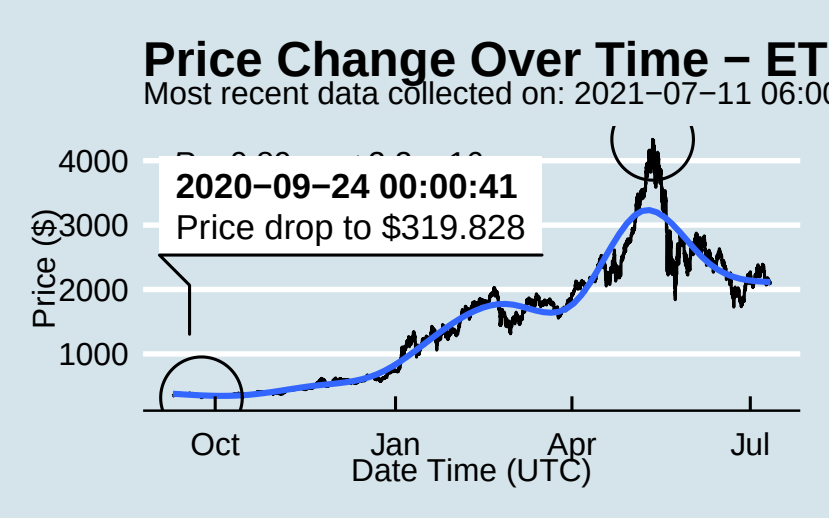
R Markdown Output

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     2099.617 2021-07-11 06:00:01
## 1      BTCUSD    BTC    33579.600 2021-07-11 06:00:00
## 2      ETHUSD    ETH     2094.423 2021-07-11 05:00:01
## 3      BTCUSD    BTC    33463.920 2021-07-11 05:00:00
## 4      ETHUSD    ETH     2091.950 2021-07-11 04:00:01
## ...       ...    ...          ...                 ...
## 15125  BTCUSD    BTC    11573.270 2020-08-13 00:03:52
## 15126  BTCUSD    BTC    11266.550 2020-08-12 03:03:52
```

```
## 15127  BTCUSD    BTC    11331.140 2020-08-12 02:03:56
## 15128  BTCUSD    BTC    11346.560 2020-08-12 01:03:56
## 15129  BTCUSD    BTC    11372.920 2020-08-12 00:03:55
##
## [15130 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     2099.617  lower 50th percentile of prices
## 1        BTC    33579.600  upper 50th percentile of prices
## 2        ETH     2094.423  lower 50th percentile of prices
## 3        BTC    33463.920  upper 50th percentile of prices
## 4        ETH     2091.950  lower 50th percentile of prices
## ...      ...          ...                              ...
## 15125    BTC    11573.270  upper 50th percentile of prices
## 15126    BTC    11266.550  upper 50th percentile of prices
## 15127    BTC    11331.140  upper 50th percentile of prices
## 15128    BTC    11346.560  upper 50th percentile of prices
## 15129    BTC    11372.920  upper 50th percentile of prices
##
## [15130 rows x 3 columns]
```