

R Markdown Output

Last run on: 2020-12-16 06:12:34

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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: 2020-12-16 06:00:02 (UTC)

$R = 0.89$, $p < 2.2e-16$



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         583.507 2020-12-16 06:00:02
## 1      BTCUSD   BTC       19367.630 2020-12-16 06:00:00
## 2      BTCUSD   BTC       19351.160 2020-12-16 05:00:01
## 3      ETHUSD   ETH         583.321 2020-12-16 05:00:01
## 4      ETHUSD   ETH         583.142 2020-12-16 04:00:01
## ...      ...      ...           ...           ...
## 5265 BTCUSD   BTC       11972.900 2020-08-10 06:03:50
## 5266 BTCUSD   BTC       11985.890 2020-08-10 05:03:48
## 5267 BTCUSD   BTC       11997.470 2020-08-10 04:32:55
## 5268 BTCUSD   BTC       10686.880                NaT
## 5269 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	583.507	lower 50th percentile of price
## 1	BTC	19367.630	upper 50th percentile of price
## 2	BTC	19351.160	upper 50th percentile of price
## 3	ETH	583.321	lower 50th percentile of price
## 4	ETH	583.142	lower 50th percentile of price