Given an 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 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.

**Example 3:**

**Input:** arr = [1,9]

**Output:** 1

**Example 4:**

**Input:** arr = [1000,1000,3,7]

**Output:** 1

**Example 5:**

**Input:** arr = [1,2,3,4,5,6,7,8,9,10]

**Output:** 5

**Constraints:**

* 1 <= arr.length <= 10^5
* arr.length is even.
* 1 <= arr[i] <= 10^5