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

10688

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
          BTCUSD
                    BTC
                            56860.000 2021-04-08 06:00:01
## 1
          ETHUSD
                    ETH
                             2011.485 2021-04-08 06:00:01
## 2
          ETHUSD
                    ETH
                             2018.416 2021-04-08 05:00:01
                    BTC
                            56907.250 2021-04-08 05:00:00
## 3
          BTCUSD
          ETHUSD
                             1994.412 2021-04-08 04:00:01
## 4
                    ETH
## ...
                     . . .
## 10685
          BTCUSD
                            11972.900 2020-08-10 06:03:50
                    BTC
## 10686
          BTCUSD
                    BTC
                            11985.890 2020-08-10 05:03:48
                            11997.470 2020-08-10 04:32:55
## 10687
          BTCUSD
                    BTC
```

10686.880

NaT

BTC

```
## 10689 ETHUSD
                    ETH
                              357.844
                                                       NaT
##
## [10690 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
           BTC
                   56860.000
                             upper 50th percentile of prices
                              lower 50th percentile of prices
## 1
            ETH
                    2011.485
                              lower 50th percentile of prices
## 2
            ETH
                    2018.416
                              upper 50th percentile of prices
## 3
           BTC
                   56907.250
## 4
            ETH
                    1994.412 lower 50th percentile of prices
## ...
## 10685
                              upper 50th percentile of prices
           BTC
                   11972.900
## 10686
                              upper 50th percentile of prices
            BTC
                   11985.890
## 10687
           BTC
                   11997.470
                              upper 50th percentile of prices
                   10686.880
                              upper 50th percentile of prices
## 10688
            BTC
## 10689
            ETH
                     357.844 lower 50th percentile of prices
##
## [10690 rows x 3 columns]
```