15.082J/6.855J **Network Optimization**

Homework Set #4
Due Lecture 9
at the beginning of class

Chapter 4 of AMO

1. Exercise 4.5
2. Exercise 4.10
3. In the radix heap algorithm, we claimed that one did not need to redistribute the minimum non-empty bucket if it only had one node in it. One could just select the node in the FindMin step. Explain why one would not need to distribute the elements of a bucket if there were K items in it, where K is the number of buckets.

Chapter 5 of AMO

4. Exercise 5.3
5. Exercise 5.12
6. Exercise 5.16. Assume that k = O(1), e.g., k = 10.
7. Exercise 5.19
8. Exercise 5.21