

Problem I. Increasing or Decreasing

Input file: *standard input*
Output file: *standard output*
Time limit: 1 second
Memory limit: 512 mebibytes

We all like monotonic things, and solved many problems about that like Longest Increasing Subsequence (LIS). Here is another one which is easier than LIS (in my opinion).

We say an integer is a momo number if its decimal representation is monotonic. For example, 123, 321, 777 and 5566 are momo numbers; But 514, 50216 and 120908 are not.

Please answer m queries. The i -th query is a interval $[l_i, r_i]$, and please calculate the number of momo numbers in it.

Input

The first line contains an integer m .

Each of the following m lines contains two integers l_i, r_i .

- $1 \leq m \leq 10^5$
- $1 \leq l_i \leq r_i \leq 10^{18}$

Output

For each query, please output the number of momo numbers in that range.

Example

standard input	standard output
2	100
1 100	48
100 200	