Lets define a simple recursive function $F(n)$, where

$$F(n) = p(x) = \begin{cases} n\%10, & \text{if } (n\%10) > 0 \\ 0, & \text{if } n = 0 \\ F(n/10), & \text{Otherwise} \end{cases}$$

Lets define another function $S(p, q)$,

$$S(p, q) = \sum_{i=p}^{q} F(i)$$

In this problem you have to Calculate $S(p, q)$ on given value of p and q.

Input

The input file contains several lines of inputs. Each line contains two non negative integers p and q ($p \leq q$) separated by a single space. p and q will fit in 32 bit signed integer. In put is terminated by a line which contains two negative integers. This line should not be processed.

Output

For each set of input print a single line of the value of $S(p, q)$.

Sample Input

```
1 10
10 20
30 40
-1 -1
```

Sample Output

```
46
48
52
```