

ZBROJ

After he got tired of rotating tables, the teacher gave Perica another problem. She wrote two integers, A

and B, on the blackboard and asked him to add them.

Perica is never wrong with his calculation, but sometimes he doesn't copy the numbers correctly. The

only mistake he ever makes is copying a 5 as a 6, and viceversa.

Given two numbers, A and B, calculate the minimum and the maximum sum Perica could possibly get.

Input

The first and only line of input contains positive integers A and B ($1 \leq A, B \leq 1\,000\,000$).

Output

In single line of output, print two space separated integers, minimum and maximum sum Perica could get.

Example

Input:

11 25

Output:

36 37