A SIMULATION ALGORITHM FOR PREEMPTIVE QUEUING SYSTEMS WITH PARALLEL WORKING STATIONS HAVING ONE'S OWN QUEUE FOR EVERY STATION

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Abstract: We can think the queuing system with several parallel stations as having a corresponding queue for every station at which the arrived clients join. The queued clients joined at a particular station are served based on a certain serving discipline. This paper presents a simulation algorithm for the queuing system, where every station has its own queue and serving discipline is based on dividing the clients in priority classes, the preemption of the served customers being permitted. One proves the polynomial complexity of the proposed algorithm. Also, we present the object oriented approach of the system.

Key words: queuing system, simulation, algorithm, preemptive discipline.

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