```
import numpy as np
         import pandas as pd
         import matplotlib.pyplot as plt
         %matplotlib notebook
In [2]:
         # Load the data
         google_data=pd.read_csv('GOOGL.csv',index_col=0,parse_dates=True)
In [3]:
         # print the first 5 rows of data
         google_data.head()
                                                 Close Adj Close
                      Open
                                                                  Volume
Out[3]:
                                High
                                         Low
             Date
         2004-08-19 50.050049 52.082081 48.028027 50.220219 50.220219 44659000
         2004-08-20 50.555557 54.594593 50.300301 54.209209 54.209209 22834300
         2004-08-23 55.430431 56.796795 54.579578 54.754753 54.754753 18256100
         2004-08-24 55.675674 55.855854 51.836838 52.487488 52.487488 15247300
         2004-08-25 52.532532 54.054054 51.991993 53.053055 53.053055
                                                                9188600
In [4]:
         # Overview of Stock value in Visualization
         google_data.plot()
         google_data['my col']=google_data['Volume']*0.5
         google_data['my col'].plot()
                  1e7
                                                                          Open
                                                                          High
                                                                          Low
                                                                          Close
                6
                                                                          Adj Close
                                                                          Volume
                0
                                                 Date
Out[4]: <AxesSubplot:xlabel='Date'>
In [5]:
         # Stock price based on Timeline
         fig1, ax1=plt.subplots()
         google_data['my col'].plot(ax=ax1)
                  1e7
              4.0
              3.5
              3.0
              2.5
              2.0
              1.5
              1.0
              0.5
              0.0
             2004
                     2006
                                                 Date
Out[5]: <AxesSubplot:xlabel='Date'>
In [6]:
         # Visualization based on entire stock variance
         fig2, ax2=plt.subplots(2,2)
         ax2
         google_data['Open'].plot(ax=ax2[0,0])
         google_data['High'].plot(ax=ax2[0,1])
         google_data['Low'].plot(ax=ax2[1,0])
         google_data['Close'].plot(ax=ax2[1,1])
         plt.tight_layout()
          1500
                                                   1500
          1000
                                                   1000
           500
                                                    500
           20042005200820102012014201620182020
                              Date
                                                                        Date
          1500
                                                    1500
          1000
                                                   1000
           500
                                                    500
                              Date
                                                                        Date
         # Average Timeline value of stocks based on volume
         fig3, ax3=plt.subplots()
         google_data.loc[:'2020-05-04','Volume'].plot.bar(ax=ax3)
                  1e7
```

In [1]:

Importing the libraries

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Out[7]: <AxesSubplot:xlabel='Date'>

In []: