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	1363.290	2021-02-28 06:00:01	
##	1	BTCUSD	BTC	44793.010	2021-02-28 06:00:00	
##	2	BTCUSD	BTC	44379.950	2021-02-28 05:00:01	
##	3	ETHUSD	ETH	1368.554	2021-02-28 05:00:01	
##	4	ETHUSD	ETH	1367.993	2021-02-28 04:00:01	
##					• • •	
##	8817	${\tt BTCUSD}$	BTC	11972.900	2020-08-10 06:03:50	
##	8818	BTCUSD	BTC	11985.890	2020-08-10 05:03:48	
##	8819	BTCUSD	BTC	11997.470	2020-08-10 04:32:55	
##	8820	BTCUSD	BTC	10686.880	NaT	

```
## 8821 ETHUSD
                    ETH
                             357.844
                                                      NaT
##
## [8822 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
                   1363.290 lower 50th percentile of prices
                  44793.010 upper 50th percentile of prices
## 1
           BTC
## 2
           BTC
                  44379.950 upper 50th percentile of prices
                   1368.554 lower 50th percentile of prices
## 3
           ETH
## 4
           ETH
                   1367.993 lower 50th percentile of prices
## ...
## 8817
           BTC
                  11972.900 upper 50th percentile of prices
## 8818
                  11985.890 upper 50th percentile of prices
           BTC
## 8819
           BTC
                  11997.470 upper 50th percentile of prices
                  10686.880 upper 50th percentile of prices
## 8820
           BTC
## 8821
           ETH
                    357.844 lower 50th percentile of prices
##
## [8822 rows x 3 columns]
```