

Coding Project



Background

Binance is at present the largest centralized cryptocurrency exchange in the world. The executed transactions on this exchange are published as public data on its website.

Problem Statement

Build a small project to generate K-line data (also known as candlestick data) from the trades data of spot currency pairs.

- The code should be able to download the trades data from <https://data.binance.vision/?prefix=data/spot/daily/trades/>, process them into K-line data, and print the K-line data to stdout in CSV format. It should have the same columns as the K-line data provided by Binance, documented [here](#).
- Your code should take the following parameters as input:
 - Symbol of the spot currency pair, e.g. `BTCUSDT`
 - Start date (inclusive) of the transactions in YYYY-mm-dd format: e.g. `2022-07-01`
 - End date (inclusive) of the transactions in YYYY-mm-dd format: e.g. `2022-07-05`
 - Aggregation interval. It should support seconds(s), minutes(m), hours(h), and days(d): e.g. `30s`, `1m`, `5m`, `1h`, `1d`
- Use the language of your choice, preferably one of Python, Go, Java, or C++.
- Write some integration tests to verify that the K-line data produced by your code are the same as the ones provided by Binance.
- Your project should contain a Dockerfile (<https://docs.docker.com/engine/reference/builder/>) that packages up your code into a runnable Docker image. To run the program, we will perform the following steps:
 - `docker build -t test .`
 - `docker run -it test BTCUSDT 2022-07-01 2022-07-05 30s`

How to Submit

1. Please upload the project to GitHub as a **PRIVATE** repository and invite `axqinterviewer` as the collaborator to allow us to review your code.
2. Reply in an email with a link to this repository.