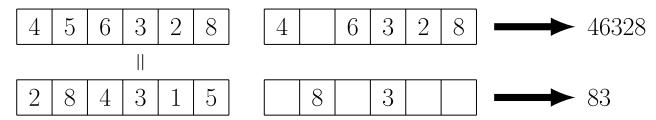
Time Limit: 1.0s **Memory Limit:** 64M

What happens when two integers **collide**? During collision, each digit of one number will be compared with the corresponding digit of the other number (with the same position), beginning from the least significant digit. The **smaller** digit will be deleted from the number containing it. if the digits are equal, nothing happens. If the other number **doesn't** have a corresponding digit (because it's too short), then we consider this corresponding digit to be **zero**. After all comparisons of corresponding digits, the remaining digits of each number **come closer and create** a new number. For example:



Write a programme that will, for two given integers, determine their **values after collision**. Be aware that all the digits of one number may be deleted. In this case output the message (YODA).

Input

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

The second line of input contains the integer M $(1 \le M \le 10^9)$, 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 Input 1

300

500

Sample Output 1

