Product Sales and Returns Dataset

A.KPI's

1.Total Revenue
```
SELECT SUM(Total_Revenue) AS Total_Revenue,
     AVG(Final_Quantity) AS Avg_Quantity,
     COUNT(*) AS Total_Transactions
FROM order_dataset;
```

	Total_Revenue	Avg_Quantity	Total_Transactions
1	4327553.48002625	0	70052

2.Filtering
```
SELECT *
FROM order_dataset
WHERE Item_Name = 'Product X';
```

Item_Name	Category	Version	Item_Code	Item_ID	Buyer_ID	Transaction_ID	Date	Final_Quantity	Total_Revenue	Price_Reductions	Refunds	Final_Revenue	Sales_Tax	Overall_Revenue	Refunded_Item_Count	Purchased_Item_Count

3.MaxRefund
```
SELECT
     MAX(Refunds) AS MaxRefund
FROM order_dataset;
```

	MaxRefund
1	0

4.AvgRevenuePerTransaction
```
SELECT AVG(Total_Revenue) AS AvgRevenuePerTransaction
FROM order_dataset;
```

	AvgRevenuePerTransaction
1	61.776301604897

5.TotalQuantitySold
```
SELECT SUM(Final_Quantity) AS TotalQuantitySold
FROM order_dataset;
```

	TotalQuantitySold
1	49119

6. Total Number of Transactions
```
SELECT COUNT(DISTINCT Transaction_ID) AS TotalTransactions
FROM order_dataset;
```

	TotalTransactions
1	30701

7. Total Discounts Applied
SELECT SUM(Price_Reductions) AS TotalDiscounts
FROM order_dataset;

	TotalDiscounts
1	-346750.6613096

8. Total Refunds Issued
SELECT SUM(Refunds) AS TotalRefunds
FROM order_dataset;

	TotalRefunds
1	-717756.330509186

9.Average Revenue per Customer
SELECT AVG(Total_Revenue) AS AvgRevenuePerCustomer
FROM (
    SELECT Buyer_ID, SUM(Total_Revenue) AS Total_Revenue
    FROM order_dataset
    GROUP BY Buyer_ID
) AS customer_revenue;

	AvgRevenuePerCustomer
1	169.422287124701

10.Customer Acquisition Rate
SELECT COUNT(DISTINCT Buyer_ID) AS NewCustomers,
     COUNT(DISTINCT Transaction_ID) AS TotalTransactions
FROM order_dataset;

	NewCustomers	TotalTransactions
1	25543	30701

11.Customer Retention Rate
SELECT COUNT(DISTINCT Buyer_ID) AS ReturningCustomers,
     COUNT(DISTINCT Transaction_ID) AS TotalTransactions
FROM order_dataset;

	ReturningCustomers	TotalTransactions
1	25543	30701

12.Customer Churn Rate
SELECT COUNT(DISTINCT Buyer_ID) AS ChurnedCustomers,
     COUNT(DISTINCT Buyer_ID) AS TotalCustomers
FROM order_dataset;

	ChurnedCustomers	TotalCustomers
1	25543	25543

13.Inventory Turnover Rate

SELECT SUM(Final_Quantity) / COUNT(DISTINCT Item_ID) AS InventoryTurnoverRate
FROM order_dataset;

	InventoryTurnoverRate
1	46

14.Customer Complaint Rate

SELECT
   (COUNT(DISTINCT CASE WHEN Refunds > 0 THEN Transaction_ID END) +
   COUNT(DISTINCT CASE WHEN Price_Reductions > 0 THEN Transaction_ID END)) AS
ComplaintTransactions,
   COUNT(DISTINCT Transaction_ID) AS TotalTransactions,
   (COUNT(DISTINCT CASE WHEN Refunds > 0 THEN Transaction_ID END) +
   COUNT(DISTINCT CASE WHEN Price_Reductions > 0 THEN Transaction_ID END)) /
   COUNT(DISTINCT Transaction_ID) * 100 AS CustomerComplaintRate
FROM
   order_dataset;

	ComplaintTransactions	TotalTransactions	CustomerComplaintRate
1	0	30701	0

15.

SELECT DATENAME(DW, Date) AS order_day,
      COUNT(DISTINCT Transaction_ID) AS Total_orders
FROM order_dataset
GROUP BY DATENAME(DW, Date);

	order_day	Total_orders
1	Saturday	4024
2	Wednesday	5356
3	Monday	5556
4	Sunday	4733
5	Friday	6544
6	Thursday	5023
7	Tuesday	5696

16.Total Revenue per Category
SELECT Category, SUM(Total_Revenue) AS TotalRevenue
FROM order_dataset
GROUP BY Category;

	Category	TotalRevenue
1	Product R	54820.8700866699
2	Product H	969373.6524086
3	Product B	234302.920398712
4	Product S	0
5	Product I	39709.7801208496
6	Product C	154883.930599213
7	Product P	1511817.95084
8	Product F	90083.8596725464
9	Product W	165534.37071991
10	Product Q	26293.0191879272
11	Product K	633.330001831055
12	DPR	28063
13	Product A	227563.780174255
14	Product T	7035.65999412537
15	Product N	113932.900564194
16	Product O	66020.5101661682
17	Product G	31130.0200767517
18	Product J	128959.238510132
19	Product D	412466.86662674
20	Product U	11389.9699821472
21	Product M	28414.9301071167
22	Product L	6974.95000839233
23	Product E	18147.9697799683