

Allocate Minimum Number of Pages Problem

Problem Statement

You are given an array *pages* where *pages*[*i*] represents the number of pages in the *i*-th book. There are *m* students, and the goal is to allocate books to these students such that the maximum number of pages assigned to any student is minimized. Each student must be assigned at least one book, and each book can be assigned to only one student. Books must be allocated in a contiguous manner.

Example

- **Input:**

$$\begin{aligned} \textit{pages} &= [12, 34, 67, 90] \\ m &= 2 \end{aligned}$$

- **Output:**

$$113$$

- **Explanation:**

The optimal way to allocate books is [12, 34, 67] and [90].
The maximum number of pages assigned to a student is 113.

Constraints

- The number of books is between 1 and 10^5 .
- The number of pages in each book is between 1 and 10^6 .
- The number of students *m* is between 1 and the number of books.