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_pri
```

##		pair	symbol	ask_1_price	date_	_time_utc
##	0	BTCUSD	BTC	48496.000	2021-03-06	06:00:01
##	1	ETHUSD	ETH	1574.102	2021-03-06	06:00:01
##	2	BTCUSD	BTC	48454.070	2021-03-06	05:00:01
##	3	ETHUSD	ETH	1529.876	2021-03-06	05:00:01
##	4	ETHUSD	ETH	1530.085	2021-03-06	04:00:01
##						
##	9105	${\tt BTCUSD}$	BTC	11972.900	2020-08-10	06:03:50
##	9106	${\tt BTCUSD}$	BTC	11985.890	2020-08-10	05:03:48
##	9107	${\tt BTCUSD}$	BTC	11997.470	2020-08-10	04:32:55
##	9108	BTCUSD	BTC	10686.880		NaT

```
## 9109 ETHUSD
                    ETH
                             357.844
                                                      NaT
##
## [9110 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
                  48496.000 upper 50th percentile of prices
                   1574.102 lower 50th percentile of prices
## 1
           ETH
## 2
           BTC
                  48454.070 upper 50th percentile of prices
                   1529.876 lower 50th percentile of prices
## 3
           ETH
## 4
           ETH
                   1530.085 lower 50th percentile of prices
## ...
                  11972.900 upper 50th percentile of prices
## 9105
           BTC
## 9106
                  11985.890 upper 50th percentile of prices
           BTC
## 9107
           BTC
                  11997.470 upper 50th percentile of prices
## 9108
                  10686.880 upper 50th percentile of prices
           BTC
## 9109
           ETH
                    357.844 lower 50th percentile of prices
##
## [9110 rows x 3 columns]
```