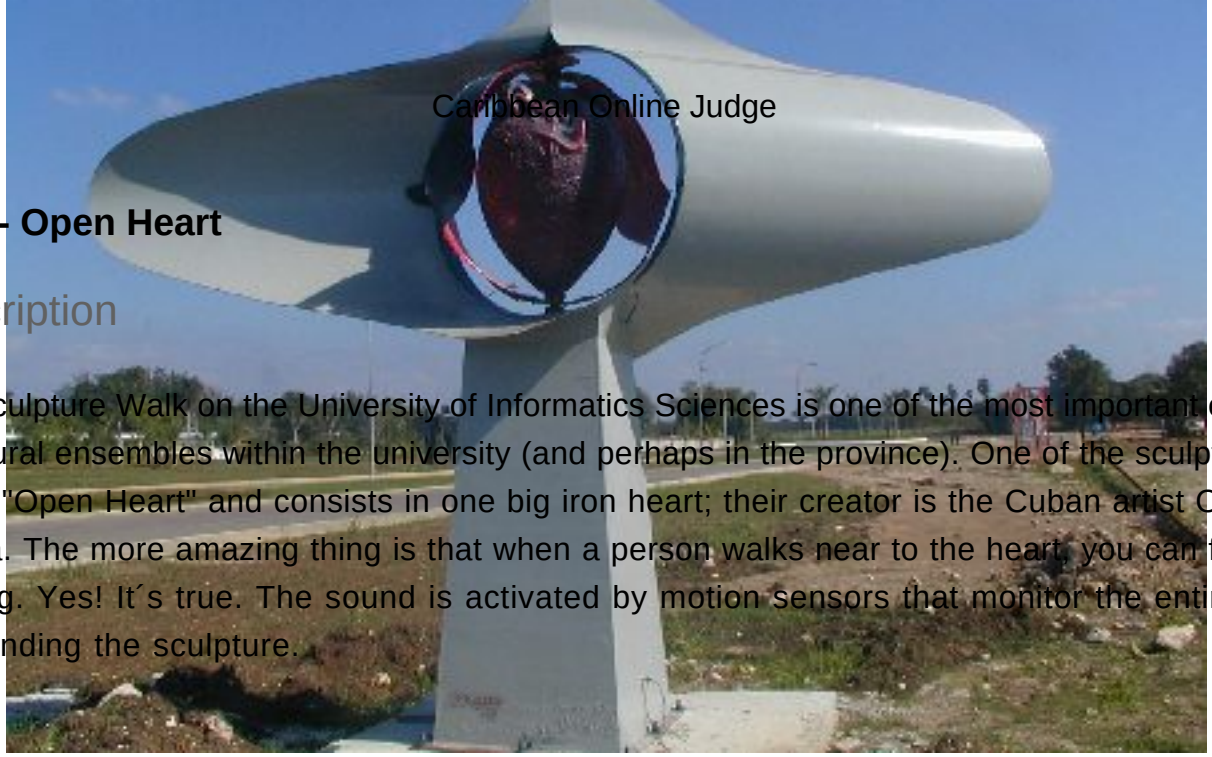
2859 - Open Heart

Description



The Sculpture Walk on the University of Informatics Sciences is one of the most important existing sculptural ensembles within the university (and perhaps in the province). One of the sculptures is called "Open Heart" and consists in one big iron heart; their creator is the Cuban artist Osneldo García. The more amazing thing is that when a person walks near to the heart, you can feel the beating. Yes! It´s true. The sound is activated by motion sensors that monitor the entire area surrounding the sculpture.

Recently the university is involved in a process of maintenance of their environmental sculpture works. Specifically for the mentioned sculpture a statistical study is needed, about the amount of time for which the sound remains activated. They don´t have a way for measuring that from the own sculpture. Instead of that they have a list of the persons which enter into the area surrounding the sculpture, including the time of entry and exit time.

One day have 24 hours, 1440 minutes and 86400 seconds. A person enters into the area surrounding the sculpture starting the second A and exit from that area starting the second B. You can safely assume that they A and B always belong to the same day. The sound is activated one half of second before entry time of a person (if no other person is already inside the area) and remain activated until one half of second after the exit time (if no other person is already inside the area). Different persons can share portions of their interval times as you could be noted at this time.

Input specification

The first line contain a integer number 1 <= T <= 100, the amount of days to be computed. For each day the first line contain a integer number 0 <= N <= 1000, the amount of persons. And the following N lines contains a pair of space-separated integer numbers A and B (1 <= A <= B <= 86400) corresponding to time of entry and exit time of each person.

Output specification

For each day print a line with a integer number: the total amount of seconds for which the sound remain activated.

Sample input

```
5
0
```

```
1
1 1
1
2 86400
2
1 500
501 86400
5
1 500
7 59
345 988
999 54698
86399 86400
```

Sample output

```
0
1
86399
86400
54690
```

Hint(s)

Source	Yonny Mondelo Hernández
Added by	**ymondelo20**
Addition date	2014-04-29
Time limit (ms)	45000
Test limit (ms)	1000
Memory limit (kb)	256000
Output limit (mb)	64
Size limit (bytes)	15000
Enabled languages	Bash C C# C++ Java Pascal Perl PHP Python Ruby Text