Announcements

- Welcome back! I hope you all had a great break!!

- Mon/Tue April 6-7 section no quiz, on divide and conquer
- HW8 divide and conquer, due Friday April 10

Plan for the remainder of the semester

- HW9-11 due Fridays April 17, 24, May 1
- Cumulative Final, May 9th
- 1-on-1 appointments possible, see signup here (also posted on Ed)

Dealing with NP-hard problems

Job scheduling and makespan

Join by Web PollEv.com/evatardos772

5 jobs with times 1, 2, 2, 2, 5. what is the minimum makespan possible with 2 or 3 machines

A. With 2 machines OPT=5, with 3 machines OPT=4
B. With 2 machines OPT=6, with 3 machines OPT=4
C. With 2 machines OPT=5, with 3 machines OPT=5
D. With 2 machines OPT=6, with 3 machines OPT=5
E. With 2 machines OPT=7, with 3 machines OPT=5

Makespan NP-hard

Greedy algorithm ideas

Plan to prove guarantee on makespan

What we know about optimal makespan

Approximation guarantee