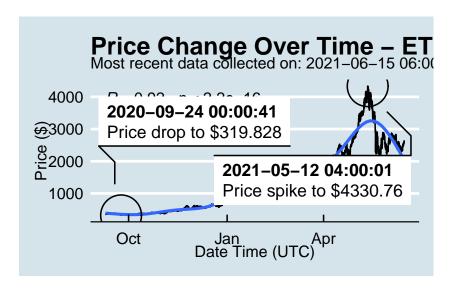
# R Markdown Output

#### 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

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
          ETHUSD
## 0
                    ETH
                             2620.153 2021-06-15 06:00:01
          BTCUSD
                    BTC
                            40341.620 2021-06-15 06:00:00
## 1
## 2
          ETHUSD
                    ETH
                             2633.586 2021-06-15 05:00:01
## 3
          BTCUSD
                    BTC
                            40500.410 2021-06-15 05:00:00
                             2588.412 2021-06-15 04:00:01
          ETHUSD
                    ETH
## 4
                    . . .
## 13943
          BTCUSD
                    BTC
                            11972.900 2020-08-10 06:03:50
## 13944
                    BTC
                            11985.890 2020-08-10 05:03:48
          BTCUSD
```

```
## 13945 BTCUSD
                    BTC
                           11997.470 2020-08-10 04:32:55
## 13946 BTCUSD
                    BTC
                           10686.880
## 13947 ETHUSD
                    ETH
                             357.844
                                                     NaT
##
## [13948 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):

```
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
                    2620.153 lower 50th percentile of prices
## 1
           BTC
                   40341.620
                             upper 50th percentile of prices
## 2
            ETH
                    2633.586 lower 50th percentile of prices
## 3
           BTC
                   40500.410 upper 50th percentile of prices
## 4
            ETH
                    2588.412 lower 50th percentile of prices
## ...
            . . .
                   11972.900 upper 50th percentile of prices
## 13943
           BTC
                              upper 50th percentile of prices
## 13944
           BTC
                   11985.890
## 13945
           BTC
                   11997.470
                              upper 50th percentile of prices
## 13946
           BTC
                   10686.880
                             upper 50th percentile of prices
## 13947
            ETH
                     357.844 lower 50th percentile of prices
##
## [13948 rows x 3 columns]
```