R Markdown Output

Overview

This document has code embedded throughout. In the next section we will create a visualization using the already loaded dataset `eth_data`:

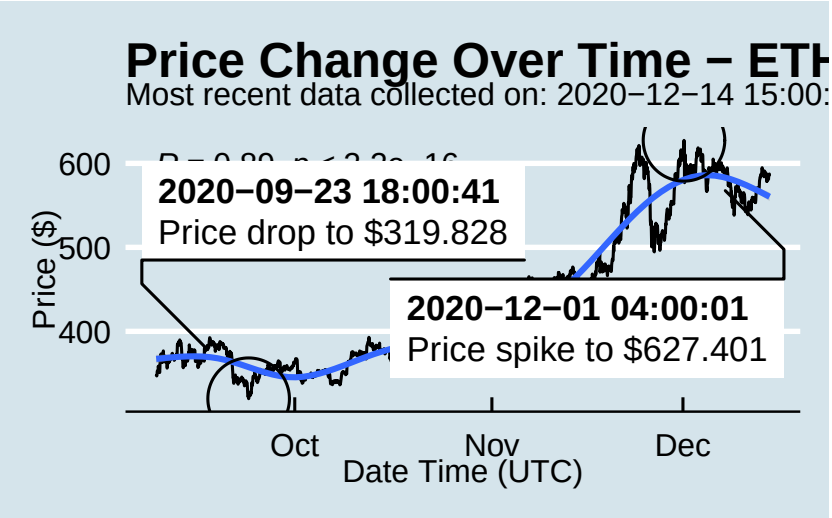
```
datatable(eth_data)
```

Show 10 entries Search:

	pair	symbol	ask_1_price	date_time_utc
1	ETHUSD	ETH	586.354	2020-12-14T22:00:01Z
2	ETHUSD	ETH	587.396	2020-12-14T21:00:01Z
3	ETHUSD	ETH	585.598	2020-12-14T20:00:01Z
4	ETHUSD	ETH	586.372	2020-12-14T19:00:01Z
5	ETHUSD	ETH	580.936	2020-12-14T18:00:01Z
6	ETHUSD	ETH	581.332	2020-12-14T17:00:01Z
7	ETHUSD	ETH	583.641	2020-12-14T16:00:01Z
8	ETHUSD	ETH	582.559	2020-12-14T15:00:01Z
9	ETHUSD	ETH	582.14	2020-12-14T14:00:01Z
10	ETHUSD	ETH	578.901	2020-12-14T13:00:01Z

Showing 1 to 10 of 2,165 entries Previous 1 2 3 4 5 … 217 Next

Price Chart - Ethereum



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      586.354 2020-12-14 22:00:01
## 1     BTCUSD    BTC    19195.290 2020-12-14 22:00:00
## 2     BTCUSD    BTC    19211.840 2020-12-14 21:00:01
## 3     ETHUSD    ETH      587.396 2020-12-14 21:00:01
## 4     BTCUSD    BTC    19176.520 2020-12-14 20:00:01
## ...      ...    ...          ...                 ...
## 5201  BTCUSD    BTC    11972.900 2020-08-10 06:03:50
## 5202  BTCUSD    BTC    11985.890 2020-08-10 05:03:48
## 5203  BTCUSD    BTC    11997.470 2020-08-10 04:32:55
## 5204  BTCUSD    BTC    10686.880                 NaT
## 5205  ETHUSD    ETH      357.844                 NaT
##
## [5206 rows x 4 columns]
```

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

```
##      symbol  ask_1_price                price_percentile
## 0       ETH      586.354  lower 50th percentile of prices
## 1       BTC    19195.290  upper 50th percentile of prices
## 2       BTC    19211.840  upper 50th percentile of prices
## 3       ETH      587.396  lower 50th percentile of prices
## 4       BTC    19176.520  upper 50th percentile of prices
## ...     ...          ...                              ...
## 5201    BTC    11972.900  upper 50th percentile of prices
## 5202    BTC    11985.890  upper 50th percentile of prices
## 5203    BTC    11997.470  upper 50th percentile of prices
## 5204    BTC    10686.880  upper 50th percentile of prices
## 5205    ETH      357.844  lower 50th percentile of prices
```

```
##
## [5206 rows x 3 columns]
```