

HOMEWORK 1 REPORT

There are 4 global variables which represent plane seats (as a matrix), turn number (0 or 1), remaining seat number and terminated thread number. There is 2 functions rather than main, which are TravelAgency1 and TravelAgency2 -practically same function-.

They represent the agencies' schedule which is:

- busywaiting until other agency is done (waits for the turn change),
- create a random number between [0-99], use that as seat number,
- check seat is empty or not, if it is empty, print that "I am using critical region right now", fill it with your agency number and decrement the remaining seat number by one, print the filled seat number, report that critical region is not used by that thread anymore,
- check whether plane is full or not,
- if it is, check count of terminated threads, if it is 0, printing that critical region is in use right now, report that critical region is not used by that thread anymore,
- terminate the thread and increment the count by 1

Those steps are valid for both functions (and threads)

Main thread fills the matrix with all zeros. After that, makes the defined threads join. While agencies(threads) doing reservation, busywaits until there is no remaining seat. Finally, print the result of plane (seats according to its agency).