

KPI's Requirements

1. Total Sales

```
SELECT ROUND(SUM(Sales), 2) AS Total_Sales  
FROM Retail_Sales;
```

Results	
	Messages
1	Total_Sales 306450967.67

2. Total Profit

```
SELECT ROUND(SUM(Profit), 2) AS Total_Profit  
FROM Retail_Sales;
```

Results	
	Messages
1	Total_Profit 130189779.12

3. Average Profit Margin (%)

```
SELECT  
    (ROUND(SUM(Profit) * 100.0 / SUM(Sales), 2)) AS Avg_Profit_Margin  
FROM Retail_Sales;
```

Results	
	Messages
1	Avg_Profit_Margin 42.48

4. Total Orders

```
SELECT COUNT(DISTINCT Order_ID) AS Total_Orders  
FROM Retail_Sales;
```

Results	
	Messages
1	Total_Orders 150000

5. Average Order Value (AOV)

```
SELECT  
    ROUND(SUM(Sales) / COUNT(DISTINCT Order_ID), 2) AS Avg_Order_Value  
FROM Retail_Sales;
```

Results	
	Messages
1	Avg_Order_Value 2043.01

6. Average Quantity per Order

```
SELECT
    SUM(Quantity) * 1.0 / COUNT(DISTINCT Order_ID) AS Avg_Quantity_Per_Order
FROM Retail_Sales;
```

Results	
	Messages
1	Avg_Quantity_Per_Order 5.496486666666

7. Average Customer Rating

```
SELECT
    ROUND(AVG(CAST(Customer_Rating AS DECIMAL(5,2))), 2) AS Avg_Rating
FROM Retail_Sales;
```

Results	
	Messages
1	Avg_Rating 3.790000

8. Return Rate (%)

```
SELECT
    CAST(
        ROUND(
            SUM(CASE WHEN Return_Status = 'Returned' THEN 1.0 ELSE 0 END)
            * 100.0 / COUNT(DISTINCT Order_ID),
        2
    ) AS DECIMAL(5,2)) AS Return_Rate
FROM Retail_Sales;
```

Results	
	Messages
1	Return_Rate 11.99

Visuals Requirements

1. Sales & Profit Over Time (Yearly Trend 2019-2025)

```
SELECT
    DATEPART(YEAR, Order_Date) AS Year,
    ROUND(SUM(Sales), 2) AS Total_Sales,
    ROUND(SUM(Profit), 2) AS Total_Profit
FROM Retail_Sales
WHERE DATEPART(YEAR, Order_Date) BETWEEN 2019 AND 2025
GROUP BY DATEPART(YEAR, Order_Date)
ORDER BY Year;
```

Results	
	Messages
1	Year Total_Sales Total_Profit
1	2019 15212383.45 6399256.54
2	2020 37259070.52 15799446.7
3	2021 26525151.92 11281456.12
4	2022 52271616.64 22290360.05
5	2023 45609784.99 19395471
6	2024 77919882.57 33042796.79
7	2025 51653077.59 21980991.92

2. Top 10 Countries by Sales

```
SELECT TOP 10
    Country,
    ROUND(SUM(Sales), 2) AS Total_Sales
FROM Retail_Sales
GROUP BY Country
ORDER BY Total_Sales DESC;
```

	Country	Total_Sales
1	France	78302362.91
2	China	40376292.23
3	Germany	39734234.73
4	United States	31193509.4
5	India	25855373.2
6	Italy	20380444.83
7	Brazil	19516255.08
8	Japan	12047217.89
9	Australia	6826504.25
10	Singapore	6777039.03

3. Profit by Region (Map)

```
SELECT
    Country,
    Region,
    ROUND(SUM(Profit), 2) AS Total_Profit
FROM Retail_Sales
GROUP BY Country, Region;
```

	Country	Region	Total_Profit
1	United States	Unitedstates_Region_4	8045104.08
2	Germany	Germany_Region_2	8249590.19
3	Japan	Japan_Region_4	5164743.9
4	Mexico	Mexico_Region_5	2807159.16
5	Brazil	Brazil_Region_1	8329395.91
6	United States	Unitedstates_Region_5	2500286.61
7	Italy	Italy_Region_4	3135064.74
8	France	France_Region_5	8610508.85
9	Singapore	Singapore_Region_2	2833353.72
10	India	India_Region_5	2732586.29
11	United States	Unitedstates_Region_1	2630315.83
12	Australia	Australia_Region_1	2829247.76
13	South Africa	Southafrica_Region_4	2848995.77
14	China	China_Region_5	17183117.96
15	Canada	Canada_Region_2	2677960
16	Germany	Germany_Region_5	2969512.07
17	France	France_Region_4	5325456.01
18	Italy	Italy_Region_5	5498705.4
19	Germany	Germany_Region_4	5719540.61
20	Spain	Spain_Region_3	2454579.01
21	France	France_Region_1	2470145.71
22	India	India_Region_3	8199960.54
23	France	France_Region_3	16974449.01

4. Sales by Segment

```
SELECT
    Segment,
    ROUND(SUM(Sales),2) AS Total_Sales,
    ROUND(SUM(Sales) * 100.0 / SUM(SUM(Sales))) OVER() ,2) AS Sales_Percentage
FROM Retail_Sales
GROUP BY Segment;
```

The screenshot shows the SQL Server Management Studio interface with the 'Results' tab selected. The results grid displays three rows of data: Corporate, Home Office, and Consumer, each with their total sales and percentage of the total.

	Segment	Total_Sales	Sales_Percentage
1	Corporate	100170805.44	32.69
2	Home Office	45256574.96	14.77
3	Consumer	161023587.28	52.54

5. Sales Channel Split

```
SELECT
    Sales_Channel,
    ROUND(SUM(Sales),2) AS Total_Sales,
    ROUND(SUM(Sales) * 100.0 / SUM(SUM(Sales))) OVER() ,2) AS Sales_Percentage
FROM Retail_Sales
GROUP BY Sales_Channel;
```

The screenshot shows the SQL Server Management Studio interface with the 'Results' tab selected. The results grid displays three rows of data: Online, Wholesale, and Retail Store, each with their total sales and percentage of the total.

	Sales_Channel	Total_Sales	Sales_Percentage
1	Online	148603600.44	48.49
2	Wholesale	47363293.65	15.46
3	Retail Store	110484073.58	36.05

6. Sales by Category

```
SELECT
    Category,
    ROUND(SUM(Sales),2) AS Total_Sales
FROM Retail_Sales
GROUP BY Category
ORDER BY Total_Sales DESC;
```

The screenshot shows the SQL Server Management Studio interface with the 'Results' tab selected. The results grid displays five rows of data: Electronics, Furniture, Home & Kitchen, Clothing, and Office Supplies, each with their total sales.

	Category	Total_Sales
1	Electronics	168226136.77
2	Furniture	98766035.96
3	Home & Kitchen	19909051.39
4	Clothing	14445250.27
5	Office Supplies	5104493.28

7. Top 10 Sales Reps by Sales

```
SELECT TOP 10
    Sales_Rep,
    ROUND(SUM(Sales), 2) AS Total_Sales
FROM Retail_Sales
GROUP BY Sales_Rep
ORDER BY Total_Sales DESC;
```

	Sales_Rep	Total_Sales
1	Mitchell Clark	47044849.56
2	Jill Rhodes	40376292.23
3	Matthew Moore	26884089.11
4	Michelle Ray	23331801.71
5	George Daniel	19404411.04
6	Melanie Munoz	19318313.07
7	Craig Ramirez	19013985.87
8	Jeremy Roberts	18084223.71
9	Danielle Johnson	13529917.09
10	Jeffery Wagner	13012610.79

8. Profit by Sales Channel

```
SELECT
    Sales_Channel,
    ROUND(SUM(Profit),2) AS Total_Profit,
    ROUND(SUM(Profit) * 100.0 / SUM(SUM(Profit)) OVER(),2) AS Profit_Percentage
FROM Retail_Sales
GROUP BY Sales_Channel;
```

	Sales_Channel	Total_Profit	Profit_Percentage
1	Online	63123239.91	48.49
2	Wholesale	20073375.42	15.42
3	Retail Store	46993163.79	36.1