Problem 4 72 Points

Bullet Time

Program Name: bullet.java Input File: bullet.in

Given the starting position of a bullet and its position after one second in flight, give the position of the bullet after 5 seconds in flight.

For the purposes of this problem, assume that the bullet has a constant velocity.

Locations will be input and output as Cartesian triples (x,y,z), where x, y, and z are integers between -1000 and 1000 (inclusive).

Input

The first line of input will contain a single integer n indicating the number of bullets.

The following n lines will each contain two Cartesian triples separated by a single space. The first triple represents the starting position of the bullet when the gun is fired. The second triple represents the position of the bullet one second after the gun is fired.

Output

Output the Cartesian triple representing the position of the bullet 5 seconds after the gun is fired.

Example Input File

```
3
(0,0,0) (1,1,1)
(0,0,0) (-3,27,0)
(-1000,-1000,1000) (-700,-1000,999)
```

Example Output To Screen

```
(5,5,5)
(-15,135,0)
(500,-1000,995)
```