→ Submit?

Language: GNU G++20 13.2 (64 bit, win

Choose file: Choose File No file chosen

Submit

G. Student Councils

time limit per test: 0.5 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

Given the number k. Each student council must consist of k students. Important rule: each council should be composed of students from different groups. That is, no two students from the same group can be in the same council.

Of course, each student should be in no more than one council (it is possible that some students are not included in any).

An array $a[1..n]$ is given, where $a[i]$ is the number of students in the i-th group. What is the maximum number of councils can be formed?

Input

The first line contains integer k ($2 \le k \le 20$). The second line contains integer n ($k \le n \le 50$). Next lines contain elements $a[1], a[2], \ldots, a[n]$ ($1 \le a[i] \le 10^9$).

Output

Print the required value.

Examples

input Copy

```
3
5
4
4
4
4
4
```

output Copy

```
6
```

input Copy

```
4
6
1
2
3
4
5
6
```

output Copy

```
5
```

Codeforces (c) Copyright 2010-2024 Mike Mirzayanov
The only programming contests Web 2.0 platform
Server time: Jun/29/2024 13:49:25 (l1).
Desktop version, switch to mobile version.
Privacy Policy

Supported by

ITMO UNIVERSITY