# COI '07 #4 Umnozak

**Time Limit:** 1.0s **Memory Limit:** 32M

The **digit-product** of a positive integer is the product of the number's decimal digits. For example, the digit-product of $2612$ is $2 \cdot 6 \cdot 1 \cdot 2 = 24$.

The **self-product** of a number is the product of the number and its digit-product. For example, the self-product of $2612$ is $2612 \cdot 24 = 62\,688$.

Write a program that, given two positive integers $A$ and $B$, calculates the number of positive integers whose self-product is between $A$ and $B$, inclusive.

## Input Specification

The first and only line contains two integers $A$ and $B$ $(1 \leq A \leq B < 10^{18})$.

## Output Specification

Output should consist of a single integer, the number of positive integers whose twist is between $A$ and $B$.

## Scoring

In test cases worth a total of $25$ points, $A$ and $B$ will be at most $10^8$.

In test cases worth another $15$, $A$ and $B$ will be at most $10^{12}$.

## Sample Input 1

```
20 30
```

## Sample Output 1

```
2
```

## Sample Input 2

```
145 192
```

## Sample Output 2

```
4
```

## Sample Input 3

```
2224222 2224222
```

## Sample Output 3

```
1
```

Clarification of second example. The self-products of numbers $19$, $24$, $32$ and $41$ are in order $171$, $192$, $192$ and $164$.