Problem B. Minimize!

Time limit 1000 ms Mem limit 262144 kB

You are given two integers a and b ($a \le b$). Over all possible integer values of c ($a \le c \le b$), find the minimum value of (c-a)+(b-c).

Input

The first line contains t ($1 \le t \le 55$) — the number of test cases.

Each test case contains two integers a and b ($1 \le a \le b \le 10$).

Output

For each test case, output the minimum possible value of (c-a)+(b-c) on a new line.

Examples

Input	Output
3	1
1 2	7
3 10	0
3 10 5 5	

Note

In the first test case, you can choose c=1 and obtain an answer of (1-1)+(2-1)=1. It can be shown this is the minimum value possible.

In the second test case, you can choose c=6 and obtain an answer of (6-3)+(10-6)=7. It can be shown this is the minimum value possible.