

1338. Reduce Array Size to The Half

Description

You are given an integer array `arr`. You can choose a set of integers and remove all the occurrences of these integers in the array.

Return *the minimum size of the set so that **at least** half of the integers of the array are removed*.

Example 1:

Input: `arr = [3,3,3,3,5,5,5,2,2,7]`

Output: 2

Explanation: Choosing {3,7} will make the new array [5,5,5,2,2] which has size 5 (i.e equal to half of the size of the old array).

Possible sets of size 2 are {3,5},{3,2},{5,2}.

Choosing set {2,7} is not possible as it will make the new array [3,3,3,3,5,5,5] which has a size greater than half of the size of the old array.

Example 2:

Input: `arr = [7,7,7,7,7,7]`

Output: 1

Explanation: The only possible set you can choose is {7}. This will make the new array empty.

Constraints:

- $2 \leq \text{arr.length} \leq 10^5$
- `arr.length` is even.
- $1 \leq \text{arr}[i] \leq 10^5$

