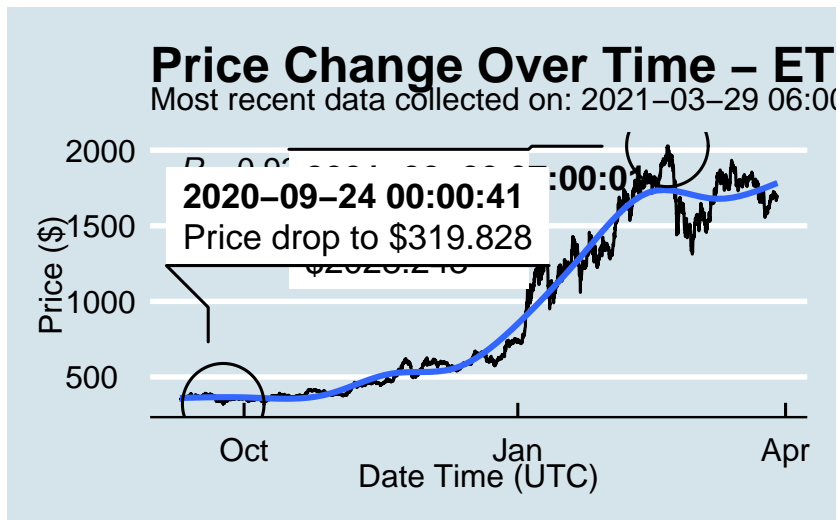# R Markdown Output

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       BTCUSD    BTC    55040.290  2021-03-29 06:00:01
## 1       ETHUSD    ETH     1688.805  2021-03-29 06:00:01
## 2       ETHUSD    ETH     1696.581  2021-03-29 05:00:01
## 3       BTCUSD    BTC    55311.120  2021-03-29 05:00:00
## 4       BTCUSD    BTC    55360.000  2021-03-29 04:00:01
## ...        ...    ...          ...                  ...
## 10205   BTCUSD    BTC    11972.900  2020-08-10 06:03:50
## 10206   BTCUSD    BTC    11985.890  2020-08-10 05:03:48
## 10207   BTCUSD    BTC    11997.470  2020-08-10 04:32:55
## 10208   BTCUSD    BTC    10686.880                  NaT
```

```
## 10209  ETHUSD    ETH      357.844                  NaT
##
## [10210 rows x 4 columns]
```

One more Python example

The code below creates a new column `price_percentile` that speci-
fies 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        BTC    55040.290  upper 50th percentile of prices
## 1        ETH     1688.805  lower 50th percentile of prices
## 2        ETH     1696.581  lower 50th percentile of prices
## 3        BTC    55311.120  upper 50th percentile of prices
## 4        BTC    55360.000  upper 50th percentile of prices
## ...      ...          ...                              ...
## 10205    BTC    11972.900  upper 50th percentile of prices
## 10206    BTC    11985.890  upper 50th percentile of prices
## 10207    BTC    11997.470  upper 50th percentile of prices
## 10208    BTC    10686.880  upper 50th percentile of prices
## 10209    ETH      357.844  lower 50th percentile of prices
##
## [10210 rows x 3 columns]
```