Statement

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Chef is very hungry. So, Chef goes to a shop selling burgers. The shop has 2 types of burgers:

- ullet Normal burgers, which cost X rupees each
- Premium burgers, which cost Y rupees each (where Y>X)

Chef has R rupees. Chef wants to buy **exactly** N burgers. He also wants to maximize the number of premium burgers he buys. Determine the number of burgers of both types Chef must buy.

Output -1 if it is not possible for Chef to buy N burgers.

Input Format

- $\bullet\,$ The first line contains a single integer T the number of test cases. Then the test cases follow.
- The first and only line of each test case contains four space-separated integers X, Y, N and R the cost of a normal burger, the cost of a premium burger, the number of burgers Chef wants to buy and the amount of money Chef has.

Output Format

For each test case, output on a new line two integers: the number of normal burgers and the number of premium burgers Chef must buy satisfying the given conditions.

Output -1 if he cannot buy N burgers.

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Constraints

- $1 \le T \le 10^4$
- $1 \le X < Y \le 1000$
- $1 \le N \le 10^6$
- $1 \le R \le 10^9$

Sample 1:

Input	Output	©
4	40	
2 10 4 12	82	
4 8 10 50	-1	
99 100 5 10	0 10	
9 10 10 200		

Explanation:

Test case 1: Chef has to buy 4 normal burgers only. Even if he buys 1 premium burger, he would not be able to buy 4 burgers.

 $\textbf{Test case 2:} \ \textbf{Chef can buy 8 normal burgers and 2 premium burgers.}$

Test case 3: It is not possible for Chef to buy 5 burgers.