

▼ Every single thing here is not a financial advise

```
import numpy as np
import pandas as pd

#Data Source
!pip install yfinance
import yfinance as yf

#Data visualization
import plotly.graph_objs as go

Collecting yfinance
  Downloading https://files.pythonhosted.org/packages/79/bd/d64719da8f5367f4d8b16e83507fa1d90942f433f748a4cf3ed7aa515d14/yfinance-0.1.63.tar.gz
Requirement already satisfied: pandas>=0.24 in /usr/local/lib/python3.7/dist-packages (from yfinance) (1.1.5)
Requirement already satisfied: numpy>=1.15 in /usr/local/lib/python3.7/dist-packages (from yfinance) (1.19.5)
Requirement already satisfied: requests>=2.20 in /usr/local/lib/python3.7/dist-packages (from yfinance) (2.23.0)
Requirement already satisfied: multitasking>=0.0.7 in /usr/local/lib/python3.7/dist-packages (from yfinance) (0.0.9)
Collecting lxml>=4.5.1
  Downloading https://files.pythonhosted.org/packages/30/c0/d0526314971fc661b083ab135747dc68446a3022686da8c16d25fcf6ef07/lxml-4.6.3-cp37-cp37m-linux\_x86\_64.whl (6.3MB)
Requirement already satisfied: python-dateutil>=2.7.3 in /usr/local/lib/python3.7/dist-packages (from pandas>=0.24->yfinance) (2.8.1)
Requirement already satisfied: pytz>=2017.2 in /usr/local/lib/python3.7/dist-packages (from pandas>=0.24->yfinance) (2018.9)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.7/dist-packages (from requests>=2.20->yfinance) (2021.5.30)
Requirement already satisfied: urllib3!=1.25.0,!<1.25.1,<1.26,>=1.21.1 in /usr/local/lib/python3.7/dist-packages (from requests>=2.20->yfinance) (1.25.11)
Requirement already satisfied: chardet<4,>=3.0.2 in /usr/local/lib/python3.7/dist-packages (from requests>=2.20->yfinance) (3.0.4)
Requirement already satisfied: idna<3,>=2.5 in /usr/local/lib/python3.7/dist-packages (from requests>=2.20->yfinance) (2.10)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.7/dist-packages (from python-dateutil>=2.7.3->pandas>=0.24->yfinance) (1.15.0)
Building wheels for collected packages: yfinance
  Building wheel for yfinance (setup.py) ... done
  Created wheel for yfinance: filename=yfinance-0.1.63-py2.py3-none-any.whl size=23919 sha256=e4ddba8154afc23ad76983dc37d1aa71abb33df0b1972121f1e1e1e1e1e1e1e1e1e1e
  Stored in directory: /root/.cache/pip/wheels/fe/a0/79/b73d4a0c535b421b88fc7b393936b371fabbbfeaf979eca4050
Successfully built yfinance
Installing collected packages: lxml, yfinance
  Found existing installation: lxml 4.2.6
    Uninstalling lxml-4.2.6:
      Successfully uninstalled lxml-4.2.6
  Successfully installed lxml-4.6.3 yfinance-0.1.63

crypto = ['BTC', 'ETH', 'DOGE', 'BNB', 'SXP']

#index the coin of choice
coin = crypto[1]
data = yf.download(tickers=f'{coin}-USD',period = '14d', interval = '15m')

#interval = ['1m', 2m, 5m, 15m, 30m, 60m, 90m, 1h, 1d, 5d, 1wk, 1mo, 3mo']

[*****100%*****] 1 of 1 completed

#Adding Moving average calculated field

data['MA5'] = data['Close'].rolling(5).mean()
data['MA20'] = data['Close'].rolling(20).mean()

data.columns

Index(['Open', 'High', 'Low', 'Close', 'Adj Close', 'Volume', 'MA5', 'MA20'], dtype='object')

#declare figure
fig = go.Figure()

#Candlestick
fig.add_trace(go.Candlestick(x=data.index,
                             open=data['Open'],
                             high=data['High'],
                             low=data['Low'],
                             close=data['Close'], name = 'market data'))

#Add Moving average on the graph
fig.add_trace(go.Scatter(x=data.index, y= data['MA20'],line=dict(color='blue', width=2)))
fig.add_trace(go.Scatter(x=data.index, y= data['MA5'],line=dict(color='orange', width=2)))

#Updating X axis and graph
# X-Axes
fig.update_xaxes(
    title=f'{coin}-USD Trade Analysis',
    rangeslider_visible =True
)

#Show
fig.show()
```



ETH-USD Trade Analysis