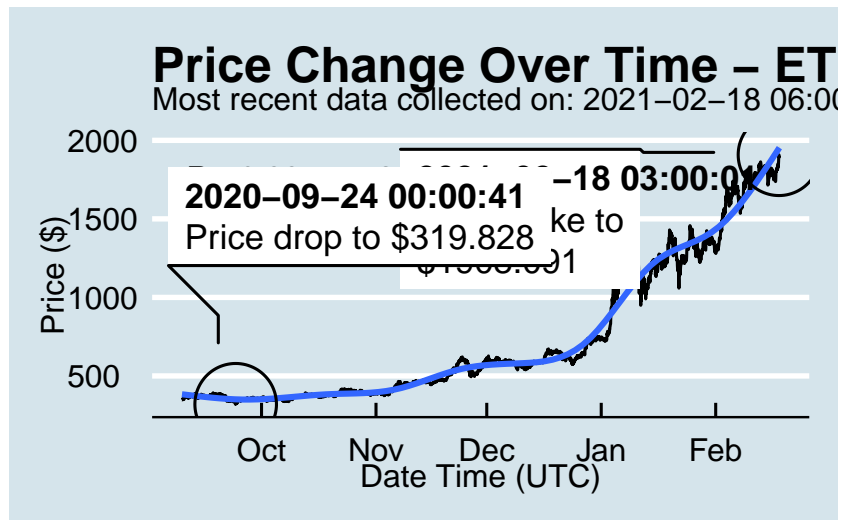# R Markdown Output

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

```python
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     1899.575  2021-02-18 06:00:01
## 1      BTCUSD    BTC    52188.470  2021-02-18 06:00:00
## 2      ETHUSD    ETH     1900.101  2021-02-18 05:00:01
## 3      BTCUSD    BTC    52147.500  2021-02-18 05:00:00
## 4      BTCUSD    BTC    52024.550  2021-02-18 04:00:01
## ...       ...    ...          ...                   ...
## 8337   BTCUSD    BTC    11972.900  2020-08-10 06:03:50
## 8338   BTCUSD    BTC    11985.890  2020-08-10 05:03:48
## 8339   BTCUSD    BTC    11997.470  2020-08-10 04:32:55
## 8340   BTCUSD    BTC    10686.880                   NaT
```

```
## 8341  ETHUSD     ETH        357.844                  NaT
##
## [8342 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):

```python
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    1899.575  lower 50th percentile of prices
## 1        BTC   52188.470  upper 50th percentile of prices
## 2        ETH    1900.101  lower 50th percentile of prices
## 3        BTC   52147.500  upper 50th percentile of prices
## 4        BTC   52024.550  upper 50th percentile of prices
## ...      ...         ...                               ...
## 8337     BTC   11972.900  upper 50th percentile of prices
## 8338     BTC   11985.890  upper 50th percentile of prices
## 8339     BTC   11997.470  upper 50th percentile of prices
## 8340     BTC   10686.880  upper 50th percentile of prices
## 8341     ETH     357.844  lower 50th percentile of prices
##
## [8342 rows x 3 columns]
```