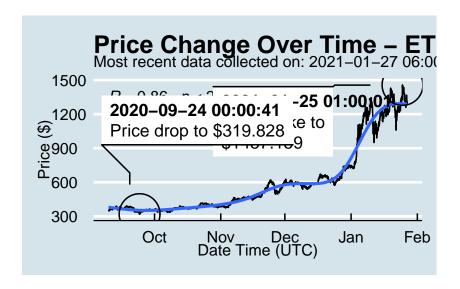
# R Markdown Output

## 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_pric
```

| ## |      | pair   | symbol | ask_1_price | date_      | _time_utc |
|----|------|--------|--------|-------------|------------|-----------|
| ## | 0    | ETHUSD | ETH    | 1282.966    | 2021-01-27 | 06:00:01  |
| ## | 1    | BTCUSD | BTC    | 31503.370   | 2021-01-27 | 06:00:00  |
| ## | 2    | ETHUSD | ETH    | 1309.434    | 2021-01-27 | 05:00:01  |
| ## | 3    | BTCUSD | BTC    | 31865.130   | 2021-01-27 | 05:00:00  |
| ## | 4    | ETHUSD | ETH    | 1308.465    | 2021-01-27 | 04:00:01  |
| ## |      |        |        |             |            |           |
| ## | 7281 | BTCUSD | BTC    | 11972.900   | 2020-08-10 | 06:03:50  |
| ## | 7282 | BTCUSD | BTC    | 11985.890   | 2020-08-10 | 05:03:48  |
| ## | 7283 | BTCUSD | BTC    | 11997.470   | 2020-08-10 | 04:32:55  |
| ## | 7284 | BTCUSD | BTC    | 10686.880   |            | NaT       |

```
## 7285 ETHUSD
                    ETH
                             357.844
                                                      NaT
##
## [7286 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
           ETH
                   1282.966 lower 50th percentile of prices
           BTC
                  31503.370 upper 50th percentile of prices
## 1
## 2
           ETH
                   1309.434 lower 50th percentile of prices
                  31865.130 upper 50th percentile of prices
## 3
           BTC
## 4
           ETH
                   1308.465 lower 50th percentile of prices
## ...
## 7281
           BTC
                  11972.900 upper 50th percentile of prices
## 7282
                  11985.890 upper 50th percentile of prices
           BTC
## 7283
           BTC
                  11997.470 upper 50th percentile of prices
                  10686.880 upper 50th percentile of prices
## 7284
           BTC
## 7285
           ETH
                    357.844 lower 50th percentile of prices
##
## [7286 rows x 3 columns]
```