

# Problem 3375: Minimum Operations to Make Array Values Equal to K

## Problem Information

**Difficulty:** Easy

**Acceptance Rate:** 73.31%

**Paid Only:** No

**Tags:** Array, Hash Table

## Problem Description

You are given an integer array `nums` and an integer `k`.

An integer `h` is called **valid** if all values in the array that are **strictly greater** than `h` are **identical**.

For example, if `nums = [10, 8, 10, 8]`, a **valid** integer is `h = 9` because all `nums[i] > 9` are equal to 10, but 5 is not a **valid** integer.

You are allowed to perform the following operation on `nums`:

\* Select an integer `h` that is **valid** for the **current** values in `nums`. \* For each index `i` where `nums[i] > h`, set `nums[i]` to `h`.

Return the **minimum** number of operations required to make every element in `nums` **equal** to `k`. If it is impossible to make all elements equal to `k`, return -1.

**Example 1:**

**Input:** nums = [5,2,5,4,5], k = 2

**Output:** 2

**Explanation:**

The operations can be performed in order using valid integers 4 and then 2.

**\*\*Example 2:\*\***

**\*\*Input:\*\*** nums = [2,1,2], k = 2

**\*\*Output:\*\*** -1

**\*\*Explanation:\*\***

It is impossible to make all the values equal to 2.

**\*\*Example 3:\*\***

**\*\*Input:\*\*** nums = [9,7,5,3], k = 1

**\*\*Output:\*\*** 4

**\*\*Explanation:\*\***

The operations can be performed using valid integers in the order 7, 5, 3, and 1.

**\*\*Constraints:\*\***

\* `1 <= nums.length <= 100` \* `1 <= nums[i] <= 100` \* `1 <= k <= 100`

## Code Snippets

**C++:**

```
class Solution {
public:
    int minOperations(vector<int>& nums, int k) {
        }
};
```

**Java:**

```
class Solution {  
public int minOperations(int[] nums, int k) {  
}  
}  
}
```

**Python3:**

```
class Solution:  
    def minOperations(self, nums: List[int], k: int) -> int:
```