M. April Fools' Problem (easy)

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

The marmots have prepared a very easy problem for this year's HC^2 – this one. It involves numbers n, k and a sequence of n positive integers $a_1, a_2, ..., a_n$. They also came up with a beautiful and riveting story for the problem statement. It explains what the input means, what the program should output, and it also reads like a good criminal.

However I, Heidi, will have none of that. As my joke for today, I am removing the story from the statement and replacing it with these two unhelpful paragraphs. Now solve the problem, fools!

Input

The first line of the input contains two space-separated integers n and k ($1 \le k \le n \le 2200$). The second line contains n space-separated integers $a_1, ..., a_n$ ($1 \le a_i \le 10^4$).

Output

Output one number.

Examples

input
8 5 1 1 1 1 1 1 1 1
output
5

input
10 3 16 8 2 4 512 256 32 128 64 1
output
7

input
5 1 20 10 50 30 46
output
10

input
6 6 6 6 6 6 6 6
output
36

input
1 1 100
output
100