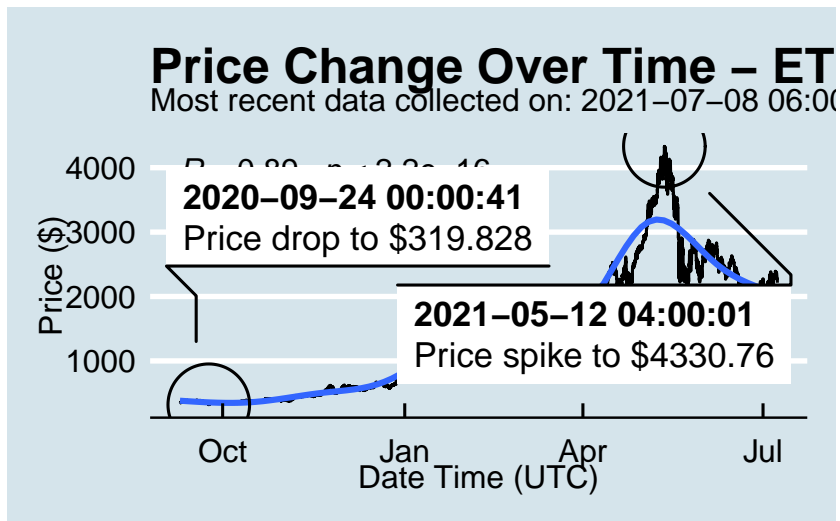## R Markdown Output

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    32872.100 2021-07-08 06:00:01
## 1        ETHUSD    ETH     2213.664 2021-07-08 06:00:01
## 2        BTCUSD    BTC    33296.350 2021-07-08 05:00:01
## 3        ETHUSD    ETH     2241.614 2021-07-08 05:00:01
## 4        ETHUSD    ETH     2254.954 2021-07-08 04:00:01
## ...         ...    ...          ...                 ...
## 15047    BTCUSD    BTC    11972.900 2020-08-10 06:03:50
## 15048    BTCUSD    BTC    11985.890 2020-08-10 05:03:48
```

```
## 15049  BTCUSD    BTC     11997.470 2020-08-10 04:32:55
## 15050  BTCUSD    BTC     10686.880                 NaT
## 15051  ETHUSD    ETH      357.844                  NaT
##
## [15052 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    32872.100  upper 50th percentile of prices
## 1         ETH     2213.664  lower 50th percentile of prices
## 2         BTC    33296.350  upper 50th percentile of prices
## 3         ETH     2241.614  lower 50th percentile of prices
## 4         ETH     2254.954  lower 50th percentile of prices
## ...       ...          ...                               ...
## 15047     BTC    11972.900  upper 50th percentile of prices
## 15048     BTC    11985.890  upper 50th percentile of prices
## 15049     BTC    11997.470  upper 50th percentile of prices
## 15050     BTC    10686.880  upper 50th percentile of prices
## 15051     ETH      357.844  lower 50th percentile of prices
##
## [15052 rows x 3 columns]
```