Task 2 – E-Commerce Sales Performance Review

1. Executive Summary

The e-commerce dataset analyzed spans transactional and aggregated data.
Key KPIs evaluated: Total Sales, Total Orders, Average Order Value, Unique Customers, Top Products.
Insights include peak sales months, product performance, and customer distribution.

2. Dataset Description

Raw Data Columns:
InvoiceNo, StockCode, Description, Quantity, InvoiceDate, UnitPrice, CustomerID, Country, Year, Month, OrderValue

Aggregated KPIs:
Year, Month, Total_Sales, Total_Orders, Avg_Order_Value, Unique_Customers, Top_Product

Dataset cleaned: missing values handled, dates parsed, order values calculated.

Sample Data (Transactional)

StockCode	Description	Quantity	InvoiceDate	UnitPrice	CustomerID	Country
85123A	WHITE HANGING HEART T-LIGHT	6	12/1/2010 8:26	2.55	17850	United Kingdom
71053	WHITE METAL LANTERN	6	12/1/2010 8:26	3.39	17850	United Kingdom
84406B	CREAM CUPID HEARTS COAT HANGER	8	12/1/2010 8:28	2.75	13047	United Kingdom
22752	SET 7 BABUSHKA NESTING BOXES	2	12/1/2010 8:34	7.65	12583	France

Sample Aggregated KPIs

Year	Month	Total_Sales	Total_Orders	Avg_Order_Value	Unique_Customers	Top_Product
11	11	896,542.34	15,234	58.85	4,201	REGENCY CAKESTAND 3 TIER
11	10	923,451.22	16,201	57.02	4,321	WHITE HANGING HEART T-LIGHT HOLD
11	9	845,123.56	14,852	56.91	4,102	REGENCY CAKESTAND 3 TIER

3. Dashboard & Visualizations

Suggested Charts:
• Monthly Sales Trend (Line Chart) – shows total sales across months/years to identify peak periods.
• Top 10 Products by Revenue (Bar Chart) – highlights most profitable products.
• Country-Wise Sales Distribution (Pie Chart) – visualizes revenue contribution per country.
• Average Order Value Trend (Line Chart) – tracks average spending per order over time.
• Unique Customers Trend (Column Chart) – shows customer acquisition or retention patterns.

Dashboard Features:
• Slicers/filters for Year, Country, and Product Category
• Pivot-tables dynamically update charts when filtered
• Conditional formatting to highlight top/bottom performing metrics

4. Key Insights

• Peak Sales Months: October & November show maximum revenue, likely due to seasonal sales.
• Top-Selling Products: REGENCY CAKESTAND 3 TIER and WHITE HANGING HEART T-LIGHT HOLDER
consistently lead in revenue.
• Customer Concentration: UK contributes the highest number of orders and unique customers.

• Anomalies: Occasional negative order values may indicate returns or cancellations.
• Trends: Avg_Order_Value remains stable; increasing trend in Total_Sales indicates business growth.

5. Recommendations

• Focus marketing and stock on high-demand products during peak months.
• Analyze country-specific promotions for low-performing regions.
• Monitor cancellations and returns to minimize revenue loss.
• Leverage dashboard filters to quickly track KPI performance monthly or annually.

6. Appendix

Files to Submit:
• Cleaned_Data.xlsx → cleaned transactional dataset
• Dashboard.xlsx → Excel dashboard with charts & pivot tables
• Insights_Report.pdf → summarized report (1–2 pages)