

9/21/26

-exchange arguments

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take any proposed feasible solution S for the given problem

label the first point of disagreement between S and the solution we provided

make a new solution S' for S that

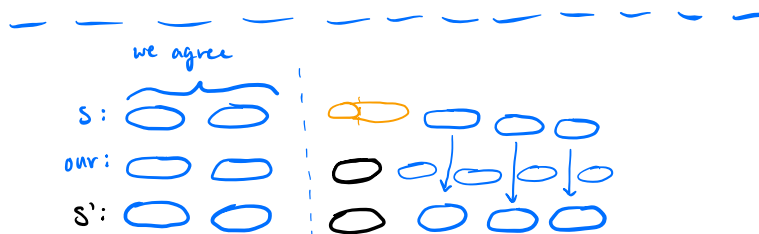
1. fixes the above disagreement WITHOUT introducing earlier disagreements
2. doesn't reduce the quality of the solution (S' is at least as good as S)

maximum interval selection

input: a collection of intervals in time

output: the biggest subset of non-overlapping intervals

alg: sort by endtime until no intervals remain:
select the interval that ends earliest
delete all overlapping intervals



HW problem:

input: collection of assignments, each with a deadline and processing time

output: schedule of assignments that minimizes the summed lateness

alg: sort by deadlines process

