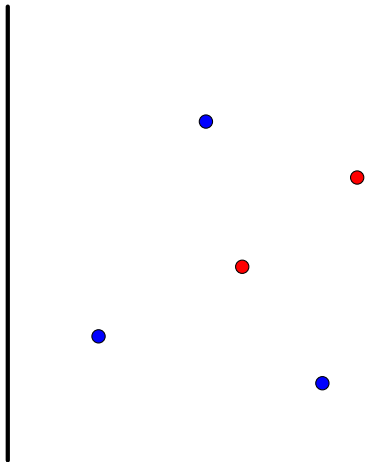


Scan line

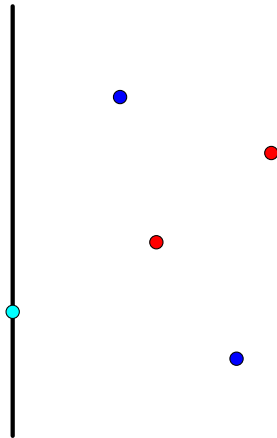
Swiss Olympiad in Informatics

February 16, 2017

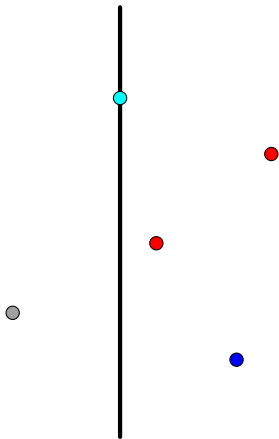
Sweeping Line:



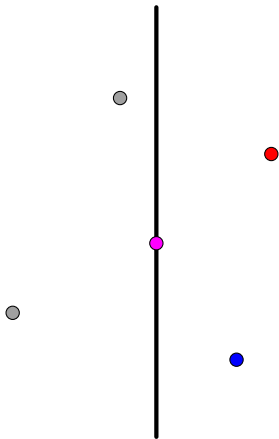
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Supporting data-structure:

- The necessary information about the other nodes is stored there
- Update the data-structure with every node you visit
- Can be everything from an int to a segmenttree

Things you need to consider:

- After which criteria do you sort the nodes
- Which data structure do you use

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- After which criteria do you sort the nodes
- Which data structure do you use
- How do I know it is a Scanline problem?

Task:

Given n rectangles with two opposite corners a_i and b_i are there any two rectangles that intersect? (*You can assume that no two rectangles touch.*)

What you should do:

- use the `std::sort` algorithm
- for reverse order, first sort, then use `std::reverse`

Problems

- off by one errors at the end/beginning

Ideas

- how to sort `std::pair`