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
                             2655.635 2021-05-20 06:00:01
## 0
                    ETH
          BTCUSD
                    BTC
                            39940.360 2021-05-20 06:00:00
## 1
## 2
          ETHUSD
                    ETH
                             2561.502 2021-05-20 05:00:01
## 3
          BTCUSD
                    BTC
                            39421.210 2021-05-20 05:00:00
          ETHUSD
                    ETH
                             2472.174 2021-05-20 04:00:01
## 4
                    . . .
## 12697
          BTCUSD
                    BTC
                            11972.900 2020-08-10 06:03:50
## 12698
                    BTC
                            11985.890 2020-08-10 05:03:48
          BTCUSD
```

```
## 12699 BTCUSD
                    BTC
                           11997.470 2020-08-10 04:32:55
## 12700 BTCUSD
                    BTC
                           10686.880
## 12701 ETHUSD
                    ETH
                             357.844
                                                     NaT
##
## [12702 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
                    2655.635 lower 50th percentile of prices
## 1
           BTC
                  39940.360
                             upper 50th percentile of prices
## 2
            ETH
                    2561.502 lower 50th percentile of prices
## 3
           BTC
                  39421.210 upper 50th percentile of prices
## 4
            ETH
                    2472.174 lower 50th percentile of prices
## ...
            . . .
                  11972.900 upper 50th percentile of prices
## 12697
           BTC
                              upper 50th percentile of prices
## 12698
           BTC
                  11985.890
## 12699
           BTC
                   11997.470
                              upper 50th percentile of prices
## 12700
           BTC
                  10686.880
                             upper 50th percentile of prices
## 12701
            ETH
                     357.844 lower 50th percentile of prices
##
## [12702 rows x 3 columns]
```