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 |
|----|------|--------|--------|-------------|------------|----------|
| ## | 0 | ETHUSD | ETH | 1745.222 | 2021-02-17 | 06:00:01 |
| ## | 1 | BTCUSD | BTC | 49709.120 | 2021-02-17 | 06:00:00 |
| ## | 2 | ETHUSD | ETH | 1737.436 | 2021-02-17 | 05:00:01 |
| ## | 3 | BTCUSD | BTC | 49356.460 | 2021-02-17 | 05:00:00 |
| ## | 4 | ETHUSD | ETH | 1753.316 | 2021-02-17 | 04:00:01 |
| ## | | | | | | |
| ## | 8289 | BTCUSD | BTC | 11972.900 | 2020-08-10 | 06:03:50 |
| ## | 8290 | BTCUSD | BTC | 11985.890 | 2020-08-10 | 05:03:48 |
| ## | 8291 | BTCUSD | BTC | 11997.470 | 2020-08-10 | 04:32:55 |
| ## | 8292 | BTCUSD | BTC | 10686,880 | | NaT |

```
## 8293 ETHUSD
                    ETH
                             357.844
                                                      NaT
##
## [8294 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
                   1745.222 lower 50th percentile of prices
           BTC
                  49709.120 upper 50th percentile of prices
## 1
## 2
           ETH
                   1737.436 lower 50th percentile of prices
                  49356.460 upper 50th percentile of prices
## 3
           BTC
## 4
           ETH
                   1753.316 lower 50th percentile of prices
## ...
## 8289
           BTC
                  11972.900 upper 50th percentile of prices
## 8290
                  11985.890 upper 50th percentile of prices
           BTC
## 8291
           BTC
                  11997.470 upper 50th percentile of prices
                  10686.880 upper 50th percentile of prices
## 8292
           BTC
## 8293
           ETH
                    357.844 lower 50th percentile of prices
##
## [8294 rows x 3 columns]
```