# HFT developer exercise (Junior/Mid)

Create a C++ app subscribing to a Coinbase ticker by websockets

- Parses ticker JSON data.
- Calculate EMA (Exponential moving average) of price field and mid price ((best_bid_price + best_ask_price) / 2) over 5 second interval.
- Log all the fields from the message including calculated EMAs to a CSV file.
- Write few testcases for JSON parsing and estimated moving average.

Please provide us the logs of your test for verification.

Note 1: You can use any third party libraries WS and JSON parsing.

Note 2: You don't actually need API keys to subscribe to Coinbase public data. It's publicly available even if the docs say that the auth is required.