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
```

##		pair	symbol	ask_1_price	date_	time_utc
##	0	BTCUSD	BTC	53632.720	2021-03-10	06:00:01
##	1	ETHUSD	ETH	1797.477	2021-03-10	06:00:01
##	2	ETHUSD	ETH	1791.070	2021-03-10	05:00:01
##	3	BTCUSD	BTC	53650.010	2021-03-10	05:00:00
##	4	BTCUSD	BTC	53478.010	2021-03-10	04:00:01
##						
##	9297	BTCUSD	BTC	11972.900	2020-08-10	06:03:50
##	9298	BTCUSD	BTC	11985.890	2020-08-10	05:03:48
##	9299	BTCUSD	BTC	11997.470	2020-08-10	04:32:55
##	9300	BTCUSD	BTC	10686.880		NaT

```
## 9301 ETHUSD
                    ETH
                             357.844
                                                      NaT
##
## [9302 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
                  53632.720 upper 50th percentile of prices
                             lower 50th percentile of prices
## 1
           ETH
                   1797.477
                   1791.070 lower 50th percentile of prices
## 2
           ETH
                  53650.010 upper 50th percentile of prices
## 3
           BTC
## 4
           BTC
                  53478.010 upper 50th percentile of prices
## ...
## 9297
                  11972.900 upper 50th percentile of prices
           BTC
## 9298
                  11985.890 upper 50th percentile of prices
           BTC
## 9299
           BTC
                  11997.470 upper 50th percentile of prices
                  10686.880 upper 50th percentile of prices
## 9300
           BTC
## 9301
           ETH
                    357.844 lower 50th percentile of prices
##
## [9302 rows x 3 columns]
```