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The vegetable selling policy

X64150_en

The manager in our vegetables shop has established a new policy for the vegetables we sell, which implies stop selling a vegetable if it does not satisfy the policy.

The policy is simple: We monitor the monthly sales of each vegetable v (e.g., lettuce, onion, etc). Each vegetable has a selling period p (e.g. 3 months) and a minimum amount of sales m (e.g. 11 units). A vegetable v is removed from sale if less of m units of v are sold in any selling period of length p.

For instance, if lettuces have a selling period p = 3 months, and a minimum amount m = 11units, and the monthly sales of lettuces are:

```
2 10 0 3 4 5 2 1 9 2 3 5
```

lettuces will be discontinued because only 10 units (2+3+5) were sold in the last 3 months. Write a program that receives the sequence of monthly sales for different vegetables, and for each of them, writes "discontinued" if it should be withdrawn from the shop, or the cumulative sum of sales otherwise.

IMPORTANT: Assume that the number of sales of each vegetable is a multiple of its selling period. E.g. in the example above, the number of sales is 12, which is a multiple of the selling period 3.

WARNING: do not use vectors or other structures to solve this problem (violating this requirement will render the solution INVALID).

Exam score: 2.500000 Automatic part: 0.000000%

Input

A sequence of vegetable sales. For each vegetable, the input consists of the vegetable name (a string), the minimum amount to sell m (a natural number) and the selling period p (a natural number), followed by a sequence of natural numbers corresponding to the monthly sales of the vegetable. The amount of monthly sales is a multiple of p. Each sale sequence ends with -1.

Output

For each vegetable, its name, the cumulative sells if it satisfies the policy, or the string "discontinued" otherwise.

Sample input

```
lettuce 11 3 2 10 0 3 4 5 2 1 9 2 3 5 -1 | lettuce discontinued
aubergine 10 2 -1
tomatoe 12 3 2 10 0 3 4 5 2 1 9 -1
garlick 7 2 2 3 2 3 -1
onion 10 5 1 2 3 4 1 1 2 2 2 4 -1
```

Sample output

aubergine 0 tomatoe 36 garlick discontinued

Problem information

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