Quantum Frog (quantum)

Beatrice is a researcher at the Italian Tandem Accelerator Collision Particles Centre and she is on the verge of a major breakthrough. She recently discovered the new Frog particle and she is now studying its behaviour in a closed system.

The system can be described by N possible energy levels a_i. From her observations so far, Beatrice has gathered the following information about the Frog particle:

- It has quantum properties: it is located at two different energy levels at the same time, i.e. its state can be represented by a pair (i, j).
- It has frog properties: it can jump from one energy level to another, but it cannot jump from both energy levels at the same time, i.e. in one jump from (i, j) it can land on (i, k) or (h, j) but not on (h, k).

However, not all jumps are possible: Beatrice knows that the entropy of the system must be strictly increasing after each jump. For an isolated Frog particle in state (i, j), she determined the entropy to be equal to the Frog constant F multiplied by the absolute difference $|a_i - a_j|$ between the energy levels of the state.

Beatrice performed one observation on the system and she identified the Frog particle in state (x, y). After the observation, the system naturally evolved and the Frog particle performed an unknown sequence of (possibly zero) entropy-increasing jumps. To help Beatrice complete her research, you should compute the number of possible distinct states where the Frog particle may now be located (the state (i, j) is considered equivalent to the state (j, i)).

Figure 1: What society thinks Beatrice is doing.

Input

The first line contains three integers N, x, y, respectively, the number of energy levels of the system and the state where the Frog particle was located during the observation.

The second line contains N integers $a_0, a_1, \ldots, a_{N-1}$, the values of the energy levels.

Output

You should output a single line containing a single integer: the number of possible distinct states that the Frog particle may have reached after the observation.

Constraints

- $2 \le N \le 5 \cdot 10^5$.
- $0 \le x, y < N$.
- $x \neq y$.
- $0 \le a_i \le 10^{18}$ for every i.
- $a_i \neq a_j$ for every $i \neq j$.

Examples

input	output
`4 1 2` `40 20 30 10`	`4`
`5 0 1` `10 20 30 40 50`	`6`

Explanation

In the **first sample case**, the Frog particle can either be in states $(0, 1)$, $(1, 2)$, $(2, 3)$ or $(0, 3)$.

In the **second sample case**, the Frog particle can either be in states $(0, 1)$, $(0, 2)$, $(0, 3)$, $(0, 4)$, $(1, 3)$ or $(1, 4)$. Note that although the state $(2, 4)$ has an entropy strictly greater than the initial one, it cannot be reached with any sequence of jumps.