

# 2386. Find the K-Sum of an Array

## Description

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)`

