Practice use case for Kafka, Hibernate, TDD

API:
https://twelvedata.com/

top-gainer-top-looser-processing-service

Manual Input

GET call to start

GET method to fetch recent stocks data from API and send it to Kafka topic raw-data.

Producer

Consumer

group-1, consumer-1, consumer-2

Filter out 1 top gainer and 1 top looser and send it to Topic: top-gainer-top-looser

Broker 1

Topic: script-raw-data, Partitions: 2

Producer

api-pull-service

Consumer

Topic: top-gainer-top-looser, Partitions: 2

Consumes by group-3

Filter out symbol, price and data for Topic: chart-data

group-2, consumer-1, consumer-2

Producer

Topic: chart-data, Partitions: 2

Consumes by group-4

chart-data-processing-service

group-3 (c1, c2), group-4 (c1, c2)

Consumes from two topics and store data into DB tables

1. Top gainer with an interval
2. Top looser with an interval
3. Chart data for an interval

Presentations like Reports, GUI, etc.

data-storage-service

reporting-and-gui-service

Event driven REST calls

Database