



## Goal

You have finally decided to monetize your knowledge in algorithmics by offering private lessons to parents filled with unjustified hopes. You quickly become very popular, too popular, you are no longer sure to be able to take all your classes. To have more chance to acquire your knowledge, all your students offer you two slots of 60 minutes during which they are available, you will be able to give them lessons on only one of these two slots (if you have the time).

Knowing that you can only teach one student at a time and that you can not start one class and finish another one at the same time, what is the maximum number of students you can take?

*Indication: you can proceed by exhaustive enumeration (brute force).*

## Data

### Input

Row 1: an integer  $N$  between 3 and 11 inclusive, the number of students.  
Rows 2 to  $N + 1$ : two integers between 0 and 1000 inclusive, the two starts of slots (in minutes) at which a student is available, each slot has a duration of 60 minutes from the beginning indicated.

### Output

The maximum number of different students that it is possible to take.

### Example 1

For the following input:

```
5
205 300
210 370
290 380
120 305
390 110
```

The expected answer is 4. For example, you can take the following 4 students:

- Student 1 on his first niche from 205 to 265
- Student 2 on his second niche from 370 to 430
- Student 3 on his first niche from 290 to 350
- Student 4 on his first niche from 120 to 180

It is possible to take other combinations of 4 students in different niches, but there are none for 5 students.

You can download sample input and output data files to work locally by clicking on the link at the bottom of the French version of the question.



Téléchargez des fichiers d'exemple ainsi qu'un modèle de code pour travailler localement.