cs473 Algorithms

Problem Set #1

Prof. Michael A. Forbes

Due: Fri., 2022-02-02 17:00

Some reminders about logistics. See the course webpage for full details.

- Submission Policy: Submit psets via gradescope. Student psets must obey the following constraints:
 - Each problem starts on its own page.
 - The first page has the following metadata:
 - * author(s) of the problem set
 - \cdot name(s)
 - \cdot netid(s)
 - * pset number
 - * list of collaborators
- Collaboration Policy: Starting with *this* problem set, students are allowed to work in groups of up to three.
- Late Policy: Late psets are not accepted. Instead, several lowest-scoring pset problems will be dropped from a students score.

All problems are of equal value.

- 1. Supercomputer job scheduling. Kleinberg-Tardos Chapter 6, Problem #10.
- 2. Maximizing addition/multiplication via parenthesization. Erickson Chapter 3, Problem #34 (https://jeffe.cs.illinois.edu/teaching/algorithms/book/03-dynprog.pdf)
- 3. Inventory management. Kleinberg-Tardos Chapter 6, Problem #26.