

Beach

Problem ID: badstrand

Maja is tired of the coast being taken up by large seaside plots and instead wants to create a long, beautiful beach for public use. She is now planning to buy a segment of plots along the coast to create the beach.

Maja has a budget of B kronor, and the plots along the coast cost A_1, A_2, \dots, A_N kr from left to right. What is the longest segment of plots that Maja can afford to buy?

Input

The first line contains two integers N ($1 \leq N \leq 10^5$), the number of plots, and B ($0 \leq B \leq 10^9$), Maja's budget.

The second line contains the N integers A_1, A_2, \dots, A_N ($1 \leq A_i \leq 1,000$), where A_i is the price of plot i .

Output

Print a single integer: the largest number of consecutive plots Maja can afford to buy.

Points

Your solution will be tested on several test case groups. To get the points for a group, it must pass all the test cases in the group.

Group	Point value	Constraints
1	20	$N \leq 500$ and all A_i has the same value.
2	30	$N \leq 500$
3	50	No additional constraints.

Sample Input 1

```
3 14
4 7 3
```

Sample Output 1

```
3
```

Sample Input 2

```
4 36
11 5 7 14
```

Sample Output 2

```
3
```

Sample Input 3

```
9 18
1 5 3 4 6 2 1 2 4
```

Sample Output 3

```
6
```