

B - Capicount

Background

As you may know, a palindromic number, or "capicúa" number, is a number that reads the same when we invert its digits, such as 2002, 181 or 5. According to the Royal Spanish Academy of Language, it owes its origin to the Catalan "cap i cua", that is, "head and tail".

In this problem, you have to create a capicount algorithm, that is, an algorithm to count the number of capicúa numbers.

The Problem

Given a couple of natural numbers, A and B , (between 1 and 10^{18}) we want to know how many capicúa numbers there are between A and B , both inclusive. For example, it is clear that between 2002 and 2002 there is only one capicúa number; between 180 and 195 there are two; and between 1 and 9, all numbers are capicúa!

The Input

The first line contains an integer M indicating the number of test cases.

For each test case, there is a line with two integers A and B . The number A can be less, greater than or equal to B . You can assume that A and B are between 1 and 10^{18} , both inclusive.

The Output

For each test case, the output must consist of a line with a natural number N , which indicates how many capicúa numbers there are between A and B , both inclusive.

Sample Input

```
6
2002 2002
180 195
1 9
100 10
800000 700000
1 1000000000000000000
```

Sample Output

```
1
2
9
9
100
1999999998
```