

# Analysis of Algorithms

CS 375, Fall 2018

Homework 7

Due **AT THE BEGINNING OF CLASS** Monday, October 8

- **Reading Assignment:** From your textbook (Levitin), read Ch. 4 (except for section 4.2—you can skip that for now).
- *A general note:* When writing up your homework, please write neatly and explain your answers clearly, giving all details needed to make your answers easy to understand. Graders may not award credit to incomplete or illegible solutions. Clear communication *is* the point, on every assignment.

## Exercises

1. Exercise 3.4.6
2. Exercise 3.5.1
3. Exercise 3.5.4
4. In lecture, one of our topics was the Traveling Salesman Problem (TSP)—we discussed a brute force solution for it. For this HW exercise, do some research online, and report what you find about the best known polynomial-time algorithm for the TSP.