B. Martian Dollar

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

One day Vasya got hold of information on the Martian dollar course in bourles for the next n days. The buying prices and the selling prices for one dollar on day i are the same and are equal to a_i. Vasya has b bourles. He can buy a certain number of dollars and then sell it no more than once in n days. According to Martian laws, one can buy only an integer number of dollars. Which maximal sum of money in bourles can Vasya get by the end of day n?

Input

The first line contains two integers n and b $(1 \le n, b \le 2000)$ — the number of days and the initial number of money in bourles. The next line contains n integers a_i $(1 \le a_i \le 2000)$ — the prices of Martian dollars.

Output

Print the single number — which maximal sum of money in bourles can Vasya get by the end of day n.

Examples

input
2 4 3 7
output
8

input
4 10 4 3 2 1
output
10

input
4 10 4 2 3 1
output
15