

Partition to K Equal Sum Subsets

Given an integer array `nums` and an integer `k`, return `true` if it is possible to divide this array into `k` non-empty subsets whose sums are all equal.

Example 1:

Input: `nums = [4,3,2,3,5,2,1]`, `k = 4`

Output: `true`

Explanation: It is possible to divide it into 4 subsets (5), (1, 4), (2,3), (2,3) with equal sums.

Example 2:

Input: `nums = [1,2,3,4]`, `k = 3`

Output: `false`

Constraints:

- $1 \leq k \leq \text{nums.length} \leq 16$
- $1 \leq \text{nums}[i] \leq 10^4$
- The frequency of each element is in the range $[1, 4]$.