

Analysis of Algorithms

CS 375, Spring 2019

Homework 11

Due **AT THE BEGINNING OF CLASS** Wednesday, April 10

- From your textbook (CLRS), please read Chapters 22.3–22.4.
- Exercises on this problem set are adapted from exercises in our recommended Levitin textbook.
- *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. CLRS 22.4-1 (pg. 614).
2. A pair of rabbits, one male and one female, is placed in a large sealed enclosure. How many pairs of rabbits will be there in a year if the initial pair are newborn and all rabbit pairs are not fertile during their first month of life but thereafter give birth to one new male / female pair at the end of every month?

As always, please explain your answer; here, a short explanation (3–4 sentences or so) could suffice, as long as it contains the ideas underlying the solution.