# 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_pr:
## 0 BTCUSD BTC 58765.6
```

##		pair	symbol	ask_1_price	date_time_utc	
##	0	BTCUSD	BTC	58765.650	2021-04-01 06:00:01	
##	1	ETHUSD	ETH	1908.191	2021-04-01 06:00:01	
##	2	BTCUSD	BTC	58877.340	2021-04-01 05:00:01	
##	3	ETHUSD	ETH	1915.921	2021-04-01 05:00:01	
##	4	BTCUSD	BTC	59096.860	2021-04-01 04:00:01	
##						
##	10349	BTCUSD	BTC	11972.900	2020-08-10 06:03:50	
##	10350	BTCUSD	BTC	11985.890	2020-08-10 05:03:48	
##	10351	BTCUSD	BTC	11997.470	2020-08-10 04:32:55	
##	10352	BTCUSD	BTC	10686.880	NaT	

```
## 10353 ETHUSD
                    ETH
                              357.844
                                                      NaT
##
## [10354 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
                   58765.650
                             upper 50th percentile of prices
                              lower 50th percentile of prices
## 1
            ETH
                    1908.191
                              upper 50th percentile of prices
## 2
            BTC
                   58877.340
                              lower 50th percentile of prices
## 3
            ETH
                    1915.921
## 4
            BTC
                   59096.860
                              upper 50th percentile of prices
## ...
## 10349
                              upper 50th percentile of prices
           BTC
                   11972.900
## 10350
                              upper 50th percentile of prices
            BTC
                   11985.890
## 10351
           BTC
                   11997.470
                              upper 50th percentile of prices
## 10352
                   10686.880
                              upper 50th percentile of prices
            BTC
## 10353
            ETH
                     357.844 lower 50th percentile of prices
##
## [10354 rows x 3 columns]
```