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

7668

BTCUSD

BTC

```
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
## 0
         ETHUSD
                   ETH
                            1655.107 2021-02-04 06:00:01
## 1
         BTCUSD
                   BTC
                           37576.880 2021-02-04 06:00:00
## 2
         ETHUSD
                            1663.354 2021-02-04 05:00:01
                   ETH
         BTCUSD
                           37689.300 2021-02-04 05:00:00
## 3
                   BTC
         ETHUSD
                            1645.709 2021-02-04 04:00:01
## 4
                   ETH
## ...
## 7665
         BTCUSD
                           11972.900 2020-08-10 06:03:50
                   BTC
## 7666
         BTCUSD
                   BTC
                           11985.890 2020-08-10 05:03:48
                           11997.470 2020-08-10 04:32:55
## 7667
         BTCUSD
                   BTC
```

10686.880

NaT

```
## 7669 ETHUSD
                    ETH
                             357.844
                                                      NaT
##
## [7670 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
                             lower 50th percentile of prices
                   1655.107
           BTC
                  37576.880 upper 50th percentile of prices
## 1
## 2
           ETH
                   1663.354 lower 50th percentile of prices
                  37689.300 upper 50th percentile of prices
## 3
           BTC
## 4
           ETH
                   1645.709 lower 50th percentile of prices
## ...
## 7665
           BTC
                  11972.900 upper 50th percentile of prices
## 7666
                  11985.890 upper 50th percentile of prices
           BTC
## 7667
           BTC
                  11997.470 upper 50th percentile of prices
                  10686.880 upper 50th percentile of prices
## 7668
           BTC
## 7669
           ETH
                    357.844 lower 50th percentile of prices
##
## [7670 rows x 3 columns]
```