

Assignment 4 - Asymptotics

CS 234

due March 10, 11:59pm

0 Introduction

This assignment comes in one part: asymptotic proofs.

This assignment is to be completed individually, but feel free to collaborate according to the course's external collaboration policy (which can be found in the syllabus).

The deliverables consist of one `.pdf` file and one `.py` file. The deliverables should be submitted electronically to by the deadline. Put any attribution text in the `.pdf` file. You may also consider adding an experience report to the `.pdf` describing your experience with the assignment: how long did it take, how hard/fulfilling was it, etc.

Your `.pdf` file should be named like `FLast_cs234_aX.ext` where `F` is your first initial, `Last` is your last name, `X` is the assignment number, and `ext` is the appropriate file extension. For example, Éva Tardos's `.pdf` file should be given the name `ETardos_cs234_a5.pdf`. (Éva Tardos is an award-winning researcher in graph and optimization algorithms. I did many asymptotic analyses for her class when I was an undergrad.)

1 Asymptotic Proofs

Please complete the following exercises from the textbook in your .pdf submission. Clearly label your responses with the exercise number.

- D.4, D.5
- D.9, D.10
- D.13, D.14
- D.16, D.17
- D.18, D.19