

Problem C. Consecutive Painting Operation

There are n squares in a row. Also, the i -th ($1 \leq i \leq n$) square from the left contains an integer a_i .

At first, all the squares are white. You are allowed to perform the following operation some number of times (possibly zero):

1. Choose any k consecutive squares.
2. Choose one of the two colors: black and white.
3. Paint all the chosen squares with the chosen color. Even if the square was painted before, the color of the square changes to the new color.

What you want to do is to *maximize* the total score, which is calculated by the sum of integers contained in the black squares. Given the sequence $\{a_i\}$, write a program that calculates the maximum possible score.

Input

Your input consists of an arbitrary number of records, but no more than 5.

Each input record consists of two lines. The first line contains two integers n ($1 \leq n \leq 100,000$) and k ($1 \leq k \leq n$), separated by a space. The second line contains n integers a_1, a_2, \dots, a_n ($-10^9 \leq a_i \leq 10^9$), each separated by a space.

The end of input is indicated by a line containing only the value -1 .

Output

For each input record, print a line that contains the maximum possible score. Note that you might need to use 64-bit type integer to store and print this value, and usually in contests, authors don't give this information.

Example

Standard input	Standard output
5 3 -1 1 -1 1 -1 1 1 100 1 1 -1000 4 2 19 -99 -1 21 -1	1 100 0 40

Explanation of the example

For the first example: Paint [2, 3, 4] to black.

For the fourth example: Paint [1,2] to black. Then, paint [3,4] to black. And finally, paint [2,3] to white.

Time Limit

1 second.