

Problem E. Effective Thief

There are n jewels arranged in a row. The i -th jewel from the left has cost of c_i . A thief is planning to steal some of the jewels. Since the thief has limited capacity, the thief can only steal **at most k consecutive jewels** at once. Of course, the thief wants the sum of cost of jewels to be maximized as possible. Given the costs of each jewel, write a program that calculates the *maximum possible sum of costs* that the thief can get by stealing jewels.

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 and k ($1 \leq k \leq n \leq 100,000$), separated by a space. The second line contains n integers c_1, c_2, \dots, c_n ($1 \leq c_i < 2^{31}$), 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 sum of costs that the thief can get by stealing jewels.

Example

Standard input	Standard output
7 5 11 1 7 1 7 13 1 2 2 6 1 -1	29 7

Time Limit

1 second.