

Task 1: LunchBox

You are the manager of a restaurant. You prepare N lunch boxes and hope to distribute them to some schools. Suppose there are m schools and assume the ith school asks for k_i lunch boxes.

You aim to distribute the lunch boxes to as many schools as possible. Moreover, you have a rule. For the ith school, you give either zero or k_i lunch boxes. Can you make a program that help you to find the maximum number of schools that can receive lunch boxes?

Input

Your program must read from standard input. The first line contains 2 integers, N and m. Then, it follows by m lines. The ith line contains an integer k_i .

Output

Your program must output one line with a single integer to the standard output, which is the maximum number of schools.

Sample Testcase

Consider the following input:

In this example, the answer is 3 since $3+4+2 \le 10$ and 3+9+4+2 > 10. For this example, the output is:

3

Subtasks

The maximum execution time on each instance is 0.5s. Your program will be tested on sets of input instances that satisfies the following restrictions:

	Subtask	Marks	Restrictions
	1	20	Each instance satisfies $m = 1$, $0 < N \le 60000$ and $0 < k_i \le 30000$
	2	30	Each instance satisfies $0 < m \le 1000$, $0 < N \le 60000$ and $0 < k_i \le 1000$
	3	50	Each instance satisfies $0 < N, m \le 60000$ and $0 < k_i \le 30000$