Project on : Data Cleaning, Pivot Tables & Data Visualization in Excel

Project Overview

This project involves cleaning raw data in an Excel file, creating pivot tables to analyse the data, and visualizing the insights using graphs. The steps undertaken ensure that the data is well-structured, analysed effectively, and presented in an easily interpretable format.

File Details

- **File Name:** Excel Project.xlsx

- **Software Used:** Microsoft Excel

- **Contents:**

    o Cleaned dataset

    o Pivot tables summarizing key insights

    o Graphs visualizing the analysis

Steps Performed

1. Data Cleaning

- Removed duplicate entries.

- Standardized formatting (date formats, numerical values, text consistency).

- Handled missing values (either through imputation or removal).

- Removed irrelevant columns and unnecessary data points.

2. Pivot Table Creation

- Created pivot tables to summarize and analyse the cleaned data.

- Used appropriate row and column fields for better data organization.

- Applied filters, sorting, and grouping for better insights.

3. Graph Creation

- Developed charts/graphs to visualize pivot table insights.

- Used different types of graphs (e.g., bar charts, pie charts, line graphs) based on data characteristics.

- Formatted graphs with titles, labels, and legends for clarity.

How to Use

1. **Open the file** in Microsoft Excel.

2. **Review the cleaned data** in the main worksheet.

3. **Navigate to the Pivot Tables** sheet to explore summarized insights.

4. **Check the Graphs** sheet for a visual representation of key findings.

5. Modify filters or parameters in pivot tables to analyse different aspects of the data.

Dependencies

- Microsoft Excel (2016 or later recommended)

- Basic understanding of Excel pivot tables and charts

Conclusion

This project demonstrates effective data cleaning, analysis, and visualization using Excel. It provides a structured approach to working with raw data and deriving meaningful insights using pivot tables and graphs.