





GE23131-Programming Using C-2024

Navigation

REC-CIS

- **∨** Dashboard
- **?** Site home
- > Site pages
- ✓ My courses
 - **∨** GE23131-PUC-2024

n GE23131-PUC-2024: Week-14-5 ×

- > Participants
- Competencies
- **Grades**
- > General
- > Skill Test-01-MCQ & Coding
- Lecture Notes
- > Week-01-Overview of C, Constants, Variables and Da...
- > Assessment-01-Overview of C, Constants, Variables ...
- > Week-02-Operators and Expressions, Managing Input ...
- > Assessment-02-Operators and Expressions, Managing

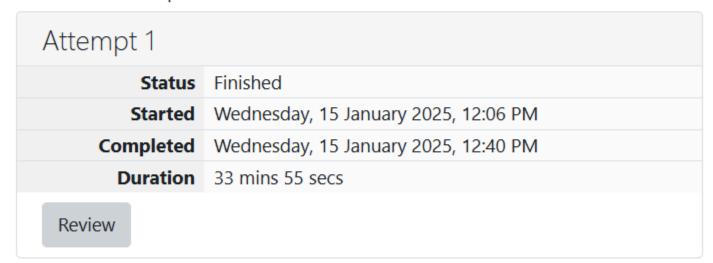
Attempts allowed: 4

This quiz has been configured so that students may only attempt it using the Safe Exam Browser.

Time limit: 1 hour 30 mins

Grading method: Highest grade

Your attempts



The Safe Exam Browser keys could not be validated. Check that you're using Safe Exam Browser with the correct configuration file.

Launch Safe Exam Browser

Download configuration

















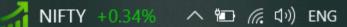








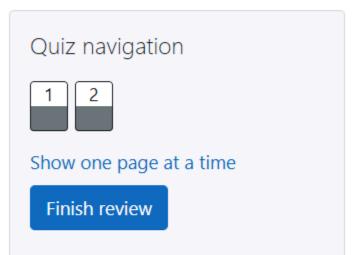


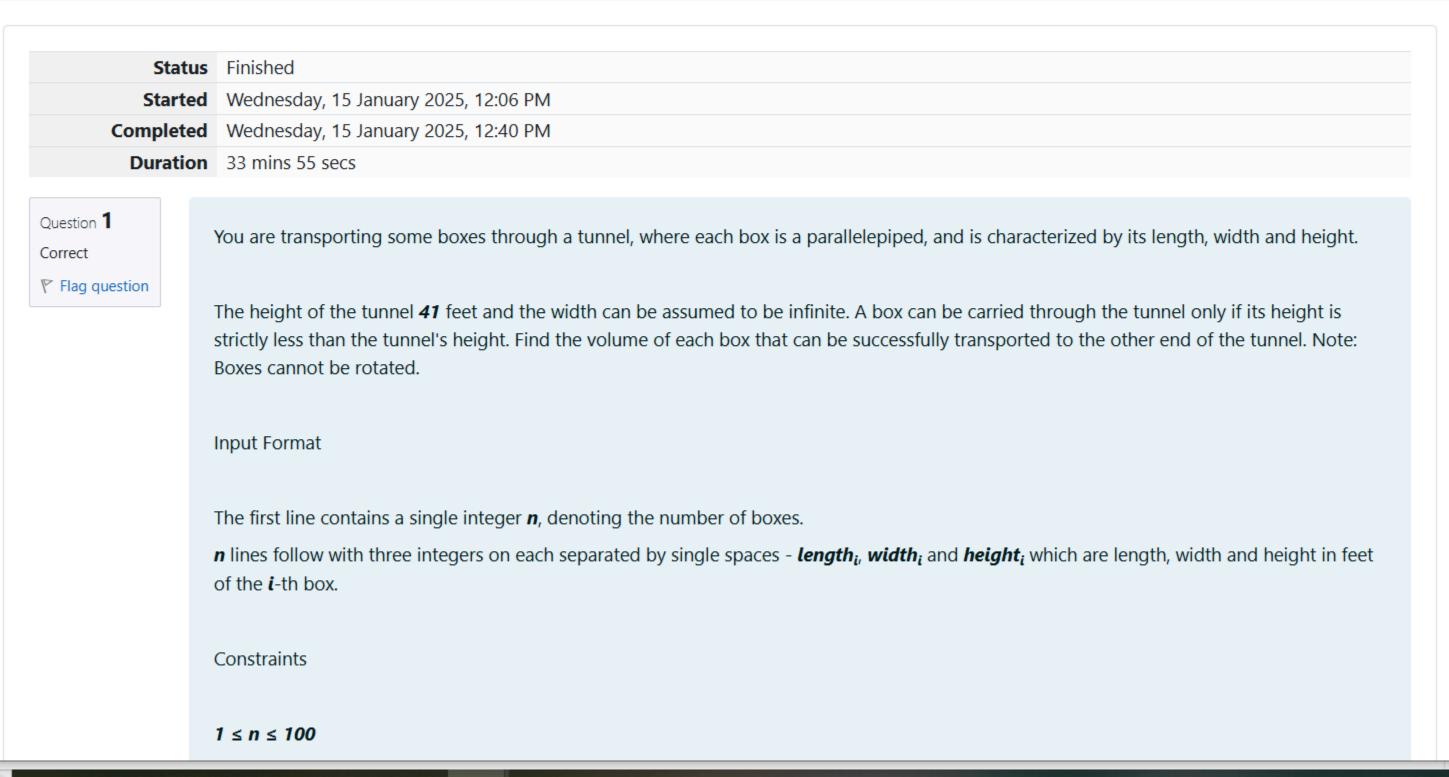


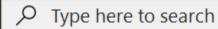




GE23131-Programming Using C-2024























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 $5 \times 5 \times 5 = 125$.

The second havis sufficiently low its valume is 1 v 2 v 1- - 20























The first box is really low, only 5 feet tall, so it can pass through the tunnel and its volume is $5 \times 5 \times 5 = 125$.

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 box.

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
    struct Box{
        int length;
        int width;
        int height;
6
    int main(){
        int n;
        scanf("%d",&n);
        struct Box boxes[n];
10
        for(int i=0;i<n;i++){</pre>
11 1
            scanf("%d %d %d",&boxes[i].length,&boxes[i].width,&boxes[i].height);
12
13
14
        for(int i=0; i<n;i++){</pre>
15
16
            if(boxes[i].height< 41){</pre>
17 •
                int volume =boxes[i].length*boxes[i].width*boxes[i].height;
18
                printf("%d \n",volume);
19
20
21
22
        return 0;
23
```











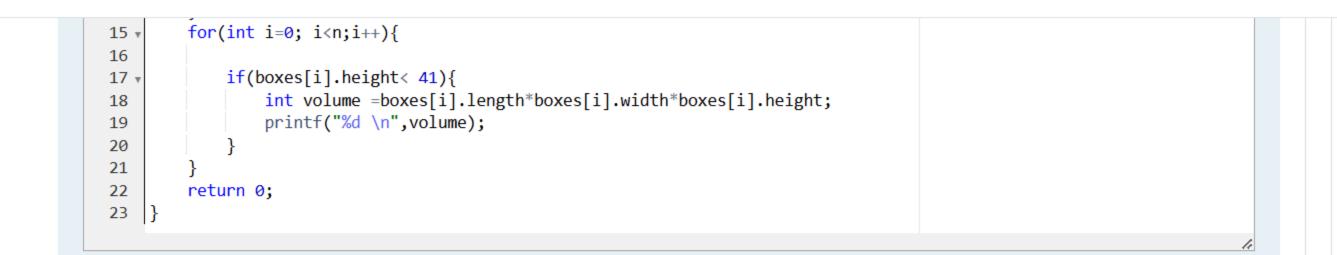






 \triangle Not secure rajalakshmicolleges.org/moodle/mod/quiz/review.php?attempt=163960&cmid=405

REC-CIS



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

Passed all tests! <

Question 2

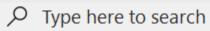
Correct

Flag question

You are given n triangles, specifically, their sides a_i , b_i and c_i . Print them in the same style but 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 **a**, **b** and **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 separated by single spaces.

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 a integers separated by single spaces, which are a_i , b_i and c_i of the corresponding triangle.

Sample Input 0

3

7 24 25

5 12 13

3 4 5

Sample Output 0























5 12 13 7 24 25

3 4 5

Explanation 0

The square of the first triangle is **84**. The square of the second triangle is **30**. The square of the third triangle is **6**. So the sorted order is the reverse one.

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
    #include<math.h>
3 v typedef struct{
        int a; int b; int c;
        double area;
    }Triangle;
7 void swap(Triangle *a, Triangle*b){
        Triangle temp=*a;
        *a=*b;
        *b=temp;
10
11
    void asced(Triangle arr[],int n){
12
        for(int i=0;i<n;i++){</pre>
13 v
            for(int j=i+1;j<n;j++){</pre>
14 v
                if(arr[i].area>arr[j].area){
15 v
                     swap(&arr[i],&arr[j]);
16
17
18
19
20
    int main(){
         int n;
```

























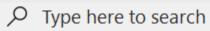
⚠ Not secure rajalakshmicolleges.org/moodle/mod/quiz/review.php?attempt=163960&cmid=405

REC-CIS

```
18
19
20
21 1
    int main(){
22
         int n;
         scanf("%d",&n);
23
         Triangle triangles[n];
24
25
         for(int i=0;i<n;i++){</pre>
             scanf("%d %d %d",&triangles[i].a,&triangles[i].b,&triangles[i].c);
26
             double s=(triangles[i].a+triangles[i].b+triangles[i].c)/2.0;
27
             triangles[i].area=sqrt(s*(s-triangles[i].a)*(s-triangles[i].b)*(s-triangles[i].c));
28
29
30
         asced(triangles,n);
         for(int i=0;i<n;i++){</pre>
31 1
             printf("%d %d %d\n",triangles[i].a,triangles[i].b,triangles[i].c);
32
33
         return 0;
34
35
36
37
38
```

	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			

Passed all tests! <























```
int n;
22
         scanf("%d",&n);
23
         Triangle triangles[n];
24
         for(int i=0;i<n;i++){</pre>
25
             scanf("%d %d %d",&triangles[i].a,&triangles[i].b,&triangles[i].c);
26
             double s=(triangles[i].a+triangles[i].b+triangles[i].c)/2.0;
27
             triangles[i].area=sqrt(s*(s-triangles[i].a)*(s-triangles[i].b)*(s-triangles[i].c));
28
29
         asced(triangles,n);
30
         for(int i=0;i<n;i++){</pre>
31 1
             printf("%d %d %d\n",triangles[i].a,triangles[i].b,triangles[i].c);
32
33
         return 0;
34
35
36
37
38
```

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

Passed all tests! <

Finish review















