In [1]:
```
pip install yfinance
```

```
Collecting yfinance
  Downloading yfinance-0.1.74-py2.py3-none-any.whl (27 kB)
Requirement already satisfied: requests>=2.26 in c:\programdata\anaconda3\lib\site-pa
ckages (from yfinance) (2.27.1)
Requirement already satisfied: numpy>=1.15 in c:\programdata\anaconda3\lib\site-packa
ges (from yfinance) (1.21.5)
Requirement already satisfied: pandas>=0.24.0 in c:\programdata\anaconda3\lib\site-pa
ckages (from yfinance) (1.4.2)
Requirement already satisfied: lxml>=4.5.1 in c:\programdata\anaconda3\lib\site-packa
ges (from yfinance) (4.8.0)
Collecting multitasking>=0.0.7
  Downloading multitasking-0.0.11-py3-none-any.whl (8.5 kB)
Requirement already satisfied: python-dateutil>=2.8.1 in c:\programdata\anaconda3\lib
\site-packages (from pandas>=0.24.0->yfinance) (2.8.2)
Requirement already satisfied: pytz>=2020.1 in c:\programdata\anaconda3\lib\site-pack
ages (from pandas>=0.24.0->yfinance) (2021.3)
Requirement already satisfied: six>=1.5 in c:\programdata\anaconda3\lib\site-packages
(from python-dateutil>=2.8.1->pandas>=0.24.0->yfinance) (1.16.0)
Requirement already satisfied: certifi>=2017.4.17 in c:\programdata\anaconda3\lib\sit
e-packages (from requests>=2.26->yfinance) (2021.10.8)
Requirement already satisfied: idna<4,>=2.5 in c:\programdata\anaconda3\lib\site-pack
ages (from requests>=2.26->yfinance) (3.3)
Requirement already satisfied: charset-normalizer~=2.0.0 in c:\programdata\anaconda3
\lib\site-packages (from requests>=2.26->yfinance) (2.0.4)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\programdata\anaconda3\lib
\site-packages (from requests>=2.26->yfinance) (1.26.9)
Installing collected packages: multitasking, yfinance
Successfully installed multitasking-0.0.11 yfinance-0.1.74
Note: you may need to restart the kernel to use updated packages.
```

In [2]:
```
import pandas as pd
import yfinance as yf
import datetime
from datetime import date, timedelta
import plotly.graph_objects as go
import plotly.express as px
```

In [3]:
```
today = date.today()

d1 = today.strftime("%Y-%m-%d")
end_date = d1
d2 = date.today() - timedelta(days=365)
d2 = d2.strftime("%Y-%m-%d")
start_date = d2
```

In [4]:
```
data = yf.download('GOOG',
                   start=start_date,
                   end=end_date,
                   progress=False)
data["Date"] = data.index
data = data[["Date", "Open", "High", "Low",
             "Close", "Adj Close", "Volume"]]
data.reset_index(drop=True, inplace=True)
print(data.head())
```

```
        Date        Open        High         Low       Close   Adj Close  \
0 2021-08-23  138.998505  142.177002  138.747955  141.099503  141.099503
1 2021-08-24  141.543503  143.007507  141.353500  142.398499  142.398499
2 2021-08-25  142.882996  143.313004  142.439499  142.949997  142.949997
3 2021-08-26  142.618500  143.134796  142.091507  142.123001  142.123001
4 2021-08-27  142.112503  145.011002  142.020004  144.550507  144.550507

     Volume
0  21090000
1  15126000
2  12838000
3  14922000
4  24562000
```

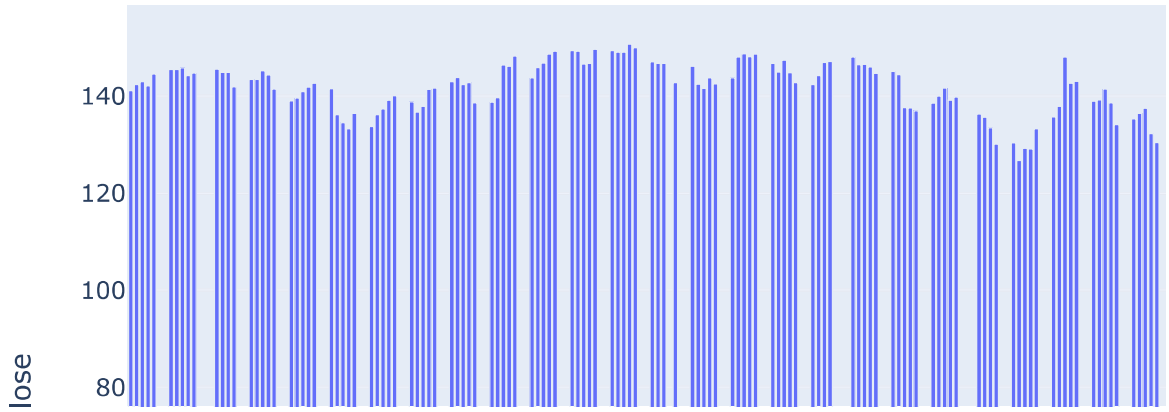
In [5]:
```
data.tail()
```

Out[5]:

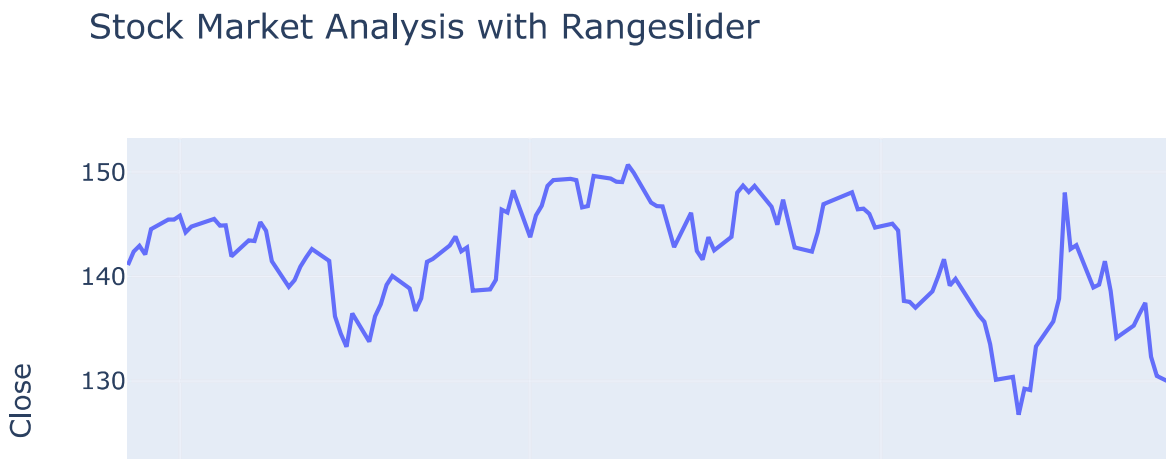
	Date	Open	High	Low	Close	Adj Close	Volume
248	2022-08-17	120.930000	122.150002	120.199997	120.320000	120.320000	17589200
249	2022-08-18	120.230003	121.690002	119.550003	120.860001	120.860001	15652000
250	2022-08-19	119.870003	120.000000	117.669998	118.120003	118.120003	20171100
251	2022-08-22	116.099998	116.500000	114.669998	115.070000	115.070000	19316000
252	2022-08-23	114.320000	115.930000	114.300003	114.769997	114.769997	14372500

In [6]:
```
figure = go.Figure(data=[go.Candlestick(x=data["Date"],
                                        open=data["Open"], high=data["High"],
                                        low=data["Low"], close=data["Close"])])
figure.update_layout(title = "Google Stock Price Analysis", xaxis_rangeslider_visible=
figure.show()
```

In [7]:
```
figure = px.bar(data, x = "Date", y= "Close")
figure.show()
```

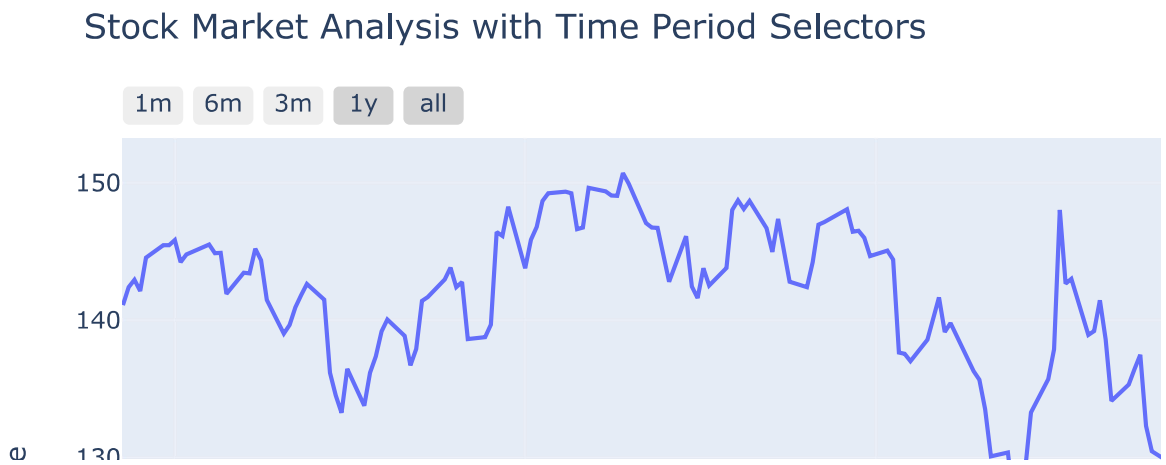


In [8]:
```
figure = px.line(data, x='Date', y='Close',
                 title='Stock Market Analysis with Rangeslider')
figure.update_xaxes(rangeslider_visible=True)
figure.show()
```



In [9]:
```
figure = px.line(data, x='Date', y='Close',
                 title='Stock Market Analysis with Time Period Selectors')

figure.update_xaxes(
    rangeselector=dict(
        buttons=list([
            dict(count=1, label="1m", step="month", stepmode="backward"),
            dict(count=6, label="6m", step="month", stepmode="backward"),
            dict(count=3, label="3m", step="month", stepmode="backward"),
            dict(count=1, label="1y", step="year", stepmode="backward"),
            dict(step="all")
        ])
    )
)
figure.show()
```



In [11]:
```
figure = px.scatter(data, x='Date', y='Close', range_x=['2021-08-23', '2022-08-23'],
                    title="Stock Market Analysis by Hiding Weekend Gaps")
figure.update_xaxes(
    rangebreaks=[
        dict(bounds=["sat", "sun"])
    ]
)
figure.show()
```


Stock Market Analysis by Hiding Weekend Gaps
150
140
130