

Objectif

The existence of Lychrel number is an open mathematical problem.

Given a number N , repeat the process of reversing digits and adding the resulting number, until forming a palindrome.

If the process ends, the number is not a Lychrel number but for example, 196 is supposed to be a Lychrel number because the process seems not to end.

Entrée

N

Sortie

List of numbers " $N\ N_1\ N_2\ldots$ " separated by space, resulted from this process until forming a palindrome

Contraintes

$10 \leq N < 10^9$

$10 \leq \text{highest number} < 10^{18}$

Exemple

Entrée

10

Sortie

10 11