

# Note Alive Note

## Problem ID: deathnote

Imagine you are a dangerous criminal with a Notebook called the 'Not Alive Note' which you use to keep track of all your future victims.

You have written in your notebook the weights of each person you would like to terminate, where  $p[i]$  represents the weight of person  $i$  in kilograms.



Today, you will go through each of these victims in order and terminate each of them. Unfortunately, you can only terminate  $K$  kilograms of people at most.

Determine the minimum number of people that need to be spared in order to execute as many people as possible.

### Input

- The first line contains two integers,  $n$  and  $k$ , where  $n$  represents the number of people in your notebook ( $1 \leq n \leq 10^6$  and  $1 \leq k \leq 10^9$ ).
- The next line will contain  $n$  space separated integers, where the  $i$ th integer,  $p[i]$ , represents the weight of the  $i$ th person ( $0 \leq p[i] \leq 10^9$ ).

### Output

- One integer representing the minimum number of victims you need to spare.
- If no victims can be terminated, print  $n$  instead.

#### Sample Input 1

```
10 30
6 10 1 4 5 7 8 9 2 3
```

#### Sample Output 1

```
3
```

#### Sample Input 2

```
5 40
41 57 99 103 84
```

#### Sample Output 2

```
5
```