# 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	1840.821	2021-03-15 06:00:01	
##	1	BTCUSD	BTC	59010.440	2021-03-15 06:00:00	
##	2	ETHUSD	ETH	1863.002	2021-03-15 05:00:01	
##	3	BTCUSD	BTC	59761.560	2021-03-15 05:00:00	
##	4	ETHUSD	ETH	1884.464	2021-03-15 04:00:01	
##					• • •	
##	9535	${\tt BTCUSD}$	BTC	11972.900	2020-08-10 06:03:50	
##	9536	BTCUSD	BTC	11985.890	2020-08-10 05:03:48	
##	9537	BTCUSD	BTC	11997.470	2020-08-10 04:32:55	
##	9538	BTCUSD	BTC	10686.880	NaT	

```
## 9539 ETHUSD
                    ETH
                             357.844
                                                      NaT
##
## [9540 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
                   1840.821 lower 50th percentile of prices
           BTC
                  59010.440 upper 50th percentile of prices
## 1
## 2
           ETH
                   1863.002 lower 50th percentile of prices
                  59761.560 upper 50th percentile of prices
## 3
           BTC
## 4
           ETH
                   1884.464 lower 50th percentile of prices
## ...
## 9535
           BTC
                  11972.900 upper 50th percentile of prices
## 9536
                  11985.890 upper 50th percentile of prices
           BTC
## 9537
           BTC
                  11997.470 upper 50th percentile of prices
                  10686.880 upper 50th percentile of prices
## 9538
           BTC
## 9539
           ETH
                    357.844 lower 50th percentile of prices
##
## [9540 rows x 3 columns]
```