

Problem M

Supsub

Time Limit: 1 seconds

Memory Limit: 512 Megabytes

Problem description

Given an array $a = a_1, a_2, \dots, a_n$

The cost of the subsegment a_l, a_{l+1}, \dots, a_r is $\sum_{i=l}^r \sum_{j=l}^i a_j$.

Find the maximum cost of a subsegment of a .

Input

- The first line contains an integer: n ($1 \leq n \leq 10^5$)
- The second line contains n integers: $a_1 a_2 \dots a_n$ ($-10^9 \leq a_i \leq 10^9$)

Output

The maximum cost of a subsegment of a

Example:

Input	Output
7 1 3 -4 3 1 -1 6	24

Look back the scoreboard, are you on the TOP alone?