Problem A
Cutting Ribbon
Time limit: 1 second

Ducktor has a ribbon with length of N. He wants to cut the ribbon in a way that fulfils the following two conditions:

- After cutting each ribbon piece should have length a, b or c.
- After cutting, the number of ribbon pieces should be maximum.

Help Ducktor and find the number of ribbon pieces after the required cutting.

Input

The first line contains four integers, space seperated, n, a, b and c – the length of the original ribbon and the acceptable lengths of the ribbon pieces after the cutting, correspondingly. The numbers a, b and c **can coincide**.

Output

Print a single number – the maximum possible number of ribbon pieces. It is guaranteed that at least one correct ribbon cutting exists.

Constraints

$1 \leq n, a, b, c \leq 4000$.

Sample Explanation

At first sample Ducktor can cut the ribbon in such way: the first piece has length 2, the second piece has length 3.

At second sample Ducktor can cut the ribbon in such way: the first piece has length 5, the second piece has length 2.

Sample Input 1	Sample Output 1
5 5 3 2	2

Sample Input 2	Sample Output 2
7 5 5 2	2

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