Problem C
Cryptlet

The 5 Latin letters a-e have each been assigned a distinct digit between 0-9. Given an expression involving the sum of two numbers written as X+Y=Z (each number having the same number of digits, at most 1000, including any leading zeroes), written using letter substitutions, print plausible values for the assignments of all 5 letters in order from a-e as a string of 5 characters.

For instance, given `ab+ac=ca`, you may choose to output `18364`. Or, given `aaa+bbb=eee`, you may output `45789`.

Input

- The only line of input contains a string of lowercase letters in `[a-e]` and symbols, of the form $X + Y = Z$ and with no spaces, where $1 \leq (|X| = |Y| = |Z|) \leq 1000$.

Output

If no assignment is possible, output `impossible`.

Otherwise, output any string of 5 distinct digits which gives plausible values for the letters a, b, c, d, and e respectively.

Sample Input 1	Sample Output 1
ab+ac=ca	18305

Sample Input 2	Sample Output 2
aaaa+bbbb=eeee	34567

Sample Input 3	Sample Output 3
bba+bbc=bab	10987

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