

Minimum days to make M bouquets

You have a row of flowers, where each flower blooms after a specific day. The array **arr[]** represents the blooming schedule: **arr[i]** is the day the flower at position **i** will bloom. To create a bouquet, you need to collect **k adjacent** bloomed flowers. Each flower can only be used in one bouquet.

Your goal is to find the **minimum** number of days required to make exactly **m** bouquets. If it is not possible to make **m** bouquets with the given arrangement, return **-1**.

Examples:

Input: m = 3, k = 2, arr[] = [3, 4, 2, 7, 13, 8, 5]

Output: 8

Explanation: We need 3 bouquets and each bouquet should have 2 flowers. After day 8: [x, x, x, x, _, x, x], we can make first bouquet from the first 2 flowers, second bouquet from the next 2 flowers and the third bouquet from the last 2 flowers.

Input: m = 2, k = 3, arr[] = [5, 5, 5, 5, 10, 5, 5]

Output: 10

Explanation: We need 2 bouquets and each bouquet should have 3 flowers, After day 5: [x, x, x, x, _, x, x], we can make one bouquet of the first three flowers that bloomed, but cannot make another bouquet. After day 10: [x, x, x, x, x, x, x], Now we can make two bouquets, taking 3 adjacent flowers in one bouquet.

Input: m = 3, k = 2, arr[] = [1, 10, 3, 10, 2]

Output: -1

Explanation: As 3 bouquets each having 2 flowers are needed, that means we need 6 flowers. But there are only 5 flowers so it is impossible to get the needed bouquets therefore -1 will be returned.

Constraints:

$1 \leq k \leq \text{arr.size}() \leq 10^5$

$1 \leq m \leq 10^5$

$1 \leq \text{arr}[i] \leq 10^9$