CODE:

%pip install yfinance==0.1.67

#%pip install pandas==1.3.3

#%pip install requests==2.26.0

%pip install bs4

%pip install plotly==5.3.1

import yfinance as yf

import pandas as pd

import requests

from bs4 import BeautifulSoup

import plotly.graph\_objects as go

from plotly.subplots import make\_subplots

def make\_graph(stock\_data, revenue\_data, stock):

"""

Displays a graph of the stock data

Arguments:

stock\_data -- DataFrame, msut contain Date and Close columns

revenue -- DataFrame, msut contain Date and Revenue columns

stock -- name of stock

"""

fig = make\_subplots(rows=2, cols=1, shared\_xaxes=True, subplot\_titles=("Historical Share Price", "Historical Revenue"), vertical\_spacing = .3)

stock\_data\_specific = stock\_data[stock\_data.Date <= '2021--06-14']

revenue\_data\_specific = revenue\_data[revenue\_data.Date <= '2021-04-30']

fig.add\_trace(go.Scatter(x=pd.to\_datetime(stock\_data\_specific.Date, infer\_datetime\_format=True), y=stock\_data\_specific.Close.astype("float"), name="Share Price"), row=1, col=1)

fig.add\_trace(go.Scatter(x=pd.to\_datetime(revenue\_data\_specific.Date, infer\_datetime\_format=True), y=revenue\_data\_specific.Revenue.astype("float"), name="Revenue"), row=2, col=1)

fig.update\_xaxes(title\_text="Date", row=1, col=1)

fig.update\_xaxes(title\_text="Date", row=2, col=1)

fig.update\_yaxes(title\_text="Price ($US)", row=1, col=1)

fig.update\_yaxes(title\_text="Revenue ($US Millions)", row=2, col=1)

fig.update\_layout(showlegend=False,

height=900,

title=stock,

xaxis\_rangeslider\_visible=True)

fig.show()

#Question1

tesla = yf.Ticker('TSLA')

tesla\_data = tesla.history(period="max")

tesla\_data.reset\_index(inplace=True)

tesla\_data.head()

SCREENSHOT:

