

6 Aim:
To execute pandas program to create a scatter plot of the trading volume / stock prices of alphabet inc stock between two specific data.

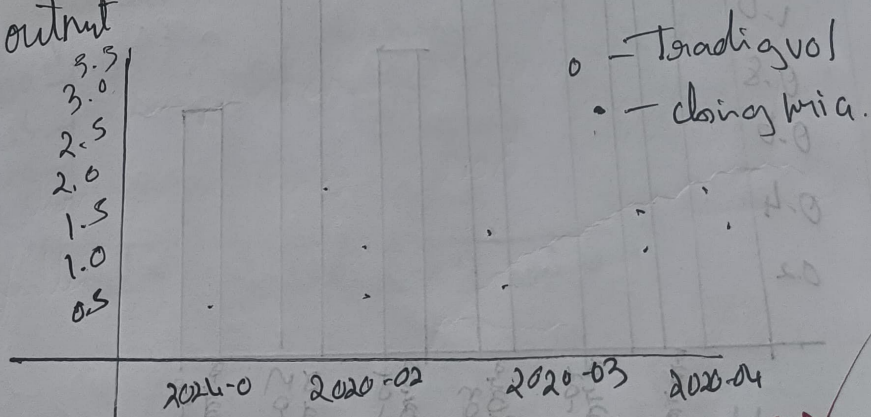
Pseudo code:

- * import necessary libraries pandas and matplotlib
- * Load stock datas
Read the csv file into a dataframe with data naming
- * Filter data between specific dates
set start-date: '2020-01-01', end date = '2020-04-01'
- * Create scatter plot
- * Display the plot.

Sample Input:

Alphabet inc database (stock price and trading)

Sample output



Result:

Therefore the pandas program execution for scatter plot executed successfully

```
import pandas as pd
import matplotlib.pyplot as plt

# Load the CSV file containing stock data
alphabet_stock_data = pd.read_csv("C:/Users/abhip/OneDrive/Documents/DSA05 LAB/alphabet.csv")

# Convert 'Date' to datetime format
alphabet_stock_data['Date'] = pd.to_datetime(alphabet_stock_data['Date'], dayfirst=True)

# Filter data between specific dates
start_date = '2020-04-01'
end_date = '2020-05-01'
filtered_data = alphabet_stock_data[(alphabet_stock_data['Date'] >= start_date) & (alphabet_stock_data['Date'] <= end_date)]

# Create a scatter plot of trading volume vs stock price (Close)
plt.figure(figsize=(10, 6))
plt.scatter(filtered_data['Volume'], filtered_data['Close'], alpha=0.5)
plt.title('Alphabet Inc. Stock: Trading Volume vs Stock Price (April 2020)')
plt.xlabel('Trading Volume')
plt.ylabel('Stock Price (Close)')
plt.grid(True)
plt.show()
```

```

File Edit View
Date,Open,High,Low,Close,Adj Close,Volume
01-04-2020,1122,1129.69,1097.45,1105.62,1105.62,2343100
02-04-2020,1098.26,1122.86,1092.12,1117.89,1117.89,2154900
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07-04-2020,1165.61,1185.21,1150.61,1186.58,1186.58,2847300
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