

R Markdown Output

Last run on: 2021-05-07 06:29:43

2021-05-07 06:29:43

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: 2021-05-07 06:00:01 (UTC)

$R = 0.94$, $p < 2.2e-16$



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	3413.896	2021-05-07 06:00:01
## 1	BTCUSD	BTC	55798.170	2021-05-07 06:00:00
## 2	ETHUSD	ETH	3420.208	2021-05-07 05:00:01
## 3	BTCUSD	BTC	55845.750	2021-05-07 05:00:00
## 4	BTCUSD	BTC	55730.220	2021-05-07 04:00:01
##
## 12075	BTCUSD	BTC	11972.900	2020-08-10 06:03:50
## 12076	BTCUSD	BTC	11985.890	2020-08-10 05:03:48
## 12077	BTCUSD	BTC	11997.470	2020-08-10 04:32:55
## 12078	BTCUSD	BTC	10686.880	NaT
## 12079	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	0	ETH	3413.896	lower 50th percentile of price
## 1	1	BTC	55798.170	upper 50th percentile of price
## 2	2	ETH	3420.208	lower 50th percentile of price
## 3	3	BTC	55845.750	upper 50th percentile of price
## 4	4	BTC	55730.220	upper 50th percentile of price