Two New Sequencing Rules for the Non-Preemptive Single-Machine Scheduling Problem

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Abstract

In this paper, two new job sequencing rules are introduced for the non-preemptive single machine scheduling problem. Through a simulation study, these new rules are compared to First Come - First Served, Shortest Process Time, Earliest Due Date, Critical Ratio, and Shortest Slack sequencing rules. The rules are compared based on five criteria of average delay, average flow time, number of delayed jobs, longest delay, and average total of earliness and delay. Simulation results show that the new rules are promising and effective.

Keywords Job Sequencing, Sequencing Rules, Single Machine Scheduling

Biography

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