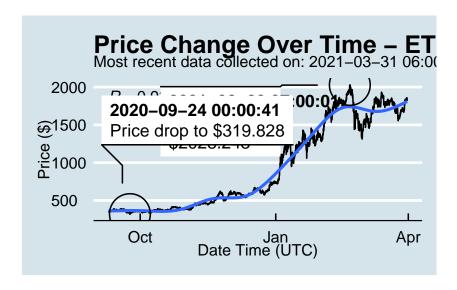
# R Markdown Output

### 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_u        | tc |
|----|-------|--------|--------|-------------|--------------------|----|
| ## | 0     | BTCUSD | BTC    | 58697.920   | 2021-03-31 06:00:0 | 01 |
| ## | 1     | ETHUSD | ETH    | 1831.371    | 2021-03-31 06:00:0 | 01 |
| ## | 2     | BTCUSD | BTC    | 58714.640   | 2021-03-31 05:00:0 | 01 |
| ## | 3     | ETHUSD | ETH    | 1824.932    | 2021-03-31 05:00:0 | 01 |
| ## | 4     | BTCUSD | BTC    | 58616.000   | 2021-03-31 04:00:0 | 01 |
| ## |       |        |        |             |                    |    |
| ## | 10301 | BTCUSD | BTC    | 11972.900   | 2020-08-10 06:03:  | 50 |
| ## | 10302 | BTCUSD | BTC    | 11985.890   | 2020-08-10 05:03:  | 48 |
| ## | 10303 | BTCUSD | BTC    | 11997.470   | 2020-08-10 04:32:  | 55 |
| ## | 10304 | BTCUSD | BTC    | 10686.880   | N                  | аΤ |

```
## 10305 ETHUSD
                    ETH
                              357.844
                                                      NaT
##
## [10306 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
## O
           BTC
                   58697.920 upper 50th percentile of prices
                              lower 50th percentile of prices
## 1
            ETH
                    1831.371
                   58714.640
                              upper 50th percentile of prices
## 2
            BTC
                              lower 50th percentile of prices
## 3
            ETH
                    1824.932
## 4
            BTC
                   58616.000 upper 50th percentile of prices
## ...
## 10301
                              upper 50th percentile of prices
           BTC
                   11972.900
## 10302
                              upper 50th percentile of prices
            BTC
                   11985.890
## 10303
           BTC
                   11997.470
                              upper 50th percentile of prices
## 10304
                   10686.880
                              upper 50th percentile of prices
            BTC
## 10305
            ETH
                     357.844 lower 50th percentile of prices
##
## [10306 rows x 3 columns]
```