
```
--EVERMART_ONLINE_TRANSACTION_PORTFOLIO_PROJECT
```

```
--#To return all the values in the table
```

```
SELECT *  
FROM Customers
```

```
SELECT *  
FROM Products
```

```
SELECT *  
FROM Transactions
```

```
--#Total Revenue Generated
```

```
SELECT SUM(TotalValue) AS Total_Revenue  
FROM Transactions
```

```
--#Monthly Revenue Trend
```

```
SELECT MONTH(TransactionDate) AS Month, SUM(TotalValue) AS Monthly_Revenue  
FROM Transactions  
GROUP BY MONTH(TransactionDate)  
ORDER BY Month
```

```
--#Top 5 Best-Selling Products
```

```
SELECT TOP 5 p.ProductName, SUM(t.Quantity) AS Total_Sold  
FROM Transactions t  
JOIN Products p ON t.ProductID = p.ProductID  
GROUP BY p.ProductName  
ORDER BY Total_Sold DESC
```

```
--#Top 5 Customers by Total Spend
```

```
SELECT TOP 5 c.CustomerName, SUM(t.TotalValue) AS Total_Spent  
FROM Transactions t  
JOIN Customers c ON t.CustomerID = c.CustomerID  
GROUP BY c.CustomerName  
ORDER BY Total_Spent DESC
```

```
--#Extracting year from date
```

```
Select SignupDate, LEFT(SignupDate,4) AS Year  
FROM Customers
```

--#Average Order Value

```
SELECT AVG(TotalValue) AS Average_Order_Value
FROM Transactions
```

--#Revenue by Product Category

```
SELECT p.Category, SUM(t.TotalValue) AS Category_Revenue
FROM Transactions t
JOIN Products p ON t.ProductID = p.ProductID
GROUP BY p.Category
ORDER BY Category_Revenue DESC
```

--#Number of Transactions Per Customer

```
SELECT CustomerID, COUNT(TransactionID) AS Transaction_Count
FROM Transactions
GROUP BY CustomerID
ORDER BY Transaction_Count DESC
```

--#Most Popular Product Category

```
SELECT TOP 1 p.Category, COUNT(t.TransactionID) AS Sales_Count
FROM Transactions t
JOIN Products p ON t.ProductID = p.ProductID
GROUP BY p.Category
ORDER BY Sales_Count DESC
```

--#Categorize Customers Based on Total Purchases

```
SELECT CustomerID,
       SUM(TotalValue) AS Total_Spent,
       CASE
           WHEN SUM(TotalValue) > 1500 THEN 'VIP'
           WHEN SUM(TotalValue) BETWEEN 500 AND 1500 THEN 'Regular'
           ELSE 'New'
       END AS Customer_Category
FROM Transactions
GROUP BY CustomerID
```

--#Revenue Contribution by Region

```
SELECT c.Region, SUM(t.TotalValue) AS Total_Revenue
FROM Transactions t
JOIN Customers c ON t.CustomerID = c.CustomerID
GROUP BY c.Region
ORDER BY Total_Revenue DESC
```

--#Count of Returning Customers

```
SELECT CustomerID, COUNT(DISTINCT TransactionDate) AS Purchase_Days
FROM Transactions
GROUP BY CustomerID
HAVING COUNT(DISTINCT TransactionDate) > 1
```

--#Customers Who Have Not Made Any Purchase

```
SELECT c.CustomerID, c.CustomerName
FROM Customers c
LEFT JOIN Transactions t ON c.CustomerID = t.CustomerID
WHERE t.TransactionID IS NULL
```

--#Product Price Discrepancies in Transactions

```
SELECT t.ProductID, p.ProductName, p.Price AS Expected_Price, t.Price AS
    Actual_Price
FROM Transactions t
JOIN Products p ON t.ProductID = p.ProductID
WHERE p.Price <> t.Price;
```

--#First and Most Recent Purchase Date per Customer

```
SELECT CustomerID, MIN(TransactionDate) AS First_Purchase, MAX(TransactionDate) AS
    Last_Purchase
FROM Transactions
GROUP BY CustomerID
```

--#Highest Revenue Day

```
SELECT TOP 1 TransactionDate, SUM(TotalValue) AS Daily_Revenue
FROM Transactions
GROUP BY TransactionDate
ORDER BY Daily_Revenue DESC
```

--#Add and Update a New Column for Discount Eligibility

```
ALTER TABLE Transactions ADD Discount_Eligible VARCHAR(10)
```

```
UPDATE Transactions
```

```
SET Discount_Eligible =
```

```
    CASE
```

```
        WHEN TotalValue >= 1000 THEN 'Yes'
```

```
        ELSE 'No'
```

```
    END
```