Problem B - Mensa

You are at Mensa and quite hungry. You want to each as much as possible but only have a limited budget. Since you arrive just before the Mensa closes, for each different meal there is exactly one plate remaining. Hence, you compile a list of every meal containing the cost in cents and how many dietary calories each meal contains. With your limited budget, what is the largest amount of calories you can consume?

Input

The input consists out of:

- One line with two integers $1 \le n \le 1000$ and $1 \le B \le 1000$, where n is the number of items and B is how many cents you could spend.
- n lines, each containing two integers, the ith of which being $1 \le c_i \le 1000$ and $0 \le e_i \le 3000$. Where c_i is the cost and e_i the amount of energy of the ith dish.

Output

The maximum dietary calories you could eat with your budget.

Sample Input 1	Sample Output 1	
3 50	1100	
30 600		
15 400		
45 1100		
	3 50 30 600 15 400	3 50 30 600 15 400