

Senior Java Engineer - Coding Task

A new bakery is about to be opened; the owner of the bakery hired you to write a simulation of the baking process in the bakery.

These are the specifications of the system:

- The bakery has a given number of employees.
- Employees are qualified for any task type
- The bakery receives orders and the orders need to be handled in the order of arrival

The process of handling an order is as follows:

1. receive order
2. gather ingredients & prepare according to recipe
3. pre-bake preparations (grease pan, pre-heat oven)
4. bake
5. wrap order

Additional Constraints:

- steps 2 and 3 can happen in parallel, and only after both 2 and 3 are completed can step 4 occur
- there is a limited number of ovens, each oven can hold up to three items
- each stage takes a given amount of time, the time for each stage depends on the stage and the type of product

Input / Output

You will receive an input file containing json's which represents a stream of incoming orders.

your program should be able to accept this file as input and run the simulation,

you should print to stdout the status of the order as it moves along.

We will review the code together, during the code review you should be able to:

- state any assumptions you made
- explain your design decisions
- explain any optimizations that can be done
- point out areas that you would have done differently but require more development effort which was not possible to implement under the current time constraints

Good Luck!