
Metronome

X69939_en

We have a sequence with the timestamps of a signal emission. Each timestamp is a number of seconds between zero and fifty-nine. At least one second and at most one minute elapses between two consecutive timestamps. We want to know whether the emitter is a metronome, that is, whether it emits at constant time intervals. For instance, the sequence 15 40 5 is compatible with a metronome that emits every 25 seconds.

The program has to document, code and use the function:

```
int time_lapse(int time_1, int time_2)
```

that given two consecutive timestamps of the input sequence, returns the elapsed time in seconds.

Exam score: 2.500000 **Automatic part:** 0.000000%

Input

A sequence with two or more timestamps in seconds. Each timestamp is an integer between 0 and 59. The time elapsed between two consecutive timestamps is greater than or equal to one second and less than or equal to one minute. After the timestamp sequence, the -1 mark appears.

Output

The output is a number. In the case that the sequence is compatible with a metronome is the number of seconds that pass between two consecutive signals. If the sequence is not compatible with a metronome, the number in the output is 0.

Sample input 1

10 25 40 55 10 25 40 -1

Sample output 1

15

Sample input 2

1 3 5 7 11 13 -1

Sample output 2

0

Sample input 3

47 47 47 -1

Sample output 3

60

Sample input 4

12 6 -1

Sample output 4

54

Observation

You can not use vectors to solve this problem

Problem information

Author : Pro1

Generation : 2019-12-24 10:35:31

© *Jutge.org*, 2006–2019.

<https://jutge.org>