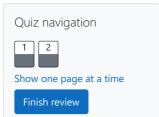
## GE23131-Programming Using C-2024



Status Finished

Started Monday, 13 January 2025, 8:58 AM

Completed Monday, 13 January 2025, 9:29 AM

Duration 31 mins 38 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 ca only 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 he width and height in feet of the i-th box.

Constraints

 $1 \le n \le 100$ 

 $1 \le length_i$  width<sub>i</sub> height<sub>i</sub>  $\le 100$ 

**Output Format** 

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

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  ${\bf 5}$  feet tall, so it can pass through the tunnel and its volume is  ${\bf 5}$ 

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

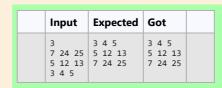
5 12 13

7 24 25

REC-CIS

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

Answer: (penalty regime: 0 %)



Passed all tests!

Save the state of the flags