Conversion

SEASON 7 - SECOND ROUND



After he had some fun, Ivancho decided to do something more productive. Now he started looking at binary numbers. He took a piece of paper and wrote two binary numbers a and b (may contain leading zeros). He wonders if he can convert a into b by performing operations of two types:

- Change a bit from number *a* with its opposite (i.e., replace 0 with 1 or 1 with 0);
- Swap any pair of bits from *a*.

After he thought for a while, he figured out that this is possible, but now he wonders what is the minimum number of operations that are needed in order to convert *a* into *b*. Help him with the task, so he can finally rest after the long day.

Input

The first and the second line of the file conversion.in contains *a* and *b* (may contain leading zeros), *a* and *b* have equal lengths.

Output

In the output file conversion.out print one number – the minimum number of operations needed to convert *a* into *b*.

Constraints

The lengths of a and b are bigger than 1 and do not exceed 10^5

Time limit: 1.0 sec Memory limit: 256 MB

Example test

Input (conversion.in)	Output (conversion.out)
01	1
10	
110	1
100	