1825. Find Minimum Time to Finish All Jobs

Difficulty : Hard

https://leetcode.com/problems/find-minimum-time-to-finish-all-jobs

You are given an integer array `jobs`, where `jobs[i]` is the amount of time it takes to complete the ith job.

There are `k` workers that you can assign jobs to. Each job should be assigned to **exactly** one worker. The **working time** of a worker is the sum of the time it takes to complete all jobs assigned to them. Your goal is to devise an optimal assignment such that the **maximum working time** of any worker is **minimized**.

*Return the **minimum** possible **maximum working time** of any assignment.*

Example 1:

Input: jobs = [3,2,3], k = 3
Output: 3
Explanation: By assigning each person one job, the maximum time is 3.

Example 2:

Input: jobs = [1,2,4,7,8], k = 2
Output: 11
Explanation: Assign the jobs the following way:
Worker 1: 1, 2, 8 (working time = 1 + 2 + 8 = 11)
Worker 2: 4, 7 (working time = 4 + 7 = 11)
The maximum working time is 11.

Constraints:

- `1 <= k <= jobs.length <= 12`
- `1 <= jobs[i] <= 10`^{7}