# CCC '13 J4 - Time on task

**Time Limit: 2.0s Memory Limit: 64M** 

#### Canadian Computing Competition: 2013 Stage 1, Junior #4

You have been asked by a parental unit to do your chores.

Each chore takes a certain amount of time, but you may not have enough time to do all of your chores, since you can only complete one chore at a time. You can do the chores in any order that you wish.

What is the largest amount of chores you can complete in the given amount of time?

#### **Input Specification**

The first line of input consists of an integer T ( $0 \le T \le 100\,000$ ), which is the total number of minutes you have available to complete your chores.

The second line of input consists of an integer C ( $0 \le C \le 100$ ), which is the total number of chores that you may choose from. The next C lines contain the (positive integer) number of minutes required to do each of these chores. You can assume that each chore will take at most  $100\,000$  minutes.

### **Output Specification**

The output will be the maximum number of chores that can be completed in time T.

#### **Sample Input 1**

3

6

6

3

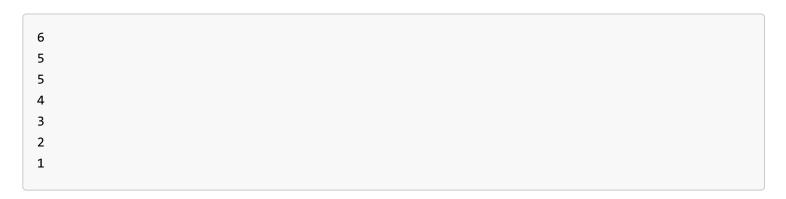
### **Output for Sample Input 1**

2

# **Explanation of Output for Sample Input 1**

Chores must be completed in at most 6 minutes. There are 3 chores available. The first chore takes 3 minutes. The second chore takes 6 minutes. The third chore takes 3 minutes. The answer is 2 since only 2 of these chores can be completed in 6 minutes of time. Specifically, the first and last chore can be completed in the allowable time. It is not possible to complete all 3 chores in 6 minutes.

#### **Sample Input 2**



## **Output for Sample Input 2**

3

# **Explanation of Output for Sample Input 2**

Tasks 3, 4, and 5 can be completed in 6 minutes. It is not possible to complete more than 3 tasks in 6 minutes.