

6. Write a Pandas program to create a scatter plot of the trading volume/stock prices of Alphabet Inc. stock between two specific dates.

PROGRAM:

```
import matplotlib.pyplot as plt
```

```
import pandas as pd
```

```
data = [  
    {'Date': '01-04-2020', 'Volume': 2343100, 'Close': 1105.62},  
    {'Date': '02-04-2020', 'Volume': 1964900, 'Close': 1120.84},  
    {'Date': '03-04-2020', 'Volume': 2313400, 'Close': 1097.88},  
    {'Date': '06-04-2020', 'Volume': 2664700, 'Close': 1186.92},  
    {'Date': '07-04-2020', 'Volume': 2387300, 'Close': 1186.51},  
    {'Date': '08-04-2020', 'Volume': 1975100, 'Close': 1210.28},  
    {'Date': '09-04-2020', 'Volume': 2175400, 'Close': 1211.45},  
    {'Date': '13-04-2020', 'Volume': 1739800, 'Close': 1217.56},  
    {'Date': '14-04-2020', 'Volume': 2470400, 'Close': 1269.23},  
    {'Date': '15-04-2020', 'Volume': 1671700, 'Close': 1262.47},  
    {'Date': '16-04-2020', 'Volume': 2518100, 'Close': 1263.47},  
    {'Date': '17-04-2020', 'Volume': 1949000, 'Close': 1283.25},  
    {'Date': '20-04-2020', 'Volume': 1695500, 'Close': 1266.61},  
    {'Date': '21-04-2020', 'Volume': 2153000, 'Close': 1216.34},  
    {'Date': '22-04-2020', 'Volume': 2093100, 'Close': 1263.21},  
    {'Date': '23-04-2020', 'Volume': 1566200, 'Close': 1276.31},  
    {'Date': '24-04-2020', 'Volume': 1640400, 'Close': 1279.31},  
    {'Date': '27-04-2020', 'Volume': 1600600, 'Close': 1275.88},  
    {'Date': '28-04-2020', 'Volume': 2951300, 'Close': 1233.67},  
    {'Date': '29-04-2020', 'Volume': 3793600, 'Close': 1341.48},  
    {'Date': '30-04-2020', 'Volume': 2665400, 'Close': 1320.61},  
    {'Date': '01-05-2020', 'Volume': 2072500, 'Close': 1320.61}
```

```
]
```

```
df = pd.DataFrame(data)
df['Date'] = pd.to_datetime(df['Date'], format='%d-%m-%Y')

filtered_data = df[(df['Date'] >= '2020-04-01') & (df['Date'] <= '2020-04-20')]

plt.scatter(filtered_data['Volume'], filtered_data['Close'])
plt.xlabel('Volume')
plt.ylabel('Close Price')
plt.title('Trading Volume vs Stock Prices (01-04-2020 to 20-04-2020)')
plt.show()
```

```
df = pd.DataFrame(data)
df['Date'] = pd.to_datetime(df['Date'])
```

filtered

OUTPUT:

Trading Volume vs Stock Prices (01-04-2020 to 20-04-2020)

