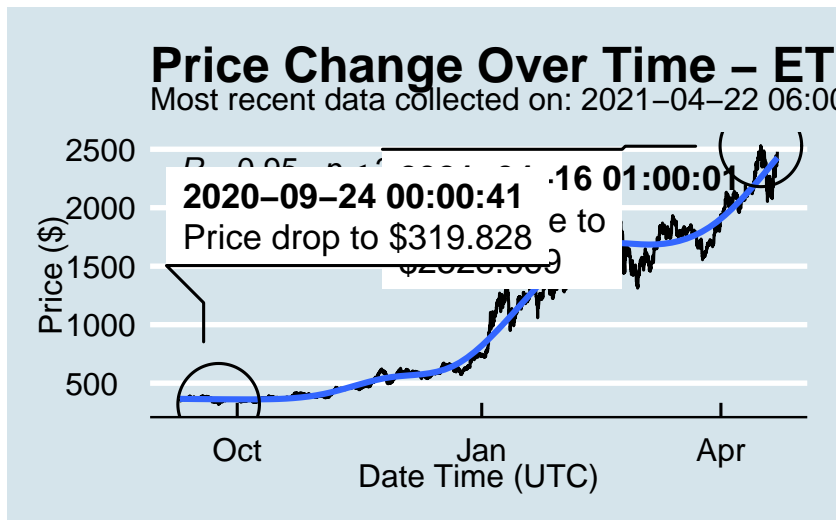# R Markdown Output

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      2478.636  2021-04-22 06:00:01
## 1          BTCUSD     BTC     54447.600  2021-04-22 06:00:00
## 2          ETHUSD     ETH      2447.587  2021-04-22 05:00:01
## 3          BTCUSD     BTC     54269.180  2021-04-22 05:00:00
## 4          ETHUSD     ETH      2390.330  2021-04-22 04:00:01
## ...           ...     ...           ...                  ...
## 11357      BTCUSD     BTC     11972.900  2020-08-10 06:03:50
## 11358      BTCUSD     BTC     11985.890  2020-08-10 05:03:48
## 11359      BTCUSD     BTC     11997.470  2020-08-10 04:32:55
## 11360      BTCUSD     BTC     10686.880                  NaT
```

```
## 11361   ETHUSD     ETH        357.844                    NaT
##
## [11362 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         ETH     2478.636  lower 50th percentile of prices
## 1         BTC    54447.600  upper 50th percentile of prices
## 2         ETH     2447.587  lower 50th percentile of prices
## 3         BTC    54269.180  upper 50th percentile of prices
## 4         ETH     2390.330  lower 50th percentile of prices
## ...       ...          ...                              ...
## 11357     BTC    11972.900  upper 50th percentile of prices
## 11358     BTC    11985.890  upper 50th percentile of prices
## 11359     BTC    11997.470  upper 50th percentile of prices
## 11360     BTC    10686.880  upper 50th percentile of prices
## 11361     ETH      357.844  lower 50th percentile of prices
##
## [11362 rows x 3 columns]
```