

You are playing the **Bulls and Cows** game with your friend.

You write down a secret number and ask your friend to guess what the number is. When your friend makes a guess, you provide a hint with the following info:

- The number of "bulls", which are digits in the guess that are in the correct position.
- The number of "cows", which are digits in the guess that are in your secret number but are located in the wrong position. Specifically, the non-bull digits in the guess that could be rearranged such that they become bulls.

Given the secret number `secret` and your friend's guess `guess`, return *the hint for your friend's guess*.

The hint should be formatted as `"xAyB"`, where `x` is the number of bulls and `y` is the number of cows. Note that both `secret` and `guess` may contain duplicate digits.

Example 1:

Input: `secret = "1807"`, `guess = "7810"`

Output: `"1A3B"`

Explanation: Bulls are connected with a '`|`' and cows are underlined:

`"1807"`

`|`

`"7810"`

Example 2:

Input: `secret = "1123"`, `guess = "0111"`

Output: `"1A1B"`

Explanation: Bulls are connected with a '`|`' and cows are underlined:

`"1123"`

`"1123"`

`|`

or

`|`

`"0111"`

`"0111"`

Note that only one of the two unmatched 1s is counted as a cow since the non-bull digits can only be rearranged to allow one 1 to be a bull.

Example 3:

Input: `secret = "1", guess = "0"`

Output: `"0A0B"`

Example 4:

Input: `secret = "1", guess = "1"`

Output: `"1A0B"`

Constraints:

- `1 <= secret.length, guess.length <= 1000`
- `secret.length == guess.length`
- `secret` and `guess` consist of digits only.