

## 5082 Signature

A digit of a decimal integer  $N$  is a local maximum if it is bigger than both of its adjacent digits. For simplicity, the first and last digits of a number are not local maxima.

Let us consider a signature of a decimal number  $N$  which is defined as the number of local maximum digits of that number. Your task is to write a program to compute the sum of signatures of all numbers in a range from  $X$  to  $Y$  inclusively.

### Input

The input file consists of several data sets. The first line of the input file contains the number of data sets which is a positive integer and is not bigger than 50000. The following lines describe the data sets.

Each data set consists of only one line, which contains two integers  $X$  and  $Y$  separated by a space ( $0 \leq X \leq Y \leq 10^{15}$ ).

### Output

For each data set, write in one line the sum for the signatures of all numbers in the range from  $X$  to  $Y$  inclusively.

### Sample Input

```
4
1 100
121 121
909 909
100 150
```

### Sample Output

```
0
1
0
10
```