```c
#include <stdio.h>
int main()
{
    int n;
    scanf("%d",&n);
    for (int i=0;i<n;i++)
    {
        int length,width,height;
        scanf("%d %d %d",&length,&width,&height);



        if (height < 41)
        {
```

```
 9          scanf("%d %d %d",&length,&width,&height);
10
11
12
13          if (height < 41)
14          {
15              int volume = length*width*height;
16              printf ("%d\n",volume);
17          }
18      }
19  }
```

Answer: (penalty regime: 0 %)

```
#include <stdio.h>
#include <math.h>
#include <stdlib.h>
typedef struct
{
    double area;
    int a,b,c;
}
Triangle;
 double calculate_area(int a,int b,int c)
 {
     double p=(a+b+c)/2.0;
     return sqrt(p*(p-a)*(p-b)*(p-c));
```

```
7       int a,b,c;
8   }
9   Triangle;
10   double calculate_area(int a,int b,int c)
11   {
12       double p=(a+b+c)/2.0;
13       return sqrt(p*(p-a)*(p-b)*(p-c));
14
15   }
16   int compare(const void*x,const void*y)
17   {
18       Triangle *t1 = (Triangle *)x;
19       Triangle *t2 = (Triangle *)y;
20       if(t1->area < t2->area)return -1;
21       if(t1->area > t2->area)return 1;
```

```
23  }
24  int main()
25  {
26      int n;
27      scanf("%d",&n);
28      Triangle triangles[n];
29
30      for(int i=0;i<n;i++)
31      {
32          int a,b,c;
33          scanf("%d %d %d ",&a,&b,&c);
34
35          triangles[i].a = a;
36          triangles[i].b = b;
37          triangles[i].c = c;
```

```
34
35          triangles[i].a = a;
36          triangles[i].b = b;
37          triangles[i].c = c;
38          triangles[i].area = calculate_area(a,b,c);
39
40
41      }
42      qsort(triangles, n, sizeof(Triangle),compare);
43
44      for(int i=0;i<n;i++)
45      {
46          printf("%d %d %d\n",triangles[i].a,triangles[i].b,triangles
47      }
48      return 0;
```

```
39
40
41      }
42      qsort(triangles, n, sizeof(Triangle),compare);
43
44      for(int i=0;i<n;i++)
45      {
46          printf("%d %d %d\n",triangles[i].a,triangles[i].b,triangles
47      }
48      return 0;
49  }
```