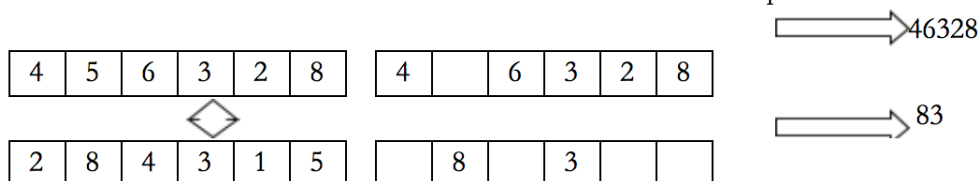


A long, long time ago in a galaxy far, far away a big collision of integers is taking place right now. What happens when two integers **collide**? During collision, each digit of one number **compares itself** to the corresponding digit of the other number (the least significant digit with the other's least significant digit, and so on). The **smaller** digit “**falls out**” of the number containing it. Additionally, if the digits are the **same**, nothing happens. If a number **doesn't** consist of a corresponding digit, then we consider it to be **zero**. After all comparisons of corresponding digits, the leftover digits in the number **come closer and create** a new number. For example:



Write a programme that will, for two given integers, determine their **values after collision**. If it happens that all the digits of one number fell out, then for that number output the message “YODA”.

INPUT

The first line of input contains the integer N ($1 \leq N \leq 10^9$), one of the integers from the task. The second line of input contains the integer M ($1 \leq N \leq 10^9$), one of the integers from the task.

OUTPUT

The first line of output must contain the new value of the first given integer from the task. The second line of output must contain the new value of the second given integer from the task.

SCORING

In test cases worth 30% points it will hold that N and M consist of three digits.

SAMPLE TESTS

input 300 500	input 65743 9651	input 2341 6785
output 0 500	output 673 95	output YODA 6785