# G - Substring Game

Editorial (/contests/abc433/tasks/abc433_g/editorial)

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Time Limit: 3 sec / Memory Limit: 1024 MiB

Score : $600$ points

## Problem Statement

You are given a string $S$ consisting of lowercase English letters.

Alice and Bob play the following game using this string.

- Prepare an empty string $T$.
- Starting with Alice, they take turns playing.
- On each turn, the player chooses one lowercase English letter and concatenates the chosen letter to the end of $T$. Here, the player cannot take an action such that $T$ after concatenation is not a substring of $S$.

The player who cannot make a move first loses.

Determine which player will win when both players play optimally.

You are given $T$ test cases; solve each of them.

## Constraints

- $1 \leq T \leq 10^5$
- $T$ is an integer.
- $S$ is a string consisting of lowercase English letters with length between $1$ and $2 \times 10^5$, inclusive.
- The sum of the lengths of $S$ over all test cases is at most $4 \times 10^5$.

## Input

The input is given from Standard Input in the following format:

$$
\begin{aligned}
&T \\
&\mathrm{case}_1 \\
&\mathrm{case}_2 \\
&\vdots \\
&\mathrm{case}_T
\end{aligned}
$$

Each test case is given in the following format.

$$S$$

## Output

Output the answers for the test cases in order, separated by newlines.

For each test case, output `Alice` if Alice wins when both players play optimally, and `Bob` if Bob wins.

## Sample Input 1 Copy

```
4
ooxo
abrakadabra
atcoderbeginnercontest
baabca
```

## Sample Output 1 Copy

```
Bob
Alice
Alice
Bob
```

Consider the first test case.

For example, the game proceeds as follows.

- Alice chooses x. $T =$ x.
- Bob chooses o. $T =$ xo.

2026-01-02 (Fri)
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- No matter which lowercase English letter Alice chooses and concatenates to the end of $T$, $T$ will not be a substring of $S$, so Alice cannot make a move. At this point, Bob wins.

In this test case, Bob can win no matter how Alice plays. Therefore, output Bob.

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