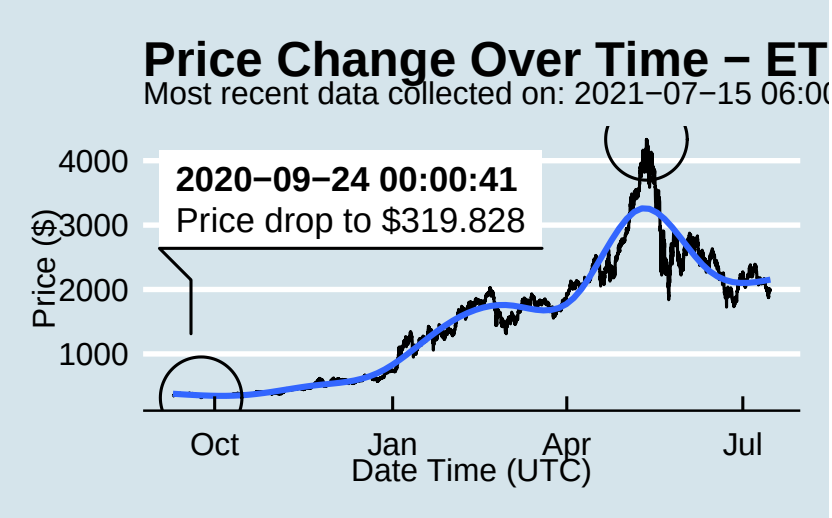
R Markdown Output

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     1964.267 2021-07-15 06:00:01
## 1      BTCUSD    BTC    32583.050 2021-07-15 06:00:00
## 2      BTCUSD    BTC    32673.000 2021-07-15 05:00:01
## 3      ETHUSD    ETH     1973.606 2021-07-15 05:00:01
## 4      BTCUSD    BTC    32651.650 2021-07-15 04:00:01
## ...       ...    ...          ...                 ...
## 15220  BTCUSD    BTC    11921.180 2020-08-16 04:03:55
## 15221  BTCUSD    BTC    11877.910 2020-08-16 03:03:52
```

```
## 15222  BTCUSD    BTC    11875.600 2020-08-16 02:04:00
## 15223  BTCUSD    BTC    11822.170 2020-08-16 01:04:00
## 15224  BTCUSD    BTC    11860.060 2020-08-16 00:03:57
##
## [15225 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     1964.267  lower 50th percentile of prices
## 1        BTC    32583.050  upper 50th percentile of prices
## 2        BTC    32673.000  upper 50th percentile of prices
## 3        ETH     1973.606  lower 50th percentile of prices
## 4        BTC    32651.650  upper 50th percentile of prices
## ...      ...          ...                              ...
## 15220    BTC    11921.180  upper 50th percentile of prices
## 15221    BTC    11877.910  upper 50th percentile of prices
## 15222    BTC    11875.600  upper 50th percentile of prices
## 15223    BTC    11822.170  upper 50th percentile of prices
## 15224    BTC    11860.060  upper 50th percentile of prices
##
## [15225 rows x 3 columns]
```