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	1864.571	2021-02-22 06:00:01
##	1	BTCUSD	BTC	55867.800	2021-02-22 06:00:00
##	2	ETHUSD	ETH	1858.352	2021-02-22 05:00:01
##	3	BTCUSD	BTC	55787.890	2021-02-22 05:00:00
##	4	BTCUSD	BTC	55883.780	2021-02-22 04:00:01
##					
##	8529	BTCUSD	BTC	11972.900	2020-08-10 06:03:50
##	8530	${\tt BTCUSD}$	BTC	11985.890	2020-08-10 05:03:48
##	8531	${\tt BTCUSD}$	BTC	11997.470	2020-08-10 04:32:55
##	8532	BTCUSD	BTC	10686.880	NaT

```
## 8533 ETHUSD
                    ETH
                             357.844
                                                      NaT
##
## [8534 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
                   1864.571 lower 50th percentile of prices
           BTC
                  55867.800 upper 50th percentile of prices
## 1
## 2
           ETH
                   1858.352 lower 50th percentile of prices
                  55787.890 upper 50th percentile of prices
## 3
           BTC
## 4
           BTC
                  55883.780 upper 50th percentile of prices
## ...
           . . .
                  11972.900 upper 50th percentile of prices
## 8529
           BTC
## 8530
                  11985.890 upper 50th percentile of prices
           BTC
## 8531
           BTC
                  11997.470 upper 50th percentile of prices
                  10686.880 upper 50th percentile of prices
## 8532
           BTC
## 8533
           ETH
                    357.844 lower 50th percentile of prices
##
## [8534 rows x 3 columns]
```