

Title: Fishing

Problem Statement:

Legend says that there are n fishes at the sea. The quality of the fishes are represented by an array of integer values. Note that fishes can have negative quality, as they may be rotten or dead.

Fisherman John is trying to catch some fish from this array with his fishing net of size k . His fishing net allows him to catch a continuous subarray of fish from the array. The subarray is always of size k . The total value he gets from fishing is the sum of the qualities of fishes inside the subarray.

Find out what is the maximum value that he can get from casting his net at most once.

Input:

The first line are integers n and k . ($1 \leq n \leq 10^6$), ($k \leq n$)

The next line will consist of n space separated 32-bit integers, which denotes the quality of each fish.

Output:

Output an integer on a single line, the maximum value he can get, terminated by a newline.

Example:

Input 1:

7 3

1 -2 5 7 -1 8 9

Output 1:

16

Input 2:

3 3

-1 -2 -3

Output 2:

0

Explanation:

For the first example, Fisherman John should cast his net at $[-1, 8, 9]$ to receive the maximum value of 16. For the second example, Fisherman John should not cast his net at all.