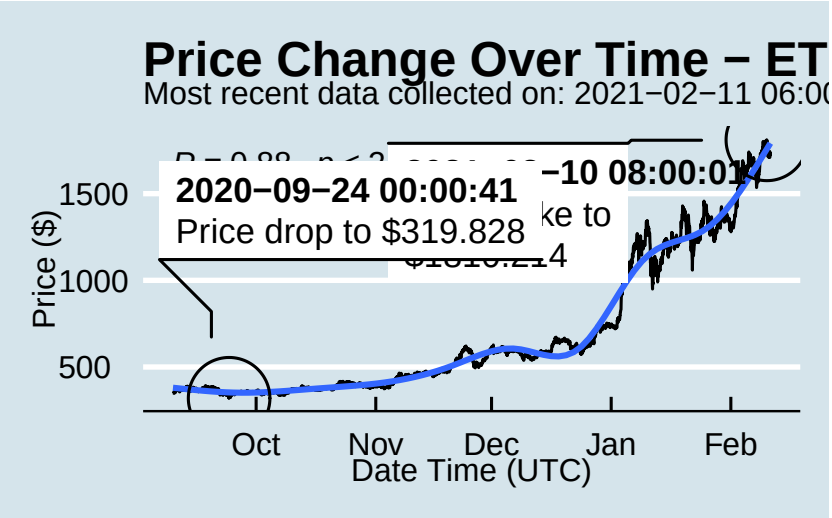
R Markdown Output

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    44640.980 2021-02-11 06:00:01
## 1     ETHUSD    ETH     1716.652 2021-02-11 06:00:01
## 2     ETHUSD    ETH     1723.927 2021-02-11 05:00:01
## 3     BTCUSD    BTC    44718.930 2021-02-11 05:00:00
## 4     ETHUSD    ETH     1740.290 2021-02-11 04:00:01
## ...      ...    ...          ...                 ...
## 8001  BTCUSD    BTC    11972.900 2020-08-10 06:03:50
## 8002  BTCUSD    BTC    11985.890 2020-08-10 05:03:48
## 8003  BTCUSD    BTC    11997.470 2020-08-10 04:32:55
## 8004  BTCUSD    BTC    10686.880                 NaT
```

```
## 8005  ETHUSD    ETH      357.844                 NaT
##
## [8006 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    44640.980  upper 50th percentile of prices
## 1       ETH     1716.652  lower 50th percentile of prices
## 2       ETH     1723.927  lower 50th percentile of prices
## 3       BTC    44718.930  upper 50th percentile of prices
## 4       ETH     1740.290  lower 50th percentile of prices
## ...     ...          ...                              ...
## 8001    BTC    11972.900  upper 50th percentile of prices
## 8002    BTC    11985.890  upper 50th percentile of prices
## 8003    BTC    11997.470  upper 50th percentile of prices
## 8004    BTC    10686.880  upper 50th percentile of prices
## 8005    ETH      357.844  lower 50th percentile of prices
##
## [8006 rows x 3 columns]
```