



# Simulated Verification 1. Password

## ■ Password

- Steve, who is lazy and an expert of petty tricks, is annoyed of having to memorize the passwords. He may carry a memo, but it may be exposed to others. So, he thought of an idea.
- He will create a password with the remaining numbers after removing the pairs of same numbers from a number string consisting of numbers 0~9. After removing the same number pairs, he can also remove the number pairs whose right and left numbers are the same. Following example shows the password from a number string after removing the applicable number pairs.

1 2 3 ~~8~~ ~~0~~ ~~9~~ ~~9~~ ~~0~~ ~~8~~ 4 → 1 2 3 4

Let us think of the algorithm to retrieve a password after removing the number pairs from a number string consisting of numbers 0~9.