

Addition

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.

Sample input

Sample output

11 25	36 37
1430 4862	6282 6292
16796 58786	74580 85582