**CRX**MARKETS
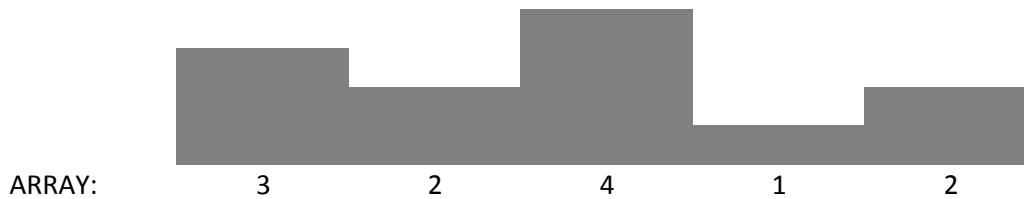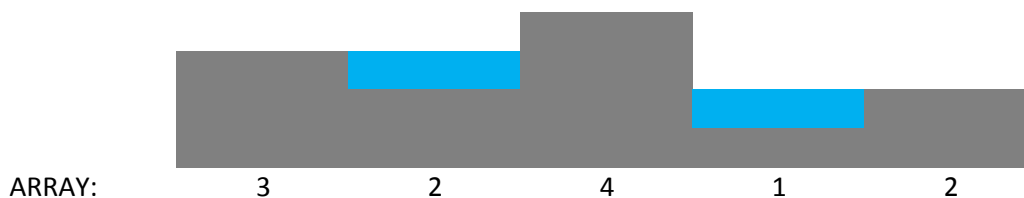
INPUT: array of integers
OUTPUT: integer number, further called "volume"
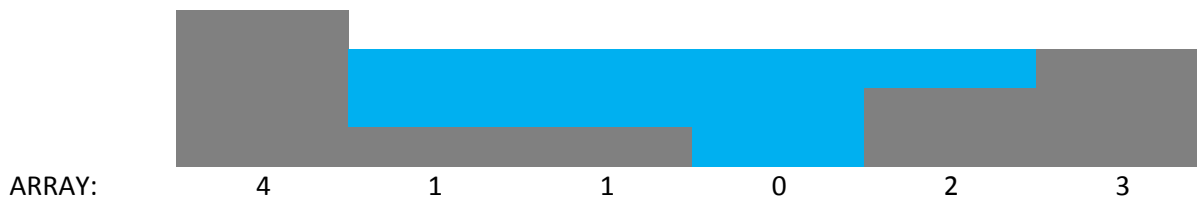
Imagine that the array describes profile of a surface, for example:



ARRAY:          3          2          4          1          2

Now imagine that there was a heavy rain, and all possible "holes" are filled with water.
In this case, we have volume == 2 units of water:



ARRAY:          3          2          4          1          2

Another example, here we have volume == 8 units of water:



ARRAY:          4          1          1          0          2          3

**TASK:**

Write an application which takes an array as an input, and calculates the volume of water which remained after the rain, in units.

The application shall be deployable in a EJB container of your choice
(preferably either JBoss, Wildfly, Glassfish, or TomEE).

Make a statement on complexity of your solution (time and memory), and if possibly discuss complexity of an optimal solution.

We evaluate in particular:
* correctness and clarity of the algorithm
* readable and maintainable code
* "real" enterprise application: layered, testable, deployable, documented