ZEROES IN RANGE V2

You are given two integers a and b. Find the number of zeroes in the digits of all the numbers in the range [a, b] inclusive.

Input

The first line consists of an integer t, the number of test cases. For each test case you will be given two integers a and b (a <= b).

Output

For each test case print the required answer.

Constraints

$1<=t<=1000$

$1<=a<=b<=10^9$

Example

Input:
2
1 10
1 100

Sample Output:
1
11