

Problem 1 – Cakes

AniG loves sweet things, especially cakes. She also loves to spend money.

AniG owns **S** leva and wants to spend as much of them as she can. She also has 3 favorite types of cakes. The first one costs **C1** leva, the second one **C2** leva and the third one **C3** leva. In the shop there are infinite number of cakes but AniG has only **S** leva.

AniG should spend as much as she can of her money to buy some cakes. Find the maximum amount of money (no more than S) that she can spend to buy cakes.

Input

The input data should be read from the console.

On the first line there will be the number S.

On the second, third and fourth line there will be the numbers C1, C2 and C3.

The input data will always be valid and in the format described. There is no need to check it explicitly.

Output

The output should be printed on the console.

Output the biggest possible amount of money that AniG can spend.

Sample solution code (in JavaScript)

```
function solve(params) {
   var s = params[0], c1 = params[1], c2 = params[2], c3 = params[3];
   var answer = 0;
   // Your solution here
   console.log(answer);
}
```

Constraints

- S will be between 1 and 7000, inclusive.
- C1, C2, C3 will be between 11 and 7000
- Allowed working time for your program: **0.1 seconds**. Allowed memory: **16 MB**.

Examples

Input	Output
110 13 15 17	110
6 cakes with price 13 1 cake with price 15 and 1 cake with price 17	

Input	Output
20 11 200 300	11
1 cake with price 11	

Input	Output
110 19 29 39	107
0 cakes with price 19 1 cake with price 29 2 cakes with price 39	

So much many sugar. Wow.