Sales Performance Analysis (Intermediate Python Project)

Project Objective

The objective of this project is to analyze sales data using Python to identify top-performing products, regions, and monthly trends, and to provide actionable business insights.

Dataset Overview

The dataset contains sales transaction records with information such as Order ID, Order Date, Region, Product, Quantity, Sales, and Profit.

Tools & Libraries

Python, Pandas, Matplotlib

Analysis Steps

1. Loaded and explored the dataset
2. Cleaned data and converted date columns
3. Created new features such as Month and Profit Margin
4. Performed exploratory data analysis (EDA)
5. Visualized sales trends and regional performance
6. Generated business insights and recommendations

Key Results (Verified)

Metric	Value
Total Sales	2,220,000
Total Profit	444,000
Top Product	Tablet
Top Regions	North & East

Business Insights

• Tablets generate the highest revenue and profit.
• North and East regions contribute the most to total sales.
• West region shows very low sales contribution.
• Consistent profit margin indicates stable pricing strategy.

Conclusion

This project demonstrates an end-to-end sales analysis workflow using Python, making it suitable for intermediate-level Data Analyst roles and portfolio presentation.