## 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)

Price Chart - Ethereum



## Python Code Example

## 10494

## 10495

## 10496

BTCUSD

BTCUSD

BTCUSD

```
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
          ETHUSD
                    ETH
                             2012.961 2021-04-04 06:00:01
## 1
          BTCUSD
                    BTC
                            57477.700 2021-04-04 06:00:00
## 2
          BTCUSD
                    BTC
                            57531.420 2021-04-04 05:00:01
                             2012.125 2021-04-04 05:00:01
## 3
          ETHUSD
                    ETH
          BTCUSD
                    BTC
                            57494.170 2021-04-04 04:00:01
## 4
## ...
                     . . .
## 10493
          BTCUSD
                            11972.900 2020-08-10 06:03:50
                    BTC
```

11985.890 2020-08-10 05:03:48 11997.470 2020-08-10 04:32:55

NaT

BTC

BTC

BTC

10686.880

```
## 10497 ETHUSD
                    ETH
                              357.844
                                                      NaT
##
## [10498 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
## O
            ETH
                    2012.961 lower 50th percentile of prices
                              upper 50th percentile of prices
## 1
            {\tt BTC}
                   57477.700
                              upper 50th percentile of prices
## 2
            BTC
                   57531.420
                              lower 50th percentile of prices
## 3
            ETH
                    2012.125
## 4
            BTC
                   57494.170 upper 50th percentile of prices
## ...
## 10493
                   11972.900
                              upper 50th percentile of prices
            BTC
## 10494
                              upper 50th percentile of prices
            BTC
                   11985.890
## 10495
            BTC
                   11997.470
                              upper 50th percentile of prices
                   10686.880
                              upper 50th percentile of prices
## 10496
            BTC
## 10497
            ETH
                     357.844 lower 50th percentile of prices
##
## [10498 rows x 3 columns]
```