A. Yet Another Two Integers Problem

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

You are given two integers a and b.

In one move, you can choose some **integer** k from 1 to 10 and add it to a or subtract it from a. In other words, you choose an integer $k \in [1; 10]$ and perform $a := a + k$ or $a := a - k$. You may use **different** values of k in different moves.

Your task is to find the **minimum** number of moves required to obtain b from a.

You have to answer t independent test cases.

Input

The first line of the input contains one integer t ($1 \le t \le 2 \cdot 10^4$) — the number of test cases. Then t test cases follow.

The only line of the test case contains two integers a and b ($1 \le a, b \le 10^9$).

Output

For each test case, print the answer: the minimum number of moves required to obtain b from a.

Example

input
6 5 5 13 42 18 4 1337 420 123456789 1000000000 100500 9000

output
0 3 2 92 87654322 9150

Note

In the first test case of the example, you don't need to do anything.

In the second test case of the example, the following sequence of moves can be applied: $13 \to 23 \to 32 \to 42$ (add 10, add 9, add 10).

In the third test case of the example, the following sequence of moves can be applied: $18 \to 10 \to 4$ (subtract 8, subtract 6).