

R Markdown Output

Last run on: 2021-05-08 06:29:31

2021-05-08 06:29:31

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: 2021-05-08 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	3534.694	2021-05-08 06:00:01
## 1	BTCUSD	BTC	57907.040	2021-05-08 06:00:00
## 2	ETHUSD	ETH	3563.105	2021-05-08 05:00:01
## 3	BTCUSD	BTC	58056.170	2021-05-08 05:00:00
## 4	ETHUSD	ETH	3531.051	2021-05-08 04:00:01
##
## 12123	BTCUSD	BTC	11972.900	2020-08-10 06:03:50
## 12124	BTCUSD	BTC	11985.890	2020-08-10 05:03:48
## 12125	BTCUSD	BTC	11997.470	2020-08-10 04:32:55
## 12126	BTCUSD	BTC	10686.880	NaT
## 12127	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'),
                                  '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	3534.694	lower 50th percentile of price
	## 1	BTC	57907.040	upper 50th percentile of price
	## 2	ETH	3563.105	lower 50th percentile of price
	## 3	BTC	58056.170	upper 50th percentile of price
	## 4	ETH	3531.051	lower 50th percentile of price