

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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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.

Input

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

```
N D R  
H1 H2 ... HN
```

Output

Output the answer.

Sample Input 1

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

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Sample Output 1

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```
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

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

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Sample Output 2

[Copy](#)

```
3
```

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