Problem D. Distributing cookies

Tomorrow is your daughter's birthday (assume that you have a daughter), and you promised to make the best party ever for her. She will be very happy if she can invite all her friends to this party (she has lots of friends), but unfortunately you cannot invite all her friends because you have a finite number of cookies, and you want everyone to be happy.

As we all know, kids love to eat a lot of cookies of the same brand. Let's assume that a kid will be *happy* only if he can eat at least K candies of the same brand. Given K, and the number of available cookies of each type, calculate the maximum number of kids where you can make all of them happy by giving each one at least K cookies of the same type.

Input

The input consists of an arbitrary number of lines, but no more than 100.

Each record consists of two lines. The first line of each record consists of two integers N $(1 \leq N \leq 100)$ and K $(1 \leq K \leq 100)$. The second line of each record contains N integers, each separated by a single space, which are the available number of cookies of each brand. There will be at least 1, and at most 100,000 cookies of each brand.

The end of input is indicated by a line containing only the value –1.

Output

For each input record, print a line that contains the maximum number of friends you are asked to calculate as described above.

Example

Standard input	Standard output
3 3 9 10 12 10 2 14 2 1 13 2 3 10 4 12 7 -1	10 32

Time Limit

1 second.