# 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

## 11312

BTCUSD

```
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
                    ETH
                             2303.354 2021-04-21 06:00:01
## 1
          BTCUSD
                    BTC
                            55386.850 2021-04-21 06:00:00
## 2
          ETHUSD
                    ETH
                             2305.398 2021-04-21 05:00:01
          BTCUSD
                    BTC
                            55385.080 2021-04-21 05:00:00
## 3
          ETHUSD
                    ETH
                             2284.321 2021-04-21 04:00:01
## 4
## ...
                     . . .
## 11309
          BTCUSD
                            11972.900 2020-08-10 06:03:50
                    BTC
## 11310
          BTCUSD
                    BTC
                            11985.890 2020-08-10 05:03:48
                            11997.470 2020-08-10 04:32:55
## 11311
          BTCUSD
                    BTC
```

10686.880

NaT

BTC

```
## 11313 ETHUSD
                    ETH
                              357.844
                                                       NaT
##
## [11314 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
                    2303.354
                              lower 50th percentile of prices
                              upper 50th percentile of prices
## 1
            {\tt BTC}
                   55386.850
                    2305.398
                              lower 50th percentile of prices
## 2
            ETH
                              upper 50th percentile of prices
## 3
            BTC
                   55385.080
## 4
            ETH
                    2284.321
                              lower 50th percentile of prices
## ...
## 11309
                   11972.900
                              upper 50th percentile of prices
            BTC
## 11310
                              upper 50th percentile of prices
            BTC
                   11985.890
## 11311
            BTC
                   11997.470
                              upper 50th percentile of prices
                   10686.880
                              upper 50th percentile of prices
## 11312
            BTC
## 11313
            ETH
                     357.844 lower 50th percentile of prices
##
## [11314 rows x 3 columns]
```