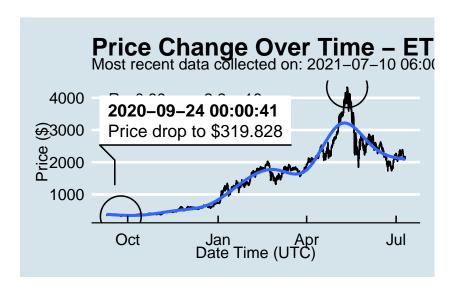
# R Markdown Output

#### 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
                             2114.555 2021-07-10 06:00:01
## 0
                    ETH
          BTCUSD
                    BTC
                            33653.860 2021-07-10 06:00:00
## 1
## 2
          BTCUSD
                    BTC
                            33651.580 2021-07-10 05:00:01
## 3
          ETHUSD
                    ETH
                             2107.891 2021-07-10 05:00:01
                             2132.825 2021-07-10 04:00:01
          ETHUSD
                    ETH
## 4
                    . . .
## 15101 BTCUSD
                    BTC
                            11372.920 2020-08-12 00:03:55
## 15102 BTCUSD
                    BTC
                            11868.320 2020-08-11 03:03:52
```

```
## 15103 BTCUSD
                    BTC
                           11900.900 2020-08-11 02:03:53
## 15104 BTCUSD
                   BTC
                           11863.170 2020-08-11 01:03:53
## 15105 BTCUSD
                   BTC
                           11906.130 2020-08-11 00:03:49
##
## [15106 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
                   2114.555 lower 50th percentile of prices
## 1
           BTC
                  33653.860 upper 50th percentile of prices
## 2
           BTC
                  33651.580 upper 50th percentile of prices
## 3
           ETH
                   2107.891 lower 50th percentile of prices
## 4
           ETH
                   2132.825 lower 50th percentile of prices
## ...
            . . .
                  11372.920 upper 50th percentile of prices
## 15101
           BTC
                  11868.320 upper 50th percentile of prices
## 15102
           BTC
## 15103
           BTC
                   11900.900 upper 50th percentile of prices
## 15104
           BTC
                   11863.170 upper 50th percentile of prices
## 15105
           BTC
                   11906.130 upper 50th percentile of prices
##
## [15106 rows x 3 columns]
```