Problem F
Zapping

Time limit: **3 seconds**
Memory limit: **1024 megabytes**

Problem Description

GuaGua loves watching TV, but he doesn't stick to a single channel - he's always zapping between different ones. He has a sweet dog named Lucky, who once tried to chew on his remote, and unfortunately, Lucky partially destroyed it. The numeric buttons GuaGua used to change channels quickly are no longer working. Now, he's left with just two buttons: one to go up to the next channel ($\triangle$) and another to go down to the previous one ($\triangledown$).

This has become frustrating for GuaGua. For example, if he's watching channel 3 and wants to switch to channel 9, he has to press the $\triangle$ button six times! GuaGua's TV has 100 channels, numbered 0 through 99, and they are cyclic. This means that if GuaGua is on channel 99 and presses $\triangle$, he'll loop back to channel 0. Similarly, if he's on channel 0 and presses $\triangledown$, he'll go to channel 99.

GuaGua would love a program that, given the current channel he's watching and the channel he wants to switch to, tells him the minimum number of button presses needed to reach that channel.

Input Format

The input contains several test cases (at most 200). Each test case is described by two integers a and b in a single line. a is the channel GuaGua is currently watching and b is the channel he would like to go to ($0 \leq a, b \leq 99$). The last line of the input contains two '-1's and should not be processed.

Output Format

For each test case, output a single integer on a single line - the minimum number of button presses needed to reach the new channel (Remember, the only two buttons GuaGua has available are $\triangle$ and $\triangledown$).

Technical Specification

- $0 \leq a, b \leq 99$

Sample Input 1

```
3 9
0 99
12 27
-1 -1
```

Sample Output 1

```
6
1
15
```

Almost blank page