

Goals

The mastermind is a code-breaking game for two players. A player has to find a secret combination with, for only clues, the number of well placed and uncorrected placed symbols.

Given the secret combination and a proposition of the second player, you have to output the number of well placed (+) and uncorrected placed symbols (-).

Input

Line 1 : The secret combination `secret` .

Line 2 : the proposition `proposition` of the second player.

Output

ERROR if the proposition has not the same length as the secret combination,

NOTHING if there is no resemblance at all,

Otherwise, one line with + times the number of well placed symbols and - times the number of uncorrected placed symbols.

Constraints

$0 < \text{len}(\text{secret}), \text{len}(\text{proposition}) < 1024$

Example

Input

1234

0204

Output

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