



First Element to Repeat k Times

You are given an array of integers and an integer k. Your task is to find the first element in the array that appears exactly k times. If no such element exists, return -1.

Input:

- An integer array arr of size n, where 1≤n≤10⁵
- An integer k, where 1≤k≤n

Output:

• Return the first element from the array that occurs exactly k times. If no element occurs exactly k times, return -1.

Examples:

Example 1

Input: arr = [3, 1, 4, 4, 5, 2, 6, 1, 4], k = 2

Output: 1 Explanation:

• Element 1 appears twice in the array (at index 1 and index 7), making it the first element that appears exactly 2 times.

Constraints:

• The array contains integers, and the elements may be positive, negative, or zero.

Test Cases:

1. Input: arr = [2, 3, 4, 2, 2, 5, 5], k = 2

Output: 5

2. Input: arr = [1, 1, 1, 1], k = 1

Output: -1

3. Input: arr = [10], k = 1

Output: 10

4. Input: arr = [6, 6, 6, 6, 7, 7, 8, 8, 8], k = 3

Output: 8





Edge Cases:

- 1. Single Element Array: The array has only one element. In this case, k should be 1 to return the element itself.
- 2. No Element Appears k Times: If no element in the array appears exactly k times, return -1.
- 3. All Elements Appear More or Less than k Times: If all elements appear either less or more than k times, return -1.