UHCC1 P3 - Busy Elevator

Time limit: 1.0s **Memory limit:** 256M

In a magical world, pigs live under the constant threat of wolves. Thus, the pigs have developed an elevator to escape from the wolves.

One day, right before a wolf raid, there are N pigs in a queue waiting for the elevator, with the i^{th} pig having weight w_i. The elevator has a weight limit L.

Since the pigs have a bit of time before the wolf raid, at most one pig in the queue can step out and re-enter the queue at a different position.

What is the largest number of pigs that can fit onto the elevator without exceeding the weight limit?

Constraints

$1 \leq N \leq 10^6$

$0 \leq L \leq 10^{18}$

$1 \leq w_i \leq 10^9$

Input Specification

The first line contains two integers N and L.

The second line of input consists of N integers w_i.

Output Specification

Output the largest number of pigs that can fit on the elevator if at most one pig changes their place.

Sample Input 1

```
6 11
2 4 5 2 1 6
```

Sample Output 1

```
4
```

Explanation for Sample Output 1

If the second pig in the queue moves to the end of the queue, then 4 pigs can enter the elevator, whose weight are 2, 5, 2, and 1, in order.

Sample Input 2

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

Sample Output 2

```
2
```

Sample Input 3

```
6 1000000000000
1 2 3 4 5 6
```

Sample Output 3

```
6
```