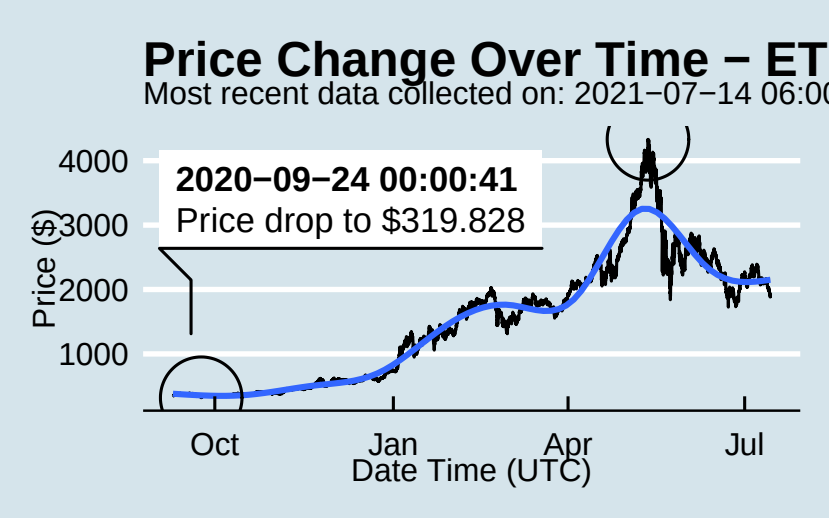
R Markdown Output

Overview

This document has code embedded throughout. In the next section we will create a visualization using the already loaded dataset `eth_data`:

```
datatable(eth_data)
```

Price Chart - Ethereum



Python Code Example

```
import pandas as pd
# Create the Python object from R
df = r.cryptodata
# Show the new Python dataframe
df
```

```
##          pair symbol  ask_1_price       date_time_utc
## 0      ETHUSD    ETH     1873.179 2021-07-14 06:00:01
## 1      BTCUSD    BTC    31812.290 2021-07-14 06:00:00
## 2      ETHUSD    ETH     1891.046 2021-07-14 05:00:01
## 3      BTCUSD    BTC    31939.360 2021-07-14 05:00:00
## 4      ETHUSD    ETH     1883.044 2021-07-14 04:00:01
## ...       ...    ...          ...                  ...
## 15196  BTCUSD    BTC    11893.640 2020-08-15 04:03:56
## 15197  BTCUSD    BTC    11898.730 2020-08-15 03:03:55
```

```
## 15198  BTCUSD    BTC    11915.360 2020-08-15 02:03:56
## 15199  BTCUSD    BTC    11915.800 2020-08-15 01:03:55
## 15200  BTCUSD    BTC    11782.580 2020-08-15 00:03:56
##
## [15201 rows x 4 columns]
```

One more Python example

The code below creates a new column `price_percentile` that specifies if the price for the row was in the upper or lower 50th percentile of prices (BTC should be upper and ETH lower):

```
import numpy as np
# Create a new column based on the ask_1_price value:
df['price_percentile'] = np.where(df['ask_1_price'] >
                                  np.percentile(df['ask_1_price'], 50),
                            'upper 50th percentile of prices',
                            'lower 50th percentile of prices')
# Show modified dataframe:
df[['symbol', 'ask_1_price', 'price_percentile']]
```

```
##       symbol  ask_1_price                 price_percentile
## 0        ETH     1873.179  lower 50th percentile of prices
## 1        BTC    31812.290  upper 50th percentile of prices
## 2        ETH     1891.046  lower 50th percentile of prices
## 3        BTC    31939.360  upper 50th percentile of prices
## 4        ETH     1883.044  lower 50th percentile of prices
## ...      ...          ...                              ...
## 15196    BTC    11893.640  upper 50th percentile of prices
## 15197    BTC    11898.730  upper 50th percentile of prices
## 15198    BTC    11915.360  upper 50th percentile of prices
## 15199    BTC    11915.800  upper 50th percentile of prices
## 15200    BTC    11782.580  upper 50th percentile of prices
##
## [15201 rows x 3 columns]
```