Krasi

SEASON 8 – FOURTH ROUND

Krasi has a really long array. He likes it quite a lot but is looking for its best section. Sadly, his array is too long and Krasi can't go through it all by hand. That's why he sent it to his friends, so they can see it as well and say which section they like best.

Krasi's array consists of whole numbers from -1000 to 1000. We will say that a "section" is an unbroken sequence of its elements from position i to position j (including i and j). We will define the goodness of a section as the sum of the elements in it. However, Krasi doesn't like zeroes at all and, if there are more than K zeroes in some section, he doesn't like it all, no matter its sum.

You also received Krasi's array, help him by writing a program, which finds the sum of the elements in its best section.

Input

From the first line of the file `krasi.in` two numbers N and K are inputted – the length of Krasi's array and the maximum number of zeroes he will tolerate. From the next line N numbers are inputted – the elements of the array.

Output

In the output file `krasi.out` print a single number – the desired maximal sum of some section of the array, which has no more than K zeroes.

Constraints

$1 \leq N \leq 10^5$

$1 \leq K \leq 100$

Time limit: 0.5 sec

Memory limit: 256 MB

Sample test

Input (krasi.in)	Output (krasi.out)
13 2 2 3 0 5 0 -1 2 0 5 -2 1 0 6	12

Explanation of the sample test

The section with up to 2 zeroes, which has maximal sum, starts at position 7 and ends at the end of the array.