

8/11/2024.

mentor/HOD

4. write a pandas program to create a line plot of the historical stock prices of Alphabet inc between two specific dates.

Aim:

To create a line plot of Alphabet inc's historical stock prices over a specified data range, providing a visual representation of the stock's performance.

Pseudo Code:

- import the necessary libraries: pandas for data manipulation, and matplotlib.pyplot for plotting
- load the historical stock price data for Alphabet into a pandas dataframe.
- filter the Dataframe for stock prices between the specified start and end dates.
- Set the date column as the index for the dataframe to allow easy plotting over time
- use matplotlib to create a time plot the closing prices for the filtered date range.
- Label the axes and title the plot for clarity.
- Display the plot.

Sample input:

data = (data['open', 'High', 'low', 'close', 'Volume'])

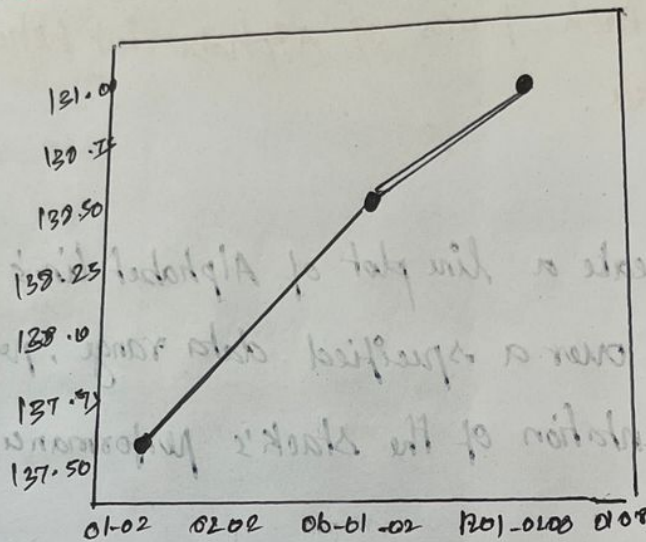
Min Salary	Max Salary
20080	40000
15000	30000
8200	16000
10000	20080
4500	10500

den by Job Title

Min Salary	Max Salary
40000	
30000	
16000	
20000	
40000	



10

Sample output:-Result:-

The code is executed successfully and got the output.

5. Write a pandas program to create a bar plot of the trading volume of Alphabet Inc. stock between two specified dates.

Aim:-

To create a bar plot of Alphabet Inc's trading volume over a specified data range to visualize trading

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

# Load stock data
data = pd.read_csv("C:/Users/abhip/OneDrive/Documents/DSA05 LAB/read.csv", parse_dates=['Date'], index_col='Date')

# Filter data for specific date range
filtered_data = data['2020-01-01':'2020-12-31']

# Plotting
filtered_data['Close'].plot(title='Alphabet Inc. Stock Prices (2020)', ylabel='Price (USD)')
plt.show()
```

Date	Open	High	Low	Close	Volume
2020-01-02	1345.56	1354.89	1334.53	1346.87	1043500
2020-01-03	1343.49	1346.23	1321.23	1334.52	1342500
2020-01-06	1331.19	1354.29	1329.04	1344.37	1534700
2020-01-07	1352.02	1365.43	1348.12	1352.89	1445200
2020-01-08	1355.12	1371.01	1348.56	1362.20	1623000
2020-01-09	1368.20	1375.23	1358.42	1374.50	1203400
2020-01-10	1372.78	1383.24	1362.40	1373.32	1802500
2020-01-13	1385.33	1390.99	1372.50	1389.85	1423700
2020-01-14	1388.67	1395.44	1376.00	1384.34	1532800
2020-01-15	1375.50	1384.50	1365.78	1372.43	1283400
2020-01-16	1375.25	1386.75	1372.34	1384.73	1405200
2020-01-17	1382.34	1394.56	1378.10	1390.20	1635200
2020-01-21	1393.12	1400.23	1385.76	1395.34	1763400
2020-01-22	1397.20	1412.00	1391.45	1403.87	1674300
2020-01-23	1405.23	1418.20	1400.56	1414.63	1522700
2020-01-24	1415.12	1425.67	1412.00	1419.83	1932800
2020-01-27	1400.00	1412.50	1380.54	1405.02	2105300
2020-01-28	1408.35	1422.40	1400.23	1419.20	1604900
2020-01-29	1425.00	1435.20	1418.50	1434.34	1536700
2020-01-30	1438.75	1450.00	1428.55	1445.09	1832400
2020-01-31	1443.23	1445.50	1425.67	1432.42	1994200

