

2226. Maximum Candies Allocated to K Children

Description

You are given a **0-indexed** integer array `candies`. Each element in the array denotes a pile of candies of size `candies[i]`. You can divide each pile into any number of **sub piles**, but you **cannot** merge two piles together.

You are also given an integer `k`. You should allocate piles of candies to `k` children such that each child gets the **same** number of candies. Each child can take **at most one** pile of candies and some piles of candies may go unused.

Return *the maximum number of candies each child can get*.

Example 1:

Input: `candies = [5,8,6], k = 3`

Output: 5

Explanation: We can divide `candies[1]` into 2 piles of size 5 and 3, and `candies[2]` into 2 piles of size 5 and 1. We now have five piles of candies of sizes 5, 5, 3, 5, and 1. We can allocate the 3 piles of size 5 to 3 children. It can be proven that each child cannot receive more than 5 candies.

Example 2:

Input: `candies = [2,5], k = 11`

Output: 0

Explanation: There are 11 children but only 7 candies in total, so it is impossible to ensure each child receives at least one candy. Thus, each child gets no candy and the answer is 0.

Constraints:

- `1 <= candies.length <= 105`
- `1 <= candies[i] <= 107`
- `1 <= k <= 1012`

