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Problem A

Space Management

The new general manager Gill Bates has been to a seminar on time management. Ever since she has been bothering all of her staff to manage their own time. Now she plans to take it one step further: she wants to start managing her space too. And since she has also learned to start small, she wants to start by managing her desk space. Work tends to pile up on her desk, especially since the time management training where she was taught to order all documents in neat piles and organise her work accordingly. She now needs to calculate how much desk space is occupied. For this she comes up with a cunning plan. First, she orders her staff to measure the size and exact location of each document on the desk, in tenths of millemetres accuracy. As Gill is a very tidy person, all her document are completely on her desk, and are all perfectly aligned to the edges of the desk (i.e. the edges of all documents are parallel to an edge of the desk). For each document, the staff writes down the position of the lower left corner of the document and its size.

What you need to do now is to write a program that, given the input from the staff, calculates the occupied space on the desk.

The maximum size of the desk is 2 * 1 metres. There is a maximum of 500 documents on the desk.

Input
The first line of the input consists of the number N of desks to be considered.
Next follows for each desk the number of documents. Then follows for each document a seperate line with 4 numbers: the smallest X and Y co-ordinates (i.e. the lower left corner), and the width and height of the document respectively.

Output
The output consists of N lines containing the amount of occupied space on each desk in squared tenths of millimetres.

Sample input
```
2
2
0 0 1000 1000
0 0 1000 1000
3
0 0 2 2
2 2 2 2
1 1 2 2
```

Output for the sample input
```
1000000
10
```