

R Markdown Output

Last run on: 2021-01-06 06:35:22

2021-01-06 06:35:22

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

Price Change Over Time - ETH

Most recent data collected on: 2021-01-06 06:00:01 (UTC)

$R = 0.88$, $p < 2.2e-16$



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      BTCUSD   BTC      34974.040 2021-01-06 06:00:01
## 1      ETHUSD   ETH       1101.446 2021-01-06 06:00:01
## 2      ETHUSD   ETH       1118.295 2021-01-06 05:00:01
## 3      BTCUSD   BTC     35332.310 2021-01-06 05:00:00
## 4      ETHUSD   ETH       1075.253 2021-01-06 04:00:01
## ...      ...      ...           ...           ...
## 6273 BTCUSD   BTC     11972.900 2020-08-10 06:03:50
## 6274 BTCUSD   BTC     11985.890 2020-08-10 05:03:48
## 6275 BTCUSD   BTC     11997.470 2020-08-10 04:32:55
## 6276 BTCUSD   BTC       10686.880                NaT
## 6277 ETHUSD   ETH         357.844                NaT
```

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'],
                                                  'upper 50th percentile of price'),
                                  'upper 50th percentile of price',
                                  'lower 50th percentile of price')
# Show modified dataframe:
df[['symbol', 'ask_1_price', 'price_percentile']]
```

	##	symbol	ask_1_price	price_percentile
## 0	0	BTC	34974.040	upper 50th percentile of price
## 1	1	ETH	1101.446	lower 50th percentile of price
## 2	2	ETH	1118.295	lower 50th percentile of price
## 3	3	BTC	35332.310	upper 50th percentile of price
## 4	4	ETH	1075.253	lower 50th percentile of price