Problem A. Rana 2

Time limit 2000 ms
Mem limit 1048576 kB

Problem Statement

There are N stones, numbered $1, 2, \ldots, N$. For each i ($1 \leq i \leq N$), the height of Stone i is h_i.

There is a frog who is initially on Stone 1. He will repeat the following action some number of times to reach Stone N:

- If the frog is currently on Stone i, jump to one of the following: Stone $i+1, i+2, \ldots, i+K$. Here, a cost of $|h_i - h_j|$ is incurred, where j is the stone to land on.

Find the minimum possible total cost incurred before the frog reaches Stone N.

Constraints

- All values in input are integers.
- $2 \leq N \leq 10^5$
- $1 \leq K \leq 100$
- $1 \leq h_i \leq 10^4$

Input

Input is given from Standard Input in the following format:

```
N K
h_1 h_2 ... h_N
```

Output

Print the minimum possible total cost incurred.

Sample 1

Input	Output
5 3 10 30 40 50 20	30

If we follow the path $1 \to 2 \to 5$, the total cost incurred would be $|10 - 30| + |30 - 20| = 30$.

Sample 2

Input	Output
3 1 10 20 10	20

If we follow the path $1 \to 2 \to 3$, the total cost incurred would be $|10 - 20| + |20 - 10| = 20$.

Sample 3

Input	Output
2 100 10 10	0

If we follow the path $1 \to 2$, the total cost incurred would be $|10 - 10| = 0$.

Sample 4

Input	Output
10 4 40 10 20 70 80 10 20 70 80 60	40

If we follow the path $1 \to 4 \to 8 \to 10$, the total cost incurred would be $|40 - 70| + |70 - 70| + |70 - 60| = 40$.