# 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
                             4329.925 2021-05-12 06:00:01
## 0
                    ETH
          BTCUSD
                    BTC
                            57260.010 2021-05-12 06:00:00
## 1
## 2
          ETHUSD
                    ETH
                             4303.848 2021-05-12 05:00:01
## 3
          BTCUSD
                    BTC
                            57385.580 2021-05-12 05:00:00
                            57767.370 2021-05-12 04:00:01
                    BTC
## 4
          BTCUSD
                    . . .
## 12315
         BTCUSD
                    BTC
                            11972.900 2020-08-10 06:03:50
## 12316 BTCUSD
                    BTC
                            11985.890 2020-08-10 05:03:48
```

```
## 12317 BTCUSD
                    BTC
                           11997.470 2020-08-10 04:32:55
## 12318 BTCUSD
                    BTC
                           10686.880
## 12319 ETHUSD
                    ETH
                             357.844
                                                     NaT
##
## [12320 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
                   4329.925 lower 50th percentile of prices
## 1
           BTC
                  57260.010
                             upper 50th percentile of prices
## 2
            ETH
                   4303.848
                             lower 50th percentile of prices
## 3
           BTC
                  57385.580 upper 50th percentile of prices
## 4
           BTC
                  57767.370
                             upper 50th percentile of prices
## ...
            . . .
## 12315
                  11972.900 upper 50th percentile of prices
           BTC
           BTC
                             upper 50th percentile of prices
## 12316
                  11985.890
## 12317
           BTC
                   11997.470
                             upper 50th percentile of prices
## 12318
           BTC
                  10686.880
                             upper 50th percentile of prices
## 12319
            ETH
                     357.844 lower 50th percentile of prices
##
## [12320 rows x 3 columns]
```