Problem A Shiritori

The Japanese game of Shiritori is the perfect 2-player game for a long car ride. The rules are simple: the first player picks any word to say, then the second player must choose a new word that begins with the last letter of the word that the first player just said. Then it is the first player's turn again to say a word that begins with the last letter of the previous word the second player said, and so on. At each turn, the player whose turn it is must say a word that links to the previous one and which has not been called out before during the game. Your job is to determine if the game was played according to these rules, given a history of the words used in a particular game. In a game, player 1 always starts first.



The original version of Shiritori is played using Japanese hiragana, katakana, or kanji characters. Source WikiMedia Author: Henry Wang Source: 2017 Virginia Te

Problem ID: shiritori

CPU Time limit: 2 secor Memory limit: 1024 ME

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Input

Input consists of one test case that begins with an integer N ($2 \le N \le 100\,000$) on a single line. Each of the following N lines contains 1 word. The words are presented in the order in which the players called them out, starting with player 1. All words consist of between 1 and 120 lowercase English

Output

letters.

If the game was played according to the rules, output "Fair Game". Otherwise, find out which player first violated the rules of the game. That player lost the game, so output "Player <i> lost". For example, if player 1 violated the rules first, output "Player 1 lost".

Sample Input 1

Sample Output 1 Fair Game

apple real letters style

Sample Input 2

3		
apple		
extra		
apple		

Sample Input 3

2	
apple	
neat	

Sample Output 3

Sample Output 2 Player 1 lost

Player 2 lost			

Sample Input 4

Sample Output 4

5
apple east
east
team
meat
team

Player 1 lost