
CSL 356: Analysis and Design of Algorithms

Instructor: Ragesh Jaiswal

1. Discuss problems of Minor-1 exam.
2. Consider the following greedy algorithm for the minimum makespan problem discussed in class:

Sort the jobs in decreasing order of their duration. Consider jobs in this order and schedule a job on a machine with the smallest current load.

By a simple argument, you can show that the above algorithm gives a $3/2$ approximation factor. You have to use a more clever argument to show that this algorithm gives a $(\frac{4}{3} - \frac{1}{3m})$ approximation factor.