D Digit Sum

For a pair of integers a and b, the digit sum of the interval $[a, b]$ is defined as the sum of all digits occurring in all numbers between (and including) a and b. For example, the digit sum of $[28, 31]$ can be calculated as:

$$2{+}8 \ + \ 2{+}9 \ + \ 3{+}0 \ + \ 3{+}1 = 28$$

Given the numbers a and b, calculate the digit sum of $[a, b]$.

Input

On the first line one positive number: the number of test cases, at most 100. After that per test case:

- one line with two space-separated integers, a and b ($0 \leq a \leq b \leq 10^{15}$).

Output

Per test case:

- one line with an integer: the digit sum of $[a, b]$.

Sample in- and output

Input	Output
3 0 10 28 31 1234 56789	46 28 1128600

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