

Complete 2 tasks

1. using Java taskNJava.java
2. using GOlang taskNGolang.go

Take the task according to the option of the remainder of division by the number of tasks.

1. Library. Several books are available to read. There are no similar books in the library. Some editions are issued to hand, some only to the reading room. The reader can take several books both in his hands and to the reading room.
2. Parking lot. Several parking spaces are available. Only one car can be in one place. If all spaces are occupied, the car will not wait longer than a certain time and will go to another parking space.
3. Call Center. Several operators work in the organization. The operator can serve only one customer, others must wait their turn. The client can hang up and call back after a certain time.
4. Bus stops. There is a bus park and a route. There are several stops on the route. Several buses can stop at one stop at the same time, but not more than a certain number. After completing the route, the bus returns to the fleet.
5. Free checkout. The quick service restaurant has several cash registers. Visitors are in a queue at a certain ticket office, but can go to another time when the queue clearance there is reduced or reduced.
6. Tunnel. There are two railway tunnels in the mountains, through which trains can move in both directions. Many trains piled up at both ends of the tunnel. Ensure safe passage of tunnels in both directions. The train can be diverted from one tunnel to another if the set waiting time for passage is exceeded.
7. Bank. There is a bank with tellers, customers and their accounts. The client can withdraw/top up/transfer/pay/exchange money. The cashier serves customers together. The money flow watcher monitors so that cash registers are always ready. When a certain amount is accumulated, the money is transferred to the vaults, and when the cash reserves are exhausted, it is replenished from the vault.
8. Auction. Several lots are being auctioned. Auction participants submit bids. The order can be adjusted in the direction of increase several times during the trading of one lot. The auction makes a winner and moves on to the next lot. A participant who has not paid for a lot within a certain period of time stands for several lots from trading.
9. Exchange. At auctions, brokers offer shares of several companies. Actions for buying and selling shares are attended at the stock exchange. Depending on other sold-bought shares, their price changes. Brokers offer a certain part of shares for sale. The stock exchange index changes from activity and changes in the quotation of actions. The exchange may suspend trading in the event of a sharp drop in the index.
10. Airport. Boarding/disembarking of passengers can take place through a limited number of terminals on the ground or through a limited number of gangways. Airplanes have different capacity and flight range. Organize the operation of the airport if there are 4-6 destinations and 2-3 range zones.