DMPG '18 G4 - Variation

You are given an array of N integers $v_1, v_2, \ldots, v_N$. You can increase any element by 1 at a cost of A or decrease any element by 1 at a cost of B. Determine the minimum cost to make all elements of the array distinct. The values are allowed to be decreased so that they are negative.

Constraints

For all subtasks,
$1 \leq A, B \leq 1\,000\,000$

Subtask 1 [30%]

$1 \leq v_i \leq 2\,000$
$1 \leq N \leq 2\,000$

Subtask 2 [70%]

$1 \leq v_i \leq 1\,000\,000\,000$
$1 \leq N \leq 2\,000$

Input Specification

The first line will contain a single integer, N.
The second line will contain two space-separated integers, A and B in that order.
The third and final line will contain N space-separated integers, $v_1, v_2, \ldots, v_N$.

Output Specification

Output a single integer, the minimum cost required.

Sample Input

```
5
4 2
6 5 6 6 5
```

Sample Output

```
12
```