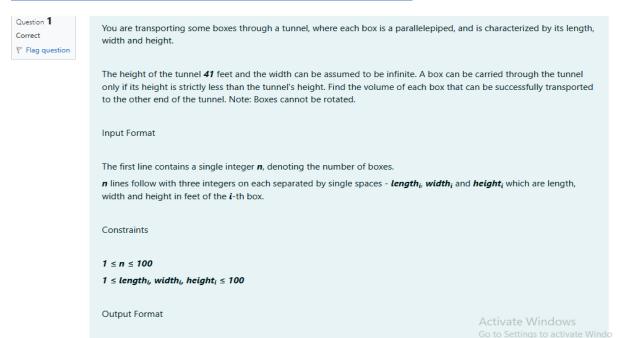
Week-14-Structures and Union

Week-14-01-Practice Session -Coding

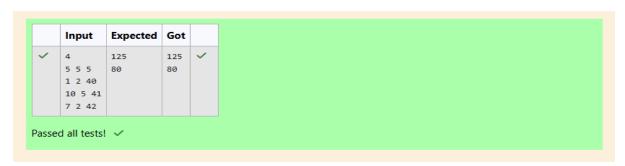


For every box from the input which has a height lesser than 41 feet, print its volume in a separate line.

Source Code

```
#include<stdio.h>
    int main(){
 2 1
 3
        int n;
        scanf("%d",&n);
 4
 5
        struct boxes{
            int l,b,h,v;
 6
 7
        }box[n];
 8
        for(int i=0;i<n;i++){</pre>
             scanf("%d %d %d",&box[i].1,&box[i].b,&box[i].h);
 9
10
            if(box[i].h<41){
                 box[i].v=box[i].l*box[i].b*box[i].h;
11
                 printf("%d\n",box[i].v);
12
13
14
15
        return 0;
16 }
```

Result



```
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 sorted by their areas from 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 \boldsymbol{a} , \boldsymbol{b} and \boldsymbol{c} is Heron's formula:

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

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

Constraints

```
1 ≤ n ≤ 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 a integers separated by single spaces, which are a_i , b_i and c_i of the corresponding triangle vate Window

Source Code

```
Answer: (penalty regime: 0 %)
   1 #include<stdio.h>
        #include<math.h>
    3 ,
       int main(){
    4
            int n;
            scanf("%d",&n);
            struct triangle{
    6
    7
                int a,b,c;
    8
                int area;
    9
            }t[n];
            for(int i=0;i<n;i++){
    scanf("%d %d %d",&t[i].a,&t[i].b,&t[i].c);</pre>
   10 ,
   11
                int p=(t[i].a+t[i].b+t[i].c)/2;
   12
   13
                t[i].area=sqrt(p*(p-t[i].a)*(p-t[i].b)*(p-t[i].c));
   15 ,
            for(int i=0;i<n-1;i++){
                for(int j=0;j<n-i-1;j++){
   16
   17 ,
                    if(t[j].area>t[j+1].area){
   18
                         struct triangle temp=t[j];
   19
                         t[j]=t[j+1];
                         t[j+1]=temp;
   20
   21
   22
   23
   24 ,
            for(int i=0;i<n;i++){</pre>
                printf("%d %d %d\n",t[i].a,t[i].b,t[i].c);
   25
   26
   27
            return 0;
                                                                                      Activate Windows
   28 }
                                                                                      Go to Settings to activate Windo
```

Result

		Input	Expected	Got	
	~	3	3 4 5	3 4 5	~
		7 24 25	5 12 13	5 12 13	
		5 12 13	7 24 25	7 24 25	
		3 4 5			
Р	asse	d all tests!	~		