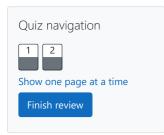
GE23131-Programming Using C-2024



Status Finished
Started Monday, 13 January 2025, 12:44 AM
Completed Monday, 13 January 2025, 1:12 AM
Duration 28 mins 23 secs

Question **1**Correct

question

You are transporting some boxes through a tunnel, where each box is a parallelepiped, and is width and height.

The height of the tunnel 41 feet and the width can be assumed to be infinite. A box can be conly if its height is strictly less than the tunnel's height. Find the volume of each box that can to the other end of the tunnel. Note: Boxes cannot be rotated.

Input Format

The first line contains a single integer n, denoting the number of boxes.

n lines follow with three integers on each separated by single spaces - $length_i$, $width_i$ and h_i and height in feet of the i-th box.

Constraints

 $1 \le n \le 100$

 $1 \le length_i$, width_i, height_i ≤ 100

Output Format

For every box from the input which has a height lesser than 41 feet, print its volume in a sepa

Sample Input 0

4

5 5 5

1 2 40

10 5 41

7 2 42

Sample Output 0

125

80

Explanation 0

The first box is really low, only 5 feet tall, so it can pass through the tunnel and its volume is :

The second box is sufficiently low, its volume is $1 \times 2 \times 4 = 80$.

The third box is exactly 41 feet tall, so it cannot pass. The same can be said about the fourth

Answer: (penalty regime: 0 %)

Input	Expected	Got	
4 5 5 5 1 2 40 10 5 41 7 2 42	125 80	125 80	

Passed all tests!

Question **2**Correct

Flag

question

You are given n triangles, specifically, their sides a_i , b_i and c_i . Print them in the same style but the smallest one to the largest one. It is guaranteed that all the areas are different.

The best way to calculate a volume of the triangle with sides ${\it a}, {\it b}$ and ${\it c}$ is Heron's formula:

$$S = \ddot{O} p * (p - a) * (p - b) * (p - c)$$
 where $p = (a + b + c) / 2$.

Input Format

First line of each test file contains a single integer n. n lines follow with a_i , b_i and c_i on each s

Constraints

$$1 \le n \le 100$$

$$1 \leq a_i, b_i, c_i \leq 70$$

$$a_i + b_i > c_i$$
, $a_i + c_i > b_i$ and $b_i + c_i > a_i$

Output Format

Print exactly n lines. On each line print 3 integers separated by single spaces, which are a_i , b_i triangle.

Sample Input 0

3

7 24 25

5 12 13

3 4 5

Sample Output 0

3 4 5

5 12 13

7 24 25

The square of the first triangle is **84**. The square of the second triangle is **30**. The square of the sorted order is the reverse one.

Answer: (penalty regime: 0 %)

Input	Expected	Got
3 7 24 25 5 12 13 3 4 5		3 4 5 5 12 13 7 24 25

Passed all tests!

Save the state of the flags