

Coding Arena

Change Default Language ▾

Time Left

06 00 00
 hr min sec

A

B

C

D

E

F

G

H

Problem : One Egg

"One Egg" is an egg supply company which supplies eggs to retailers. They have M classes of eggs. Each class can have N number of eggs (N can be same or can vary class to class).

They accept an order via mail for X eggs. In response, they confirm if they can supply the eggs with a "Thank you" note and the number of eggs or with a "Sorry" note and the numbers of eggs they can supply. They also mention the breakdown of eggs by class they will supply. The ordered eggs are adjusted against the different classes with the most number of eggs adjusted first then the balance is adjusted against the second highest and so on.

The company is a bit superstitious as well. If the number of eggs ordered is greater than or equal to the total number of eggs in stock then they retain one egg and responds back with the "Sorry" note with total number of eggs in stock minus one and breakdown of eggs by class.

Note: If the classes have same number of eggs then class entered first should be selected to adjust.

Input Format:

First line contains two space-separated integers denoting the respective values of M (the number of classes of eggs) and X, the number of eggs ordered

The following M lines contain an integer each indicating the number of eggs available in each class

Output Format:

First line should be, if X is less than total number of Eggs then Print
 "Thank you, your order for X eggs is accepted"
 Else if X is greater than or equal to total number of Eggs then print "
 "Sorry, we can only supply (total number of Eggs in stock -1) eggs"
 Then M lines with 3 columns:
 First column - Number of eggs available in each class
 Second column - Eggs allocated against each class for that order
 Third column - Balance Eggs against each class

Constraints:

$1 \leq M \leq 20$
 $N \geq 1$
 $X \geq 1$

Example 1

Input
 5 150
 50
 15
 80
 10
 5

Output
 Thank you, your order for 150 eggs are accepted
 50 50 0
 15 15 0
 80 80 0
 10 5 5
 5 0 5

Explanation

Total order of 150 eggs is less than the total number of Eggs $50+15+80+10+5 = 160$. Hence the Thank you message.

150 was first adjusted against Class with first highest number of eggs 80. Balance of $150-80 = 70$ was adjusted against second highest class of 50. Balance of $70-50 = 20$ then adjusted against 15. Balance of $20-15 = 5$ then adjusted against 10 leaving behind 5 eggs in that class.

Rules & Regulations**Launch Code Editor****Notifications****Status messages**

Example 2

Input
4 250
80
50
70
20

Output
Sorry, we can only supply 219 eggs
80 80 0
50 50 0
70 70 0
20 19 1

Explanation

Total order of 250 eggs was greater than the total number of eggs $80+50+70+20 = 220$. Hence the sorry message.

250 was first adjusted against Class with first highest number of eggs 80. Balance of $250-80 = 170$ was adjusted against second highest class of 70.

Balance of $170-70 = 100$ was then adjusted against 50. Balance of $100-50 = 50$ then adjusted against 20. Since Balance is greater than last class of egg all but one egg is left in that last class.

Note:

Please do not use package and namespace in your code. For object oriented languages your code should be written in one class.

Note:

Participants submitting solutions in C language should not use functions from `<conio.h>` / `<process.h>` as these files do not exist in gcc

Note:

For C and C++, return type of `main()` function should be `int`.

© 2017 Tata Consultancy Services Limited. All Rights Reserved.

Submit Answer

- ☒ I ,confirm that the answer submitted is my own.I would like to
☐ provide attribution to the following sources.

Select File

Browse...

Submit

