

## D. Beautiful numbers

time limit per test: 4 seconds  
memory limit per test: 256 megabytes  
input: standard input  
output: standard output

Volodya is an odd boy and his taste is strange as well. It seems to him that a positive integer number is *beautiful* if and only if it is divisible by each of its nonzero digits. We will not argue with this and just count the quantity of beautiful numbers in given ranges.

### Input

The first line of the input contains the number of cases  $t$  ( $1 \leq t \leq 10$ ). Each of the next  $t$  lines contains two natural numbers  $l_i$  and  $r_i$  ( $1 \leq l_i \leq r_i \leq 9 \cdot 10^{18}$ ).

Please, do not use `%lld` specifier to read or write 64-bit integers in C++. It is preferred to use `cin` (also you may use `%I64d`).

### Output

Output should contain  $t$  numbers — answers to the queries, one number per line — quantities of beautiful numbers in given intervals (from  $l_i$  to  $r_i$ , inclusively).

### Examples

input
1 1 9
output
9

input
1 12 15
output
2