Digit Sum

The security system for Associated Computer Informatics Systems (ACIS) has an interesting test to check the identity for authorized personal. These persons have got a piece of software that allowed them to calculate, given two integer positive numbers M and N, what is the sum of the decimal digits in the sequence M, M + 1, ..., N. Then, when somebody is trying to access ACIS system, he/she is asked to answer the question of the sum for some M and N that are provided at that moment, by means of the given software.

ACIS programmers have developed a rather naïve algorithm only to verify that the method calculates the right answer. Now they are interested in developing a faster algorithm, in order to stop unauthorized users (who may be detected because they do not answer the sum question fast enough). And then you have been hired to help ACIS programmers to find such a method.

Input

The problem input consists of several cases, each one defined by a line with two integer numbers, M and N, without leading blanks and separated by a blank. You may assume that $1 \leq M \leq N \leq 10^9$. The end of the input is signaled by a line with two zero values.

Output

For each case, output a line with the sum of the decimal digits for the sequence M, M + 1, ..., N.

Sample Input

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3 8
5 18
1 50
0 0
```

Sample Output

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33
80
330
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