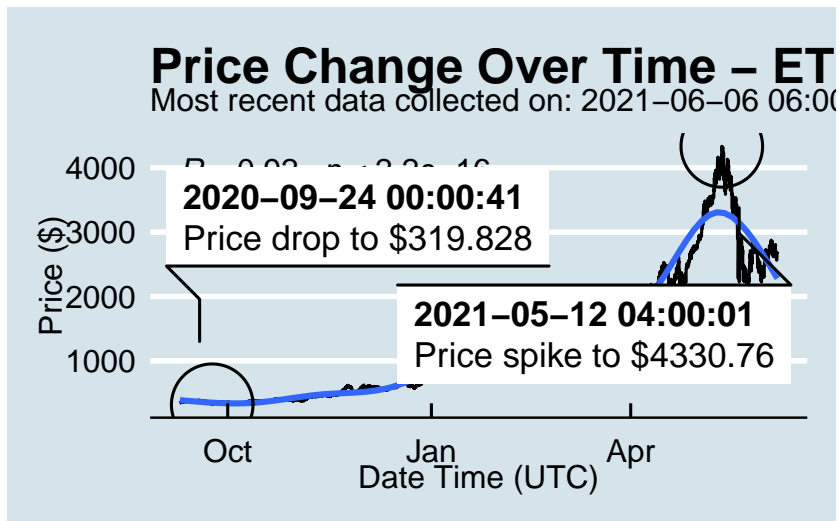# R Markdown Output

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    36231.330  2021-06-06 06:00:01
## 1       ETHUSD    ETH     2694.507  2021-06-06 06:00:01
## 2       BTCUSD    BTC    36091.060  2021-06-06 05:00:01
## 3       ETHUSD    ETH     2681.362  2021-06-06 05:00:01
## 4       ETHUSD    ETH     2674.951  2021-06-06 04:00:01
## ...        ...    ...          ...                  ...
## 13511   BTCUSD    BTC    11972.900  2020-08-10 06:03:50
## 13512   BTCUSD    BTC    11985.890  2020-08-10 05:03:48
```

```
## 13513  BTCUSD    BTC    11997.470 2020-08-10 04:32:55
## 13514  BTCUSD    BTC    10686.880                 NaT
## 13515  ETHUSD    ETH     357.844                  NaT
##
## [13516 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         BTC    36231.330  upper 50th percentile of prices
## 1         ETH     2694.507  lower 50th percentile of prices
## 2         BTC    36091.060  upper 50th percentile of prices
## 3         ETH     2681.362  lower 50th percentile of prices
## 4         ETH     2674.951  lower 50th percentile of prices
## ...       ...        ...                             ...
## 13511     BTC    11972.900  upper 50th percentile of prices
## 13512     BTC    11985.890  upper 50th percentile of prices
## 13513     BTC    11997.470  upper 50th percentile of prices
## 13514     BTC    10686.880  upper 50th percentile of prices
## 13515     ETH     357.844  lower 50th percentile of prices
##
## [13516 rows x 3 columns]
```