Simple Sales data Visualisation

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Introduction:

This project aims to visualize monthly sales data using Python libraries such as Matplotlib and Seaborn. The program reads a CSV file uploaded to Google Colab, extracts relevant columns, and plots a line graph to represent sales trends over time.

Methodology:

First, we bring in the required libraries like Matplotlib for making graphs, Seaborn to make them look better, Pandas for handling data, and Google Colab file module to upload files and when the libraries are ready, we upload a CSV file that contains sales data. The script takes the file name, reads the data into a Pandas DataFrame, and shows the first few rows to check if everything looks fine.

Next, we clean up the column names by removing any extra spaces. We assume that the first two columns in the file represent 'Month' and 'Sales'. This helps the to figure out which data to use for plotting. To make the graph look better, we apply a dark grid background and choose a color theme called Set2 using Seaborn.

To create the graph, we set the figure size and use a line plot to display the sales data. We also add markers to each point so it's easier to read. The graph includes labels for the axes, a title, and grid lines to make it look neat. If the month names on the x-axis look crowded, we rotate them slightly. Finally, we use plt.show() to display the graph.

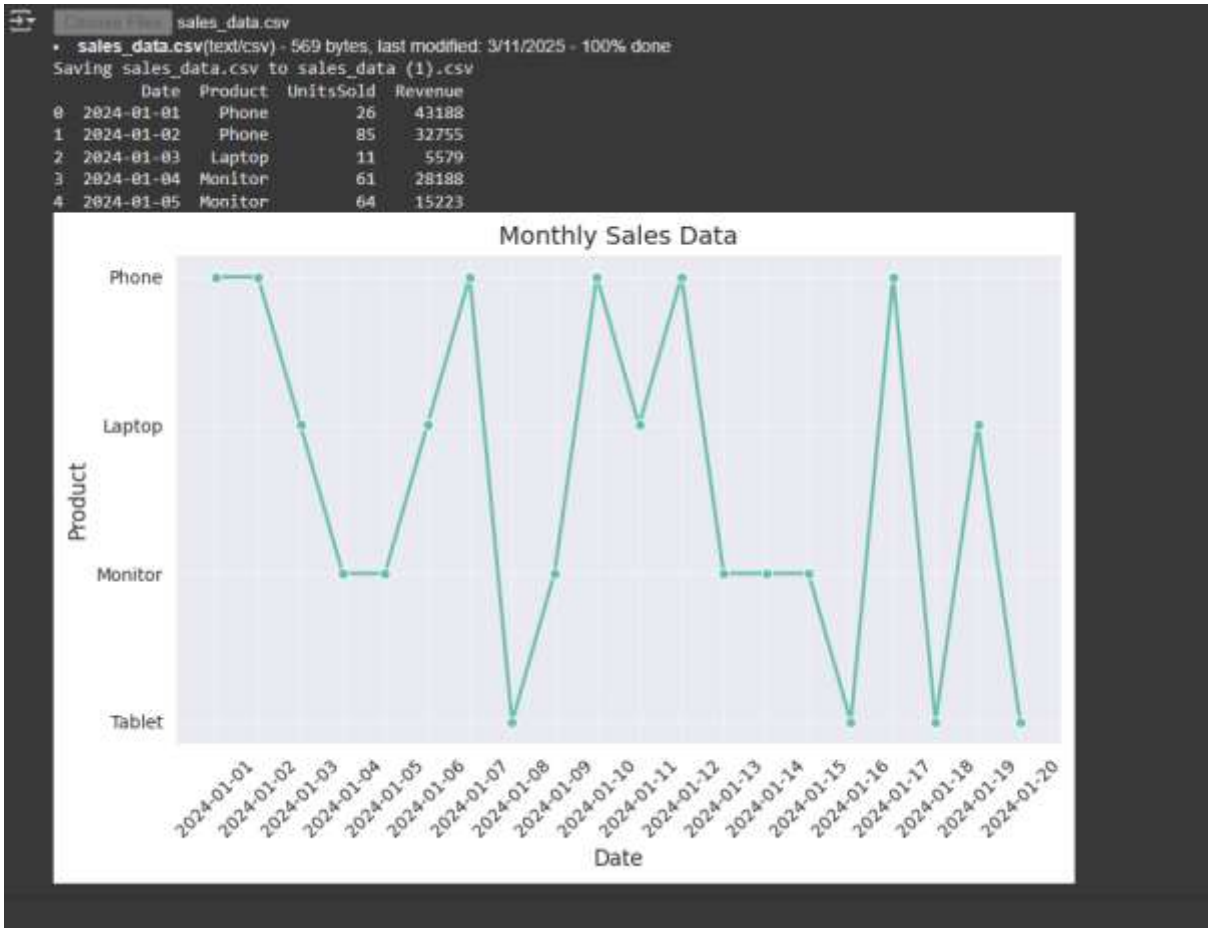
The Code:

```
import matplotlib.pyplot as plt

import seaborn as sns

import pandas as pd

from google.colab import files
```

```
# Upload file manually in Google Colab
uploaded = files.upload()

# Get the uploaded filename
file_name = list(uploaded.keys())[0]

# Read the CSV file
df = pd.read_csv(file_name)

# Display the first few rows to inspect data
print(df.head())

# Automatically detect column names
df.columns = df.columns.str.strip()  # Remove any trailing spaces
month_column, sales_column = df.columns[:2]  # Assuming first two columns are Month and Sales

# Set Seaborn style and color palette
sns.set_style("darkgrid")
sns.set_palette("Set2")

# Create a line plot
plt.figure(figsize=(9, 5))
sns.lineplot(x=df[month_column], y=df[sales_column], marker='o', linewidth=2)

# Labels and title
plt.xlabel(month_column, fontsize=12)
plt.ylabel(sales_column, fontsize=12)
plt.title("Monthly Sales Data", fontsize=14)
plt.xticks(rotation=45)  # Rotate labels if needed
plt.grid(True, linestyle="--", alpha=0.6)
```

```
# Show the plot

plt.show()
```

Output:



References/Credits:

- Chat GPT
- Deep Seek
- Matplotlib documentation: https://matplotlib.org/
- Seaborn documentation: https://seaborn.pydata.org/