Problem: Party

Time Limit: 1 second
Memory Limit: 256 MB

Problem Statement

Polycarp is organizing a party and wants to invite his friends. He has **n** friends numbered from 1 to n. Each friend has a unique integer associated with them representing their level of enthusiasm to attend the party.

Polycarp aims to maximize the total enthusiasm at his party. However, there is a constraint: he wants the total enthusiasm to be **at least** a certain value **k**. Determine the **minimum number of friends** Polycarp needs to invite to achieve a total enthusiasm of at least **k**. If it's impossible to reach the desired enthusiasm, output -1.

Input

- The first line contains two integers **n** and **k** ($1 \le n \le 10^5, 1 \le k \le 10^9$) — the number of friends and the minimum total enthusiasm Polycarp wants to achieve.
- The second line contains **n** integers $a\_1, a\_2, ..., a\_n$ ($1 \le a\_i \le 10^4$) — the enthusiasm levels of each friend.

Output

- Print a single integer representing the minimum number of friends Polycarp needs to invite to achieve a total enthusiasm of at least **k**. If it's impossible, print -1.

Subtasks

- **Subtask 1 (30 points):**
  - $1 \le n \le 1000$
  - $1 \le a\_i \le 1000$
- **Subtask 2 (70 points):**
  - Original constraints.

Examples

Example 1

makefile
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```
Input:
5 12
1 2 3 4 5

Output:
3
```

Explanation:
Polycarp can invite friends with enthusiasm levels 5, 4, and 3. The total enthusiasm is 5 + 4 + 3 = 12, which meets the requirement with the minimum number of friends invited.

Example 2

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Input:
3 15
4 4 4

Output:
-1
```

Explanation:
The total possible enthusiasm is 4 + 4 + 4 = 12, which is less than 15. Hence, it's impossible to meet the requirement.

Example 3

makefile
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Input:
4 7
2 2 1 3

Output:
3
```

Explanation:

One optimal way is to invite friends with enthusiasm levels 3, 2, and 2, totaling 7.