Problem I – Inspecting PIN numbers

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John has came to you with a new idea to generate 5 digits PIN numbers for your bank applications. He says a secure method is applying the following algorithm:

1. Take a number K ($1 \leq K \leq 10^5$).
2. Let $S = K!$.
3. Take last digit from S. If it is 0 delete it and repeat this step.
4. If S has less than 5 digits: add a 0 to it's left and repeat this step.
5. Your PIN is the one formed with the last 5 digits from S.

It is simple, isn't it? But, the more you think about it, the more disturbing it becomes, it sounds like between all the values you can take for K there are values for the PIN that will repeat, for example if $K = 9$ and $K = 10$ the PIN is the same (36288).

You are willing to show John that his method is not so secure as he believes, that's why you have taken action and will create a program to count, for a given set of Q, queries how many PINs in the range x, y exist for the values of K between l and r.

Input

The first line of the input contains a single integer Q ($1 \leq Q \leq 5 * 10^5$), representing the number of queries to answer. The next Q lines contain four values separated by a space l, r, x, y ($1 \leq l \leq r \leq 10^5$) and ($1 \leq x \leq y \leq 10^5$)

Output

For each query in the input, output a line containing a single integer, representing the number of values for K between l and r such that the PIN generated with that value lies in the range $[x, y]$.

Sample input 1	**Sample output 1**
4 9 10 36288 36288 1 2 1 2 1 5 3 6 1 20 20 50	2 2 1 1