Biggest sum of a coherent subsequence

Wersja polska English version

Your task is to find the biggest sum of a coherent subsequence.

Input

There is an unknown number (less than 10^5) of integers which are less than 10^9.

Output

One single number which is the biggest sum of a coherent subsequence.

Example

Input:
1000 -100 5 -8 4 -100 1000
Output:
1801