2_波奇與芒果假面 (Bocchi and Mango Masks)

(10分)

時間限制: 1 second 記憶體限制: 256 MB

題目敘述

波奇要迎來在 STARRY 的第二場演奏了!因為她還是不敢看著觀眾,團結 Band 的其他團員幫她準備了 n 個紙箱,讓她能夠進入紙箱(?並表演。

已知第i 個紙箱的長、寬、高分別為 l_i,w_i,h_i ,而且可以用一個長、寬、高分別為L,W,H 的長方體來表示波奇。一個紙箱可以作為波奇的「芒果假面」若將紙箱旋轉或翻轉後,它能夠裝的下波奇。更具體來說,假設經過一些旋轉或翻轉後紙箱的長、寬、高為a,b,c,則若 $L\leq a,W\leq b,H\leq c$,它能夠裝的下波奇。

現在波奇想要知道這些紙箱有幾個可以作為她的「芒果假面」?請幫助她求出答案。

輸入格式

輸入第一行有一個正整數 n,代表有幾個紙箱。

接下來 n 行,每行有三個正整數 l_i, w_i, h_i ,意義與題目敘述相同。

接下來一行有三個正整數 L, W, H, 意義與題目敘述相同。

輸出格式

請輸出一行,包含一個數字,代表可以作為波奇的「芒果假面」的紙箱數量。

資料範圍

- 1 < n < 1000
- $1 \le l_i, w_i, h_i, L, W, H \le 10^6$

測試範例

輸入範例 1

輸出範例 1

2

輸入範例 2

```
6
7 2 4
1 6 5
5 6 5
3 2 5
5 4 7
2 6 6
1 3 1
```

輸出範例 2

6

範例說明

在範例測資一中,第一個紙箱和第三個紙箱可以作為「芒果假面」。

在範例測資二中,所有紙箱都可以作為「芒果假面」。

2_Bocchi and Mango Masks

(10 points)

Time Limit: 1 second Memory Limit: 256MB

Statement

Bocchi is about to have her second performance in STARRY! Since she still can't look at the audience, the other members of Kessoku Band have prepared n cardboard boxes for her to enter(? and perform.

It is known that the dimensions of the i-th cardboard box are given by l_i, w_i, h_i . And Bocchi can be represented by a rectangular prism with dimensions L, W, H. A cardboard box can serve as Bocchi's "Mango Mask" if, after rotating or flipping the box, it can contain Bocchi. More specifically, let's assume that after some rotation or flipping, the dimensions of the box become a,b,c. If $L \le a, W \le b, H \le c$, then it can contain Bocchi.

Now Bocchi wants to know how many of these cardboard boxes can serve as her "Mango Mask." Please help her find the answer.

Input Format

The first line of input contains a positive integer n, representing the number of cardboard boxes.

The next n lines each contain three positive integers l_i, w_i, h_i , representing the dimensions of the cardboard boxes, as described in the problem statement.

The next line contains three positive integers L, W, H, representing the dimensions of Bocchi, as described in the problem statement.

Output Format

The output should consist of a single line containing a number representing the count of cardboard boxes that can serve as "Mango Masks" for Bocchi.

Constraints

- $1 \le n \le 1000$
- $1 \le l_i, w_i, h_i, L, W, H \le 10^6$

Test Cases

Input 1

```
3
3 5 2
100 100 1
10 10 10
2 4 3
```

Output 1

2

Input 2

```
6
7 2 4
1 6 5
5 6 5
3 2 5
5 4 7
2 6 6
1 3 1
```

Output 2

6

Illustrations

In Sample Test Case 1, the first cardboard box and the third cardboard box can serve as a "Mango Masks."

In Sample Test Case 2, all the cardboard boxes can serve as "Mango Masks."