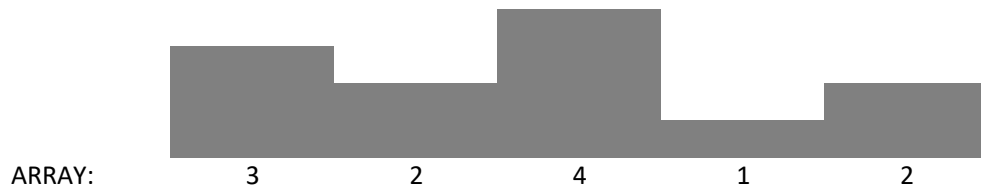


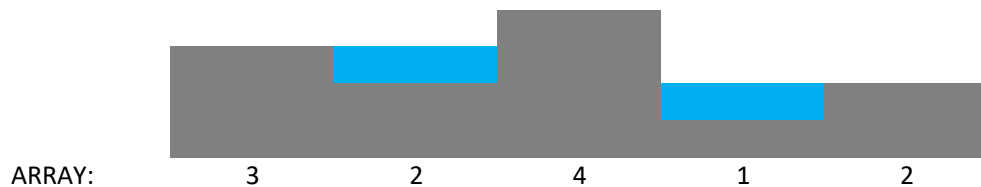
INPUT: array of integer numbers

OUTPUT: a number, further called "volume"

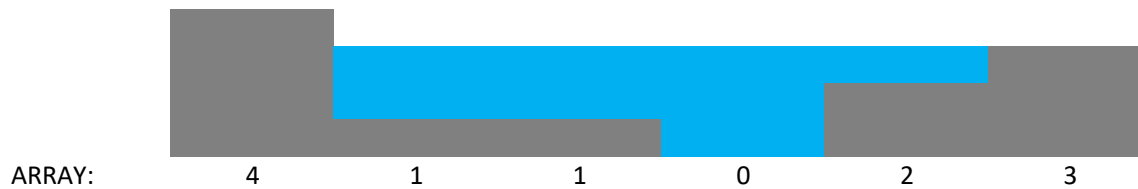
Imagine that the array describes profile of a surface, for example:



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:



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



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).

We also accept Spring Boot solutions as an alternative to a JEE conform packaging.

Make a statement on complexity of your solution (time and memory).

We evaluate in particular:

- * correctness and clarity of the algorithm
- * industry-standard build process, readable and maintainable code
- * "real" enterprise application: layered, testable, deployable, documented
- * quality of API and/or UI, provided by the solution