

R Markdown Output

Last run on: 2021-01-21 07:14:16

2021-01-21 07:14:16

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: 2021-01-21 07:00:01 (UTC)

$R = 0.84$, $p < 2.2e-16$



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      ETHUSD    ETH      1308.618 2021-01-21 07:00:01
## 1      BTCUSD    BTC      34659.730 2021-01-21 07:00:00
## 2      ETHUSD    ETH      1306.049 2021-01-21 06:00:01
## 3      BTCUSD    BTC      34567.710 2021-01-21 06:00:00
## 4      ETHUSD    ETH      1287.744 2021-01-21 05:00:01
## ...      ...      ...           ...           ...
## 6995  BTCUSD    BTC      11972.900 2020-08-10 06:03:50
## 6996  BTCUSD    BTC      11985.890 2020-08-10 05:03:48
## 6997  BTCUSD    BTC      11997.470 2020-08-10 04:32:55
## 6998  BTCUSD    BTC      10686.880                NaT
## 6999  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'],
                                                  50,
                                                  '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 | ETH | 1308.618 | lower 50th percentile of price |
| ## 1 | BTC | 34659.730 | upper 50th percentile of price |
| ## 2 | ETH | 1306.049 | lower 50th percentile of price |
| ## 3 | BTC | 34567.710 | upper 50th percentile of price |
| ## 4 | ETH | 1287.744 | lower 50th percentile of price |