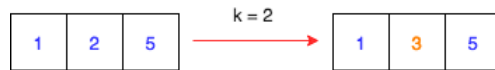# Minute to Win It

In a new version of the game *Minute to Win It*, the math round involves manipulating arrays to meet the given condition. In the challenge, you are given an array of n numbers $[a[0], a[1], \ldots, a[n-1]]$ and an integer k. In one minute, you can change any element of the array to any integer you want. Find the minimum amount of time you have to spend so that the following condition is satisfied: *for all i from 1 to $n-1$, $a[i] - a[i-1] = k$*.

For example, consider the array $[1, 2, 5]$ and $k = 2$. Then the condition can be satisfied in 1 minute by replacing the 2 with a 3.

Complete the function minuteToWinIt which accepts an array a of n integers and an integer k as input and returns the minimum amount of time in minutes.

Input Format

The first line contains two space-separated integers n and k.

The second line contains the array in the form of n space-separated integers $a[0], a[1], \cdots, a[n-1]$.

Constraints

- $2 \le n \le 10^5$
- $|k| \le 10^5$
- $|a[i]| \le 10^5$

Output Format

Print the minimum number of minutes needed to reorder the array.

Sample Input 0

```
6 2
1 2 5 7 9 85
```

Sample Output 0

```
2
```

Explanation 0

The given array is $[1, 2, 5, 7, 9, 85]$. If we change $2 \Rightarrow 3$ and $85 \Rightarrow 11$ at index 1 and 5 respectively, we get the desired array $[1, 3, 5, 7, 9, 11]$.