A. Vasya and Digital Root

time limit per test
1 second
memory limit per test
256 megabytes
input
standard input
output
standard output

Vasya has recently found out what a digital root of a number is and he decided to share his knowledge with you.

Let's assume that S(n) is the sum of digits of number n, for example, S(4098) = 4 + 0 + 9 + 8 = 21. Then the digital root of number n equals to:

- 1. dr(n) = S(n), if S(n) < 10;
- 2. dr(n) = dr(S(n)), if $S(n) \ge 10$.

For example, dr(4098) = dr(21) = 3.

Vasya is afraid of large numbers, so the numbers he works with are at most 101000. For all such numbers, he has proved that dr(n) = S(S(S(S(n)))) ($n \le 101000$).

Now Vasya wants to quickly find numbers with the given digital root. The problem is, he hasn't learned how to do that and he asked you to help him. You task is, given numbers k and d, find the number consisting of exactly k digits (the leading zeroes are not allowed), with digital root equal to d, or else state that such number does not exist.

Input

The first line contains two integers k and d ($1 \le k \le 1000$; $0 \le d \le 9$).

Output

In a single line print either any number that meets the requirements (without the leading zeroes) or "No solution" (without the quotes), if the corresponding number does not exist. The chosen number must consist of exactly k digits. We assume that number 0 doesn't contain any leading zeroes.

Examples input

Сору

4 4 output

Сору

5881

input

Copy **5 1**

output

Сору

36172

input

Copy

1 0

output

Copy

0

Note

For the first test sample dr(5881) = dr(22) = 4. For the second test sample dr(36172) = dr(19) = dr(10) = 1.