

SQL Retail Performance Analysis (Query + Answer)

1. Top 5 Products by Sales

```
SELECT TOP 5 p.Product_Name, SUM(od.Quantity * od.Unit_Price * (1 -  
od.Discount)) AS Total_Sales  
FROM OrderDetails od  
JOIN Products p ON od.Product_ID = p.Product_ID  
GROUP BY p.Product_Name  
ORDER BY Total_Sales DESC;
```

Output:

Product_Name	Total_Sales
Bluetooth Speaker	545105.0000
Router	538303.5000
Bluetooth Headphones	494382.0000
External HDD 1TB	490047.5000
Wireless Charger	419300.0000

2. Revenue by Region

```
SELECT r.Region_Name, SUM(od.Quantity * od.Unit_Price * (1 - od.Discount)) AS  
Revenue  
FROM Orders o  
JOIN Customers c ON o.Customer_ID = c.Customer_ID  
JOIN Regions r ON c.Region_ID = r.Region_ID  
JOIN OrderDetails od ON o.Order_ID = od.Order_ID  
GROUP BY r.Region_Name  
ORDER BY Revenue DESC;
```

Output:

Region_Name	Revenue
North	1519856.5000
East	1298401.5000
West	1273575.0000
South	1251826.0000

3. Monthly Sales Trend

```
SELECT FORMAT(Order_Date, 'yyyy-MM') AS [Month], SUM(Total_Amount) AS  
Monthly_Sales  
FROM Orders  
GROUP BY FORMAT(Order_Date, 'yyyy-MM')  
ORDER BY [Month];
```

Output:



4. Average Order Value

```
SELECT ROUND(SUM(Total_Amount) / COUNT(Order_ID), 2) AS avg_Order_Value
FROM Orders;
```

Output:

avg_Order_Value
44530.490000

5. Low Stock

```
SELECT p.Product_Name, i.Stock_Available, i.Reorder_Level
FROM Inventory i
JOIN Products p ON i.Product_ID = p.Product_ID
WHERE i.Stock_Available <= i.Reorder_Level;
```

Output:

Product_Name	Stock_Available	Reorder_Level
Monitor 24 inch	5	5
SSD 512GB	3	5
Wireless Charger	5	5

6. Customer Lifetime Value

```
SELECT c.Customer_Name, SUM(o.Total_Amount) AS Total_Spent
FROM Customers c
JOIN Orders o ON c.Customer_ID = o.Customer_ID
GROUP BY c.Customer_Name
ORDER BY Total_Spent DESC;
```

Output:

Customer_Name	Total_Spent
Rahul Mehta	368256.50
Kriti Sharma	329904.50
Aman Sharma	267895.50
Pooja Khan	262354.00
Rahul Verma	192738.00
Aman Bansal	182080.50
Arjun Gupta	173792.50
Meera Iyer	170197.50
Kavita Kumar	169925.00
Deepak Verma	166555.00
Geeta Joshi	161628.00
Vikram Nair	141132.00
Kavita Khan	136476.50
Priya Bansal	133039.00
Meera Bose	132466.50
Ritu Mehta	132364.00
Sneha Verma	131894.00
Anita Patel	125262.00
Arjun Bansal	119392.50
Siddharth Roy	116382.00
Geeta Verma	116071.00
Deepak Joshi	116025.50
Anita Sharma	110650.00
Ritu Iyer	108668.00
Deepak Mehta	104419.50
Rohit Kumar	92362.00
Aman Bose	91903.50
Pooja Bansal	89453.50
Meera Nair	80388.00
Sneha Reddy	77263.00
Anita Nair	73900.50
Varun Reddy	73024.00
Anita Mehta	69822.00
Meera Patel	67830.50
Vikram Joshi	63777.00
Geeta Iyer	59721.50
Varun Singh	48147.00
Rohit Verma	41527.50
Arjun Singh	39023.00
Ritu Nair	34146.00
Anita Gupta	24678.00
Sana Khan	23101.00
Sneha Roy	22975.50
Sana Joshi	22363.50
Priya Verma	18802.00
Neha Gupta	16957.50
Ajay Sharma	8825.50
Sana Nair	8683.00
Kriti Singh	8559.50
Sneha Kumar	7531.00
Kavita Reddy	7524.00
Meera Roy	1800.00

7. Product Profit Analysis

```
SELECT p.Product_Name, SUM((od.Unit_Price - p.Cost_Price) * od.Quantity *  
(1 - od.Discount)) AS Profit  
FROM OrderDetails od  
JOIN Products p ON od.Product_ID = p.Product_ID  
GROUP BY p.Product_Name  
ORDER BY Profit DESC;
```

Output:

Product_Name	Profit
Bluetooth Speaker	238975.0000
External HDD 1TB	203456.7500
Bluetooth Headphones	148493.4000
Desk Lamp	143106.0500
Router	133479.9500
HDMI Cable	130879.4500
SSD 512GB	114159.5000
Wireless Charger	106382.4000
Webcam HD	98066.6000
Microphone	89540.0000
USB Cable	89356.8000
Monitor 24 inch	62208.9000
Fitness Band	57362.1000
Laptop Bag	52557.7500
Smartphone Case	45511.9000
Gaming Mouse	42755.6000
Wireless Mouse	39673.1000
Graphic Tablet	11620.8000
Mechanical Keyboard	10706.2000
Portable Charger	2581.2500