

Jumping Salesman Problem

Samay the Salesman is crossing the city of OBH. The city of OBH has N houses in it in a single straight line. The height of the i^{th} house in the city is denoted by H_i .

Since Samay wants to cross the city in the least time possible, he parkours over the buildings, from left to right. However, he is not very athletic and can only jump to buildings with heights less than the height of the current building he is on. He is also a very good salesman and sells 1 item at every house he visits.

Being greedy, he wants to sell as many items as he can. To help him, his friend Tejasvi living in the M^{th} house of the city, can throw him to a building to the right with height more than the height of his own house, if Samay chooses to visit him.

Help Samay find the maximum number of items he can sell. He can choose his starting point as any of the buildings in the city.

Since there is plain ground after the N^{th} building, Samay is always able to cross the city.

Input format

The first contains N , the number of houses in OBH and M , the index of Tejasvi's house The second line contains N integers, i^{th} of them being H_i .

Output format

A single integers, the maximum number of items Samay can sell.

Constraints

$$N \leq 10^3$$

$$1 \leq M \leq N$$

$$1 \leq H_i \leq 10^9$$

Sample input 1

```
7 5
```

```
1 6 3 5 2 4 5
```

Sample Output 1

```
4
```

Explanation

Samay starts from building 2 and goes through buildings with heights: 6 -> 5 -> 2 -> 5 -> exit

On house 5 with height 2, Tejasvi helps Samay go to building 7 with height 5.

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Clarifications

No clarifications have been made at this time.

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