

12241 Digits Count

Diana is going to write a list of all positive integers between A and B , inclusive, in base 10 and without any leading zeros. She wants to know how many times each digit is going to be used.

Input

Each test case is given in a single line that contains two integers A and B ($1 \leq A \leq B \leq 10^8$). The last test case is followed by a line containing two zeros.

Output

For each test case output a single line with 10 integers representing the number of times each digit is used when writing all integers between A and B , inclusive, in base 10 and without leading zeros. Write the counter for each digit in increasing order from 0 to 9.

Sample Input

```
1 9
12 321
5987 6123
12345678 12345679
0 0
```

Sample Output

```
0 1 1 1 1 1 1 1 1 1
61 169 163 83 61 61 61 61 61 61
134 58 28 24 23 36 147 24 27 47
0 2 2 2 2 2 2 2 1 1
```