Note: the Momotor tests are not working at the moment of publication of the assignment; we are working on it; in the meantime submission is possible.

1 2IP90 Homework Assignment – Rectangle

General Description

On input are 6 integers, representing three points in a Cartesian coordinate system, for each point first the x- and then the y-coordinate. The first two points designate a rectangle with sides parallel to the axes. The first point is the top left corner of the rectangle, the second point is the bottom right corner. The program has to decide whether the third point lays inside the rectangle (including the edges) or outside, and output "inside" or "outside" as a result. The program should output "error" if the rectangle is ill-defined, i.e., if the second point is above or to the left of the first point. The program may assume that no other errors occur in the input.

Design

Create a public class Rectangle in a file called Rectangle.java. This class has to contain the following methods: `public static void main()` and `void run()`. An object of the Rectangle class should be created within this **main** method, and the **run** method of this object should be called from there as well. All logic of the program should be located in the the **run** method. Examples of this structure can be found in the slides.

Important Remarks

- The output should be exactly as described. Any additionally printed text will lead to a score of 0. (e.g. printing "Please provide your input" or "error!" will give you 0 points. The same holds for the presence of whitespaces.)
- Upon submission Peach will report back whether the submission was accepted or rejected. Peach will indicate any problems with your submission in case of rejection. You can resubmit your work as often as necessary for as long as the deadline has not passed.
- If you encounter problems with Peach that you cannot fix yourself, please contact the 2IP90 helpdesk at `course2ip90@gmail.com`.

Examples

input: 1 4 4 1 2 2
output: inside

input: 1 4 4 1 5 5
output: outside

input: 4 1 1 4 5 5
output: error