

Problem A

Parking Lot

Source file: parking.{ c | cpp | java | py }

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Leo is an entrepreneur that has recently abandoned the generator market and is now working with parking lots. He wants to know how long his establishment is actually being used in order to change the hours of operation. As he is your friend, he asked you some help. Your first task is to calculate how long the parking lot is in use given a history of times of entry and exit of vehicles.

Input

The input starts with an integer N ($1 \leq N \leq 500$), corresponding to the number of vehicles. The next N lines contain 4 integers each, HE ($0 \leq HE \leq 23$), ME ($0 \leq ME \leq 59$), HS ($0 \leq HS \leq 23$), and MS ($0 \leq MS \leq 59$), corresponding to the hour and minute of entry, and the hour and minute of exit of a vehicle, respectively. You should consider that every vehicle leaves the parking lot the same day it entered.

Output

The output contains a single integer representing the time in minutes in which the last car left the parking. The start time is equal to the time of arrival of the first vehicle. The output line must be ended with a line break.

Example of Input 1

```
4
7 0 8 0
7 30 8 20
7 55 8 45
8 0 9 0
```

Example of Output 1

```
120
```

Example of Input 2

```
3
7 0 8 0
8 30 9 30
8 45 9 20
```

Example of Output 2

```
150
```

Example of Input 3

```
2
9 0 10 0
7 0 8 0
```

Example of Output 3

```
180
```