**Find the K-Sum of an Array**

**LeetCODE link -** [**https://leetcode.com/problems/find-the-k-sum-of-an-array/**](https://leetcode.com/problems/find-the-k-sum-of-an-array/)

You are given an integer array nums and a **positive** integer k. You can choose any **subsequence** of the array and sum all of its elements together.

We define the **K-Sum** of the array as the kth **largest** subsequence sum that can be obtained (**not** necessarily distinct).

Return *the K-Sum of the array*.

A **subsequence** is an array that can be derived from another array by deleting some or no elements without changing the order of the remaining elements.

**Note** that the empty subsequence is considered to have a sum of 0.

**Example 1:**

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

**Output:** 2

**Explanation:** All the possible subsequence sums that we can obtain are the following sorted in decreasing order:

- 6, 4, 4, 2, 2, 0, 0, -2.

The 5-Sum of the array is 2.

**Example 2:**

**Input:** nums = [1,-2,3,4,-10,12], k = 16

**Output:** 10

**Explanation:** The 16-Sum of the array is 10.

**Constraints:**

* n == nums.length
* 1 <= n <= 105
* -109 <= nums[i] <= 109
* 1 <= k <= min(2000, 2n)