

1. Compare Market Cap of all coins at 01/04/20 and 01/04/21. [multiple type of graphs is preferred]

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In [ ]: import pandas as pd
import matplotlib.pyplot as plt
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In [ ]: bitcoin = pd.read_csv('D:\python\data\coin_Bitcoin.csv')
ethereum = pd.read_csv('D:\python\data\coin_Ethereum.csv')

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')

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')
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In [ ]: start_date = '2020-04-01'
end_date = '2021-04-01'
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```
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))
Ripple = Ripple.sort_values('Date')
ethereum = ethereum.sort_values('Date')
```

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a = bitcoin[start_date:end_date]['Marketcap']
ax[0][0].plot(a)

b = ethereum[start_date:end_date]['Marketcap']
ax[0][1].plot(b)

c = Litecoin[start_date:end_date]['Marketcap']
ax[0][2].plot(c)

d = Monero[start_date:end_date]['Marketcap']
ax[1][0].plot(d)

e = Ripple[start_date:end_date]['Marketcap']
ax[1][1].plot(e)

f = Solana[start_date:end_date]['Marketcap']
ax[1][2].plot(f)

g = Stellar[start_date:end_date]['Marketcap']
ax[2][0].plot(g)

h = Tether[start_date:end_date]['Marketcap']
ax[2][1].plot(h)

i = Tron[start_date:end_date]['Marketcap']
ax[2][2].plot(i)

for ax in fig.axes:
    plt.ylabel('Market_Cap')
    plt.xlabel('Duration')
    plt.sca(ax)
    plt.xticks(rotation=90)

fig.tight_layout()

```

