Problem B

Input: Standard Input
Output: Standard Output

Counting Inversion

The number system we are used to is called the decimal number system. The digits of decimal number system are 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9.

$$(123)_{10} = 1 \times 100 + 2 \times 10 + 3 \times 1 = 1 \times 10^2 + 2 \times 10^1 + 3 \times 10^0$$

The leftmost digit is called the most significant digit and the rightmost one is called the least significant digit. Let, **K** be a decimal integer represented as $\mathbf{d_n \ldots d_2 d_1 d_0}$, where, $\mathbf{d_n}$ ($\mathbf{d_n > 0}$) is the most significant digit (the leftmost digit) and $\mathbf{d_0}$ is the least significant digit (the rightmost digit).

Any two digits of **K**, $\mathbf{d_i}$ and $\mathbf{d_j}$ form an inversion **if and only if,** $\mathbf{d_i > d_j}$ where $\mathbf{i < j}$.

We define the number of digit inversions of **K** as **DI(K)**. For example, if **K = 123,** then, $\mathbf{d_2 = 1, d_1 = 2, d_0 = 3}$ and **DI(K) = DI(123) = 3** (as $\mathbf{d_0 > d_1}$, $\mathbf{d_1 > d_2}$ and $\mathbf{d_0 > d_2}$). If **K = 253,** then $\mathbf{d_2 = 2, d_1 = 5, d_0 = 3,}$ then **DI(K) = DI(253) = 2** (as $\mathbf{d_0 > d_2}$ and $\mathbf{d_1 > d_2}$). Similarly, **DI(5) = 0 , DI(321) = 0, DI(491383) = 6**.
In this problem, you are given two integers **x** and **y** in the decimal number system.
You have to calculate $\sum_{K=x}^{y} DI(K)$.

Input

Input starts with an integer **T($1 \le T \le 50000$)** denoting the number of test cases.
Following **T** lines each contains two integers **x** and **y** (without leading zeros) where **($1 \le x \le y \le 10^{14}$)**. The dataset is huge, so use faster I/O methods.

Output

For each test case, the output should contain the case number in the format: "**Case T:** ", where **T** is the test case number followed by the desired answer in a single line. Please see the sample for clarification.

Sample Input

```
5
1 9
1 100
50 60
23 2343
345 99373
```

Output for Sample Input

```
Case 1: 0
Case 2: 36
Case 3: 4
Case 4: 6083
Case 5: 410008
```