1425. Constrained Subsequence Sum

Description

Given an integer array `nums` and an integer `k`, return the maximum sum of a **non-empty** subsequence of that array such that for every two **consecutive** integers in the subsequence, `nums[i]` and `nums[j]`, where `i < j`, the condition `j - i <= k` is satisfied.

A *subsequence* of an array is obtained by deleting some number of elements (can be zero) from the array, leaving the remaining elements in their original order.

Example 1:

```
Input: nums = [10,2,-10,5,20], k = 2
Output: 37
Explanation: The subsequence is [10, 2, 5, 20].
```

Example 2:

```
Input: nums = [-1,-2,-3], k = 1
Output: -1
Explanation: The subsequence must be non-empty, so we choose the largest number.
```

Example 3:

```
Input: nums = [10,-2,-10,-5,20], k = 2
Output: 23
Explanation: The subsequence is [10, -2, -5, 20].
```

Constraints:

- `1 <= k <= nums.length <= 10^5`
- `-10^4 <= nums[i] <= 10^4`