

Sticks

Given an array of N sticks of certain lengths, and a target length K . You have to pick the minimum number of sticks from the given array to form K . In other words, you have to use the fewest amount of sticks possible. You are able to use each stick several times.

Constraints

- $1 \leq N \leq 100$
- $1 \leq K \leq 10000$
- The lengths of the stick are natural numbers and are smaller than or equal to 100,000.
- The same length of the sticks may be given several times.

Output

- If there is a solution, output the minimum number of sticks used.
- If impossible, output -1.

Additional Information

- Please make the time complexity of this code be less than or equal to $O(N \cdot K)$.

Case 1	Case 2	Case 3
Input N = 3 K = 13 Sticks = [1, 5, 12]	Input N = 4 K = 68 Sticks = [1,14,30,17]	Input N = 6 K = 109 Sticks = [13,17,43,100,110,120]
Output 2	Output 4	Output -1
Explanation: You can choose (1,12) to make 13	Explanation: You can choose (17,17,17,17) to make 68	Explanation: You can not make 109 with the given sticks