Problem B. Easy Linear Programming

Time limit 2000 ms **Mem limit** 1048576 kB

Problem Statement

We have A cards, each of which has an integer 1 written on it. Similarly, we also have B cards with 0s and C cards with -1s.

We will pick up K among these cards. What is the maximum possible sum of the numbers written on the cards chosen?

Constraints

- All values in input are integers.
- $0 \le A, B, C$
- $1 \le K \le A + B + C \le 2 \times 10^9$

Input

Input is given from Standard Input in the following format:

A B C K

Output

Print the maximum possible sum of the numbers written on the cards chosen.

Sample 1

Input	Output
2 1 1 3	2

Consider picking up two cards with 1s and one card with a 0. In this case, the sum of the numbers written on the cards is 2, which is the maximum possible value.

Sample 2

Input	Output
1 2 3 4	0

Sample 3

Input	Output
2000000000 0 0 2000000000	200000000