The 2021 Freshman Programming Contest Hunan University



Problem L

Playf and Astringent Map

Time Limit: 1second Memory Limit: 256MB

Description

As we all know, Playf is a very diligent girl, she has been doing programming for two days and two nights. Now Playf is very tired, and she wants someone to give her an Astringent Map so that she can play and rest on it.



An Astringent Map can be described as an $n \times m$ matrix, which contains only two types of character:'o' and'.'. 'o' stands for obstacles, and '.' stands for roads that can be passed through. Playf intends to play a catching game with Xu on the Astringent Map.

As we all know, Playf is also a great athlete, she can move at a speed of 2 steps per second, while Xu can only move at a speed of 1 step per second. At each step, Playf and Xu can move freely in any direction of up, down, left, and right, but they cannot move onto obstacles, nor can they walk out of the Astringent Map. Assuming that Playf can catch Xu when they meet at any position, Playf wants to know if it is possible for her to catch Xu.

Input

The first line contains two integers n and m $(1 \le n, m \le 100)$ — size of the Astringent Map. Then, n lines follow. Each line contains m characters, represents the Astringent Map. It is guaranteed that the Astringent Map only contains 'o', '.', 'P' and 'X', where 'P' represents the initial position of Playf and 'X' represents the initial position of Xu. There is exactly one 'X' and one 'P' on the Astringent Map.

Output

If it is possible for Playf to catch Xu, print "Playftql" (without quotes) in a single line. Otherwise, print "Playftcl" (without quotes) in a single line.

3 4	Playftcl
.P	
0000	
X.	
Sample Input2	Output for Sample input2
5 2	Playftql
0.	
Р.	
.0	

Output for Sample input1

Sample Input1