

299. Bulls and Cows

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.

Constraints:

- $1 \leq \text{secret.length}, \text{guess.length} \leq 1000$
- $\text{secret.length} == \text{guess.length}$
- secret and guess consist of digits only.