SALES DATA ANALYSIS USING SQL

DATABASE CREATION

```
CREATE DATABASE Sales_Analysis
USE Sales_Analysis
```

TABLE STRUCTURE

```
CREATE TABLE Sales (
        Sales_Id INT PRIMARY KEY,
        Sale_Date DATE,
        Product_Name NVARCHAR (25),
        Category NVARCHAR (15),
        Quantity INT,
        Price DECIMAL (10,2),
        Location NVARCHAR (30)
);
```

TABLE SAMPLE VALUES

```
INSERT INTO Sales (Sales_Id, Sale_Date, Product_Name, Category, Quantity, Price,
Location)
        VALUES (1, '2025-02-14', 'Sunglasses', 'Accessories', 2, 1500, 'Mumbai'),
               (2, '2024-11-22', 'Laptop', 'Electronics', 5, 45000, 'Delhi'),
               ..........
               (149, '2025-01-27', 'Shoes', 'Footwear', 8, 2500, 'Delhi'),
               (150, '2024-10-27', 'Headphones', 'Electronics', 5, 1500, 'Chennai');
```

QUERIES:

SELECT * FROM Sales

Results | Messages

	Sales_Id	Sale_Date	Product_Name	Category	Quantity	Price	Location
1	1	2025-02-14	Sunglasses	Accessories	2	1500.00	Mumbai
2	2	2024-11-22	Laptop	Electronics	5	45000.00	Delhi
3	3	2025-02-27	Tablet	Electronics	7	22000.00	Mumbai
4	4	2025-02-12	Tablet	Electronics	8	22000.00	Bangalore
5	5	2024-02-17	Tablet	Electronics	10	22000.00	Mumbai
6	6	2024-05-25	Headphones	Electronics	2	1500.00	Kolkata
7	7	2024-05-04	Smartphone	Electronics	7	30000.00	Delhi
8	8	2025-02-10	Shirt	Clothing	7	700.00	Pune
9	9	2024-07-13	Backpack	Accessories	1	1800.00	Mumbai
10	10	2024-11-05	Smartphone	Electronics	4	30000.00	Chennai
11	11	2025-03-10	Smartphone	Electronics	7	30000.00	Delhi
12	12	2024-06-18	Jeans	Clothing	1	1200.00	Pune

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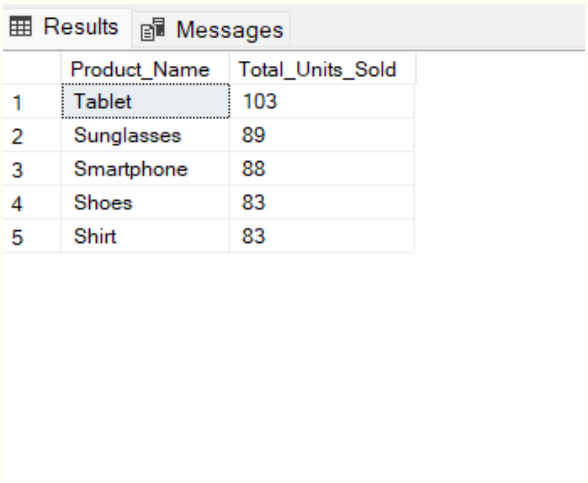
140	140	2024-10-21	Headphones	Electronics	3	1500.00	Hyderab...
141	141	2024-01-31	Shirt	Clothing	6	700.00	Kolkata
142	142	2025-02-11	Shoes	Footwear	9	2500.00	Hyderab...
143	143	2024-08-25	Shoes	Footwear	5	2500.00	Kolkata
144	144	2024-11-07	Headphones	Electronics	4	1500.00	Delhi
145	145	2024-10-05	Smartphone	Electronics	1	30000.00	Coimbat...
146	146	2024-12-05	Laptop	Electronics	3	45000.00	Pune
147	147	2024-05-09	Laptop	Electronics	7	45000.00	Hyderab...
148	148	2025-07-19	Headphones	Electronics	7	1500.00	Hyderab...
149	149	2025-01-27	Shoes	Footwear	8	2500.00	Delhi
150	150	2024-10-27	Headphones	Electronics	5	1500.00	Chennai

1. **WHAT ARE THE TOP 5 SELLING PRODUCTS?**

```
SELECT TOP 5
        Product_Name, SUM(Quantity) AS Total_Units_Sold
FROM Sales
GROUP BY Product_Name
ORDER BY Total_Units_Sold DESC;
```

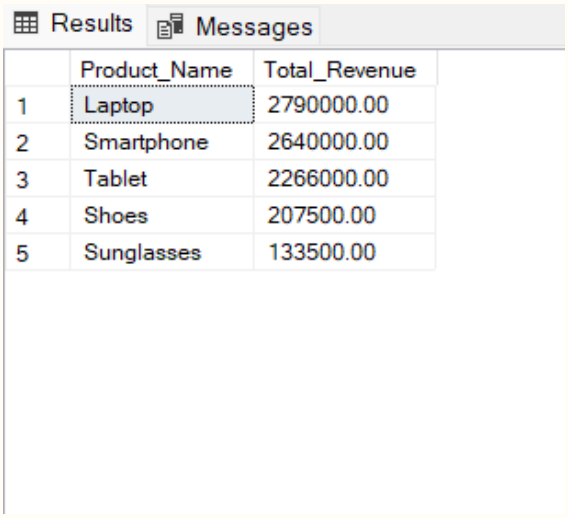


Results | Messages

	Product_Name	Total_Units_Sold
1	Tablet	103
2	Sunglasses	89
3	Smartphone	88
4	Shoes	83
5	Shirt	83

2. **WHICH ARE THE TOP 5 SELLING'S BY REVENUE?**

```
SELECT TOP 5
        Product_Name, SUM(Quantity * Price) AS Total_Revenue
FROM Sales
GROUP BY Product_Name
ORDER BY Total_Revenue DESC;
```



Results | Messages

	Product_Name	Total_Revenue
1	Laptop	2790000.00
2	Smartphone	2640000.00
3	Tablet	2266000.00
4	Shoes	207500.00
5	Sunglasses	133500.00

3. SHOW THE MONTHLY REVENUE TRENDS.

```
SELECT
        FORMAT(Sale_Date, 'yyyy-MM') AS MONTH,
        SUM(Quantity * Price) AS Monthly_Revenue
FROM Sales
GROUP BY FORMAT(Sale_Date, 'yyyy-MM')
ORDER BY MONTH;
```

Results Messages

	MONTH	Monthly_Revenue
1	2024-01	139200.00
2	2024-02	725100.00
3	2024-03	746300.00
4	2024-04	288800.00
5	2024-05	887500.00
6	2024-06	509000.00
7	2024-07	365600.00
8	2024-08	268700.00
9	2024-09	83400.00
10	2024-10	415200.00

10	2024-10	415200.00
11	2024-11	389700.00
12	2024-12	730700.00
13	2025-01	48900.00
14	2025-02	690900.00
15	2025-03	541200.00
16	2025-04	114600.00
17	2025-05	563800.00
18	2025-06	929400.00
19	2025-07	68700.00

4. SHOW THE QUARTERLY REVENUE TRENDS.

```
SELECT
        CONCAT(YEAR(Sale_Date), '-Q', DATEPART(QUARTER, Sale_Date)) AS quarter,
        SUM(Quantity * Price) AS Quarterly_Revenue
FROM Sales
GROUP BY  YEAR(Sale_Date),
        DATEPART(QUARTER, Sale_Date)
ORDER BY  YEAR(Sale_Date),
        DATEPART(QUARTER, Sale_Date);
```

Results Messages

	quarter	Quarterly_Revenue
1	2024-Q1	1610600.00
2	2024-Q2	1685300.00
3	2024-Q3	717700.00
4	2024-Q4	1535600.00
5	2025-Q1	1281000.00
6	2025-Q2	1607800.00
7	2025-Q3	68700.00

5. **QUERY THE SALES BY REGION.**

```
SELECT Location, SUM(Quantity * Price) AS Total_Revenue
FROM Sales
GROUP BY Location
ORDER BY Total_Revenue DESC;
```

Results Messages

	Location	Total_Revenue
1	Delhi	1652800.00
2	Kolkata	1362900.00
3	Hyderabad	1243000.00
4	Coimbatore	1143900.00
5	Mumbai	1114000.00
6	Bangalore	889800.00
7	Pune	684900.00
8	Chennai	415400.00

6. **QUERY THE SALES BY CATEGORY.**

```
SELECT Category, SUM(Quantity * Price) AS Total_Revenue
FROM Sales
GROUP BY Category
ORDER BY Total_Revenue DESC;
```

136 %

Results Messages

	Category	Total_Revenue
1	Electronics	7804000.00
2	Accessories	359100.00
3	Footwear	207500.00
4	Clothing	136100.00