

1. Use Pandas to store given data in DataFrames and use Matplotlib or Plotly to Plot Bitcoin's 'Low' and its corresponding 'Quantum' for the first and last month of trade data available.

Quantum = Difference in low for two consecutive days.

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In [ ]: import pandas as pd
import matplotlib.pyplot as plt
```

```
In [ ]: bitcoin = pd.read_csv('D:\python\data\coin_Bitcoin.csv')
```

```
In [ ]: bitcoin['Date'] = pd.to_datetime(bitcoin['Date'])
bitcoin['Quantum'] = bitcoin['Low'].diff()

first = bitcoin[bitcoin['Date'].dt.month == 1]
last = bitcoin[bitcoin['Date'].dt.month == 12]
```

```
In [ ]: first.set_index('Date', inplace=True, drop=True)
last.set_index('Date', inplace=True, drop=True)
```

```
In [ ]: a = first[['Low', 'Quantum']]
b = last[['Low', 'Quantum']]

ax = a.plot(figsize=(20,8))
b.plot(ax = ax)
plt.title('Question NO.1')
ax.legend(['First_Low', 'F_Quant', 'Last_Low', 'L_Quant'])
```

```
Out [ ]: <matplotlib.legend.Legend at 0x21236f03670>
```

