

Hands of Straights

Alice has some cards, each card has one number written on it. She wants to rearrange the cards into groups so that each group is of size **groupSize**, and consists of **groupSize** consecutive cards.

Given an integer array **hand** of size **N** where **hand [i]** is the value written on the **ith** card and an integer **groupSize**, return **true** if she can rearrange the cards, or **false** otherwise.

Example 1:

Input:

N = 9

groupSize = 3

hand[] = { 1, 2, 3, 6, 2, 3, 4, 7, 8 }

Output: true

Explanation:

Alice's hand can be rearranged as { 1, 2, 3 } , { 2, 3, 4 }, { 6, 7, 8 }. There are three groups with size 3. Each group has 3 consecutive cards.

Example 2:

Input:

N = 5

groupSize = 2

hand[] = { 1, 2, 3, 4, 5 }

Output: false

Explanation:

Alice's hand cannot be rearranged into groups of 2. Since there are 5 cards and 5 cards cannot be divided into groups of 2.

Your Task:

You don't need to read input or print anything. Your task is to complete the function **isStraightHand()** which takes the interger **N**, integer **groupSize** and an

integer array **hand** as parameters and returns the true if specified arrangement is possible.

Expected Time Complexity: $O(N \log(N))$

Expected Auxiliary Space: $O(N)$

Constraints:

$$1 \leq N \leq 10^5$$

$$1 \leq \text{groupSize} \leq N$$

$$0 \leq \text{hand}_i \leq 10^9$$