

A. Divisibility Problem

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

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 ($1 \leq t \leq 10^4$) — the number of test cases. Then t test cases follow.

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

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 .

Example

| input | Copy |
|---|------|
| 5 10 4 13 9 100 13 123 456 92 46 | |
| output | Copy |
| 2 5 4 333 0 | |

Codeforces Round #629 (Div. 3)

Finished

Practice



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Language: Java 1.8.0_241
 Choose file: [Choose File](#) No file chosen

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| Submission | Time | Verdict |
|---------------------------|-------------------|-------------------------------|
| 133371921 | Oct/28/2021 18:36 | Time limit exceeded on test 3 |
| 133371829 | Oct/28/2021 18:35 | Wrong answer on test 1 |

→ Problem tags

[math](#) [*800](#)

No tag edit access

→ Contest materials

- Announcement 
- Tutorial (en) 

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