

Cool Numbers

Cool numbers are those, whose digits can be partitioned into two sets such that the sum of the digits in either sets are equal.

Example: 23450 is cool because $3+4+0 = 2+5$; So is 91125;

The numbers 567, 34523 are not cool, since there is no such digit partition.

Write a program that prints the number of cool numbers in the inclusive range [A,B].

Input Format:

The input file consists of multiple testcases.

Each case contains one line containing two 32-bit unsigned integers A and B. ($1 \leq A \leq B \leq 4 \cdot 10^9$).

Input terminates with a line containing two zeros and must not be processed.

Output Format:

For each testcase print a single line containing one integer saying the number of cool numbers between A and B, inclusive.

Sample Input:

```
1 11
12 20
1 20
3 100
6354 234363
123456789 234567891
0 0
```

Sample Output:

```
1
0
1
9
82340
54801678
```

Test Data:

About 50 testcases.