In [ ]:
```
##pull cryptocurrencies prices from a public API and download them as Excel files,
## import two libraries first: requests (to pull data from the web) and pandas to proce
```

In [2]:
```
import requests
import pandas as pd
```

In [3]:
```
def get_historic_price(symbol, exchange='bitfinex', after='2018-09-01'):
    url = 'https://api.cryptowat.ch/markets/{exchange}/{symbol}usd/ohlc'.format(
        symbol=symbol, exchange=exchange)
    resp = requests.get(url, params={
        'periods': '3600',
        'after': str(int(pd.Timestamp(after).timestamp()))
    })
    resp.raise_for_status()
    data = resp.json()
    df = pd.DataFrame(data['result']['3600'], columns=[
        'CloseTime', 'OpenPrice', 'HighPrice', 'LowPrice', 'ClosePrice', 'Volume', 'NA'
    ])
    df['CloseTime'] = pd.to_datetime(df['CloseTime'], unit='s')
    df.set_index('CloseTime', inplace=True)
    return df
```

In [ ]:
```
## pull data from Bitcoin for the last 7 days
```

In [6]:
```
last_week = (pd.Timestamp.now() -  pd.offsets.Day(7))
last_week
```

Out[6]:
```
Timestamp('2021-07-16 09:42:32.621435')
```

In [7]:
```
btc =  get_historic_price('btc', 'bitstamp', after=last_week)
```

In [8]:
```
btc.head()
```

Out[8]:

CloseTime	OpenPrice	HighPrice	LowPrice	ClosePrice	Volume	NA
2021-07-16 10:00:00	31444.13	31528.65	31330.00	31415.02	48.617021	1.526923e+06
2021-07-16 11:00:00	31382.91	31461.23	31150.00	31324.98	141.525371	4.431123e+06
2021-07-16 12:00:00	31311.93	31311.93	31012.93	31088.15	123.098029	3.837395e+06
2021-07-16 13:00:00	31079.04	31786.27	31079.04	31701.69	169.173385	5.307785e+06
2021-07-16 14:00:00	31734.83	31977.45	31712.44	31771.78	134.933419	4.295794e+06

In [9]:
```
eth = get_historic_price('eth', 'bitstamp', after=last_week)
```

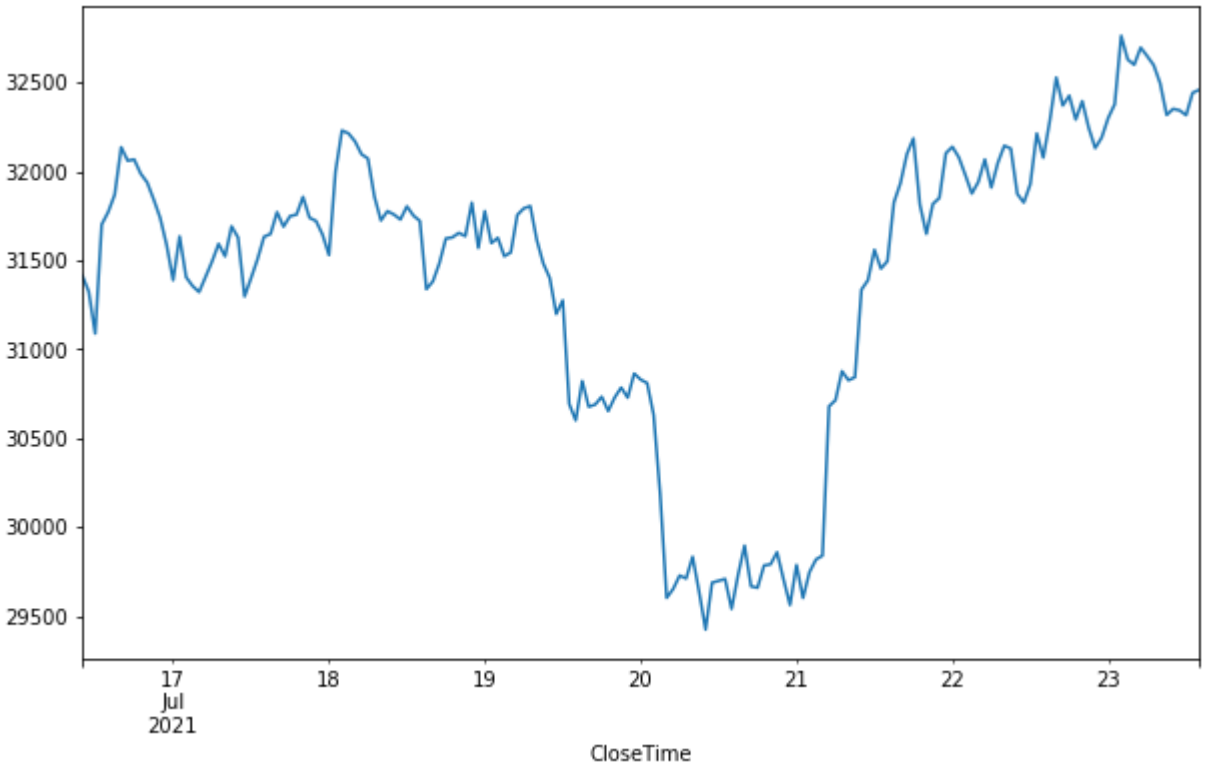
In [10]:
```
eth.head()
```

Out[10]:

CloseTime	OpenPrice	HighPrice	LowPrice	ClosePrice	Volume	NA
2021-07-16 10:00:00	1871.74	1878.97	1861.39	1871.37	832.502950	1.557688e+06
2021-07-16 11:00:00	1868.54	1874.45	1848.13	1863.97	1325.615406	2.464645e+06
2021-07-16 12:00:00	1864.45	1869.73	1851.27	1851.27	683.519113	1.270976e+06
2021-07-16 13:00:00	1851.02	1894.84	1849.31	1890.69	768.978106	1.440425e+06
2021-07-16 14:00:00	1890.38	1916.64	1890.38	1898.11	860.845712	1.637274e+06

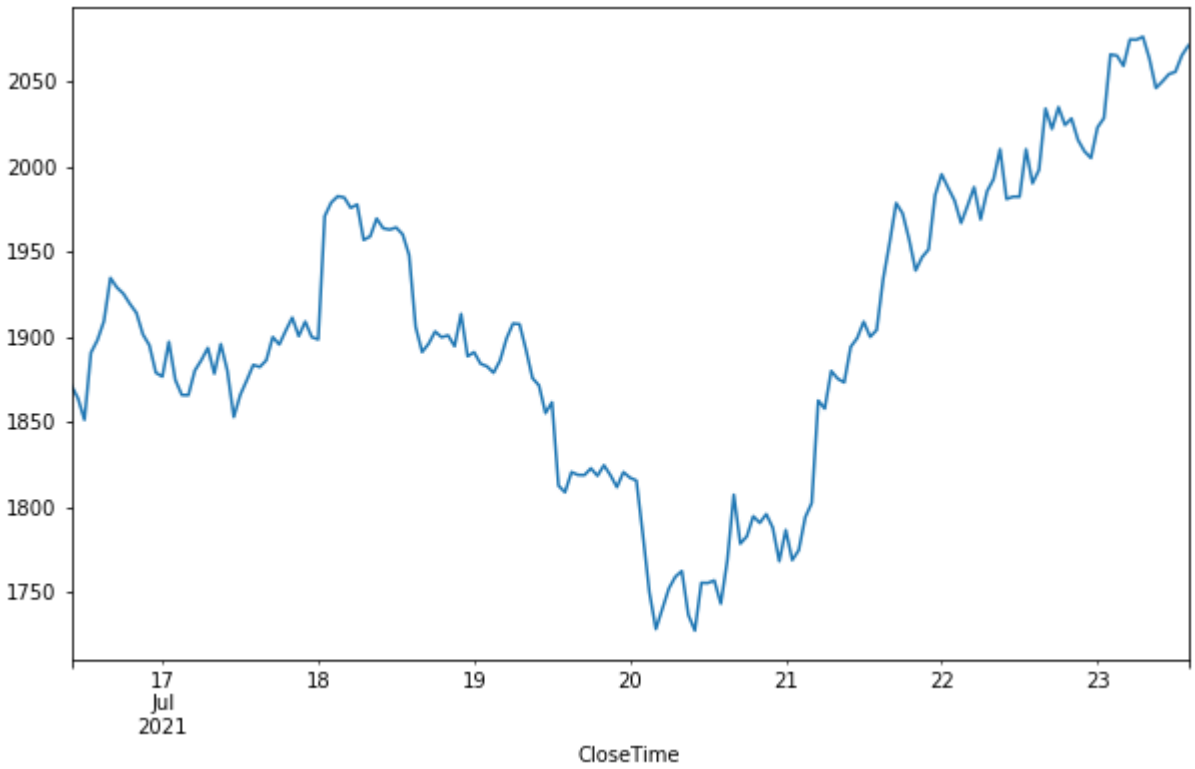
In [11]:
```
btc['ClosePrice'].plot(figsize=(10,6))
```

Out[11]: <AxesSubplot:xlabel='CloseTime'>



In [14]:
```
eth['ClosePrice'].plot(figsize=(10,6))
```

Out[14]: <AxesSubplot:xlabel='CloseTime'>



Using Bokeh as dynamic plots

it is interactive plot that you can manipulate within the browser

In [19]:
```
from bokeh.plotting import figure, output_file, show
from bokeh.io import output_notebook
```

In [20]:
```
output_notebook()
```

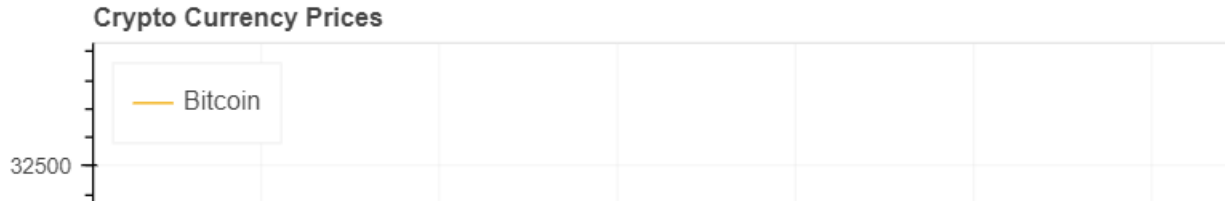
BokehJS 2.3.2 successfully loaded.

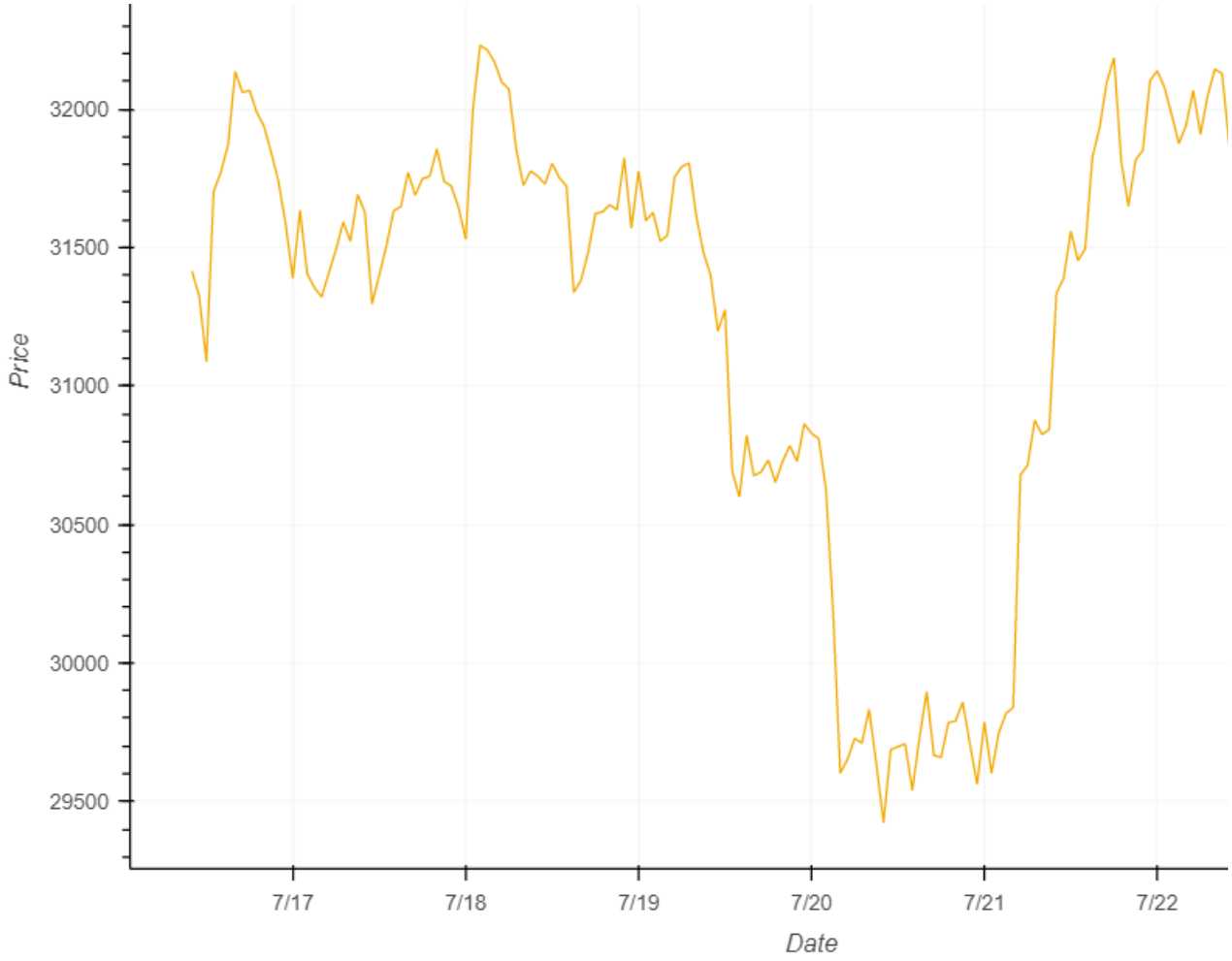
In [27]:
```
p1 = figure(x_axis_type='datetime', title='Crypto Currency Prices', width=800)
p1.grid.grid_line_alpha=0.3
p1.xaxis.axis_label='Date'
p1.yaxis.axis_label='Price'

p1.line(btc.index, btc['ClosePrice'], color='#f2a900', legend='Bitcoin')
p1.legend.location='top_left'

show(p1)
```

```
BokehDeprecationWarning: 'legend' keyword is deprecated, use explicit 'legend_label', 'l
egend_field', or 'legend_group' keywords instead
```





In [28]:
```
writer = pd.ExcelWriter('cryptos.xlsx')
```

Make an excel file/cvs file using crypto data

In [29]:
```
btc.to_excel(writer, sheet_name='bitcoin')
```

In [30]:
```
eth.to_excel(writer, sheet_name='Ether')
```

In [32]:
```
writer.save()
```

```
C:\Users\zurie\anaconda3\lib\site-packages\xlsxwriter\workbook.py:336: UserWarning: Call
ing close() on already closed file.
  warn("Calling close() on already closed file.")
```

In [ ]:
```

```