

# 683. K Empty Slots

## Description

You have `n` bulbs in a row numbered from `1` to `n`. Initially, all the bulbs are turned off. We turn on **exactly one** bulb every day until all bulbs are on after `n` days.

You are given an array `bulbs` of length `n` where `bulbs[i] = x` means that on the  $(i+1)^{\text{th}}$  day, we will turn on the bulb at position `x` where `i` is **0-indexed** and `x` is **1-indexed**.

Given an integer `k`, return *the minimum day number such that there exists two turned on bulbs that have exactly `k` bulbs between them that are all turned off*. If there isn't such day, return `-1`.

### Example 1:

Input: `bulbs = [1,3,2]`, `k = 1`

Output: `2`

Explanation:

On the first day: `bulbs[0] = 1`, first bulb is turned on: `[1,0,0]`

On the second day: `bulbs[1] = 3`, third bulb is turned on: `[1,0,1]`

On the third day: `bulbs[2] = 2`, second bulb is turned on: `[1,1,1]`

We return 2 because on the second day, there were two on bulbs with one off bulb between them.

### Example 2:

Input: `bulbs = [1,2,3]`, `k = 1`

Output: `-1`

### Constraints:

- `n == bulbs.length`
- `1 <= n <= 2 * 104`
- `1 <= bulbs[i] <= n`
- `bulbs` is a permutation of numbers from `1` to `n`.
- `0 <= k <= 2 * 104`

