Problem C. Maximum Subarray Sum II

Time limit 1000 ms
Mem limit 524288 kB

Given an array of n integers, your task is to find the maximum sum of values in a contiguous subarray with length between a and b.

Input

The first input line has three integers n, a and b: the size of the array and the minimum and maximum subarray length.

The second line has n integers $x_1, x_2, \ldots, x_n$: the array values.

Output

Print one integer: the maximum subarray sum.

Constraints

- $1 \leq n \leq 2 \cdot 10^5$
- $1 \leq a \leq b \leq n$
- $-10^9 \leq x_i \leq 10^9$

Example

Input	Output
8 1 2 -1 3 -2 5 3 -5 2 2	8