Sales Data Analysis Report

1. **Overview**

   This report explores key insights from the sales dataset, covering aggregate metrics and drill-downs based on various dimensions.

2. **Key Insights**

   Aggregate Sales Data:
   1. Total Sales- Rs 10.20 Billion
   2. Average Transaction Value- Rs 20405
   3. Total Quantity Sold- 3747755
   4. Most Sold Product- NoteBook
   5. Most Profitable City- Kolkata

   Sales Breakdown:
   a. **By Payment Method:**
      i. Cash- Rs 2558.68 Cr
      ii. Debit Card- Rs 2552.37 Cr
      iii. UPI- Rs 2530.18 Cr
      iv. Credit Card- Rs 2517.71 Cr
      v. Unknown- Rs. 45.73 Cr
   b. **By Store Type:**
      i. In-Store Sales- Rs 5078.88 Cr
      ii. Online Sales- Rs 5078.08 Cr
      iii. Unknown- 45.73 Cr
   c. **By Region:**
      i. South- Rs 3177.27 Cr
      ii. East- Rs 2654.97 Cr
      iii. North- Rs 2171.50 Cr
      iv. West- Rs2159.91 Cr
      v. Unknown- Rs 39.01 Cr
   d. **By Gender:**
      i. Male- Rs 3397.98 Cr

ii. Other- Rs 3391.55 Cr

iii. Female- Rs 3367.39 Cr

iv. Unknown- 45.73 Cr

3. SQL Queries

a. Total Sales
SELECT SUM(TransactionAmount) AS TotalSales FROM SalesData;

b. Average Transaction Value
SELECT AVG(TransactionAmount) AS AvgTransactionValue FROM SalesData;

c. Total Products Sold
SELECT SUM(Quantity) AS ProductSold FROM SalesData

d. Most Products Sold
SELECT ProductName, COUNT(*) AS SalesCount
FROM SalesData
GROUP BY ProductName
ORDER BY SalesCount DESC
LIMIT 1;

e. Most Profitable City
SELECT City, SUM(TransactionAmount) AS Revenue
FROM SalesData
GROUP BY City
Order BY Revenue DESC
LIMIT 1;

f. Sales By Payment Method
SELECT PaymentMethod, SUM(TransactionAmount) AS Revenue
FROM SalesData
GROUP BY PaymentMethod

Order BY Revenue DESC;

g. Sales By Store Type

```
SELECT StoreType, SUM(TransactionAmount) AS Revenue
FROM SalesData
GROUP BY StoreType
Order BY Revenue DESC;
```

h. Sales By Region

```
SELECT Region, SUM(TransactionAmount) AS Revenue
FROM SalesData
GROUP BY Region
Order BY Revenue DESC;
```

i. Sales By Gender

```
SELECT CustomerGender, SUM(TransactionAmount) AS Revenue
FROM SalesData
GROUP BY CustomerGender
Order BY Revenue DESC;
```

j. Sales By Gender in a region

```
SELECT Region, CustomerGender, SUM(TransactionAmount) AS
TotalRevenue
FROM SalesData
GROUP BY Region, CustomerGender
ORDER BY TotalRevenue DESC;
```

k. Loyalty Points gained by each Customer ID

```
SELECT CustomerID, SUM(LoyaltyPoints) as LoyaltyPoints
FROM SalesData
GROUP BY CustomerID
```