Q1. Stock Inventory Management (30 marks):

Components A, B and C are required to manufacture a certain product. Assume that a specific combination of the amounts of the three components needs to be assembled to produce one unit of the product. Assume that initially, you have an inventory of components A, B and C with certain quantities. You are required to find out with the existing inventory, how many product(s) you can produce, and what are the remaining quantities of the components after the above number of product(s) has/have been produced.

Write a program to:

Input, in sequence,

1) the current quantities of components A, B and C, **where the inputs must be non-negative integers**;

2) the amounts of A, B and C needed per product, **where the inputs must be positive integers**.

Output, in sequence,

1) the number of product(s) that can be produced, and

2) the remaining quantities of components A, B, and C, after the above number of products has/have been produced.

Note: If any of the inputs does not fulfil the criteria given in the input specifications, then output "Invalid Input".

试题 1. 库存管理 （30 分）：

某产品的制造需要 A、B 和 C 三种部件。而这三种部件必须按特定的数量，才能够组装一个单位的产品。假设在起始时刻，你在库存里分别有一定数量的 A、B 和 C 部件。你想了解根据现有库存，你可以生产多少个产品，以及在生产完上述数量的产品后，部件的剩余数量是多少。

试写一程式以

依序输入

1) 部件 A、B 和 C 的当前数量；**其输入必须为非负整数；**

2) 每个产品所需 A、B 和 C 的数量；**其输入必须为正整数。**

依序输出

1) 可以生产的产品数量，以及

2) 在上述数量的产品生产之后，部件 A、B 和 C 分别剩余的数量。

注意： 如果任何输入不符合所规定的输入规范，则输出"Invalid Input"。

Example (例子)

Input (输入)	Output (输出)
78 96 42 3 5 2	19 21 1 4
100 200 1 1 2 2	0 100 200 1
2600 5000 1900 60 110 50	38 320 820 0
5.2 8 7 0 4 3	Invalid Input
85 20 -1 7 6 4	Invalid Input