# 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

```
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	2013.652	2021-02-20 06:00:01	
##	1	BTCUSD	BTC	55672.000	2021-02-20 06:00:00	
##	2	ETHUSD	ETH	2020.576	2021-02-20 05:00:01	
##	3	BTCUSD	BTC	55811.850	2021-02-20 05:00:00	
##	4	ETHUSD	ETH	2015.780	2021-02-20 04:00:01	
##						
##	8433	BTCUSD	BTC	11972.900	2020-08-10 06:03:50	
##	8434	BTCUSD	BTC	11985.890	2020-08-10 05:03:48	
##	8435	BTCUSD	BTC	11997.470	2020-08-10 04:32:55	
##	8436	BTCUSD	BTC	10686.880	NaT	

```
## 8437 ETHUSD
                    ETH
                             357.844
                                                      NaT
##
## [8438 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
                   2013.652 lower 50th percentile of prices
           BTC
                  55672.000 upper 50th percentile of prices
## 1
## 2
           ETH
                   2020.576 lower 50th percentile of prices
                  55811.850 upper 50th percentile of prices
## 3
           BTC
## 4
           ETH
                   2015.780 lower 50th percentile of prices
## ...
## 8433
           BTC
                  11972.900 upper 50th percentile of prices
## 8434
                  11985.890 upper 50th percentile of prices
           BTC
## 8435
           BTC
                  11997.470 upper 50th percentile of prices
                  10686.880 upper 50th percentile of prices
## 8436
           BTC
## 8437
           ETH
                    357.844 lower 50th percentile of prices
##
## [8438 rows x 3 columns]
```