Living Cost (H)

Beo go to market every sunday to buy 3 kinds of food which he need for the next week. The kinds of food have price p1, p2, and p3 for each piece respectively. Among of them he like the first one more than the second one, and like the second one more than the last one. He try to buy as much as possible the first kind of food, then as much as possible the second kind of food. With the exactly X vnd, how many each kind of food will he buy?

Input

- The first line has an integer X ($0 \le X \le 10^7$).

- The second line has 3 integers p_1, p_2, p_3 respectively ($0 \le p_i \le 10^7$).

Output

Three integers which are the number of pieces of each kind of food (food 1, food 2, food 3) that Beo will buy. Print an emply line if there is not any solution.

Sample

Input	Output
28 3 5 7	7 0 1