In [1]:

```
# Current working directory
import os
os.getcwd()    # It will show the current working directory
```

Out[1]:

```
'C:\\Users\\ASUS'
```

In [2]:

```
import pandas as pd
cryptos= pd.read_excel("cryptos.xlsx")
cryptos.head()
```

Out[2]:

	CloseTime	OpenPrice	HighPrice	LowPrice	ClosePrice	Volume	NA
0	2019-03-20 14:00:00	3998.64	4002.52	3993.50	3998.00	173.321628	6.928502e+05
1	2019-03-20 15:00:00	3998.83	4004.95	3993.00	4004.95	347.431239	1.388839e+06
2	2019-03-20 16:00:00	4006.00	4008.00	3992.00	3998.85	232.962893	9.317110e+05
3	2019-03-20 17:00:00	3998.84	4021.02	3994.84	4002.50	781.703067	3.138661e+06
4	2019-03-20 18:00:00	4001.56	4005.41	3992.97	3998.60	171.735476	6.867960e+05

In [3]:

```
import requests
import pandas as pd
```

Want to pull cryptocurrencies prices from a public API and download them as Excel files. Need to import two libraries first: requests (to pull data from the web) and pandas to process it.

In [4]:

```
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 [5]:

```
# https://docs.cryptowat.ch/rest-api/#ohlc
```

In [6]:

```
# pull data from Bitcoin and Ether, two of the most popular cryptocurrencies, for the last
last_week = (pd.Timestamp.now() - pd.offsets.Day(7))
last_week
```

Out[6]:

```
Timestamp('2021-10-19 13:41:12.003065')
```

In [7]:

```
btc = get_historic_price('btc', 'bitstamp', after=last_week)
```

In [8]:

```
eth = get_historic_price('eth','bitstamp', after=last_week)
```

In [9]:

```
# Bitcoin
btc.head()
```

Out[9]:

CloseTime	OpenPrice	HighPrice	LowPrice	ClosePrice	Volume	NA
2021-10-19 14:00:00	62206.77	63337.54	62087.89	62610.79	371.228521	2.331604e+07
2021-10-19 15:00:00	62629.77	62691.16	61350.00	62574.38	241.159607	1.498359e+07
2021-10-19 16:00:00	62560.72	62846.30	62334.21	62422.65	121.057239	7.578716e+06
2021-10-19 17:00:00	62385.22	63200.00	62344.18	63197.92	127.005225	7.977416e+06
2021-10-19 18:00:00	63200.00	63500.00	63071.84	63392.40	127.881657	8.096043e+06

In [10]:

```
btc.describe()
```

Out[10]:

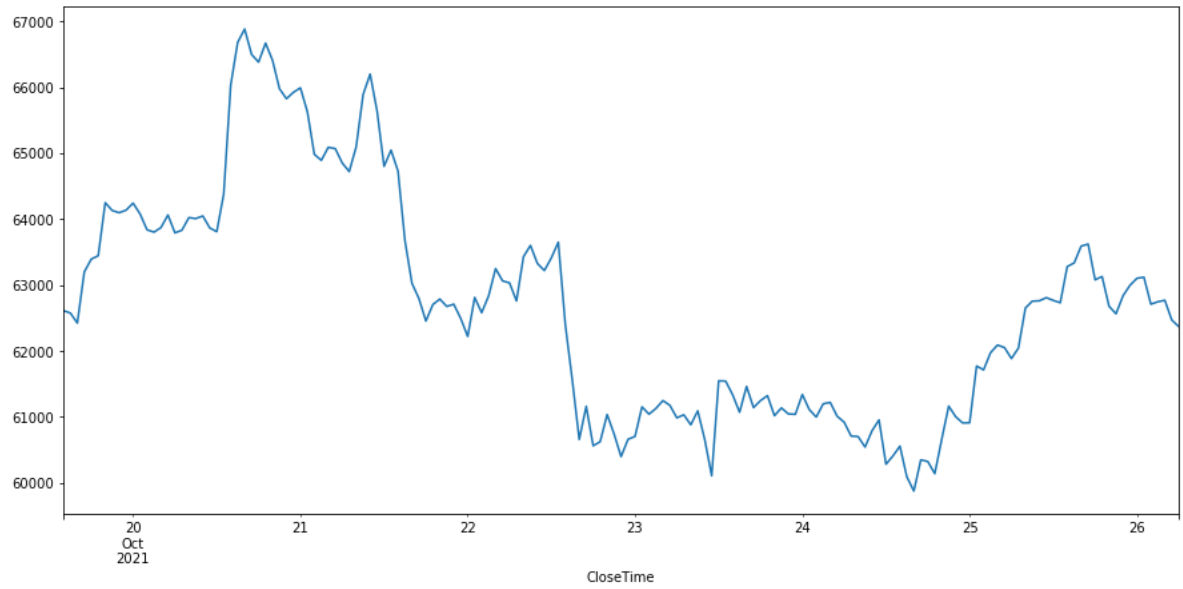
	OpenPrice	HighPrice	LowPrice	ClosePrice	Volume	NA
count	161.000000	161.000000	161.000000	161.000000	161.000000	1.610000e+02
mean	62698.788012	62988.466398	62372.920807	62699.706646	104.866772	6.648340e+06
std	1728.884291	1740.258857	1700.554260	1727.625768	110.684794	7.143183e+06
min	59865.000000	60322.660000	59510.000000	59874.980000	1.891381	1.210382e+05
25%	61135.610000	61334.010000	60866.750000	61127.120000	37.380055	2.286082e+06
50%	62717.790000	63030.820000	62441.460000	62708.420000	66.008960	4.171276e+06
75%	63792.960000	64043.400000	63602.990000	63808.410000	122.134504	7.706884e+06
max	66893.030000	67016.500000	66387.550000	66882.120000	611.654986	4.058830e+07

In [11]:

```
btc['ClosePrice'].plot(figsize=(15,7))
```

Out[11]:

```
<AxesSubplot:xlabel='CloseTime'>
```



In [12]:

```
# Ethereum
eth.head()
```

Out[12]:

CloseTime	OpenPrice	HighPrice	LowPrice	ClosePrice	Volume	NA
2021-10-19 14:00:00	3800.27	3861.10	3789.13	3810.89	1344.620081	5.137974e+06
2021-10-19 15:00:00	3812.00	3820.61	3742.88	3803.59	1432.043532	5.431179e+06
2021-10-19 16:00:00	3803.95	3815.01	3773.42	3773.42	775.653613	2.942907e+06
2021-10-19 17:00:00	3775.09	3805.54	3775.09	3805.54	208.292598	7.893235e+05
2021-10-19 18:00:00	3806.45	3822.28	3803.84	3811.70	611.619722	2.332513e+06

In [13]:

```
eth.describe()
```

Out[13]:

	OpenPrice	HighPrice	LowPrice	ClosePrice	Volume	NA
count	161.000000	161.000000	161.000000	161.000000	161.000000	1.610000e+02
mean	4062.854348	4086.050124	4038.703851	4065.077081	865.427450	3.531490e+06
std	118.955761	120.192741	117.104728	117.479656	1232.233794	5.071366e+06
min	3775.090000	3805.540000	3742.880000	3773.420000	8.510073	3.287223e+04
25%	4009.000000	4033.180000	3972.700000	4011.560000	183.906524	7.530677e+05
50%	4089.000000	4116.920000	4067.990000	4090.110000	395.948554	1.625079e+06
75%	4138.780000	4158.430000	4118.380000	4142.000000	955.813837	3.725263e+06
max	4306.710000	4375.000000	4269.820000	4306.350000	7444.906982	3.173341e+07

In [14]:

```
eth['ClosePrice'].plot(figsize=(15, 7))
```

Out[14]:

```
<AxesSubplot:xlabel='CloseTime'>
```