# Sales Performance Analysis - Python & Excel Project

## 📌 Project Overview

This project analyzes sales performance using Python and Excel data. We used the Pandas and NumPy libraries to read, clean, and analyze the data to generate insights like total sales, profit trends, quantity distribution, and top-performing regions.

## 🔧 Tools & Technologies

- Python (Jupyter Notebook)  
- Pandas & NumPy Libraries  
- Excel (sales\_data\_large.xlsx)

## 📁 Dataset Used

The dataset 'sales\_data\_large.xlsx' includes the following fields:  
- OrderID  
- Date  
- Product  
- Category  
- Region  
- Sales  
- Quantity  
- Profit

## 📊 Key Analysis Performed

- Total Sales, Average Profit, Total Quantity  
- Maximum and Minimum Sales  
- Region-wise and Product Category-wise Analysis  
- Monthly Sales Trend  
- Visualizations using Power BI (optional if integrated)

## 📎 How to Run the Project

1. Open Jupyter Notebook.  
2. Run the provided `.ipynb` file.  
3. Ensure the Excel file is in the same directory.  
4. Read and analyze the outputs in the notebook.

## 🎯 Outcome

The analysis helps identify high-performing regions and products, understand profit trends, and make data-driven decisions for improving sales strategy.

## 🙋 About Me

I am Vakiti Sravanthi, currently in my final year of B.Tech in Information Technology. My skills include Python, SQL, Power BI, Excel, and data analytics libraries such as Pandas and NumPy. I am passionate about learning and applying data-driven solutions.