```
In [1]:  !pip install pycoingecko
         !pip install plotly
         !pip install mplfinance

Collecting pycoingecko
  Downloading https://files.pythonhosted.org/packages/3a/f9/bfda8a54a1a
98983bed91b3b865dcbcefe1590f4d444b3f1e118d541d639/pycoingecko-2.1.0-py3
-none-any.whl
Requirement already satisfied: requests in /home/jupyterlab/conda/envs/
python/lib/python3.6/site-packages (from pycoingecko) (2.25.1)
Requirement already satisfied: idna<3,>=2.5 in /home/jupyterlab/conda/e
nvs/python/lib/python3.6/site-packages (from requests->pycoingecko) (2.
10)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in /home/jupyterla
b/conda/envs/python/lib/python3.6/site-packages (from requests->pycoing
ecko) (1.26.4)
Requirement already satisfied: certifi>=2017.4.17 in /home/jupyterlab/c
onda/envs/python/lib/python3.6/site-packages (from requests->pycoingeck
o) (2020.12.5)
Requirement already satisfied: chardet<5,>=3.0.2 in /home/jupyterlab/co
nda/envs/python/lib/python3.6/site-packages (from requests->pycoingeck
o) (4.0.0)
Installing collected packages: pycoingecko
Successfully installed pycoingecko-2.1.0
Requirement already satisfied: plotly in /home/jupyterlab/conda/envs/py
thon/lib/python3.6/site-packages (4.14.3)
Requirement already satisfied: retrying>=1.3.3 in /home/jupyterlab/cond
a/envs/python/lib/python3.6/site-packages (from plotly) (1.3.3)
Requirement already satisfied: six in /home/jupyterlab/conda/envs/pytho
n/lib/python3.6/site-packages (from plotly) (1.16.0)
Collecting mplfinance
  Downloading https://files.pythonhosted.org/packages/3f/4e/a3de915df8d
112579beb3df22e47b3929670b10e9c5dfd4a2b31bf1a34a7/mplfinance-0.12.7a17-
py3-none-any.whl (62kB)
     |████████████████████████████████| 71kB 19.9MB/s eta 0:00:01
Requirement already satisfied: pandas in /home/jupyterlab/conda/envs/py
```

```
thon/lib/python3.6/site-packages (from mplfinance) (1.1.5)
Requirement already satisfied: matplotlib in /home/jupyterlab/conda/env
s/python/lib/python3.6/site-packages (from mplfinance) (3.3.4)
Requirement already satisfied: pytz>=2017.2 in /home/jupyterlab/conda/e
nvs/python/lib/python3.6/site-packages (from pandas->mplfinance) (2021.
1)
Requirement already satisfied: python-dateutil>=2.7.3 in /home/jupyterl
ab/conda/envs/python/lib/python3.6/site-packages (from pandas->mplfinan
ce) (2.8.1)
Requirement already satisfied: numpy>=1.15.4 in /home/jupyterlab/conda/
envs/python/lib/python3.6/site-packages (from pandas->mplfinance) (1.1
9.5)
Requirement already satisfied: pyparsing!=2.0.4,!=2.1.2,!=2.1.6,>=2.0.3
in /home/jupyterlab/conda/envs/python/lib/python3.6/site-packages (from
matplotlib->mplfinance) (2.4.7)
Requirement already satisfied: pillow>=6.2.0 in /home/jupyterlab/conda/
envs/python/lib/python3.6/site-packages (from matplotlib->mplfinance)
(8.2.0)
Requirement already satisfied: kiwisolver>=1.0.1 in /home/jupyterlab/co
nda/envs/python/lib/python3.6/site-packages (from matplotlib->mplfinanc
e) (1.3.1)
Requirement already satisfied: cycler>=0.10 in /home/jupyterlab/conda/e
nvs/python/lib/python3.6/site-packages/cycler-0.10.0-py3.6.egg (from ma
tplotlib->mplfinance) (0.10.0)
Requirement already satisfied: six>=1.5 in /home/jupyterlab/conda/envs/
python/lib/python3.6/site-packages (from python-dateutil>=2.7.3->pandas
->mplfinance) (1.16.0)
Installing collected packages: mplfinance
Successfully installed mplfinance-0.12.7a17
```

In [2]:
```python
import pandas as pd
import numpy as np
import plotly.graph_objects as go
from plotly.offline import plot
import matplotlib.pyplot as plt
import datetime
from pycoingecko import CoinGeckoAPI
from mplfinance.original_flavor import candlestick2_ohlc
```

```
In [3]: dict_={'a':[11,21,31],'b':[12,22,32]}
```

```
In [6]: df.head()
```

Out[6]:

	a	b
0	11	12
1	21	22
2	31	32

```
In [5]: df=pd.DataFrame(dict_)
        type(df)
```

Out[5]: pandas.core.frame.DataFrame

```
In [8]: cg = CoinGeckoAPI()

        bitcoin_data = cg.get_coin_market_chart_by_id(id='bitcoin', vs_currency
        ='inr', days=30)
```

```
In [9]: type(bitcoin_data )
```

Out[9]: dict

```
In [11]: bitcoin_price_data = bitcoin_data['prices']

         bitcoin_price_data[0:10]
```

Out[11]: [[1620155117828, 4030332.255646671],
          [1620158495178, 4020583.9029159117],
          [1620162038168, 4040476.148437184],
          [1620165771368, 4012075.0040912814],
          [1620169242225, 3995220.262177175],
          [1620173008233, 3944555.7366159256],
          [1620176694001, 4039176.067935701],
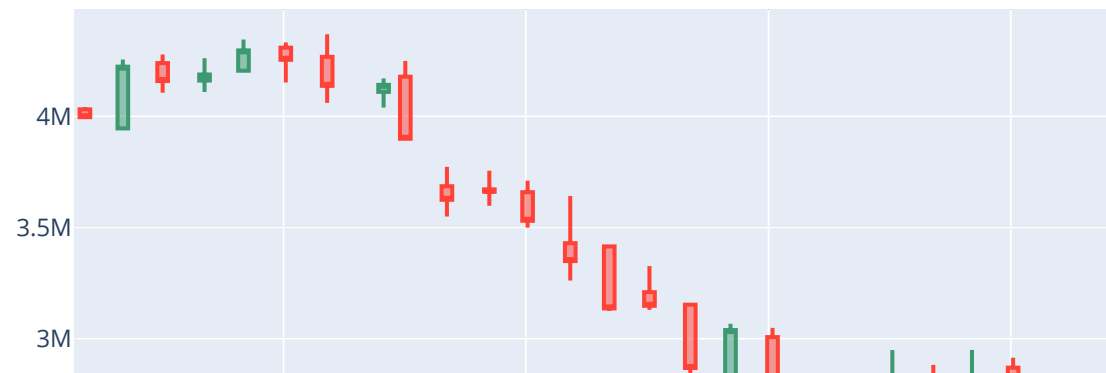   [1620181720146, 4091093.542856137],

```
                    [1620183654837, 4062672.822524114],
                    [1620187361205, 4059146.692031293]]
```
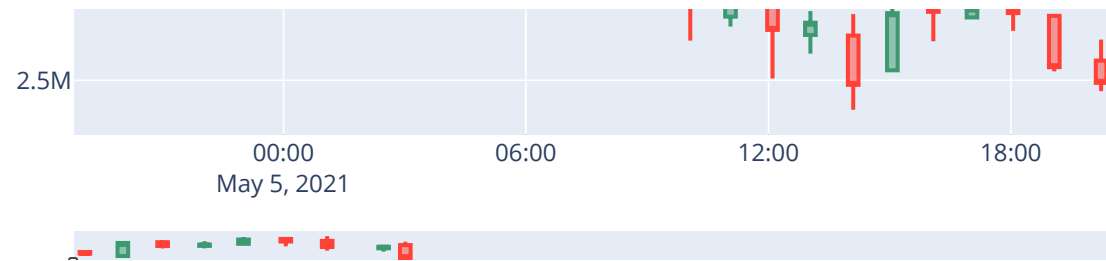
In [12]: `data = pd.DataFrame(bitcoin_price_data, columns=['TimeStamp', 'Price'])`

In [13]: `data['Date'] = pd.to_datetime(data['TimeStamp'], unit='ms')`

In [14]: `candlestick_data = data.groupby(data.Date.dt.date).agg({"Price": ['min', 'max', 'first', 'last']})`

In [15]:
```python
fig = go.Figure(data=[go.Candlestick(x=data['Date'],
                open=candlestick_data['Price']['first'],
                high=candlestick_data['Price']['max'],
                low=candlestick_data['Price']['min'],
                close=candlestick_data['Price']['last'])
                ])

fig.update_layout(xaxis_rangeslider_visible=True)

fig.show()
```

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May 5, 2021

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12:00

18:00

In [ ]: