Digit Non-diverse Number

Description

With the massive progress in computing resources, DNNs become more and more popular. DNNs can give out better solutions on many problems, especially on computer vision. However, we are still not fully understand why DNNs have such a great power, so the interpretability of DNNs is still left to be a good research topic.

Of course, the DNNs mentioned in the first paragraph is an abbreviation for Digit Non-diverse Numbers. Digit Non-diverse Numbers are numbers that the difference of any two adjacency digits does not exceed 3 in 10-digit representation without any leading zeroes.

In order to delving into the power of DNNs, can you tell me how many DNNs there are in the given ranges $[a, b]$? If you can solve this difficult problem, the whole computer science community will appreciate your effort.

Input

The first line of the input contains a integer T indicating the number of test cases.

For the rest T lines, each line has 2 integers a, b, separated by a spaces, indicating a query of the number of DNNs in $[a, b]$.

- $1 \leq T \leq 100$
- $0 \leq a \leq b \leq 10^{100000}$

Output

For each test case, please print a line with 1 integer which denotes the number of DNNs in the desired range.

Because the output may be too large, please print the answer modulo $10^9 + 7$.

Sample Input

```
2
1 9
123 514
```

Sample Output

```
9
141
```