Enes's Exam

Help Enes!

One day your friend comes to your door and seek your help for upcoming math exam. He knows the topic of the exam, digit-sum. But this digit-sum is somewhat different, if the result of the digit-sum of a number is more than a single digit, you must proceed and do this digit-sum for the resulting number as well until the result is a single digit number. But your friend knows that things are never this simple (since he can sum digits only one by one). The question is asking you to do this special digit-sum for number a^b. Can you help Enes to pass the exam?

Input Format

Only one line contains: a and b with separated one space

Constraint

$1 \leq a, b \leq 10^9$

Output Format

Special digit sum for (a^b)

Sample Input:

```
670434715 627431538
```

Copy

Sample Output:

```
1
```

Copy

Submit Solution

Points: 1

Time limit: 1.0s
Java 8: 4.0s
Python: 8.0s

All submissions

Best submissions

My submissions

Request clarification

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