

Contest Duration: 2025-05-31(Sat) 22:00 (<http://www.timeanddate.com/worldclock/fixedtime.html?iso=20250531T2100&p1=248>) - 2025-05-31(Sat) 23:40 (<http://www.timeanddate.com/worldclock/fixedtime.html?iso=20250531T2240&p1=248>) (local time) (100 minutes)

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## F - Athletic

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Time Limit: 2 sec / Memory Limit: 1024 MiB

Score : 500 points

### Problem Statement

There are  $N$  scaffolds numbered from 1 to  $N$  arranged in a line. The height of scaffold  $i$  ( $1 \leq i \leq N$ ) is  $H_i$ .

Takahashi decides to play a game of moving on the scaffolds. Initially, he freely chooses an integer  $i$  ( $1 \leq i \leq N$ ) and gets on scaffold  $i$ .

When he is on scaffold  $i$  at some point, he can choose an integer  $j$  ( $1 \leq j \leq N$ ) satisfying the following condition and move to scaffold  $j$ :

- $H_j \leq H_i - D$  and  $1 \leq |i - j| \leq R$ .

Find the maximum number of moves he can make when he repeats moving until he can no longer move.

### Constraints

- $1 \leq N \leq 5 \times 10^5$
- $1 \leq D, R \leq N$
- $H$  is a permutation of  $(1, 2, \dots, N)$ .
- All input values are integers.

2026-01-02 (Fri)

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## Input

The input is given from Standard Input in the following format:

```
 $N \ D \ R$   
 $H_1 \ H_2 \ \dots \ H_N$ 
```

## Output

Output the answer.

### Sample Input 1

Copy

```
5 2 1  
5 3 1 4 2
```

Copy

### Sample Output 1

Copy

```
2
```

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Takahashi initially gets on scaffold 1 and can move between the scaffolds as follows:

- First move: Since  $H_2 \leq H_1 - D$  and  $|2 - 1| \leq R$ , he can move to scaffold 2. Move from scaffold 1 to scaffold 2.
- Second move: Since  $H_3 \leq H_2 - D$  and  $|3 - 2| \leq R$ , he can move to scaffold 3. Move from scaffold 2 to scaffold 3.
- Since the height of scaffold 3 is 1, he can no longer move.

As shown above, he can move 2 times. Also, no matter how he chooses the scaffolds to move to, he cannot move 3 or more times. Therefore, output 2.

### Sample Input 2

Copy

```
13 3 2  
13 7 10 1 9 5 4 11 12 2 8 6 3
```

Copy

### Sample Output 2

Copy

```
3
```

Copy

[/#telegram](#))

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