Even

Elly considers a natural number to be "pretty" if each of its distinct digits is contained an even number of times. For example, she considers 11, 4242, and 123123123123 to be pretty, while 42, 666, and 1337 are not. The numbers are not allowed to have leading zeroes, so 0077 is not a valid number, although if it was, it would be "pretty" since each of its digits is met twice (an even number of times).

Now the girl wonders how many pretty numbers there are between **L** and **R**, inclusive?

Input
On the first line of the standard input will be given one integer **T** – the number of queries that your program needs to answer. On each of the next **T** lines will be given two integers $\mathbf{L_i}$ and $\mathbf{R_i}$ – the left and right ends of the interval for the respective query.

Output
For each query print a line with one integer – how many "pretty" numbers are there in the given interval.

Constraints
- $1 \leq \mathbf{T} \leq 1000$
- $1 \leq \mathbf{L} \leq \mathbf{R} \leq 10^{18}$
- In tests worth 15 points, $\mathbf{T} \leq 10$ и $\mathbf{R_i} - \mathbf{L_i} \leq 1{,}000{,}000$
- In tests worth another 15 points, $\mathbf{T} \leq 50$ и $\mathbf{L_i} \leq \mathbf{R_i} \leq 10^9$
- In tests worth another 15 points, $\mathbf{T} \leq 50$
- In tests worth another 15 points, $\mathbf{L_i} \leq \mathbf{R_i} \leq 10^9$

Sample Input	*Sample Output*
4 42 666 13 1337 421337 1234567890 12345677654321 98765433456789	6 24 1944342 247635746802

There are four queries in the test.
The pretty numbers in the first query are 44, 55, 66, 77, 88, and 99.
In the third query some of the valid pretty numbers are 1133332222, 42424242, 666666 and 1233122211, while, for example, 424242 and 4242 are not (the first one has odd number of 4s and 2s, while the second one is outside the interval).