07/04/2022, 18:36 QUES3

1. Plot 5 day Moving/Rolling Average of Volume Traded for every coin in given period: [01/01/20 – 31/01/20].

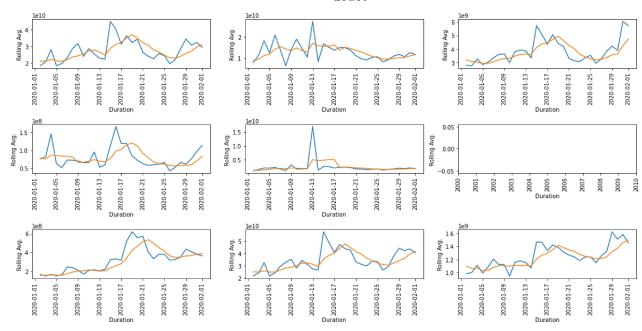
```
In [ ]:
         import pandas as pd
         import matplotlib.pyplot as plt
In [ ]:
         bitcoin = pd.read_csv('D:\python\data\coin_Bitcoin.csv')
         ethereum = pd.read csv('D:\python\data\coin Ethereum.csv')
         ethereum = ethereum.sort_values('Date')
         Litecoin = pd.read_csv('D:\python\data\coin_Litecoin.csv')
         Monero = pd.read_csv('D:\python\data\coin_Monero.csv')
         Ripple = pd.read_csv('D:\python\data\coin_Ripple.csv')
         Ripple = Ripple.sort_values('Date')
         Solana = pd.read_csv('D:\python\data\coin_Solana.csv')
         Stellar = pd.read_csv('D:\python\data\coin_Stellar.csv')
         Tether = pd.read csv('D:\python\data\coin Tether.csv')
         Tron = pd.read csv('D:\python\data\coin Tron.csv')
In [ ]:
         start date = '2020-01-01'
         end date = '2020-01-31'
In [ ]:
         bitcoin['Date'] = pd.to datetime(bitcoin['Date'])
         bitcoin.set index('Date', drop=True, inplace=True)
         ethereum['Date'] = pd.to datetime(ethereum['Date'])
         ethereum.set_index('Date', drop=True, inplace=True)
         Litecoin['Date'] = pd.to datetime(Litecoin['Date'])
         Litecoin.set_index('Date', drop=True, inplace=True)
         Monero['Date'] = pd.to datetime(Monero['Date'])
         Monero.set_index('Date', drop=True, inplace=True)
         Ripple['Date'] = pd.to datetime(Ripple['Date'])
         Ripple.set_index('Date', drop=True, inplace=True)
         Solana['Date'] = pd.to datetime(Solana['Date'])
         Solana.set_index('Date', drop=True, inplace=True)
         Stellar['Date'] = pd.to_datetime(Stellar['Date'])
         Stellar.set index('Date', drop=True, inplace=True)
         Tether['Date'] = pd.to datetime(Tether['Date'])
         Tether.set_index('Date', drop=True, inplace=True)
         Tron['Date'] = pd.to datetime(Tron['Date'])
         Tron.set_index('Date', drop=True, inplace=True)
In [ ]:
         fig, ax = plt.subplots(nrows=3 , ncols=3 , figsize=(16,8))
         ethereum = ethereum.sort values('Date')
         Ripple = Ripple.sort_values('Date')
         bitcoin['Bit moving'] = bitcoin['Volume'].rolling(window=5).mean()
```

file:///D:/python/QUES3.html

07/04/2022, 18:36 QUES3

```
a = bitcoin[start date:end date][['Volume', 'Bit moving']]
ax[0][0].plot(a)
ethereum['Eth_moving'] = ethereum['Volume'].rolling(window=5).mean()
b = ethereum[start date:end date][['Volume', 'Eth moving']]
ax[0][1].plot(b)
Litecoin['lite_moving'] = Litecoin['Volume'].rolling(window=5).mean()
c = Litecoin[start_date:end_date][['Volume', 'lite_moving']]
ax[0][2].plot(c)
Monero['Mon_moving'] = Monero['Volume'].rolling(window=5).mean()
d = Monero[start_date:end_date][['Volume', 'Mon_moving']]
ax[1][0].plot(d)
Ripple['Rpl_moving'] = Ripple['Volume'].rolling(window=5).mean()
e = Ripple[start_date:end_date][['Volume', 'Rpl_moving']]
ax[1][1].plot(e)
Solana['Sol'] = Solana['Volume'].rolling(window=5).mean()
f = Solana[start_date:end_date][['Volume', 'Sol']]
ax[1][2].plot(f)
Stellar['Stl'] = Stellar['Volume'].rolling(window=5).mean()
g = Stellar[start date:end date][['Volume', 'Stl']]
ax[2][0].plot(g)
Tether['tehr'] = Tether['Volume'].rolling(window=5).mean()
h = Tether[start date:end date][['Volume', 'tehr']]
ax[2][1].plot(h)
Tron['Tron'] = Tron['Volume'].rolling(window=5).mean()
i = Tron[start date:end date][['Volume', 'Tron']]
ax[2][2].plot(i)
for ax in fig.axes:
    plt.ylabel('Rolling Avg.')
    plt.xlabel('Duration')
    plt.sca(ax)
    plt.xticks(rotation=90)
fig.tight layout()
```

file:///D:/python/QUES3.html



file:///D:/python/QUES3.html 3/3