## **Explanation of the Cryptocurrency Data**

This file provides detailed information on the types of data collected from the Kraken API for the cryptocurrency pairs: BTC-ETH, ETH-USD, and BTC-USD. Below is a breakdown of the different data fields available for each trading pair.

## **Data Fields:**

- 1. current\_price ("c"):
  - o The most recent price at which the asset was traded.
- 2. **bid\_price** ("b"):
  - The highest price a buyer is willing to pay for the asset (also known as the buy price).
- 3. **ask\_price** ("a"):
  - The lowest price a seller is willing to accept for the asset (also known as the sell price).
- 4. **24h\_high** ("h"):
  - The highest price at which the asset was traded over the last 24 hours.
- 5. **24h\_low** ("1"):
  - o The lowest price at which the asset was traded over the last 24 hours.
- 6. **24h\_volume** ("v"):
  - The total trading volume of the asset over the past 24 hours. This indicates how much of the asset was traded during this period.
- 7. opening\_price ("o"):
  - The price at which the asset started trading at the beginning of the current day (in UTC).
- 8. timestamp:
  - The exact time (in Unix timestamp format) when the data was retrieved.

## **Data Collection Example:**

For the pair BTC-USD, if the data looks like this:

```
{
    "BTC-USD": {
        "current_price": "42340.5",
        "bid_price": "42342.0",
        "ask_price": "42342.0",
        "24h_high": "42900.0",
        "24h_low": "41200.0",
        "24h_volume": "3500.25",
        "opening_price": "41800.0",
        "timestamp": 1634760821.582
    }
}
```

This means that 1 Bitcoin is currently worth 42,340.5 USD. The highest bid price is 42,339.0 USD, while the lowest ask price is 42,342.0 USD. Over the past 24 hours, the highest price Bitcoin reached was 42,900.0 USD, and the lowest was 41,200.0 USD. A total of 3,500.25 Bitcoin were traded during this period. The price at the opening of the day was 41,800.0 USD, and the data was fetched at the exact timestamp: 1634760821.582.

## File Structure:

The data for each trading pair is saved in a JSON file, with a similar structure for each pair. The JSON file provides real-time information for multiple pairs in one place