Bitwyre Technical Test

Challenge 1

OHLC with Volume & Value

In a modern online trading, we know the concept of OHLC with Volume & Value to indicate a stock's performance in real-time, this concept is highly leveraged by investors to guide their investment decisions.
The nature of the data is small but moving ultra-fast, we can't afford to delay a single second. Worry not, in this challenge, we only provided you a tiny subset of the real data.

A crash-course of terminologies used in this challenge for you:

- Stock: a tradeable equity

- OHLC: stands for Open High Lowes Price

- Close Price: the very last price of today

- Previous Price: the Close of the previous day

- Open Price: the first price of today

- Lowest Price: the lowest price that is ever archived today

- Transaction: Elements of a transaction are Quantity and Price. Quantity and Executed Quantity are the same. Price and ExecutionPrice are the same

- Volume the sum of quantity

- Value the sum of (quantity * price)

- Average Price: is value / volume

Task Breakdown

1. Given Transaction inside a bunch of .ndjson from rawdata.zip. Calculate OHLC with Volume and Value

2. Convert OHLC to protobuf and send the protobuf to another service called consume OHLC.

3. In consumer you can save in database like redis or whatever

4. And inside the consumer create the gRPC server that will give client data based on stock