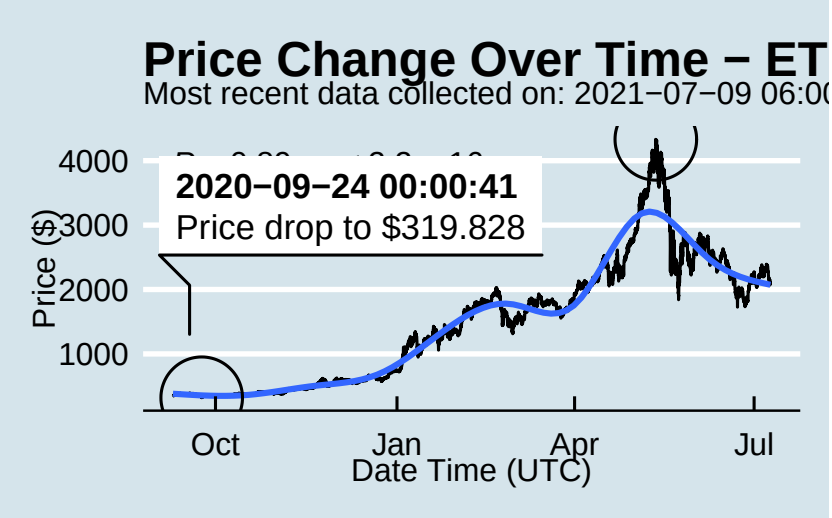
R Markdown Output

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      BTCUSD    BTC    32974.920 2021-07-09 06:00:01
## 1      ETHUSD    ETH     2137.489 2021-07-09 06:00:01
## 2      BTCUSD    BTC    33020.580 2021-07-09 05:00:01
## 3      ETHUSD    ETH     2140.297 2021-07-09 05:00:01
## 4      ETHUSD    ETH     2120.626 2021-07-09 04:00:01
## ...       ...    ...          ...                 ...
## 15077  BTCUSD    BTC    11906.130 2020-08-11 00:03:49
## 15078  BTCUSD    BTC    11993.880 2020-08-10 07:03:48
```

```
## 15079  BTCUSD    BTC    11972.900 2020-08-10 06:03:50
## 15080  BTCUSD    BTC    11985.890 2020-08-10 05:03:48
## 15081  BTCUSD    BTC    11997.470 2020-08-10 04:32:55
##
## [15082 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        BTC    32974.920  upper 50th percentile of prices
## 1        ETH     2137.489  lower 50th percentile of prices
## 2        BTC    33020.580  upper 50th percentile of prices
## 3        ETH     2140.297  lower 50th percentile of prices
## 4        ETH     2120.626  lower 50th percentile of prices
## ...      ...          ...                              ...
## 15077    BTC    11906.130  upper 50th percentile of prices
## 15078    BTC    11993.880  upper 50th percentile of prices
## 15079    BTC    11972.900  upper 50th percentile of prices
## 15080    BTC    11985.890  upper 50th percentile of prices
## 15081    BTC    11997.470  upper 50th percentile of prices
##
## [15082 rows x 3 columns]
```