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]
```

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

(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

(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)          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 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
```

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])
```

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

	Country	Item_Type
1	Albania	Clothes
2	Angola	Household
3	Australia	Beverages
4	Austria	Cosmetics
5	Azerbaijan	Cosmetics
6	Bangladesh	Clothes
7	Belize	Clothes
8	Brunei	Office Supplies
9	Bulgaria	Office Supplies
10	Burkina Faso	Vegetables
11	Cameroon	Office Supplies
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	Cereal
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	Household
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	Clothes

Results Messages

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

	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

Results Messages

	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

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?

```
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
```

Results Messages

	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
```

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?

```
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
```

Results | Messages

	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]
```

Results | Messages

	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)
```

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
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)
```

Results | Messages

	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
```

Results | Messages

	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) 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 | Messages

	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
12	2011	July	888
13	2011	September	3732
14	2011	November	19026
15	2012	January	1548
16	2012	February	15776
17	2012	March	6457
18	2012	April	8903
19	2012	May	10984
20	2012	June	7620
21	2012	July	22646
22	2012	August	2804
23	2012	September	16545
24	2012	October	4684
25	2013	February	5062
26	2013	March	4063
27	2013	April	5010
28	2013	June	5432
29	2013	July	19546
30	2013	August	9606
31	2013	September	7637
32	2013	October	6182
33	2013	December	2125
34	2014	February	10460
35	2014	April	13808
36	2014	May	9229
37	2014	June	8102
38	2014	July	14513
39	2014	August	4168
40	2014	September	2187
41	2014	October	22619
42	2014	November	6954
43	2015	January	8250
44	2015	February	5821
45	2015	April	12772
46	2015	July	13110
47	2015	August	673
48	2015	October	2924
49	2015	November	5930
50	2016	March	962
51	2016	May	5070
52	2016	June	3710
53	2016	July	5498
54	2016	October	4660
55	2016	November	13441
56	2016	December	9815
57	2017	January	13030
58	2017	February	16301
59	2017	March	3015
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
36	2013	March	Cereal	4063
37	2012	Septemb...	Cosmetics	8661
38	2012	July	Personal Care	8656
39	2012	May	Baby Food	8614
40	2012	April	Office Suppli...	6708
41	2012	March	Vegetables	6457
42	2012	February	Personal Care	6422
43	2012	October	Household	4513
44	2012	June	Clothes	3482
45	2012	November	Office Suppli...	3457
46	2012	August	Cereal	2804
47	2012	January	Office Suppli...	1266
48	2011	November	Fruits	10051
49	2011	January	Beverages	8829
50	2011	February	Beverages	8156
51	2011	May	Beverages	5741
52	2011	April	Household	4187
53	2011	December	Household	3830
54	2011	Septemb...	Vegetables	3732
55	2011	July	Clothes	888
56	2011	June	Vegetables	124
57	2010	May	Baby Food	9925
58	2010	June	Clothes	9905
59	2010	October	Office Suppli...	8287
60	2010	November	Cosmetics	7910
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;
```

Results Messages

	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