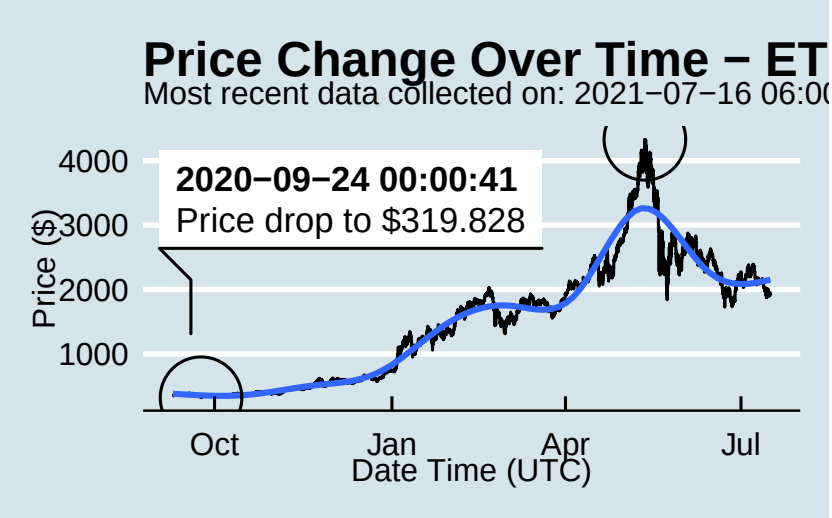
R Markdown Output

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     1928.872 2021-07-16 06:00:01
## 1      BTCUSD    BTC    31804.460 2021-07-16 06:00:00
## 2      ETHUSD    ETH     1947.025 2021-07-16 05:00:01
## 3      BTCUSD    BTC    31916.240 2021-07-16 05:00:00
## 4      ETHUSD    ETH     1949.451 2021-07-16 04:00:01
## ...       ...    ...          ...                 ...
## 15244  BTCUSD    BTC    11844.000 2020-08-17 04:03:55
## 15245  BTCUSD    BTC    11855.070 2020-08-17 03:03:54
```

```
## 15246  BTCUSD    BTC    11838.670 2020-08-17 02:04:02
## 15247  BTCUSD    BTC    11825.050 2020-08-17 01:03:53
## 15248  BTCUSD    BTC    11925.450 2020-08-17 00:03:56
##
## [15249 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     1928.872  lower 50th percentile of prices
## 1        BTC    31804.460  upper 50th percentile of prices
## 2        ETH     1947.025  lower 50th percentile of prices
## 3        BTC    31916.240  upper 50th percentile of prices
## 4        ETH     1949.451  lower 50th percentile of prices
## ...      ...          ...                              ...
## 15244    BTC    11844.000  upper 50th percentile of prices
## 15245    BTC    11855.070  upper 50th percentile of prices
## 15246    BTC    11838.670  upper 50th percentile of prices
## 15247    BTC    11825.050  upper 50th percentile of prices
## 15248    BTC    11925.450  upper 50th percentile of prices
##
## [15249 rows x 3 columns]
```