Problem G. Divisibility Problem

Time limit 1000 ms
Mem limit 262144 kB

You are given two positive integers a and b. In one move you can increase a by 1 (replace a with $a + 1$). Your task is to find the minimum number of moves you need to do in order to make a divisible by b. It is possible, that you have to make 0 moves, as a is already divisible by b. You have to answer t independent test cases.

Input

The first line of the input contains one integer t ($1 \le t \le 10^4$) — 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 you need to do in order to make a divisible by b.

Examples

Input	Output
5 10 4 13 9 100 13 123 456 92 46	2 5 4 333 0