## 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

## 8867

## 8868

BTCUSD

BTCUSD

BTC

BTC

```
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
         BTCUSD
                   BTC
                           46179.370 2021-03-01 06:00:01
## 1
         ETHUSD
                   ETH
                            1433.548 2021-03-01 06:00:01
## 2
         ETHUSD
                            1442.465 2021-03-01 05:00:01
                   ETH
         BTCUSD
                           46462.770 2021-03-01 05:00:00
## 3
                   BTC
         ETHUSD
                            1430.300 2021-03-01 04:00:01
## 4
                   ETH
## ...
## 8865
         BTCUSD
                           11972.900 2020-08-10 06:03:50
                   BTC
## 8866
         BTCUSD
                   BTC
                           11985.890 2020-08-10 05:03:48
```

10686.880

11997.470 2020-08-10 04:32:55

NaT

```
## 8869 ETHUSD
                    ETH
                             357.844
                                                      NaT
##
## [8870 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
           BTC
                  46179.370 upper 50th percentile of prices
                   1433.548 lower 50th percentile of prices
## 1
           ETH
## 2
           ETH
                   1442.465 lower 50th percentile of prices
                  46462.770 upper 50th percentile of prices
## 3
           BTC
## 4
           ETH
                   1430.300 lower 50th percentile of prices
## ...
## 8865
           BTC
                  11972.900 upper 50th percentile of prices
## 8866
                  11985.890 upper 50th percentile of prices
           BTC
## 8867
           BTC
                  11997.470 upper 50th percentile of prices
                  10686.880 upper 50th percentile of prices
## 8868
           BTC
## 8869
           ETH
                    357.844 lower 50th percentile of prices
##
## [8870 rows x 3 columns]
```