A. Queue on Bus Stop

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

It's that time of the year when the Russians flood their countryside summer cottages (dachas) and the bus stop has a lot of people. People rarely go to the dacha on their own, it's usually a group, so the people stand in queue by groups.

The bus stop queue has n groups of people. The i-th group from the beginning has a_i people. Every 30 minutes an empty bus arrives at the bus stop, it can carry at most m people. Naturally, the people from the first group enter the bus first. Then go the people from the second group and so on. Note that the order of groups in the queue never changes. Moreover, if some group cannot fit all of its members into the current bus, it waits for the next bus together with other groups standing after it in the queue.

Your task is to determine how many buses is needed to transport all n groups to the dacha countryside.

Input

The first line contains two integers n and m ($1 \le n, m \le 100$). The next line contains n integers: $a_1, a_2, \ldots, a_n$ ($1 \le a_i \le m$).

Output

Print a single integer — the number of buses that is needed to transport all n groups to the dacha countryside.

Examples

input
4 3 2 3 2 1
output
3

input
3 4 1 2 1
output
1

Codeforces Round #249 (Div. 2)
Finished

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Problem tags

implementation

No tag edit access

→ Contest materials

- Announcement
- Tutorial

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