1188 - Cow Multiplication

Description

Bessie is tired of multiplying pairs of numbers the usual way, so she invented her own style of multiplication. In her style, A*B is equal to the sum of all possible pairwise products between the digits of A and B. For example, the product 123*45 is equal to 1*4 + 1*5 + 2*4 + 2*5 + 3*4 + 3*5 = 54. Given two integers A and B (1 <= A, B <= 1,000,000,000), determine A*B in Bessie's style of multiplication.

Input specification

Two space-separated integers: A and B.

Output specification

A single line that is the A*B in Bessie's style of multiplication.

Sample input

```
123 45
```

Sample output

```
54
```

Hint(s)

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Time limit (ms)	10000
Test limit (ms)	1000
Memory limit (kb)	131072