages 33.00% Personal Care 30.66% 9 Fruits 25.83% Household 10 24.80% 11 Office Supplies 19.39%

(Most Expensive Item)

16. The most expensive item on Amazon?

13.56%

ce=(SELECT MAX(CONVERT(DECIMAL(10,2), Unit_Price))
FROM [dbo].[Amazon Sales data])



12

Meat

(Cheapest Item)

17. The cheapest item on Amazon?



------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
```

	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

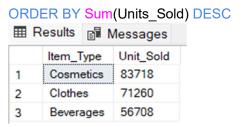
------SALES ANALYTICS------

-

(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
```



(Top 3 Least Sold Items throughout Amazon Sales)

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



(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
```

	Country	Item_Type	⊞ F	Results 🖺 Messages	
1	Albania	Clothes		Country	Item_Type
2	Angola	Household	36	Lithuania	Office Supplies
3	Australia	Beverages	37	Macedonia	Clothes
4	Austria	Cosmetics	38	Madagascar	Clothes
5	Azerbaijan	Cosmetics	39	Malaysia	Fruits
6	Bangladesh	Clothes	40	Mali	Fruits
7	Belize	Clothes	41	Mauritania	Office Supplies
8	Brunei	Office Supplies	42	Mexico	Personal Care
9	Bulgaria	Office Supplies	43	Moldova	Personal Care
10	Burkina Faso	Vegetables	44	Monaco	Baby Food
11	Cameroon	Office Supplies	45	Mongolia	Personal Care
12	Cape Verde	Clothes	46	Mozambique	Household
13	Comoros	Cereal	47	Myanmar	Household
14	Costa Rica	Personal Care	48	New Zealand	Fruits
15	Cote d'Ivoire	Clothes	49	Nicaragua	Beverages
16	Democratic Republic of the Cong	o Beverages	50	Niger	Personal Care
17	Diibouti	Cereal	51	Norway	Baby Food
18	East Timor	Meat	52	Pakistan	Cosmetics
19	Federated States of Micronesia	Beverages	53	Portugal	Baby Food
20	Fiii	Clothes	54	Republic of the Congo	Personal Care
21	France	Cosmetics	55	Romania	Cosmetics
22	Gabon	Personal Care	56	Russia	Office Supplies
23	Grenada	Cereal	57	Rwanda	Office Supplies
24	Haiti	Cosmetics	58	Samoa	Cosmetics
25	Honduras	Household	59	San Marino	Baby Food
26	Iceland	Cosmetics	60	Sao Tome and Principe	Fruits
27	Iran	Cosmetics	61	Saudi Arabia	Cereal
	Kenya	Vegetables	62	Senegal	Cereal
28	Keriya	Fruits	63	Sierra Leone	Office Supplies
29		Fruits	64	Slovakia	Vegetables
30	Kuwait		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
Syria		ruits			
		aby Food			
		Office Supplies			
Tuva		aby Food			
Unit	ed Kingdom F	lousehold			

Zambia

Snacks

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
```


	Country	Item_Type	m (Results Messages	
1	Albania	Clothes	ш г	E- mooagoo	
2	Angola	Household		Country	Item_Type
3	Australia	Cereal	36	Lithuania	Office Supplies
4	Austria	Cosmetics	37	Macedonia	Clothes
5	Azerbaijan	Office Supplies	38	Madagascar	Clothes
6	Bangladesh	Clothes	39	Malaysia	Fruits
7	Belize	Clothes	40	Mali	Clothes
8	Brunei	Office Supplies	41	Mauritania	Office Supplies
9	Bulgaria	Clothes	42	Mexico	Household
10	Burkina Faso	Vegetables	43	Moldova	Personal Care
11	Cameroon	Beverages	44	Monaco	Baby Food
12	Cape Verde	Clothes	45	Mongolia	Personal Care
13	Comoros	Cereal	46	Mozambique	Household
	Costa Rica	Personal Care	47	Myanmar New Zealand	Clothes
14			48		
15	Cote d'Ivoire	Clothes	49	Nicaragua	Beverages Personal Care
16	Democratic Republic of the Congo	Beverages	50 51	Niger Norway	Beverages
17	Djibouti	Cosmetics	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	Cosmetics
23	Grenada	Cereal	58	Samoa	Cosmetics
24	Haiti	Cosmetics	59	San Marino	Baby Food
25	Honduras	Snacks	60	Sao Tome and Principe	Beverages
26	Iceland	Cosmetics	61	Saudi Arabia	Cereal
27	Iran	Cosmetics	62	Senegal	Cereal
28	Kenya	Vegetables	63	Sierra Leone	Vegetables
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	Fruits	70	Switzerland	Personal Care

71	Syria	Fruits
72	The Gambia	Cereal
73	Turkmenistan	Household
74	Tuvalu	Baby Food
75	United Kingdom	Household
76	Zambia	Snacks

(Total Sold Items by Region)

23. Highest to lowest total sold items by region?

SELE	ECT Region, SUM(Units Sold) AS Total	Sold Items		
FRO	M [dbo].[Amazon Sales data]	· _		
GRO	UP BY Region			
ORD	ER BY Total_Sold_Items DESC			
⊞F	⊞ Results			
	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?

	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
```

III	Results Messages		
	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
```

▦▮	Results Messages	
	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)

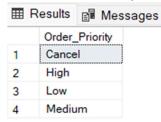
27. Highest to lowest profit region?

	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]



(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
```



(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

■ F	Results 🗐 Mes	sages		
	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
```

⊞ F	Results 🗐 Mes	sages		
	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?



(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)

Results Messages
```

⊞ F	Results	Messages
	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
     Honduras
                 6336545.48
1
2
     Myanmar
                  6161257.90
3
     Diibouti
                  6052890.86
     Turkmenistan 5822036.20
     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)
```



(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
                 4870.26
     Kuwait
1
                 19103.44
2
     Kyrgyzstan
     New Zealand
                 20404.71
3
     Slovakia
                 26344.26
                 35304.72
5
     Syria
```

(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
```



(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
Sales_Channel
                 Item_Type Total_Profit
    Offline
                 Household 7365869.85
1
                 Cosmetics 7297150.03
2
    Online
```

(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) 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
```

▦	Results 🗐 Mess	sages	
	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



(Yearly Revenue)

42. Total revenue generated for each year?

SELECT Order_Year AS Year,

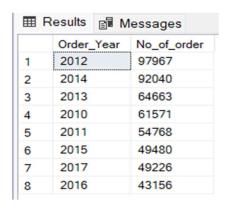
SUM(Total_Revenue) AS Revenue
FROM [dbo].[Amazon Sales data]
GROUP BY Order_Year
ORDER BY Revenue DESC

Ш	Results	Message:		
	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
```



(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
```

Ⅲ	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?

▦	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

	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	1344
31	2013	September	7637	56	2016	December	9815
32	2013	October	6182	57	2017	January	13030
33	2013	December	2125	58	2017	February	1630
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;
```

⊞ F	Results	Message Message	jes						
	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	36	2013	March	Cereal	4063
12	2015	July	Personal Care	11837	37	2013	Septemb	Cosmetics	8661
13	2015	January	Household	8250	38	2012	July	Personal Care	8656
14	2015	April	Clothes	7342	39	2012	May	Baby Food	8614
15	2015	November	Clothes	5930	40	2012	April	Office Suppli	6708
16	2015	February	Baby Food	2974	41	2012	March	Vegetables	6457
17	2015	October	Office Suppli	2924	42	2012	February	Personal Care	6422
18	2015	August	Fruits	673	43	2012	October	Household	4513
19	2014	July	Beverages	14513	44	2012	June	Clothes	3482
20	2014	October	Beverages	9379	45	2012	November	Office Suppli	3457
21	2014	June	Fruits	8102	46	2012	August	Cereal	2804
22	2014	May	Baby Food	7450	47	2012	January	Office Suppli	1266
23	2014	April	Cosmetics	7215	48	2011	November	Fruits	1005
24	2014	November	Household	6954	49	2011	January	Beverages	8829
25	2014	February	Baby Food	5559	50	2011	February	Beverages	8156
26	2014	August	Clothes	4168	51	2011	May	Beverages	5741
27	2014	Septemb	Fruits	2187	52	2011	April	Household	4187
28	2014	December	Personal Care	2125	53	2011	December	Household	3830
29	2013	July	Cosmetics	19546	54	2011	Septemb	Vegetables	3732
30	2013	August	Fruits	9606	55	2011	July June	Clothes	888 124
31	2013	Septemb	Fruits	7637	56 57	2010	May	Vegetables Baby Food	9925
32	2013	October	Cosmetics	6182	58	2010	June	Clothes	9905
33	2013	February	Office Suppli	5062	59	2010	October	Office Suppli	8287
34	2013	April	Office Suppli	5010	60	2010	November	Cosmetics	7910
35	2013	June	Baby Food	4750	61	2010	February	Cosmetics	7234

(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;
```

⊞ F	Results	Messag	es						
	Year	Month	Item_Type	Total_Solo	1				
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	36	2013	July	Cosmetics	195
11	2016	November	Cosmetics	13441	37	2012	October	Vegetables	17
12	2015	August	Fruits	673	38	2012	January	Household	282
13	2015	July	Baby Food	1273	39	2012	April	Fruits	522
14	2015	February	Cosmetics	2847	40	2012	June	Office Supplies	202
15	2015	October	Office Supplies	2924	41	2012	May	Household	237
16	2015	April	Beverages	5430	42	2012	August	Cereal	280
17	2015	November	Clothes	5930	43	2012	November	Office Supplies	345
18	2015	January	Household	8250	44	2012	February	Office Supplies	39
19	2014	May	Office Supplies	1779	45	2012	July	Meat	590
20	2014	December	Personal Care	2125	46	2012	March	Vegetables	645
21	2014	September	Fruits	2187	47	2012	September	Clothes	788
22	2014	August	Clothes	4168	48	2011	June	Vegetables	124
23	2014	February	Personal Care	4901	49	2011	December	Personal Care	273
24	2014	October	Fruits	5398	50	2011	July	Clothes	888
25	2014	April	Cereal	6593	51	2011	September	Vegetables	373
26	2014	November	Household	6954	52	2011	January	Snacks	408
27	2014	June	Fruits	8102	53	2011	April	Household	418
28	2014	July	Beverages	14513	54	2011	November	Office Supplies	55
29	2013	June	Cereal	682	55	2011	May	Beverages	574
30	2013	March	Cereal	4063	56	2011	February	Beverages	815
31	2013	April	Office Supplies	5010	57	2010	February	Clothes	226
32	2013	February	Office Supplies	5062	58	2010	May	Fruits	582
33	2013	October	Cosmetics	6182	59	2010	October	Clothes	61
34	2013	September	Fruits	7637	60	2010	November	Cosmetics	791
35	2013	August	Fruits	9606	61	2010	June	Clothes	990