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
                    ETH
                             2163.333 2021-04-13 06:00:01
## 1
          BTCUSD
                    BTC
                            60664.150 2021-04-13 06:00:00
## 2
                    ETH
                             2164.155 2021-04-13 05:00:01
          ETHUSD
                            60589.980 2021-04-13 05:00:00
## 3
          BTCUSD
                    BTC
          BTCUSD
                    BTC
                            60473.660 2021-04-13 04:00:01
## 4
## ...
                     . . .
## 10925
          BTCUSD
                            11972.900 2020-08-10 06:03:50
                    BTC
## 10926
          BTCUSD
                    BTC
                            11985.890 2020-08-10 05:03:48
                            11997.470 2020-08-10 04:32:55
## 10927
          BTCUSD
                    BTC
## 10928
                    BTC
                            10686.880
          BTCUSD
                                                       NaT
```

```
## 10929 ETHUSD
                    ETH
                              357.844
                                                       NaT
##
## [10930 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
                    2163.333
                              lower 50th percentile of prices
                              upper 50th percentile of prices
## 1
            {\tt BTC}
                   60664.150
                              lower 50th percentile of prices
## 2
            ETH
                    2164.155
                              upper 50th percentile of prices
## 3
            BTC
                   60589.980
## 4
            BTC
                   60473.660
                              upper 50th percentile of prices
## ...
## 10925
                              upper 50th percentile of prices
            BTC
                   11972.900
## 10926
                              upper 50th percentile of prices
            BTC
                   11985.890
## 10927
            BTC
                   11997.470
                              upper 50th percentile of prices
## 10928
                   10686.880
                              upper 50th percentile of prices
            BTC
## 10929
            ETH
                     357.844 lower 50th percentile of prices
##
## [10930 rows x 3 columns]
```