**E-commerce Sales Analysis**

**Project Overview**

This project analyses a sample **e-commerce sales dataset** to uncover key business insights. Using **Python (Pandas, Matplotlib, Seaborn)**, I explored sales patterns, customer behaviour, and revenue distribution across different product categories, regions, and time periods.

**Objectives**

* Identify which product categories and items generate the most revenue.
* Understand monthly sales trends.
* Compare regional sales performance.
* Calculate key business metrics such as **Total Revenue** and **Average Order Value (AOV)**.

**Dataset**

The dataset contains **100 e-commerce transactions** with the following columns:

* OrderID – Unique order number
* Date – Order date
* CustomerID – Customer identifier
* Product – Purchased product
* Category – Product category
* Quantity – Units sold
* Unit Price – Price per unit
* Total Amount – Total transaction value
* Region – Sales region

**Analysis Performed**

* **Sales by Category** → Electronics and Clothing generated the highest revenue.
* **Monthly Trend** → Sales showed an upward trend in later months.
* **Top Products** → Laptops and Mobiles dominated total revenue.
* **Regional Analysis** → North and South regions contributed the most.
* **Key Metrics**:
  + **Total Revenue** ≈ XX, XXX (calculated from dataset)
  + **Total Orders** = 100
  + **Average Order Value (AOV)** ≈ XXX

**Visualizations**

* Bar chart of sales by category
* Line chart of monthly sales trend
* Bar chart of top 5 products by revenue
* Pie chart of regional sales distribution