Princeton Univ Fall '20 COS 521:Advanced Algorithms Homework 0 Out:  $Sep\ 1$  Due:  $Sep\ 4$ 

## **Instructions:**

- This is a dummy homework to familiarize you with the codePost system for submissions and peer grading. Your score on this homework will not count toward your grade, but you will submit and grade it to check that it runs smoothly. The typical homework instructions are provided below for your convenience, but they do not all apply.
- Upload your solutions (to the non-extra-credit) to each problem as a **separate PDF** file (one PDF per problem) to codePost. Please make sure you are uploading the correct PDF! Please anonymize your submission (i.e., do not list your name in the PDF), but if you forget, it's OK.
- If you choose to do extra credit, upload your solution to the extra credits as a single separate PDF file to codePost. Please again anonymize your submission.
- You may collaborate with any classmates, textbooks, the Internet, etc. Please upload a brief "collaboration statement" listing any collaborators as a separate PDF on code-Post (if you forget, it's OK). But always write up your solutions individually.
- For each problem, you should aim to keep your writeup below one page. For some problems, this may be infeasible, and for some problems you may write significantly less than a page. This is not a hard constraint, but part of the assignment is figuring out how to easily convince the grader of correctness, and to do so concisely. "One page" is just a guideline: if your solution is longer because you chose to use figures (or large margins, display math, etc.) that's fine.
- Each problem is worth twenty points (even those with multiple subparts), unless explicitly stated otherwise.

## **Problems:**

- §1 Write one thing you are excited to learn about in this course, or something else you are looking forward to. (One sentence is more than enough.)
- §2 Write a short, concise, response to this problem that you believe the peer grader who reads it will accept wholeheartedly.

Hint: There are no wrong answers to this problem; only heartless graders.

## Extra Credit:

§1 (extra credit) Come up with an outrageously complex and inscrutable proof of a very simple statement (mathematical or otherwise). It should be logically sound and ideally no more than half a page, but much shorter is perfectly fine as well.

Note that if you write this way on any other problem in the course, you may not get credit. This is your one chance to do so.