

## 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

## Price Change Over Time - ETH

Most recent data collected on: 2020-12-13 02:00:01 (UTC)

$R = 0.88$ ,  $p < 2.2e-16$



## 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      BTCUSD   BTC    18792.420 2020-12-13 02:00:01
## 1      ETHUSD   ETH      565.813 2020-12-13 02:00:01
## 2      ETHUSD   ETH      565.682 2020-12-13 01:00:01
## 3      BTCUSD   BTC    18748.340 2020-12-13 01:00:00
## 4      ETHUSD   ETH      567.839 2020-12-13 00:00:01
## ...      ...      ...           ...           ...
## 5113 BTCUSD   BTC    11972.900 2020-08-10 06:03:50
## 5114 BTCUSD   BTC    11985.890 2020-08-10 05:03:48
## 5115 BTCUSD   BTC    11997.470 2020-08-10 04:32:55
## 5116 BTCUSD   BTC    10686.880                NaT
## 5117 ETHUSD   ETH      357.844                NaT
```

## 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_p
                                  'upper 50th percentile of price
                                  'lower 50th percentile of price

# Show modified dataframe:
df[['symbol', 'ask_1_price', 'price_percentile']]
```

	##	symbol	ask_1_price	price_percentile
	## 0	BTC	18792.420	upper 50th percentile of price
	## 1	ETH	565.813	lower 50th percentile of price
	## 2	ETH	565.682	lower 50th percentile of price
	## 3	BTC	18748.340	upper 50th percentile of price
	## 4	ETH	567.839	lower 50th percentile of price

## Back to Gallery

```
include_url("https://r-markdown-gallery.org")
```