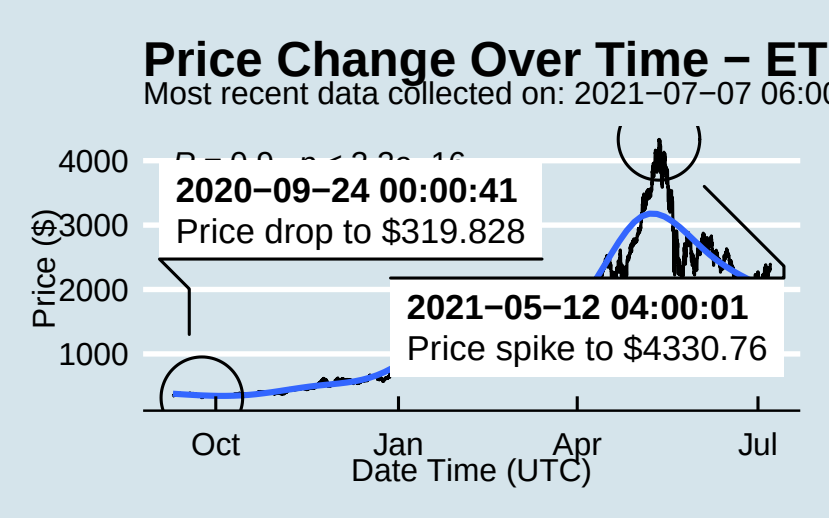
# *R Markdown Output*

## *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
## 0      BTCUSD    BTC    34822.380 2021-07-07 06:00:01
## 1      ETHUSD    ETH     2384.943 2021-07-07 06:00:01
## 2      BTCUSD    BTC    34715.600 2021-07-07 05:00:01
## 3      ETHUSD    ETH     2392.826 2021-07-07 05:00:01
## 4      ETHUSD    ETH     2340.197 2021-07-07 04:00:01
## ...       ...    ...          ...                  ...
## 14999  BTCUSD    BTC    11972.900 2020-08-10 06:03:50
## 15000  BTCUSD    BTC    11985.890 2020-08-10 05:03:48
```

```
## 15001  BTCUSD    BTC    11997.470 2020-08-10 04:32:55
## 15002  BTCUSD    BTC    10686.880                 NaT
## 15003  ETHUSD    ETH      357.844                 NaT
##
## [15004 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        BTC    34822.380  upper 50th percentile of prices
## 1        ETH     2384.943  lower 50th percentile of prices
## 2        BTC    34715.600  upper 50th percentile of prices
## 3        ETH     2392.826  lower 50th percentile of prices
## 4        ETH     2340.197  lower 50th percentile of prices
## ...      ...          ...                              ...
## 14999    BTC    11972.900  upper 50th percentile of prices
## 15000    BTC    11985.890  upper 50th percentile of prices
## 15001    BTC    11997.470  upper 50th percentile of prices
## 15002    BTC    10686.880  upper 50th percentile of prices
## 15003    ETH      357.844  lower 50th percentile of prices
##
## [15004 rows x 3 columns]
```