

**CSES Problem Set****Maximum Subarray Sum II**TASK | [SUBMIT](#) | [RESULTS](#) | [STATISTICS](#)**Time limit:** 1.00 s **Memory limit:** 512 MB

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, \dots, 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:

```
8 1 2
-1 3 -2 5 3 -5 2 2
```

Output:

8

Sorting and Searching

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