



Problem J. Even More Exciting Game

Input file: *standard input*
Output file: *standard output*
Time limit: 1 second
Memory limit: 256 mebibytes

Petro decided to play new game with Oleg-Andriy. They have a string that consists of lowercase English letters and they alternatively make turns: one can choose an arbitrary letter and delete it, or replace with the next letter in the alphabetical order (if it exists). In this strange game a player who can't move loses.

Petro was almost sure in his victory, but suddenly realized, that this game is unequal, because Oleg-Andriy always will make moves two times in a row (first for Oleg, then for Andriy). So, he is interested whether he can win this game.

You are given the initial string and the information about the player who starts. Your task is to determine whether Petro can win game if his opponent will play optimally.

Input

The first line contains a positive integer n ($1 \leq n \leq 10^5$) — the number of characters in the string, followed by the name of the player which goes first (“Petro” or “Oleg-Andriy”). In the second line you are given the game string itself.

All characters in the given string are lowercase English letters.

Output

Print one word — “Win” in case of Petro’s win, or “Lose” otherwise.

Examples

standard input	standard output
1 Petro a	Win
17 Oleg-Andriy olegandriywillwin	Lose