

# Problem D

## Digits Count

*Problem code name: digits*

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      | Output for the sample input     |
|-------------------|---------------------------------|
| 1 9               | 0 1 1 1 1 1 1 1 1 1             |
| 12 321            | 61 169 163 83 61 61 61 61 61 61 |
| 5987 6123         | 134 58 28 24 23 36 147 24 27 47 |
| 12345678 12345679 | 0 2 2 2 2 2 2 2 1 1             |
| 0 0               |                                 |