



Problem I

International Grandmaster

Time limit: 10 seconds

Memory limit: 2048 megabytes

Problem Description

Alice is an international chess grandmaster. Since there are no chess tournaments recently, she decides to play another game with her grandmaster friend Bob.

There is a string s and n strings t_1, t_2, \dots, t_n written on the blackboard. They take turns alternately, with Alice going first. On a player's turn, they must choose an index $i \in \{1, 2, \dots, n\}$ and a non-empty string u that is both a suffix of t_i and a substring of s . Then, the suffix u is erased from the string t_i .

The player who can't make a move on their turn loses. Assuming both players play optimally, who has a winning strategy?

Input Format

The first line contains the string s . The next line contains the integer n . The i^{th} of the next n lines contains the string t_i .

Output Format

If Alice has a winning strategy, print "Alice" (without quotes). Otherwise, print "Bob".

Technical Specification

- $1 \leq |s| \leq 3 \times 10^5$
- $1 \leq n \leq 10^5$
- $1 \leq |t_i| \leq 3 \times 10^5$ for $i = 1, 2, \dots, n$
- $\sum_{i=1}^n |t_i| \leq 3 \times 10^5$

Sample Input 1

```
ABC
3
ABC
BC
A
```

Sample Output 1

```
Bob
```

Hint

A string a is a suffix of string b if a can be obtained from b by deleting several (possibly zero) characters from the beginning.



A string a is a substring of string b if a can be obtained from b by deleting several (possibly zero) characters from the beginning and several (possibly zero) characters from the end.