Turn Off the Lights

There are n bulbs in a straight line, numbered from 0 to $n - 1$. Each bulb i has a button associated with it, and there is a *cost*, c_i, for pressing this button. When some button i is pressed, all the bulbs at a distance $\leq k$ from bulb i will be toggled(off->on, on->off).

Given n, k, and the costs for each button, find and print the minimum cost of turning off all n bulbs if they're all on initially.

Input Format

The first line contains two space-separated integers describing the respective values of n and k. The second line contains n space-separated integers describing the respective costs of each bulb (i.e., $c_0, c_1, \ldots, c_{n-1}$).

Constraints

- $3 \leq n \leq 10^4$
- $0 \leq k \leq 1000$
- $0 \leq c_i \leq 10^9$

Output Format

Print a long integer denoting the minimum cost of turning off all n bulbs.

Sample Input

```
3 1
1 1 1
```

Sample Output

```
1
```

Explanation

If we press the middle switch, the middle bulb and the $k = 1$ closest adjacent bulbs (i.e., the first and third) will turn off. Because all bulbs will be off in one button press, this cost is minimal. Thus, we print 1 as our answer.