

CS41 rewrite 2

This assignment is due at 11:59PM on **Tuesday, December 11**. Write your solution using \LaTeX . Submit this homework using **github** as a **.tex** file. This is an **individual homework**.

In this rewrite, you will select one problem from a homework assignment 4–8. For that problem, you will give a completely formal write-up of the solution (whether or not the original problem asked for this). This includes:

- A full description of the problem, including specification of how the input is encoded/formatted.
- An explanation of the high-level intuition behind your algorithm for the problem.
- A low-level pseudocode description of an algorithm.
- A proof that the algorithm halts.
- A fully-formal runtime analysis. (You will need to refer to your pseudocode.)
- A proof of correctness. (This may require multiple parts, depending on the problem.)

The objective of this rewrite is to practice the analysis and proof skills you have learned throughout the semester, and bring them together in one coherent, complete presentation of a single algorithms problem.