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
## 0
                    ETH
                             3987.486 2021-05-13 06:00:01
          BTCUSD
                    BTC
                            50888.590 2021-05-13 06:00:00
## 1
## 2
          BTCUSD
                    BTC
                            50443.950 2021-05-13 05:00:01
## 3
          ETHUSD
                    ETH
                             3901.329 2021-05-13 05:00:01
                    BTC
                            50465.800 2021-05-13 04:00:01
## 4
          BTCUSD
                     . . .
## 12363
          BTCUSD
                    BTC
                            11972.900 2020-08-10 06:03:50
## 12364
                    BTC
                            11985.890 2020-08-10 05:03:48
          BTCUSD
```

```
## 12365 BTCUSD
                    BTC
                           11997.470 2020-08-10 04:32:55
## 12366 BTCUSD
                    BTC
                           10686.880
## 12367 ETHUSD
                    ETH
                             357.844
                                                     NaT
##
## [12368 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
                    3987.486 lower 50th percentile of prices
## 1
           BTC
                   50888.590
                              upper 50th percentile of prices
## 2
            BTC
                   50443.950
                              upper 50th percentile of prices
## 3
           ETH
                             lower 50th percentile of prices
                   3901.329
## 4
           BTC
                   50465.800
                              upper 50th percentile of prices
## ...
            . . .
                             upper 50th percentile of prices
## 12363
           BTC
                   11972.900
           BTC
                              upper 50th percentile of prices
## 12364
                   11985.890
## 12365
           BTC
                   11997.470
                              upper 50th percentile of prices
## 12366
           BTC
                   10686.880
                              upper 50th percentile of prices
## 12367
            ETH
                     357.844 lower 50th percentile of prices
##
## [12368 rows x 3 columns]
```