



Exchange and Algorithmic Trading – Part 2: Intraday Market Analysis

Intraday market data is the bread & butter for high frequency trading. Having a strong data infrastructure is crucial to researchers. In this task, we will focus on two things:

- 1) Developing the data infrastructure specially for time series data
- 2) Study the data to build intraday trading models.

Task 1

Build an intraday market data database with the provided data.

- 01** Use any kind of time series database (e.g. InfluxDB, TimescaleDB, Graphite, QuestDB) to host the provided data.
- 02** Use any kind of non-timeseries No-SQL database to host the provided data.
- 03** Create the following REST API to expose the data from both database:
a. Given start time and end time (which could be across multiple dates), tickers (could be multiple), and fields, returning the corresponding time series of the given day range with the requested fields.
- 04** Conduct performance analysis on the query time of the two types of database and create a few page of slides to summarize your way of benchmarking performances and findings.