

Problem Diary

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Problem Set #2

1. Solution Process

Couldn't really grasp how to start, but was going through possible data structures, but i realised that all data structures that seemed okay for this, did not allow for elements to be deleted, such as a sparse table or union find. A range tree did not seem correct because of the updating operation too.

Then under the guidance of lab demos i realised that you can go backwards, which meant it was only union operations.

And then it was pretty easy to add an auxiliary tree in the form of an ordered map to keep track of population.

2. Challenges and Reflections

This problem encouraged thinking outside the box and was eye opening.

3. Collaboration

Tutors Jack and Larissa.