Problem: Minimum Distance:

Consider an array of  integers, . The distance between two indices,  and , is denoted by .

Given , find the *minimum*  such that  and . In other words, find the minimum distance between any pair of equal elements in the array. If no such value exists, print .

**Note:**  denotes the absolute value of .

**Input Format**

The first line contains an integer, , denoting the size of array .   
The second line contains  space-separated integers describing the respective elements in array .

**Constraints**

**Output Format**

Print a single integer denoting the minimum  in ; if no such value exists, print .

**Sample Input**

6

7 1 3 4 1 7

**Sample Output**

3

**Explanation**   
Here, we have two options:

* and  are both , so .
* and  are both , so .

The answer is .

Solution

int minimumDistances(vector <int> a) {

int min=2147483647;

for(int i=0; i<a.size(); i++)

{

for(int j=i+1; j<a.size(); j++)

{

if(a[i]==a[j])

{

if(min>abs(i-j) )

{

min=abs(i-j);

}

}

}

}

(min==2147483647 ? min=-1 : min+=0);

return min;

}

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