DMPG '15 B5 - Lux-urious S'mores

Time limit: 0.6s **Memory limit:** 64M

After beating his friends at their card game, Bob decides to make a few s'mores before retiring for the night. Bob loves s'mores, so he decides to build N campfires arranged neatly in a circle to roast his s'mores quickly. Unfortunately, he does not know how efficient each of the fires are, and it is here that he requires your help.

Each campfire x burns with a certain **intensity** I_x. The **variance** of a campfire V_x is the larger of the absolute values of the difference in intensity between itself and either of the two adjacent fires, calculated as $\max(|I_x - I_{x-1}|, |I_{x+1} - I_x|)$.

Little does he know that campfires must fulfill exactly one of two conditions to be able to cook s'mores as efficiently as possible.

- $I_x \geq K$ — its intensity should be at least K degrees, otherwise the s'mores will not melt fast enough.
- $V_x \leq L$ — its variance should be at most L degrees, since similar fires will cook the s'mores evenly.

Input Specification

The input begins with three space-separated integers on one line N $(3 \leq N \leq 500)$; K, L $(0 \leq K, L \leq 500)$, representing the number of campfires Bob absentmindedly built, the minimum recommended intensity, and the maximum recommended variance respectively.

The next N lines will each contain a single integer I_i $(1 \leq I_i \leq 500)$, denoting the intensity of the i^{th} campfire, in the order in which Bob has arranged them.

Output Specification

Output a single integer, denoting the number of campfires Bob has built that can be used to cook s'mores efficiently.

Sample Input

```
3 2 1
1
2
1
```

Sample Output

```
2
```