

CP2 : Reading Material I

Segment Trees

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1 Reading material

Read [this](#) post for an introduction motivated by the range-sum problem.

2 Exercises

- [SPOJ - HORRIBLE](#): A simple task you can use to test your implementation.
- [SPOJ - CTRICK](#): A not so simple task, which Mohit claims changed his life.
- [SPOJ - GSS1](#): This task begins to show the versatility of the segment tree data structure.
- [SPOJ - GSS3](#): Same as GSS1, but also has updates (yay).
- [CF - 446C](#): This actually boils down to range-sum and lazy propagation. Since it doesn't teach much beyond patience while implementing, feel free to skip this task if you don't have time.

3 Optional extra material

NB: This material will not be on the end of month contests.

[This](#) post shows some more (powerful) ways to use the segment tree data structure. It is written somewhat tersely, so feel free to discuss this in the discussions section, and we will try our best to help.

3.1 Moar exercises

The post already has a lot of problems, so you can try to implement the solutions it discusses (or even solve them yourself.) We have only problem to add, [Parade](#) from the Canadian Computing Olympiad, 2009. If you run out of problems to solve, you can email the TAs or start a discussion on backpack.