EXPERIMENT 2

import pandas as pd

import matplotlib.pyplot as plt

from datetime import datetime

def load\_and\_clean\_data(file\_path):

df = pd.read\_csv("C:\\Users\\sh103\\Downloads\\sales-of-shampoo-over-a-three-ye.csv")

df['month'] = pd.to\_datetime(df['month'], format='%d-%b', errors='coerce')

df = df.dropna(subset=['month', 'price'])

df = df.sort\_values('month')

return df

def plot\_time\_series(df):

plt.figure(figsize=(10, 5))

plt.plot(df['month'], df['price'], marker='o', linestyle='-', color='b', label='Price')

plt.xlabel("Month")

plt.ylabel("Price")

plt.title("Time Series Visualization of Price Over Months")

plt.xticks(rotation=45)

plt.legend()

plt.grid(True)

plt.show()

if \_\_name\_\_ == "\_\_main\_\_":

file\_path = "/mnt/data/Dataset.csv" # Update with your dataset path

df = load\_and\_clean\_data(file\_path)

print("Loaded Data:")

print(df.head())

plot\_time\_series(df)