



Robust Multi-Source Sales Data Pipeline



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Created with Pi

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Built by Poojitha Gollapudi for Flipkart

Task-1

Custom sales data pipeline: ingests, cleans, analyzes, visualizes.

Supports CSV, JSON, Excel.

Modular, visualization-capable, insight-rich, extensible.



Project Overview

Data_Pipe_Updated.py – Main script.

Product_metadata.json – Dataset.

region_info.xlsx – Dataset.

Sales_data.csv – Dataset.

Sales_database.db – Database (SQLite).



File Structure

Multi-source data loading.

Data-cleaning & type conversion.

Smart merging.

Insight extraction & visualizations.

Exports & custom handling.

Database Management using SQLite.



Key Features

`pip install pandas numpy matplotlib seaborn tabulate openpyxl sqlite3`

Download these extensions in your command prompt or Terminal.



Requirements

Import the required data files in the Jupyter Notebook/VS code.

Install SQLite in the system for database management and connect with Python using the sqlite3 library.

Run: Data_Pipe_Updated.py file in the VS Code/Jupyter Notebook.

Prompt to generate insights & visualizations.



How to Use

Total Revenue: \$255.00

Average Revenue per Sale: \$85.00

Total Units Sold: 23.

Example Insights

Monthly Sales Trend Plot Chart.

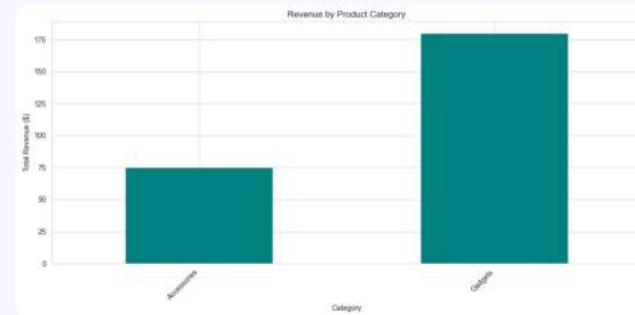
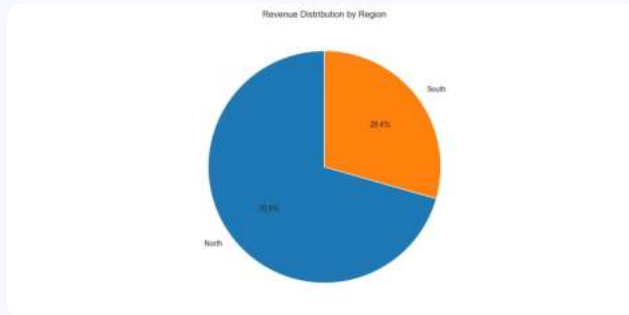
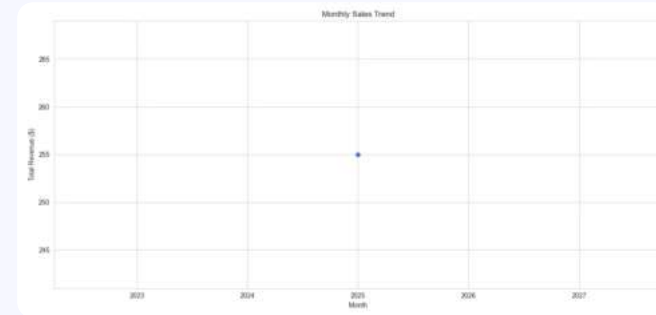
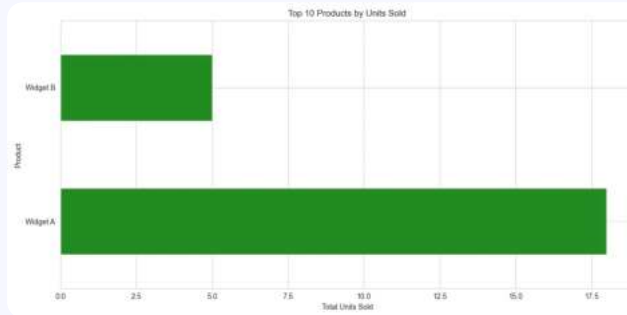
Top Products By units Bar Chart.

Revenue by Product Category Column Chart.

Revenue Distribution by Region Pie Chart.



Sample Visuals



Handles missing or corrupt files gracefully.

Warns about unsupported formats or merge conflicts. Import related libraries to overcome issues.

Eg. Openpyxl library is installed and imported to run Excel files.



Error Handling

Git for tracking changes.

Code is production-ready and AI-clean.



Version Control

Poojitha Gollapudi

Flipkart Data Pipeline Task-1 Project



Thank You