Minimum value

Given a 32-bit integer array, calculate the lowest possible value between 2 integers in an array.

Note that the order of the numbers cannot be changed. Your program must evaluate the subtraction equation for any given array from right to left. For example, in the third line from example below starting at 98, your program should evaluate the following equations:

- 98 - 55
- 98 - 33
- 98 - 1500
- 98 - 700
- 98 - 500

But, your program should not evaluate:

- 98 - 2
- 98 - 5
- 98 - 34
- 98 - 24

Input Format

```
20
10 20 -30 1 5 7 9 66 -100 101
500 700 1500 33 55 98 2 5 34 28
```

The first line of the input displays the total number of elements in the array (less than 300,000). The subsequent lines display the array elements separated by spaces and newline characters.

Output Format

Output the lowest integer value evaluated from the list.

Sample Input/Output

Given the following input:

```
20
10 20 -30 1 5 7 9 66 -100 101
500 700 1500 33 55 98 2 5 34 28
```

The output should be:

- 1498