

CS 758/858 Homework 4: Heaps
for Tue Sep 15 2026

These are some suggestions to help you prepare for quiz 4.

1. Review any problems from previous quizzes that you got wrong.
2. Exercise 6.5-7 from CLRS.
3. Exercise 6.5-11 from CLRS.
4. Exercise 6.2-5 from CLRS.
5. Exercise 6.4-2 from CLRS
6. Part b of problem 6-1 from CLRS
7. You are given a stream of numbers coming in from a quantitative trading system. Every now and then, a trader will want to know the median of all the numbers seen so far. Design a way to track the median such that, after seeing n numbers so far, absorbing an additional incoming number takes $O(\lg n)$ time and reporting the current median takes $O(1)$ time.