

## (Adv.) Competitive Programming

Submit until 28.06.2019 13:30, via the [judge interface](#)



### Problem: biketrip (1 second timelimit)

For next semester break, you and your friends are planning a road trip through Asia with motorbikes. Planning went well so far, except that there is one country having a fuel crisis on the way. For that reason the equidistant fuel stations on the road you want to take have strict limits for selling gas to foreigners. Each station has its own limit and some aren't even allowed to sell to foreigners at all. Since the country has some of the most beautiful landscapes on earth, you don't really want to miss it. So please figure out, how many of your group can cross the country, while staying within the limit. Note that transferring fuel is also forbidden, because the local authorities view it as circumventing the selling limits.

**Input** The first line contains  $l \leq 1000$  and  $r \leq 30$ .  $l$  is the length of the road you want to take in kilometers and  $r$  the range of the motorbikes on one tank of gas. The second line contains  $l - 1$  integers  $a_i (1 \leq i \leq l - 1, 0 \leq a_i \leq 10000)$ , detailing how many foreign customers can be served at the fuel station at distance  $i$  from the border. This means, that there are no fuel stations at the borders.

**Output** Output the number of people who can cross the country. Hopefully it's larger than the number of your friends.

#### Sample input

```
10 5
0 0 1 0 2 0 0 1 0
```

```
10 3
1 1 1 1 2 1 1 1 1
```

#### Sample output

```
3
```

```
3
```