Sorting points

Write a program which will sort points and write it in descending order.

Input

The first line of the standard input contains one integer **t** (t<1000) which is the number of points to sort.

In each of the next **t** lines there are numbers **x**, **y** and **z** (x,y,z<1001) which are x, y and z coordinates of i-th point in spherical coordinate system.

Output

For each test, print list of sorted in descending order points.

Example

Input
```
6
3 2 2
2 1 3
2 3 1
1 3 2
3 1 2
1 3 1
```
Output:
```
1 3 1
1 3 2
2 1 3
2 3 1
3 1 2
3 2 2
```