1368. Same Number

Given an array, If the same number **exists** in the array, and the distance of the same number is less than the given value k, output YES, otherwise output NO.

Example

Given array = [1,2,3,1,5,9,3], k = 4, return "YES".

Explanation:

The distance of 1 whose indexes are 3 and 0 is 3, which meets the requirement and output YES.

Given array =[1,2,3,5,7,1,5,1,3], k = 4, return "YES".

Explanation:

The distance of 1 whose indexes are 0 and 5 is 5, which meets the requirement， and output YES.

Notice

* The length of the given array is n，and n <= 100000.
* The element is x，0 <= x <= 1e9.
* 1 <= k < n。

<https://www.lintcode.com/problem/same-number/description>

1. #include <iostream>
2. #include <stdio.h>
3. #include <vector>
5. using namespace std;
7. string sameNumber(vector<int> &nums, int k) {
8. // Write your code here
9. map<int,int> hash;
11. int min\_dist = INT\_MAX;
13. for(int i =0; i < nums.size(); i++) {
14. if(hash.find(nums[i]) != hash.end()) {
15. //hash[nums[i]] = i - hash[nums[i]] + 1;
16. min\_dist = min(min\_dist, i - hash[nums[i]] + 1 );
17. }
18. else {
19. hash[nums[i]] = i;
20. }
21. }
23. return min\_dist;

26. }
28. int main() {
30. int array[] = {1,2,3,1,5,9,3};
31. int k = 4

34. return 0;
35. }